Documents of the World Administrative Radio Conference for the mobile services (2nd session) (WARC MOB-87 (2)) (Geneva, 1987)

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MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 401-E
9 October 1987

B.9

PLENARY MEETING

NINTH 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	Title
COM.5	313 (354)	Article N 39
COM.5	314 (354)	Article N 40
COM.5	339 (354)	Article N 41
		Resolution No. 322 (Rev.Mob-87)

Y.C. MONGELARD
Chairman of Committee 7

Annex: 18 pages

ADD

ARTICLE N 39

Operational Procedures for Distress and Safety Communicatios in the Global Maritime Distress and Safety System (GMDSS)

Section I. General

N 3169 Distress and safety communications rely on the use of terrestrial MF, HF and VHF radiocommunications and communications using satellite techniques.

N 3170 The distress alert (see No. N 3172) shall be sent through a satellite either with absolute priority in general communication channels or on exclusive distress and safety frequencies or, alternatively, on the distress and safety frequencies in the MF, HF and VHF bands using digital selective calling.

N 3170A The distress alert (see No. N 3172) shall be sent only on the authority of the person responsible for the ship, aircraft or other vehicle carrying the mobile station or the mobile earth station.

N 3171 All stations which receive a distress alert transmitted by digital selective calling shall immediately cease any transmission capable of interfering with distress traffic and shall continue watch until the call has been acknowledged.

N 3171A Digital selective calling shall be in accordance with the relevant CCIR Recommendations.

Section II. Distress Alerting

A. General

N 3172 The transmission of a distress alert indicates that a mobile unit[1] or person[1A] is in distress and requires immediate assistance. The distress alert is a digital selective call using a distress call format[2] in bands used for terrestrial radiocommunication or a distress message format, in which case it is relayed through space stations.

N 3172.1 Mobile unit: A ship, aircraft or other vehicle.

N 3172.1A In this Article, where the case in of a person in distress, the application of the procedures may require adaptation to meet the needs of the particular circumstances.

N 3172.2 The format of distress calls and distress messages shall be in accordance with the relevant CCIR Recommendations.

N 3173 The distress alert shall provide[1] the identification of the station in distress and its position.

N 3173.1 The distress alert may also contain information regarding the nature of the distress, the type of assistance required, the course and speed of the mobile unit, the time that this information was recorded and any other information which might facilitate rescue.

B. Transmission of a Distress Alert

B1. Transmission of a Distress Alert by a Ship Station or a Ship Earth Station

3174 Ship-to-shore distress alerts are used to alert Rescue Coordination Centres via coast stations or coast earth stations that a ship is in distress. These alerts are based on the use of transmissions via satellites (from a ship earth station or a satellite EPIRB) and terrestrial services (from ship stations and EPIRBs).

N 3175 Ship-to-ship distress alerts are used to alert other ships in the vicinity of the ship in distress and are based on the use of digital selective calling in the VHF and MF bands. Additionally, the HF band may be used.

B2. Transmission of a Shore-to-Ship Distress Alert Relay

N 3176 A station or a Rescue Coordination Centre which receives a distress alert shall initiate the transmission of a shore-to-ship distress alert relay addressed, as appropriate, to all ships, to a selected group of ships or to a specific ship by satellite and/or terrestrial means.

N 3176A The distress alert relay shall contain the identification of the mobile unit in distress, its position and all other information which might facilitate rescue.

B3. Transmission of a Distress Alert by a Station Not Itself in Distress

N 3177 A station in the mobile or mobile-satellite service which learns that a mobile unit is in distress shall initiate and transmit a distress alert in any of the following cases:

N 3178 a) when the mobile unit in distress is not itself in a position to transmit the distress alert;

N 3179 b) when the master or person responsible for the mobile unit not in distress or the person responsible for the land station considers that further help is necessary.

ADD N 3180 A station transmitting a distress alert relay in accordance with Nos. N 3177, N 3178, N 3179 and N 3188 shall indicate that it is not itself in distress.

C. Receipt and Acknowledgement of Distress Alerts

C1. Procedure for Acknowledgement of Receipt of Distress Alerts

N 3181 Acknowledgement by digital selective calling of receipt of a distress alert in the terrestrial services shall be in accordance with relevant CCIR Recommendations.

N 3182 Acknowledgement through a satellite of receipt of a distress alert from a ship earth station shall be sent immediately (see No. N 3184).

N 3183 Acknowledgement by radiotelephony of receipt of a distress alert from a ship station or a ship earth station shall be given in the following form:

- the distress signal MAYDAY;
- the call sign or other identification of the station sending the distress message, spoken three times;
- the words THIS IS (or DE spoken as DELTA ECHO in case of language difficulties);
- the call sign or other identification of the station acknowledging receipt, spoken three times;
- the word RECEIVED (or RRR spoken as ROMEO ROMEO ROMEO in case of language difficulties);
- the distress signal MAYDAY.

N 3183A The acknowledgement by direct-printing telegraphy of receipt of a distress alert from a ship station shall be given in the following form:

- the distress signal MAYDAY;
- the call sign or other identification of the station sending the distress alert;
- the signal DE;
- the call sign or other identification of the station acknowledging receipt of the distress alert;
- the signal RRR;
- the distress signal MAYDAY.

N 3183B The acknowledgement by direct-printing telegraphy of receipt of a distress alert from a ship earth station shall be given by the coast earth station receiving the distress alert, by retransmitting the ship station identity of the ship transmitting the distress alert.

C2. Receipt and Acknowledgement of Receipt by a Coast Station, a Coast Earth Station or a Rescue Coordination Centre

N 3184 Coast stations and appropriate coast earth stations in receipt of distress alerts shall ensure that they are routed as soon as possible to a Rescue Coordination Centre. Receipt of a distress alert is to be acknowledged as soon as possible by a coast station, or by a Rescue Coordination Centre via a coast station or an appropriate coast earth station.

N 3185 A coast station using digital selective calling to acknowledge a distress call shall transmit the acknowledgement on the distress calling frequency on which the call was received and should address it to all ships. The acknowledgement shall include the identification of the ship whose distress call is being acknowledged.

C3. Receipt and Acknowledgement of Receipt by a Ship Station or Ship Earth Station

N 3186 Ship or ship earth stations in receipt of a distress alert shall, as soon as possible, inform the master or person responsible for the ship of the contents of the distress alert.

N 3186A In areas where reliable communications with one or more coast stations are practicable, ship stations in receipt of a distress alert should defer acknowledgement for a short interval so that receipt may be acknowledged by a coast station.

N 3187 Ship stations operating in areas where reliable communications with a coast station are not practicable which receive a distress alert from a ship station which is, beyond doubt, in their vicinity, shall, as soon as possible and if appropriately equipped, acknowledge receipt and inform a Rescue Coordination Centre through a coast station or coast earth station. (See No. N 3179.)

N 3188 However, a ship station receiving an HF distress alert shall not acknowledge it but shall observe the provisions N 3189D, N 3189E and N 3189F and shall, if the alert is not acknowledged by a coast station within 3 minutes, relay the distress alert.

N 3189 A ship station acknowledging receipt of a distress alert in accordance with No. N 3186A or No. N 3187 should:

N 3189A a) in the first instance, acknowledge receipt of the alert by using radiotelephony on the distress and safety traffic frequency in the band used for the alert;

N 3189B b) if acknowledgement by radiotelephony of the distress alert received on the MF or VHF distress alerting frequency is unsuccessful, acknowledge receipt of the distress alert by responding with a digital selective call on the appropriate frequency.

N 3189C A ship station in receipt of a shore-to-ship distress alert (see No. N 3176) should establish communication as directed and render such assistance as required and appropriate.

D. Preparations for Handling of Distress Traffic

N 3189E On receipt of a distress alert transmitted by use of digital selective calling techniques, ship stations and coast stations shall set watch on the radiotelephone distress and safety traffic frequency associated with the distress and safety calling frequency on which the distress alert was received.

N 3189F Coast stations and ship stations with narrow-band direct printing equipment shall set watch on the narrow-band direct-printing frequency associated with the distress alert signal if it indicates that narrow-band direct-printing is to be used for subsequent distress communications. If practicable, they should additionally set watch on the radiotelephone frequency associated with the distress alert frequency.

Section III. Distress Traffic

N 3189G A. General and Search and Rescue Coordinating Communications

N 3190 Distress traffic consists of all messages relating to the immediate assistance required by the ship in distress, including search and rescue communications and on-scene communications. The distress traffic shall as far as possible be on the frequencies contained in Article N 38.

N 3190A The distress signal consists of the word MAYDAY, pronounced in radiotelephony as the French expression "m'aider".

N 3191 For distress traffic by radiotelephony, when establishing communications, calls shall be prefixed by the distress signal MAYDAY.

N 3192 Error correction techniques in accordance with relevant CCIR Recommendations shall be used for distress traffic by direct-printing telegraphy. All messages shall be preceded by at least one carriage return, a line feed signal, a letter shift signal and the distress signal MAYDAY.

N 3192A Distress communications by direct-printing telegraphy should normally be established by the ship in distress and should be in the broadcast (forward error correction) mode. The ARQ mode may subsequently be used when it is advantageous to do so.

N 3193 The Rescue Coordination Centre responsible for controlling a search and rescue operation shall also coordinate the distress traffic relating to the incident or may appoint another station to do so.

N 3194 The Rescue Coordination Centre coordinating distress traffic, the unit coordinating search and rescue operations[1] or the coast station involved may impose silence on stations which interfere with that traffic. This instruction shall be addressed to all stations or to one station only, according to circumstances. In either case, the following shall be used:

a) in radiotelephony, the signal SEELONCE MAYDAY, pronounced as the French expression "silence, m'aider";

b) in narrow-band direct-printing telegraphy normally using forward-error correcting mode, the signal SILENCE MAYDAY. However, the ARQ mode may be used when it is advantageous to do so.

N 3194.1 In accordance with the International Convention on Maritime Search and Rescue, 1979, this is the on-scene commander (OSC) or the coordinator surface search (CSS).

N 3195 Until they receive the message indicating that normal working may be resumed (see No. N 3195B), all stations which are aware of the distress traffic, and which are not taking part in it, and which are not in distress are forbidden to transmit on the frequencies in which the distress traffic is taking place.

N 3195A A station of the mobile service which, while following distress traffic, is able to continue its normal service, may do so when the distress traffic is well established and on condition that it observes the provisions of No. N 3195 and that it does not interfere with distress traffic.

N 3195B When distress traffic has ceased on frequencies which have been used for distress traffic, the Rescue Coordination Centre controlling a search and rescue operation shall initiate a message for transmission on these frequencies indicating that distress traffic has finished.

N 3195C In radiotelephony the message referred to in No. N 3195B consists of:

- the distress signal MAYDAY;
- the call "Hello all stations" or CQ (spoken as CHARLIE QUEBEC) spoken three times;
- the words THIS IS (or DE spoken as DELTA ECHO in the case of language difficulties);
- the call sign or other identification of the station sending the message;
- the time of handing in of the message;
- the name and call sign of the mobile station which was in distress;
- the words SEELONCE FEENEE pronounced as the French words "silence fini".

N 3195CA In direct printing telegraphy the message referred to in No. N 3195B consists of:

- the distress signal MAYDAY;
- the call CQ;
- the signal DE;
- the call sign or other identification of the station sending the message;
- the time of handing in of the message;
- the name and call sign of the mobile station which was in distress; and
- the words SILENCE FINI.

B. On-scene communications

N 3195D to N 3195F Not allocated.

N 3195G On-scene communications are those between the mobile unit in distress and assisting mobile units, and between the mobile units and the unit coordinating search and rescue operations[1].

N 3195G.1 In accordance with the International Convention on Maritime Search and Rescue, 1979, this is the on-scene commander (OSC) or the coordinator surface search (CSS).

N 3195H Control of on-scene communications is the responsibility of the unit coordinating search and rescue operations[1]. Simplex communications shall be used so that all on-scene mobile stations may share relevant information concerning the distress incident. If direct-printing telegraphy is used, it shall be in the forward error-correcting mode.

N 3195H.1 In accordance with the International Convention on Maritime Search and Rescue, 1979, this is the on-scene commander (OSC) or the coordinator surface search (CSS).

N 3195I The preferred frequencies in radiotelephony for on-scene communications are 156.8 MHz and 2 182 kHz. The frequency 2 174.5 kHz may also be used for ship-to-ship on-scene communications using narrow-band direct-printing telegraphy in the forward error correcting mode.

N 3195J In addition to 156.8 MHz and 2 182 kHz the frequencies 3 023 kHz, 4 125 kHz, 5 680 kHz, 123.1 MHz and 156.3 MHz may be used for ship-to-aircraft on-scene communications.

N 3195K The selection or designation of on-scene frequencies is the responsibility of the unit coordinating search and rescue operations[1]. Normally, once an on-scene frequency is established, a continuous aural or teleprinter watch is maintained by all participating on-scene mobile units on the selected frequency.

N 3195K.1 In accordance with the International Convention on Maritime Search and Rescue, 1979, this is the on-scene commander (OSC) or the coordinator surface search (CSS).

C. Locating and Homing Signals

N 3195L Locating signals are radio transmissions intended to facilitate the finding of a mobile unit in distress or the location of survivors. These signals include those transmitted by searching units, and those transmitted by the mobile unit in distress, by survival craft, by float-free EPIRBs, by satellite EPIRBs and by search and rescue radar transponders to assist the searching units.

N 3195LA Homing signals are those locating signals which are transmitted by mobile units in distress, or by survival craft, for the purpose of providing searching units with a signal that can be used to determine the bearing to the transmitting stations.

N 3195M Locating signals may be transmitted in the following frequency bands:

a) 117.975 - 136 MHz;

b) 156 - 174 MHz;

c) 406 - 406.1 MHz; and

d) 9 200 - 9 500 MHz.

N 3195N Signals for locating shall be in accordance with the relevant CCIR Recommendations.

ARTICLE N 40

ADD

Operational Procedures for Urgency and Safety Communications in the Global Maritime Distress and Safety System (GMDSS)

Section I. General

N 3195NA Urgency and safety communications include:

a) navigational and meteorological warnings and urgent information;

b) ship-to-ship safety of navigation communications;

c) ship reporting communications;

d) support communications for search and rescue operations;

e) other urgency and safety messages; and

f) communications relating to the navigation, movements and needs of ships and weather observation messages destined for an official meteorological service.

Section II. Urgency communications

N 3195P In a terrestrial system the announcement of the urgency message shall be made on one or more of the distress and safety calling frequencies specified in Section I of Article N 38 using digital selective calling and the urgency call format. A separate announcement need not be made if the urgency message is to be transmitted through the maritime mobile-satellite service.

N 3195Q The urgency signal and message shall be transmitted on one or more of the distress and safety traffic frequencies specified in Section I of Article N 38, or via the maritime mobile-satellite service or on other frequencies used for this purpose.

N 3195R The urgency signal consists of the words PAN PAN. In radiotelephony each word of the group shall be pronounced as the French word "panne".

N 3195S The urgency call format and the urgency signal indicate that the calling station has a very urgent message to transmit concerning the safety of a mobile unit or a person.

N 3195T In radiotelephony, the urgency message shall be preceded by the urgency signal (see N 3195R), repeated three times, and the identification of the transmitting station.

N 3195U In narrow-band direct-printing, the urgency message shall be preceded by the urgency signal (see N 3195R) and the identification of the transmitting station.

N 3195X The urgency call format or urgency signal shall be sent only on the authority of the master or the person responsible for the mobile unit carrying the mobile station or mobile earth station.

N 3195XA The urgency call format or the urgency signal may be transmitted by a land station or a coast earth station with the approval of the responsible authority.

N 3195XB When an urgency message which calls for action by the stations receiving the message has been transmitted, the station responsible for its transmission shall cancel it as soon as it knows that action is no longer necessary.

N 3195XC Error correction tehcniques in accordance with relevant CCIR Recommendations shall be used for urgency messages by direct-printing telegraphy. All messages shall be preceded by at least one carriage return, a line feed signal, a letter shift signal and the distress signal MAYDAY.

N 3195XD Urgency communications by direct-printing telegraphy should normally be established by the ship in distress and should be in the broadcast (forward error correction) mode. The ARQ mode may subsequently be used when it is advantageous to do so.

Section III. Medical Transports

N 3209 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 or of neutral States and of other States not parties to an armed conflict, when these ships, craft and aircraft assist the wounded, the sick and the shipwrecked.

N 3210 For the purpose of announcing and identifying medical transports which are protected under the above-mentioned Conventions, the procedure of Section II of this Article is used. The urgency signal shall be followed by the addition of the single word MEDICAL in narrow-band direct-printing and by the addition of the single word MAY-DEE-CAL pronounced as in French "médical", in radiotelephony.

N 3212 The use of the signals described in No. N 3210 indicates that the message which follows concerns a protected medical transport. The message shall convey the following data:

N 3213 a) call sign or other recognized means of identification of the medical transport;

N 3214 b) position of the medical transport;

N 3215 c) number and type of vehicles in the medical transport;

N 3216 d) intended route;

N 3217 e) estimated time en route and of departure and arrival, as appropriate;

N 3218 f) any other information, such as flight altitude, radio frequencies guarded, languages used and secondary surveillance radar modes and codes.

N 3219A The identification and location of medical transports at sea may be conveyed by means of appropriate standard maritime radar transponders.

N 3219B The identification and location of aircraft medical transports may be conveyed by the use of the secondary surveillance radar (SSR) system specified in Annex 10 to the Convention on International Civil Aviation.

N 3220 The use of radiocommunications for announcing and identifying medical transports is optional; however, if they are used, the provisions of these Regulations and particularly of this Section and of Articles N 37 and N 38 shall apply.

Section IV. Safety Communications

N 3195Z In a terrestrial system the announcement of the safety message shall be made on one or more of the distress and safety calling frequencies specified in Section I of Article N 38 using digital selective calling techniques. A separate announcement need not be made if the message is to be transmitted through the maritime mobile-satellite service.

N 3195AC The safety signal and message shall normally be transmitted on one or more of the distress and safety traffic frequencies specified in Section I of Article N 38, or via the maritime mobile-satellite service or on other frequencies used for this purpose.

N 3195AA The safety signal consists of the word SECURITE in radiotelephony; it shall be pronounced as in French.

N 3195AB The safety call format or the safety signal indicates that the calling station has an important navigational or meteorological warning to transmit.

N 3195AD In radiotelephony, the safety message shall be preceded by the safety signal (see No. N 3195AA), repeated three times, and the identification of the transmitting station.

N 3195AE In narrow-band direct-printing, the safety message shall be preceded by the safety signal (see No. N 3195AA), and the identification of the transmitting station.

N 3195AEA Error correction tehcniques in accordance with relevant CCIR Recommendations shall be used for safety messages by direct-printing telegraphy. All messages shall be preceded by at least one carriage return, a line feed signal, a letter shift signal and the distress signal MAYDAY.

N 3195AEB Safety communications by direct-printing telegraphy should normally be established by the ship in distress and should be in the broadcast (forward error correction) mode. The ARQ mode may subsequently be used when it is advantageous to do so.

Section V. Transmission of Maritime Safety Information

A. General

N 3195AFC The operational details of the stations transmitting maritime safety information in accordance with Nos. N 3195AF, N 3195AFB, N 3195AFA, N 3195AFE and N 3195AFG shall be indicated in the List of Radiodetermination and Special Service Stations (see Nos. 3323, 3326 and 3334).

N 3195AFD The mode and format of the transmissions mentioned in Nos. N 3195AF, N 3195AFB, N 3195AFA and N 3195AFE shall be in accordance with the relevant CCIR Recommendations.

B. International NAVTEX System

N 3195AF Maritime safety information shall be transmitted by means of narrow-band direct-printing telegraphy with forward error correction using the frequency 518 kHz in accordance with the international NAVTEX system (see Nos. N 2971A and N 2971B).

C. 490 kHz and 4 339.5 kHz

N 3195AFB The frequency 490 kHz may be used, after full implementation of the GMDSS, for the broadcast of maritime safety information by means of narrow-band direct-printing telegraphy with forward error correction. (See No. N 2968 and Resolution [COM5/3].)

N 3195AFA The frequency 4 339.5 kHz is used exclusively for NAVTEX-type transmission by means of narrow-band direct-printing telegraphy with forward error correction (see Resolution [COM5/4]).

D. High Seas Maritime Safety Information

N 3195AFE Maritime safety information is transmitted by means of narrow-band direct-printing telegraphy with forward error correction using the frequencies 4 340, 6482.5, 8685.5, 12 997.5, 17 144, 19 730.5, 22 626.5 and 26 123.5 kHz (see Resolution [COM5/5]).

E. Maritime Safety Information via Satellite

N 3195AFG Maritime safety information may be transmitted via satellite in the maritime mobile-satellite service using the band 1 530 - 1 545 MHz (see Nos. 726, N 2998B and N 2998C).

Section VI. Intership Navigation Safety Communications

N 3195AI Intership navigation safety communications are those VHF radiotelephone communications conducted between ships for the purpose of contributing to the safe movement of ships.

N 3195AJ The frequency 156.650 MHz is used for intership navigation safety communications (see also No. N 2993D and note n) in Appendix 18).

Section VII. Use of Other Frequencies for Distress and Safety

N 3195AL Radiocommunications for distress and safety purposes may be conducted on any appropriate communications frequency, including those used for public correspondence. In the maritime mobile-satellite service, frequencies in the bands 1 530 to 1 544 MHz and 1 626.5 to 1 645.5 MHz are used for this function as well as for distress alerting purposes (see No. 3170).

ARTICLE N 41

Alerting Signals

Section I. Emergency Position-Indicating Radiobeacon (EPIRB) and Satellite EPIRB Signals

N 3195AM The emergency position-indicating radiobeacon signal transmitted on 156.525 MHz and satellite EPIRB signals in the band 406 - 406.1 MHz or 1 645.5 - 1 646.5 MHz shall be in accordance with relevant CCIR Recommendations.

Section II. Digital Selective Calling

N 3195AO The characteristics of the "distress call" (see No. N 3172) in the digital selective calling system shall be in accordance with relevant CCIR Recommendations.

RESOLUTION No. 322 (Rev.Mob-87)

MOD **Relating to Coast Stations and Coast Earth Stations Assuming Watch-Keeping Responsibilities on Certain Frequencies in Connection with the Implementation of Distress and Safety Communications for the Global Maritime Distress and Safety System (GMDSS)**

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

a) that the International Maritime Organization (IMO) is implementing a Global Maritime Distress and Safety System (GMDSS);

b) that this Conference has introduced in the Radio Regulations provisions for distress and safety communications for the GMDSS to facilitate the progressive implementation of the new system while maintaining the provisions for the continuation of the existing system during the transitional period (see Resolution [COM5/1];

c) that the new system necessitates the use or exclusive use of a number of additional frequencies for maritime distress and safety purposes;

d) that the extra watch-keeping responsibilities associated with these additional frequencies may prove to be too onerous to be assumed, for MF, HF and VHF frequencies, by all coast stations open to public correspondence and, for space systems, by all coast earth stations;

recognizing

a) that the successful implementation of the new system requires an adequate geographical distribution of coast earth stations and coast stations keeping watch on the appropriate frequencies as well as on those already used for this purpose;

b) that IMO is the organization best qualified to coordinate, in cooperation with administrations, a plan of coast earth stations and coast stations which administrations intend to use for watch-keeping on GMDSS frequencies;

resolves to invite

1. administrations to inform the ITU and IMO of the arrangements they intend to make for watch-keeping on GMDSS distress and safety calling frequencies;

2. IMO to ensure that the services provided by administrations are sufficient for world-wide HF DSC coverage;

3. ITU to indicate in the List of Coast Stations all coast and coast earth stations designated by administrations for providing distress and safety watch-keeping services for the GMDSS;

instructs the Secretary-General

to communicate this Resolution to the IMO.

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 402-E
9 October 1987
Original: English

COMMITTEE 6

EIGHTH REPORT BY THE CHAIRMAN OF WORKING GROUP 6-B TO THE CHAIRMAN OF COMMITTEE 6

1. Working Group 6-B has completed considerations on the terms of reference assigned to the Working Group at its eleventh meeting held on 6 October, except for the matters relating to the aeronautical public correspondence and to the radiodetermination satellite service (Articles 1, 35 and 50), to which the view of the Working Group was that the consideration on the relevant proposals should not be made before Committee 4 concludes its considerations concerning Article 8.

2. Comments on the remaining items which Committee 6 must deal with are briefly given in the following:

a) Definition of Aeronautical Mobile (R) and (OR) Services in Article 1

Committee 6 has the primary responsibility together with Committee 4, and this matter is closely related to a possible amendment of RR 3630 and RR 3633 in Article 50.

At the tenth meeting of Committee 4 held on 9 October, long discussion was made on this matter, and the Drafting Group (ad hoc 5) was established to prepare the draft elements (Documents 357 and 374).

b) Definition of Maritime, Land and Aeronautical RDSS in Article 1 (see Annex 2 to Document 244)

This is also a matter of primary responsibility for both Committee 4 and 6, and the necessity for those definitions highly depends on the decision concerning the frequency allocation in Committee 4.

c) Article 35 (see Annex 2 to Document 244)

The primary responsibility is in Committee 6 and proposed additions and modifications may be needed to make the concept of radiodetermination satellite service clearer.

d) Article 50 (see Document DL/10)

This is a matter of second responsibility for Committee 6. It was already agreed in Working Group 6-B to add "Aeronautical Mobile-Satellite Service" in the provisions and title of Article 50. The Working Group also approved the following view as stated in the first report (Document 182) and sent to Committee 4.

"Working Group 6-B recommends that this Conference make provision to satisfy frequency requirements for public correspondence to aircraft on a global basis. This provision needs to be made by Committee 4 in appropriate frequency band(s). Committee 4 also needs to decide whether the provision is to be expressed in Article 8 or Article 50 of the Radio Regulations. Once these decisions are made, Working Group 6-B can, if necessary, then return to the revision of Article 50 of the Radio Regulations."

3. With respect to Appendices 41 and 42, no proposals were made to this Conference, and therefore the Working Group proposes to retain those texts as they are.

NOC Appendix 41
NOC Appendix 42

Y. HIRATA
Chairman of Working Group 6-B

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MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 403-E
9 October 1987

B.10 PLENARY MEETING

TENTH 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	Documents	Title
COM.5	217 (354)	Article N 38
COM.6	337 (368)	Article 44 Article 49
COM.6	353 (368)	Article 64
TECH WG PL	DT/56 (392)	Appendix 19 (Mob-87)
COM.6	312 (368)	Appendix 26
TECH WG PL	392	Resolution GT-TEC PLEN/4
COM.6	284 (368)	Recommendation No. 316 (Rev.Mob-87)

Y.C. MONGELARD
Chairman of Committee 7

Annexes: 25 pages

ADD

ARTICLE N 38

Frequencies for Distress and Safety Communications for the Global Maritime Distress and Safety System (GMDSS)

Section I. Availability of Frequencies

N 2967 A. 490 kHz

N 2968 In the maritime mobile service, after full implementation of the GMDSS the frequency 490 kHz will be used exclusively for the transmission by coast stations of meteorological and navigational warnings and urgent information to ships by means of narrow-band direct-printing telegraphy (see Resolution [COM5/3]).

N 2971A B. 518 kHz

N 2971B In the maritime mobile service, the frequency 518 kHz is used exclusively for the transmission by coast stations of meteorological and navigational warnings and urgent information to ships by means of narrow-band direct-printing telegraphy (international NAVTEX system) (see Article 14A).

N 2971C C. 2 174.5 kHz

N 2971D The frequency 2 174.5 kHz is used exclusively for distress and safety traffic using narrow-band direct-printing telegraphy.

N 2972 D. 2 182 kHz

N 2973 The carrier frequency 2 182 kHz is used [exclusively] for distress and safety traffic by radiotelephony, using class of emission J3E (see also No. 2973).

N 2978A E. 2 187.5 kHz

N 2978B The frequency 2 187.5 kHz is used exclusively for distress and safety calls using digital selective calling in accordance with No. N 3171A (see Nos. N 3172, N 3195S and N 3233).

N 2979 F. 3 023 kHz

N 2980 The aeronautical carrier (reference) frequency 3 023 kHz may be used for intercommunication between mobile stations when they are engaged in coordinated search and rescue operations, and for communication between these stations and participating land stations, in accordance with the provisions of Appendix 27 Aer2 (see Nos. 501 and 505).

N 2981 G. 4 125 kHz

N 2982 The carrier frequency 4 125 kHz is used for distress and safety traffic by radiotelephony (see also No. 2982).

N 2982A The carrier frequency 4 125 kHz may be used by aircraft stations to communicate with stations of the maritime mobile service for distress and safety purposes, including search and rescue (see No. N 2943).

N 2982B H. 4 177.5 kHz

N 2982C The frequency 4 177.5 kHz is used exclusively for distress and safety traffic using narrow-band direct-printing telegraphy.

N 2982D I. 4 207.5 kHz

N 2982E The frequency 4 207.5 kHz is used exclusively for distress and safety calls using digital selective calling in accordance with No. N 3171A (see Nos. N 3172, N 3195S and N 3233).

N 2982EA IA. 4 339.5 kHz

N 2982EB In the maritime mobile service, the frequency 4 339.5 kHz is used exclusively for NAVTEX-type transmissions by coast stations by means of narrow-band direct-printing telegraphy (see Resolution [COM5/4]).

N 2982EC IB. 4 340 kHz

N 2982ED The frequency 4 340 kHz is used exclusively for the transmission by coast stations of maritime safety information, by narrow-band direct-printing telegraphy (see Resolution [COM5/1]).

N 2983 J. 5 680 kHz

N 2984 The aeronautical carrier (reference) frequency 5 680 kHz may be used for intercommunication between mobile stations when they are engaged in coordinated search and rescue operations, and for communication between these stations and participating land stations, in accordance with the provisions of Appendix 27 Aer2 (see also Nos. 501 and 505).

N 2985 K. [6 215] kHz

N 2986 The carrier frequency [6 215] kHz is used for distress and safety traffic by radiotelephony (see also No. 2986).

N 2986A L. 6 268 kHz

N 2986B The frequency 6 268 kHz is used exclusively for distress and safety traffic using narrow-band direct-printing telegraphy.

N 2986C M. 6 312 kHz

N 2986D The frequency 6 312 kHz is used exclusively for distress and safety calls using digital selective calling in accordance with No. N 3171A (see Nos. N 3172, N 3195S and N 3233).

N 2986DA MA. 6 482.5 kHz

N 2986DB The frequency 6 482.5 kHz is used exclusively for the transmission by coast stations of maritime safety information, by narrow-band direct-printing telegraphy (see Resolution [COM5/1]).

N 2986E N. 8 291 kHz

N 2986F The carrier frequency 8 291 kHz is used exclusively for distress and safety traffic by radiotelephony.

N 2986G O. 8 376.5 kHz

N 2986H The frequency 8 376.5 kHz is used exclusively for distress and safety traffic using narrow-band direct-printing telegraphy.

N 2988A P. 8 414.5 kHz

N 2988B The frequency 8 414.5 kHz is used exclusively for distress and safety calls using digital selective calling in accordance with No. N 3171A (see Nos. N 3172, N 3195S and N 3233).

N 2988BA PA. 8 685.5 kHz

N 2988BB The frequency 8 685.5 kHz is used exclusively for the transmission by coast stations of maritime safety information, by narrow-band direct-printing telegraphy (see Resolution [COM5/1]).

N 2988C Q. 12 290 kHz

N 2988D The carrier frequency 12 290 kHz is used for distress and safety traffic by radiotelephony.

N 2988E R. 12 520 kHz

N 2988F The frequency 12 520 kHz is used exclusively for distress and safety traffic using narrow-band direct-printing telegraphy.

N 2988G S. 12 577 kHz

N 2988H The frequency 12 577 kHz is used exclusively for distress and safety calls using digital selective calling in accordance with No. N 3171A (see Nos. N 3172, N 3195S and N 3233).

N 2988HA SA. 12 997.5 kHz

N 2988HB The frequency 12 997.5 kHz is used exclusively for the transmission by coast stations of maritime safety information, by narrow-band direct-printing telegraphy (see Resolution [COM5/1]).

N 2988I T. 16 420 kHz

N 2988J The carrier frequency 16 420 kHz is used for distress and safety traffic by radiotelephony.

N 2988K U. 16 695 kHz

N 2988L The frequency 16 695 kHz is used exclusively for distress and safety traffic using narrow-band direct-printing telegraphy.

N 2988M V. 16 804.5 kHz

N 2988N The frequency 16 804.5 kHz is used exclusively for distress and safety calls using digital selective calling in accordance with No. N 3171A (see Nos. N 3172, N 3195S and N 3233).

(N 29880 not used)

N 2988P VA. 17 144 kHz

N 2988Q The frequency 17 144 kHz is used exclusively for the transmission by coast stations of maritime safety information, by narrow-band direct-printing telegraphy (see Resolution [COM5/5]).

N 2988R VB. 19 730.5 kHz

N 2988S The frequency 19 730.5 kHz is used exclusively for the transmission by coast stations of maritime safety information, by narrow-band direct-printing telegraphy (see Resolution [COM5/5]).

N 2988T VC. 22 626.5 kHz

N 2988U The frequency 22 626.5 kHz is used exclusively for the transmission by coast stations of maritime safety information, by narrow-band direct-printing telegraphy (see Resolution [COM5/5]).

N 2988Y VD. 26 123.5 kHz

N 2988W The frequency 26 123.5 kHz is used exclusively for the transmission by coast stations of maritime safety information, by narrow-band direct-printing telegraphy (see Resolution [COM5/5]).

N 2989 W. 121.5 MHz and 123.1 MHz

N 2990A The aeronautical emergency frequency 121.5 MHz[1] is used for the purposes of distress and urgency for radiotelephony by stations of the aeronautical mobile service using frequencies in the band between 117.975 MHz and 136 MHz (137 MHz after 1 January 1990). This frequency may also be used for these purposes by survival craft stations and emergency position-indicating radiobeacons.

N 2990A.1 Normally, aircraft stations transmit distress and urgency messages on the working frequency in use at the time of the distress or urgency incident.

N 2990B The aeronautical auxiliary frequency 123.1 MHz, which is auxiliary to the aeronautical emergency frequency 121.5 MHz, is for use by stations of the aeronautical mobile service and by other mobile and land stations engaged in coordinated search and rescue operations (see also No. 593).

N 2991 Mobile stations of the maritime mobile service may communicate with stations of the aeronautical mobile service on the aeronautical emergency frequency 121.5 MHz for the purposes of distress and urgency only, and on the aeronautical auxiliary frequency 123.1 MHz for coordinated search and rescue operations, using class A3E emissions for both frequencies (see also Nos. 501 and 593). They shall then comply with any special arrangements between the governments concerned by which the aeronautical mobile service is regulated.

N 2992 X. 156.3 MHz

N 2993 The frequency 156.3 MHz may be used for communication between ship stations and aircraft stations engaged in coordinated search and rescue operations. It may also be used by aircraft stations to communicate with ship stations for other safety purposes (see also note g) in Appendix 18).

N 2993A Y. 156.525 MHz

N 2993B The frequency 156.525 MHz is used in the maritime mobile service for distress and safety calls using digital selective calling (see also Nos. 347, 613A, N 2932, N 2933 and N 2934).

N 2993C Z. 156.650 MHz

N 2993D The frequency 156.650 MHz is used for ship-to-ship communications relating to the safety of navigation in accordance with note n) in Appendix 18.

N 2993E AA. 156.8 MHz

N 2994 The frequency 156.8 MHz is used for distress and safety traffic by radiotelephony (see also No. 2994).

N 2995A The frequency 156.8 MHz may be used by aircraft stations for safety purposes only.

N 2997 AB. 406 - 406.1 MHz Band

N 2997A The frequency band 406 - 406.1 MHz is used exclusively by satellite emergency position-indicating radiobeacons in the Earth-to-space direction (see No. 649).

N 2997B AC. 1 530 - 1 544 MHz Band

N 2997C In addition to its availability for routine non-safety purposes, the band 1 530 - 1 544 MHz is used for distress and safety purposes in the space-to-Earth direction in the maritime mobile-satellite service.

N 2998 AD. 1 544 - 1 545 MHz Band

N 2998A Use of the band 1 544 - 1 545 MHz (space-to-Earth) is limited to distress and safety operations (see No. 728), including:

N 2998B a) feeder links of satellites needed to relay the emissions of satellite emergency position-indicating radiobeacons to earth stations;

N 2998C b) narrow-band (space-to-Earth) links from space stations to mobile stations.

N 2998CA AE. 1 626.6 - 1 645.5 MHz Band

N 2998CB In addition to its availability for routine non-safety purposes, the band 1 626.5 - 1 645.5 MHz is used for distress and safety purposes in the Earth-to-space direction in the maritime mobile-satellite service.

N 2998D AF. 1 645.5 - 1 646.5 MHz Band

N 2998E Use of the band 1 645.5 - 1 646.5 MHz (Earth-to-space) is limited to distress and safety operations (see No. 728), including:

N 2998EA a) transmissions from satellite EPIRBs;

N 2998EB b) relay of distress alerts received by satellites in low polar earth orbits to geostationary satellites.

N 2998F AG. 9 200 - 9 500 MHz Band

N 2998G The band 9 200 - 9 500 MHz is used by radar transponders to facilitate search and rescue.

N 3001 AH. Survival Craft Stations

N 3002 Equipment for radiotelephony use in survival craft stations shall, if capable of operating on any frequency in the bands between 156 MHz and 174 MHz, be able to transmit and receive on 156.8 MHz and at least one other frequency in these bands.

N 3002A Equipment for transmitting locating signals from survival craft stations shall be capable of operating in the 9 200 - 9 500 MHz band.

N 3008A Equipment with digital selective calling facilities for use in survival craft shall, if capable of operating:

N 3008B a) in the bands between 1 605 kHz and 2 850 kHz, be able to transmit on 2 187.5 kHz;

N 3008C b) in the bands between 4 000 kHz and 27 500 kHz, be able to transmit on 8 414.5 kHz;

N 3008D c) in the bands between 156 MHz and 174 MHz, be able to transmit on 156.525 MHz.

Section II. Protection of Frequencies for Distress and Safety Communications for the GMDSS

N 3009 A. General

N 3010 Except as provided for in these Regulations, any emission capable of causing harmful interference to distress, alarm, urgency or safety communications on the frequencies 500 kHz, 518 kHz, 2 174.5 kHz, 2 182 kHz, 2 187.5 kHz, 4 125 kHz, 4 177.5 kHz, 4 207.5 kHz, [6 215 kHz,] 6 268 kHz, 6 312 kHz, 8 291 kHz, 8 376.5 kHz, 8 414.5 kHz, 12 290 kHz, 12 520 kHz, 12 577 kHz, 16 420 kHz, 16 695 kHz, 16 804.5 kHz, 121.5 MHz, 156.525 MHz, 156.8 MHz or the frequency bands 406 - 406.1 MHz, 1 544 - 1 545 MHz and 1 645.5 - 1 646.5 MHz (see also No. 3010) is prohibited. Any emission causing harmful interference to distress and safety communications on any of the other frequencies identified in Section I of this Article and in Section I of Article 38 is prohibited.

N 3011 Test transmissions shall be kept to a minimum on the frequencies identified in Section I of this Article; they should be coordinated with a competent authority, as necessary, and, wherever practicable, be carried out on artificial antennas or with reduced power. However, testing on the distress and safety calling frequencies should be avoided, but where this is unavoidable, it should be indicated that these are test transmissions.

N 3016A Before transmitting for other than distress purposes on any of the frequencies identified in Section I for distress and safety, a station shall, where practicable, listen on the frequency concerned to make sure that no distress transmission is being sent.

N 3022 B. 2 173.5 - 2 190.5 kHz Band

N 3023 Except for transmissions authorized on the carrier frequency 2 182 kHz and on the frequencies 2 174.5 kHz, [2 177] kHz, 2 187.5 kHz and [2 189.5] kHz, all transmissions on the frequencies between 2 173.5 kHz and 2 190.5 kHz are forbidden.

N 3032 C. 156.7625 - 156.8375 MHz Band

N 3033 All emissions in the band 156.7625 - 156.8375 MHz capable of causing harmful interference to the authorized transmissions of stations of the maritime mobile service on 156.8 MHz are forbidden.

Section III. Watch on Frequencies for Distress and Safety Communications for the GMDSS

N 3037 A. Coast Stations

N 3038 Those coast stations assuming a watch-keeping responsibility in the GMDSS shall maintain an automatic digital selective calling watch on frequencies and for periods of time as indicated in the information published in the List of Coast Stations (see Resolution No. 322 (Rev.Mob-87)).

N 3038A B. Coast Earth Stations

N 3038B Those coast earth stations assuming a watch-keeping responsibility in the GMDSS shall maintain a continuous automatic watch for appropriate distress alerts relayed by space stations (see Resolution No. 322 (Rev.Mob-87)).

N 3040 C. Ship Stations

N 3041 Ship stations complying with the provisions of this Chapter shall, while at sea, maintain an automatic digital selective calling watch on the appropriate distress and safety calling frequencies in the frequency bands in which they are operating. Ship stations, where so equipped, should also maintain watch on the appropriate frequencies for the automatic reception of transmissions of meteorological and navigational warnings and other urgent information to ships. However, ship stations shall also continue to apply the appropriate watch-keeping provisions of Chapter IX (see Resolution [COM5/1]).

N 3042 Ship stations complying with the provisions of this Chapter should, where practicable, maintain a watch on the frequency 156.650 MHz for communications related to the safety of navigation.

N 3041A D. Ship Earth Stations

N 3041B Ship earth stations in use for the reception of shore-to-ship distress alert relays should maintain watch except when communicating on a working channel.

ARTICLE 44

NOC **Operators' Certificates for Aircraft Stations and for Aircraft Earth Stations**

NOC **Section I. General Provisions**

SUP 3392

MOD 3393 (2) The service of every aircraft station and every aircraft earth station shall be controlled by an operator holding a certificate issued or recognized by the government to which the station is subject. Provided the station is so controlled, other persons besides the holder of the certificate may use the radiotelephone equipment.

MOD 3393A (2A) In order to meet special needs, special agreements between administrations may fix the conditions to be fulfilled in order to obtain a radiotelephone operator's certificate intended to be used in aircraft radiotelephone stations and aircraft earth stations complying with certain technical conditions and certain operating conditions. These agreements, if made, shall be on the condition that harmful interference to international services shall not result therefrom. These conditions and agreements shall be mentioned in the certificates issued to such operators.

MOD 3394 The service of automatic communication devices[1] installed in an aircraft station or aircraft earth station shall be controlled by an operator holding a certificate issued or recognized by the government to which the station is subject. Provided the devices are so controlled, they may be used by other persons. If such devices require for their basic function the use of Morse code signals specified in the Instructions for the Operation of the International Public Telegram Service, the service shall be performed by an operator holding a radiotelegraph operator's certificate. However, this latter requirement does not apply to automatic devices which may use Morse code signals solely for identification purposes.

NOC 3394.1

MOD 3395 Nevertheless, in the service of aircraft stations and aircraft earth stations operating radiotelephony solely on frequencies above 30 MHz, each government shall decide for itself whether a certificate is necessary and, if so, shall define the conditions for obtaining it.

MOD 3396 The provisions of No. 3395 shall not, however, apply to any aircraft station or aircraft earth station working on frequencies assigned for international use.

NOC 3397-3402

NOC **Section II. Classes and Categories of Certificates**

MOD 3403 (1) There are two classes of certificates for radiotelegraph operators, as well as a special certificate.

SUP 3403.1

MOD 3404 (2) There are two categories of radiotelephone operators' certificates, general and restricted.

SUP 3404.1

MOD 3405 The holder of a first- or second-class radiotelegraph operator's certificate may carry out the radiotelegraph or radiotelephone service of any aircraft station or aircraft earth station.

MOD 3406 (2) The holder of a radiotelephone operator's general certificate may carry out the radiotelephone service of any aircraft station or of any aircraft earth station.

SUP 3407-3409

MOD 3410 (3) The holder of a radiotelephone operator's restricted certificate may carry out the radiotelephone service of any aircraft station or aircraft earth station operating on frequencies allocated exclusively to the aeronautical mobile service or the aeronautical mobile-satellite service, provided that the operation of the transmitter requires only the use of simple external switching devices.

MOD 3411 (4) The radiotelephone service of aircraft stations or aircraft earth stations for which only a restricted radiotelephone operator's certificate is required may be carried out by an operator holding a radiotelegraph operator's special certificate.

NOC 3412

NOC **Section III. Conditions for the Issue of Operators' Certificates**

NOC 3413-3419

MOD 3420

a) knowledge both of the general principles and theory of radio;

MOD 3421

b) theoretical and practical knowledge of the operation, maintenance and adjustment of radiotelegraph and radiotelephone apparatus;

SUP 3422

MOD 3423

c) ability to send correctly by hand and receive correctly by ear, in the Morse code, code groups (mixed letters, figures and punctuation marks)[1] at a speed of twenty groups a minute, and a plain language text at a speed of twenty-five words[2] a minute. The duration of each test of sending and of receiving shall be, as a rule, five minutes;

MOD 3424

d) ability to send correctly and to receive correctly by radiotelephone in one of the working languages of the Union;

MOD 3425

e) detailed knowledge of the Regulations applying to radiocommunications, knowledge of the provisions of the Convention for the Safety of Life at Sea which relate to radio, and, in the case of air navigation, knowledge of the special provisions governing the aeronautical fixed, mobile and radionavigation services. In the latter case, the certificate states that the holder has successfully passed the tests relating to these special provisions;

ADD 3423.1

[1]Each code group shall comprise five characters, each figure or punctuation counting as two characters.

ADD 3423.2

[2]The average word of the text in plain language shall contain five characters.

SUP 3426-3427

NOC 3428-3429

MOD 3430

a) elementary theoretical and practical knowledge of basic radiocommunications;

MOD 3431

b) elementary theoretical and practical knowledge of the operation, maintenance and adjustment of radiotelegraph and radiotelephone apparatus;

SUP 3432

MOD 3433

c) ability to send correctly by hand and to receive correctly by ear, in the Morse code, code groups (mixed letters, figures and punctuation marks) at a speed of sixteen groups a minute, and a plain language text at a speed of twenty words a minute. The duration of each test of sending and of receiving shall, as a rule, be five minutes. (The provisions of Nos. ADD 3423.1 and ADD 3423.2 also apply.)

MOD 3434

d) ability to send correctly and to receive correctly by radiotelephone, in one of the working languages of the Union[1];

MOD 3435

e) knowledge of the Regulations applying to radiocommunications, knowledge of the provisions of the Convention for the Safety of Life at Sea which relate to radio, and, in the case of air navigation, knowledge of the special provisions governing the aeronautical fixed, mobile, and radionavigation services. In the latter case, the certificate states that the holder has successfully passed the tests relating to these special provisions.

ADD 3434.1 [1]This provision need not apply in the case provided for in No. 3412.

SUP 3436-3437

NOC 3438-3439

MOD 3440 a) knowledge of the practical operation and adjustment of radiotelegraph and radiotelephone apparatus[1];

MOD 3441 b) ability to send correctly by hand and receive correctly by ear, in the Morse code, code groups (mixed letters, figures and punctuation marks) at a speed of sixteen groups a minute, and a plain language text at a speed of twenty words a minute. (The provisions of Nos. ADD 3423.1 and ADD 3423.2 also apply.)

ADD 3441A c) ability to send correctly and to receive correctly by radiotelephone in one of the working languages of the Union[1];

MOD 3442 d) knowledge of the Regulations applying to radiotelegraph communications and specifically of that part of those Regulations relating to safety of life at sea;

MOD 3443 (2) Each administration concerned may fix the other conditions for obtaining this certificate [except as provided for in No. 3412.]

NOC 3444-3447

MOD 3448 c) ability to send correctly and to receive correctly by radiotelephone in one of the working languages of the Union;

NOC 3449-3451

MOD 3452 b) ability to send correctly and to receive correctly by radio telephone in one of the working languages of the Union;

NOC 3453

ADD 3440.1
ADD 3441A.1 [1]This provision need not apply in the case provided for in No. 3412.

MOD 3454 For aircraft radiotelephone stations and aircraft earth stations operating on frequencies allocated exclusively to the aeronautical mobile service or the aeronautical mobile-satellite service, each administration may itself fix the conditions for obtaining a radiotelephone operator's restricted certificate, provided that the operation of the transmitter requires only the use of simple external switching devices. The administration shall ensure that the operator has an adequate knowledge of radiotelephone operation and procedure particularly as far as distress, urgency and safety are concerned. This in no way contravenes the provisions of No. 3393A.

NOC 3455-3456

ARTICLE 49

MOD **Conditions to be Observed by Mobile Stations in the Aeronautical Mobile Service and by Mobile Earth Stations in the Aeronautical Mobile-Satellite Service**

ADD **Section I. Aeronautical Mobile Service**

NOC 3597-3600

SUP 3601-3602

NOC 3603-3604

ADD **Section II. Aeronautical Mobile-Satellite Service**

ADD 3605 The provisions of Nos. 3597 to 3604 are also applicable to mobile earth stations in the aeronautical mobile-satellite service.

ARTICLE 64

NOC **General Procedures for Narrow-Band Direct-Printing Telegraphy in the Maritime Mobile Service**[1]

NOC **Section I. General**

NOC 4841

ADD 4842A § 2A. Before transmitting, a station shall take precautions to ensure that its emissions will not interfere with transmissions already in progress; if such interference is likely, the station shall await an appropriate break in the communications in progress. This obligation does not apply to stations where unattended operation is possible through automatic means (see No. 3863).

SUP 4843

NOC 4844-4847

NOC **Section II. Procedures for Manual Operation**

NOC 4848 A. General

NOC 4849

NOC A.64

NOC 4850 B. Ship to Coast Station

MOD 4851 § 7. (1) The operator of the ship station establishes communication with the coast station by AIA Morse telegraphy, telephony or by other means using normal calling procedures. The operator then requests direct-printing communication, exchanges information regarding the frequencies to be used and, when applicable, gives the ship station the direct-printing selective call number assigned in accordance with Appendix 38, or the ship station identity assigned in accordance with Appendix 43.

NOC 4852

MOD 4853 § 8. (1) Alternatively the operator of the ship station, using the direct-printing equipment, calls the coast station on a predetermined coast station receive frequency using the identification of the coast station assigned in accordance with Appendix 38, or the coast station identity assigned in accordance with Appendix 43.

NOC 4854

NOC 4855 C. Coast Station to Ship

NOC 4856-4857

NOC 4858 D. Intership

MOD 4859 § 10. (1) The operator of the calling ship station establishes communication with the called ship station by AIA Morse telegraphy, telephony, or by other means, using normal calling procedures. The operator then requests direct-printing communication, exchanges information regarding the frequencies to be used and, when applicable, gives the direct-printing selective call number of the calling ship station assigned in accordance with Appendix 38, or the ship station identity assigned in accordance with Appendix 43.

NOC 4860

NOC **Section III. Procedures for Automatic Operation**

NOC 4861 A. Ship to Coast Station

MOD 4862 § 11. (1) The ship station calls the coast station on a predetermined coast station receive frequency, using the direct-printing equipment and the identification signal of the coast station assigned in accordance with Appendix 38, or the coast station identity assigned in accordance with Appendix 43.

NOC 4863

NOC 4864 B. Coast Station to Ship

MOD 4865 § 12. (1) The coast station calls the ship station on a predetermined coast station transmit frequency, using the direct-printing equipment and the ship station direct-printing selective call number assigned in accordance with Appendix 38, or the ship station identity assigned in accordance with Appendix 43.

NOC 4866-4868

NOC **Section IV. Message Format**

NOC 4869-4872

MOD 4873 § 15. In the ship-to-shore direction, the message format should conform to the operational procedures specified in the relevant CCIR Recommendations.

SUP 4874-4875

NOC **Section V. Procedures for Operation in the Forward-Error-Correcting Mode**

NOC 4876-4881

NOC 4882 to 4902 NOT allocated.

ANNEX

MOB

APPENDIX 19
Mob-87

Technical Characteristics for Transmitters and Receivers Used in the Maritime Mobile Service in the Band 156 - 174 MHz

(see Articles 59 and 60 and Appendix 18)

1. Only frequency modulation with a pre-emphasis of 6 dB/octave (phase modulation) shall be used.

2. The frequency deviation corresponding to 100% modulation shall approach ±5 kHz as nearly as practicable. In no event shall the frequency deviation exceed ±5 kHz.

3. The frequency tolerance for coast and ship stations shall be 10 parts in 10^6.

4. In transmission on any of the frequencies designated in the table in Appendix 18, the emission of each station shall be vertically polarized at the source.

5. The audio-frequency band shall be limited to 3 000 Hz.

6. It must readily be possible to reduce the mean power of a ship station transmitter to 1 W or less, except for digital selective calling equipment operating on 156.525 MHz (channel 70), in cases where this facility is available.

7. Stations using digital selective calling shall have the following capabilities:

a) sensing to determine the presence of a signal on 156.525 MHz (channel 70), and

b) automatic prevention of the transmission of a call, except for distress and safety calls, when the channel is occupied by calls.

8. The remaining characteristics of transmitters and receivers used for digital selective calling shall comply with the relevant CCIR Recommendations.

9. When coast station transmitters emit marking signals required for the operation of an automatic service, this shall be done with a mean power attenuation of at least 10 dB (see Nos. 4326A and 4910).

APPENDIX 26

PART IV

(MOD)

Plan for the Allotment of Frequencies for the Aeronautical Mobile (OR) Service in the Bands between 2 505 and 23 350 kHz

1. (a) Alphabetical list of country designations

ADD ALG Algeria (People's Democratic Republic of)

MOD F France (replacing France and Algeria)

MOD D Germany (Federal Republic of)

ADD DDR German Democratic Republic

(b) Other abbreviations

SUP (81) means "East Germany"

2. (OR) Frequency Plan

MOD ALG Replacing F (Algeria) and F (Oran)

MOD F Replacing F (except Algeria)

ADD ALG On channels allotted to F, except for:

5 710.5 kHz
11 218.5 kHz
13 235.5 kHz
15 076.0 kHz

MOD For the following frequencies, replace "D(81)" with "DDR":

3 102 kHz
3 109 kHz
3 116 kHz
4 745.5 kHz
6 685 kHz
3 932 kHz
3 939 kHz

MOD CHN replacing CHN (7)
MOD MRC replacing MRC (6)

RESOLUTION GT-TEC PLEN/4

Relating to the Compatibility of Equipment Used in the Mobile-Satellite Service

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

a) that only a limited number of frequency bands is allocated to the mobile-satellite service;

b) that the CCIR is studying the preferred technical and operating characteristics for a mobile-satellite system which would have earth stations on ships, land and/or aircraft, all operating within the same system;

c) that there is a need to use efficiently the bands allocated to the mobile-satellite service;

d) that the maritime mobile-satellite service and the aeronautical mobile-satellite service have special requirements with regard to safety;

resolves

that the CCIR should continue to study, as a matter of urgency, terminal characteristics which are common to the extent practicable, in order to ensure compatibility between the land, maritime, and aeronautical mobile-satellite services;

urges administrations

to encourage the development and manufacture of compatible mobile-satellite user equipment.

(MOD) RECOMMENDATION No. 316 (Rev.Mob-87)

NOC **Relating to the Use of Ship Earth Stations Within Harbours and Other Waters Under National Jurisdiction**

(MOD) The World Administration Radio Conference for the Mobile Service, Geneva, 1987,

NOC recognizing

that permitting the use of ship earth stations within harbours and other waters under national jurisdiction belongs to the sovereign right of countries concerned;

NOC recalling

SUP

(MOD) that the World Administrative Radio Conference, Geneva, 1979, allocated the bands, 1 535 - 1 544 MHz and 1 626.5 - 1 645.5 MHz to the maritime mobile-satellite service and the bands 1 544 - 1 545 MHz and 1 645.5 - 1 646.5 MHz to the mobile-satellite service;

ADD noting

that the International Agreement on the use of INMARSAT ship earth stations within the Territorial Sea and Ports has been adopted and this agreement is open to accession, ratification, approval or acceptance, as appropriate;

NOC considering

NOC a) that the maritime mobile-satellite service, which is at present in operation worldwide, has improved maritime communications greatly and has contributed much to the safety and efficiency of ship navigation, and that fostering and developing the use of that service in future will contribute further to their improvement;

MOD b) that the maritime mobile-satellite service will play an important role in the Global Maritime Distress and Safety System (GMDSS);

NOC c) that the use of the maritime mobile-satellite service will be beneficial not only to the countries having ship earth stations at present but also to those considering the introduction of that service;

NOC is of the opinion

NOC that all administrations should be invited to consider permitting, to the extent possible, ship earth stations to operate within harbours and other waters under national jurisdiction in the bands 1 535 - 1 545 MHz and 1 626.5 - 1 646.5 MHz;

MOD recommends

ADD 1. that all administrations should consider permitting ship earth stations to operate within harbours and other waters under national jurisdiction;

ADD 2. that administrations should consider the adoption, where required, of international agreements on this matter.

Resolutions

NOC	RESOLUTION No. 9
SUP	RESOLUTION No. 600

Recommendations

NOC	RECOMMENDATION No. 305
NOC	RECOMMENDATION No. 310
SUP	RECOMMENDATION No. 404
SUP	RECOMMENDATION No. 600

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 404-E
9 October 1987
Original: English

COMMITTEE 4

NOTE FROM THE CHAIRMAN OF COMMITTEE 4

Following the decision of Committee 4 on Document 372, in Resolution [COM4/7], in "resolves 3", to introduce a common date: 1 July 1989 for the assignment in conformity with Appendix 25, the following consequential modifications should be made. These modifications shall be applicable from the date of transfer of the present channels to the new channels in Appendix 16, if this date is later than the date of entry into force of the Final Acts of this Conference.

MOD 1392 (2) If the finding is favourable with respect to Nos. 1317 and 1318, the date of ~~7 June 1974~~ 1 July 1989 shall be entered in Column 2a.

MOD 1396 (2) If the finding is favourable with respect to Nos. 1328 and 1329, the date of ~~7 June 1974~~ 1 July 1989 shall be entered in Column 2a.

O. VILLANYI
Chairman of Committee 4

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 405-E
10 October 1987
Original: English

COMMITTEE 7

FIFTH SERIES OF TEXTS FROM COMMITTEE 4 TO THE EDITORIAL COMMITTEE

1. The following texts, which were approved by Committee 4 at its tenth meeting with slight modifications, are submitted to the Editorial Committee:

- Resolution No. 300 (Rev.Mob-87, Document 372;
- Resolution [COM4/6], Document 372;
- Resolution [COM4/7], Document 372;
- Resolution [COM4/10], Document DT/75.

2. Committee 4 took, also, the following decisions:

- Resolution No. 302: SUP;
- Resolution No. 314: SUP.

O. VILLANYI
Chairman of Committee 4

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 406-E
16 October 1987
Original: English

COMMITTEE 6

SUMMARY RECORD

OF THE

TENTH MEETING OF COMMMITTEE 6

(MOBILE AND RADIODETERMINATION SERVICES
- EXCEPT DISTRESS AND SAFETY)

Friday, 9 October 1987, at 1800 hours
and Saturday, 10 October 1987 at 0900 hrs.

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

Subjects discussed:		Documents
1.	Note by the Secretary-General	391
2.	Sixteenth report of Working Group 6-A	382
3.	Setting up an informal Working Group (draft Article 60)	DT/68
4.	Consideration of Articles 55 and 56	376
5.	Consideration of Article 56	232, 376

1. Note by the Secretary-General: Matters for clarification: Appendix 25 and No. 2246 of the Radio Regulations (Document 391)

1.1 The Chairman introduced Document 391, which dealt with matters which the Secretary-General considered needed clarification in regard to the meaning of "country" taking account of changes made at WARC MOB-1983 for Appendix 43. Also part of the document envisaged reference to No. 2246 to the Editorial Committee.

1.2 The delegate of Australia said that the Secretary-General's proposals appeared to be suitable for inclusion in the Radio Regulations and clarified many difficulties.

Document 391 was approved.

2. Sixteenth report of the Chairman of Working Group 6-A to the Chairman of Committee 6 (Document 382)

2.1 The Chairman of Working Group 6-A, introducing Document 382, said that the suppression of Resolution No. 320 had created a problem in that Resolutions became effective on the last day of the Conference and until then or until the revision of the Radio Regulations took effect there were no guidelines regarding the allocation of maritime identification digits. It was felt that a Resolution was needed to cover the period between the end of the Conference and the coming into force of the Final Acts and that matter should be considered at some appropriate point. Turning to the modifications to Appendix 43 he said that the only significant change from the existing guidelines had been the possibility of making group calls to groups of coast stations. There had been close cooperation between the Working Group and the Secretariat to ensure that the Working Group did not do anything about Appendix 43 which could cause difficulties for the on-going studies in CCIR and CCITT.

2.2 The Chairman suggested that the Chairman of Working Group 6-A might himself draft a Resolution for consideration by the Committee to cover the time period he had referred to.

It was so agreed.

Group Coast Call Identities

2.3 The delegate of Argentina drew attention to the Spanish text of the last paragraph which differed from other language versions.

Document 332 was approved, subject to alignment of the Spanish text.

3. Setting up an informal Working Group (draft Article 60) (Document DT/68)

3.1 The Chairman of working Group 6-B said that the Working Group had completed its work and would issue its report on Saturday, 10 October 1987. There was one matter of some concern to the Working Group and should be of some concern also to Committee 4, i.e., Appendix 31 and Article 60. Working Group 4-C had produced Document DT/68 on the matter but it had not yet been approved by Committee 4. He proposed the setting up by Committee 6 of a special Working Group to monitor, purely on an editorial basis, progress on Document DT/68 and subsequent corrigenda and amendments, so that the document on Article 60 submitted to Committee 6 would be in line with the decisions of Committee 4 in relation to matters within the responsibility of that Committee.

It was so agreed.

Note by the Chairman of Committee 6:

4. Consideration of Articles 55 and 56 (Document 376)

4.1 The Chairman introduced Document 376 as a proposal from the chair. An informal Working Group of six people had been working hard to seek solutions to the various problems over which agreement had not been reached. The Group felt that it was preferable to amend the existing Articles 55 and 56 rather than to add new ones. It considered the number and level of certificates and the annexes contained the texts relating to 6 certificates. He drew attention to Document DL/65(Rev.1) which endeavoured to resume in the form of a chart the essence of the certificate requirements showing those that were identical and those which were not. The broken lines in the chart indicated that the texts related to those classes that were identical. The Group considered the possibility of adding paragraphs (x) and (xx) to Article 56 in addition to a number of regulations over which there had been little disagreement. There was also draft Resolution xyz which gave some additional criteria which administrations were urged to take into account. The annexes to the documents set forth the qualifications required for the various certificates. He wished to express his appreciation for the very hard work performed by that small informal group.

4.2 The delegate of the Federal Republic of Germany said that the proper operation of GMDSS, which was vital to ensure the safety of life at sea, required highly trained personnel and international standards were needed in that connection otherwise there would be difficulties in making the new system work. Although it found some of the proposals in Document 376 difficult to accept, his Administration was willing, in the spirit of compromise, to go along with most of them, for instance ADD (x) and ADD (xx). It was also willing to accept, at least in principle, draft Resolution xyz. He suggested, however, that in resolves, the word "urge" should be replaced by "encourage".

4.3 The delegate of the United Kingdom recognized that Document 376 was a helpful and neutral attempt to provide a new start for further negotiations which would be necessary to reach agreement. The selection of the six certificates for inclusion in Article 55 was probably correct and it should be recognized that ITU was only one of the rule-making bodies involved, the other being IMO. If the first-class and the second-class technical certificates were to be established in Article 55, that needed to be with qualifications established by IMO. As a matter of principle, that also applied to the two certificates for general and restricted operators. With regard to Article 56, the issue was one of flexibility but the draft Resolution severely restricted the freedom of administrations to apply the provisions of that Article. The aim of the present Conference was to work out interim legislation recognizing that there would be further legislation by IMO. His Delegation considered that the proper course of action was to use ADD (x) and ADD (xx) as starting points and then to look at Article 55 concerning qualifications. In that connection he fully agreed with the remarks made by the delegate of the Federal Republic of Germany as to the need for international standards of qualification. He emphasized that ITU and IMO were both involved in the same task and that they should work in close harmony and cooperation.

4.4 The delegate of Japan said that his Administration supported the Chairman's proposal in principle. The delegates of Morocco, Yugoslavia and Italy also expressed support for Document 376. The delegate of the United States said that he accepted Document 376 as the basis for further discussions in order to reach the compromise which the present Conference needed in order to move ahead with GMDSS. The delegate of Kenya said that Document 376 was well-balanced and provided for the necessary qualifications and also for flexibility to apply those requirements in accordance with specific conditions. The delegate of Brazil welcomed the document as the basis for further discussion starting with Article 55.

4.5 The delegate of Greece said that although his Administration was not satisfied with all the elements in Document 376 it nevertheless thought that it opened the way forward. His Delegation was of the opinion that the correct approach was to include all requirements in the Radio Regulations, but the same purpose could be achieved if the right understanding was included in the Chairman's proposal. He believed that his Delegation's proposals provided a sound foundation for a truly safe GMDSS through a process of proper certification, discipline and professional operation of GMDSS equipment. The day had not yet dawned when equipment would be fail-proof and it was a fact that shore-based maintenance and spare parts were not always available in many parts of the world where ships called. Unlike aircraft, ships might be out of communication for days at a time in the event of failure of communications equipment. During those periods, the distress system could not function. It was therefore essential to have properly trained personnel to operate the equipment in the interests of the safety of seafarers.

4.6 The delegate of Turkey found Document 376 unacceptable and would prefer the proposal for modification of Articles 55 and 56 set out in Document 232.

Having been asked by the Chairman whether he would reconsider that opinion in the light of his (the Chairman's) statement that Document 376 should be read in conjunction with Document 232, he said that that depended on the removal of references to the technical certificates.

4.7 The delegate of Togo said that, while not wishing to belittle the value of the work done by the Working Group, what really mattered was the safety of the thousands of people who travelled by sea, and that safety depended on the decisions of ITU.

4.8 The Chairman invited the Committee to consider the levels of the certificates involved, and later to consider ADD (x) and ADD (xx).

4.9 The delegate of the USSR said that the word "operator" indicated, at least in Russian, a low-skill occupation but, in fact, the job of a radio electronic operator was highly skilled, requiring a university degree or an equivalent qualification. The word "operator" was most unsuitable to describe a person carrying out very highly qualified, technical and specialized duties. Equipment was becoming more and more sophisticated and required increasingly higher levels of skill and knowledge to be able to make it work. He referred to the 1978 International Convention on Standardization and Training and to the Japanese Administration's experience as described in Lloyds List of 1 August 1987 at it was clear that the word "operator" should be replaced by a more accurate term, such as "officer", which more accurately reflected the duties, knowledge and skills involved.

4.10 The delegates of Spain, Greece, Brazil, Argentina and China supported the proposal of the USSR delegate.

4.11 The representative of IMO recalled the practice followed in the STCW Convention of using the term "operator" in the title of the certificate and referring to the holder of the certificate as an officer.

4.12 The delegate of the United Kingdom pointed out that it was the function rather than the status of the mariner in the office in question which was most relevant. He had doubts about the effect of such a modification of terminology.

4.13 Since his suggestion not to use either term proved controversial, the Chairman proposed that both terms, "operator" and "officer", should be retained in square brackets for the first two certificates.

It was so agreed.

4.14 The Chairman requested the Committee to consider Annexes 1-6 in conjunction with the chart contained in Document DL/65(Rev.1). He drew attention to the similar and parallel requirements proposed for the various certificates.

Annex 1

paragraph a)

4.15 The delegate of Australia said that the word "knowledge" should be qualified to reflect the higher level of qualification required. The delegate of Kenya proposed that the word "detailed" could be added. The delegate of Greece said that the text should not altered. The purpose was to establish minimum levels, beyond which administrations would remain free to impose whatever higher standards they required.

4.16 The Chairman noted that there was no support for proposals to amend the text of a).

paragraph b)

4.17 The delegate of France, supported by the delegates of Morocco, Papua New Guinea and Spain, proposed that the word "general" should be deleted. The delegate of Greece, supported by the delegates of the Federal Republic of Germany, Senegal, the Netherlands, Paraguay, Argentina and the United Kingdom, opposed its deletion.

It was agreed to amend the term "general" to "a general", on a suggestion by the Observer for ITF.

paragraph c)

The wording of this paragraph was common to some other Annexes and was approved wherever it occured in Annexes 1-6.

paragraph d)

4.18 The delegate of Paraguay proposed that the parentheses and enclosed text should be deleted. The delegate of Australia proposed that the words "which may occur during a voyage" should be deleted.

The proposals were rejected.

paragraph e)

4.19 The delegate of Paraguay proposed that the words "and equipment" should be deleted.

Annex 1 was approved as amended, subject to an editorial amendment concerning the title of the 1974 SOLAS Convention referred to in g).

Annex 2

paragraphs a) and b)

4.20 The Chairman, in response to an observation by the delegate of Mexico, invited the Committee to consider whether the word "general" at the beginning of paragraphs a) and b) adequately reflected the difference in requirements for first-class and second-class radioelectronic operators' certificates.

It was agreed not to amend the text of paragraphs a) and b).

paragraph d)

4.21 Following a request for clarification by the delegate of Israel, it was agreed to replace the word "components" by "units". It was also agreed, on a proposal by the delegate of Greece, to replace the words "damage of" in that paragraph by "faults in". He pointed out that the phrase "with particular reference to maintaining the equipment in service" had inadvertently been omitted. The delegates of Kenya, Mexico, Argentina, Turkey and India supported the inclusion of that phrase, while the delegates of the United Kingdom, the Netherlands and Australia opposed it.

It was agreed to insert the phrase in square brackets.

Annex 2 was approved, as amended.

Annex 3

Annex 3 was approved.

Annex 4

paragraph c)

4.22 The delegate of Australia pointed out that in the current context there would be no direct-telegraphy printing on VHF. A knowledge of the regulations applying to direct-printing telegraphy communications might therefore be superfluous. The delegates of Canada and Denmark shared his concern on that point. The delegate of Greece observed that the Restricted Operator's Certificate was intended also as a minimum for those operating on non-Convention ships so that although GMDSS might not require direct-printing telegraphy, the latter might well be used by other vessels also licensed under the Radio Regulations. The delegate of the United Kingdom pointed to the need for the ITU to ensure that it acted in parallel with IMO in that context.

4.23 The Observer for IMO said that IMO policy concerning the operator function in GMDSS had been established by the Maritime Safety Committee at its 54th Session in April 1987, which had decided that a flexible approach should be adopted on the methods to be used by administrations to ensure the operational availability of GMDSS equipment on ships of their flags. The manning aspect was covered by Regulation 13, Chapter V of the SOLAS Convention, in which context reference had been made to the principles of safe manning in Resolution A481 of the 12th Assembly of IMO.

The certificates referred to in Document 237 and reproduced in Document 376 represented the outcome of the work of the IMO Sub-Committee on Radiocommunications at its July 1987 session. The proposed certificates, together with any other related information, were to be considered by the Sub-Committee on Standards of Training and Watchkeeping at its January 1988 session. The reports of the Sub-Committee on Radiocommunications on its July 1987 and January 1988 sessions, together with the report of the Sub-Committee on Standards of Training and Watchkeeping on its January 1988 session, would be considered for approval by the Maritime Safety Committee in April 1987.

The 1978 International Convention on Standards of Training, Certification and Watchkeeping for Seafarers had entered into force in April 1987 and to date had been ratified by some 60 States with an aggregate capacity under their flags of some 70% of world merchant shipping. The Maritime Safety Committee, in treating the amendments to the SOLAS Convention consequential to those in Chapter IV to introduce GMDSS, would in due course require that the relevant subsidiary bodies should prepare amendments to that Convention consequential to the introduction of GMDSS.

4.24 The delegate of Papua New Guinea proposed deletion of "and direct-printing telegraphy". The delegates of Sweden, the United Kingdom and Australia supported that proposal.

4.25 The delegate of Ireland, supported by the delegate of Norway proposed deletion of the whole of paragraph c).

4.26 The delegates of the Federal Republic of Germany and Morocco expressed the opinion that it might be useful to retain the requirement in order to take non-Convention vessels into consideration.

4.27 The delegate of the USSR said that it would be useful for holders of the certificate to know the rules for using direct-printing telegraphy, particularly bearing in mind the use of the NAVTEX system. The delegate of the United Kingdom pointed out that vessels might receive but were not required to send NAVTEX transmission.

4.28 The Chairman drew attention to the fact that the certificates were intended to ensure that minimum requirements were satisified. Individual administrations could, of course, impose stricter requirements.

It was agreed to delete the words "and direct-printing telegraphy".

Annex 4 was approved, as amended.

The meeting was suspended at 2110 hours and resumed at 0900 hours on Saturday, 10 October 1987.

Annex 5

Approved.

Annex 6

paragraph a)

4.29 After lengthy discussion on the relative merits of the adjectives "general" and "elementary" in qualifying the knowledge required for a second class technical certificate, and in view of the conflicting opinions expressed, the Chairman proposed that both words should remain in square brackets until the next stage at which the new texts for Article 55 were examined.

It was so agreed.

paragraph b)

As with paragraph a), it was agreed to leave the words "general" and "elementary" in square brackets for the time being.

4.30 The delegate of Norway proposed that the words "with particular reference to maintaining the equipment in service" should be deleted.

4.31 The delegate of Greece said that it should be retained. As shown in Document DL/65(Rev.1), it was common to the First-Class and Second-Class Radio Electronic Operator's Certificates and to the First-Class and Second-Class Technical Certificates.

4.32 The delegate of the United Kingdom said that, in view of paragraph c), the last phrase of paragraph b) was redundant and should be deleted.

4.33 The delegate of Spain recalled that paragraph b) dealt with theoretical knowledge. He stressed that the last phrase should be retained to ensure that trainees were given theoretical knowledge relevant to maintenance. The delegates of Kenya, India and Ethiopia supported that view as it was important to have someone on board able to maintain equipment in service.

4.34 The delegate of the Netherlands noted that more breakdowns were caused by human error rather than by faults in the equipment itself. He opposed the inclusion of the last phrase, considering that it might encourage tinkering with equipment.

4.35 The delegate of Sweden, while agreeing that such practice should be discouraged, said that it was necessary for someone on board to have sufficient knowledge of maintenance to inform shore-based services what maintenance was needed. The last phrase of paragraph b) should therefore be retained.

4.36 In view of the conflicting opinions, the Chairman proposed that the phrase in question should be placed in square brackets.

It was so agreed.

paragraph d)

4.37 The Chairman suggested that the text should be aligned on the new text just adopted for paragraph d) of Annex 2.

4.38 The delegate of Norway proposed that it be replaced by the words "practical knowledge sufficient for location and repair of simple faults such as blown fuses and indicator lamps" which would be in line with the approach adopted by the IMO Sub-Committee on Radiocommunications.

4.39 The delegate of Greece, speaking on a point of order, said that it was the task of the current Conference to draft Radio Regulations, not to refer to measures taken in other fora. The matter was one of technical certificates which might be used to substitute the requirements of a second class REO certificate. The avoidance of harmful interference was equally important for all vessels, regardless of the class of certificate held by on-board personnel. It must not be implied, therefore, that the duties relating to a second-class technical certificate were less important. Safety of life at sea everywhere was the paramount issue; for that purpose, the same high standards must be implied in each class of certificate. He therefore strongly objected to the proposed amendment by Norway. Furthermore, he considered that a proliferation of shore-based maintenance systems would lead to the creation of maintenance industries with unknown owners and bases.

4.40 The delegate of the United States said that in his Administration's view, there was a place for a limited class of technical certificate. He fully agreed with the previous speaker about the problem of harmful interference but that problem stemmed chiefly from operation of equipment; the matter being discussed was the requirement for technical certificates.

4.41 The delegate of Sweden, strongly supporting the amendment proposed by Norway, said that the major point at issue was the drafting of a procedure that would accommodate all types of maintenance systems, whether ship based or shore based, provided they were effective, not to force one particular system on all administrations.

4.42 The delegate of the Netherlands said that no objective evidence had yet been submitted to the Conference of any need to raise the minimum qualifications required for operators of radioelectronic equipment from those already set out in the Radio Regulations (RR 3922)for second-class radio telegraph operators, especially considering that no such qualifications were considered necessary to ensure the safety of the many ships and fishing vessels operating solely with radiotelephone stations. The safety record of administrations providing for maintenance by means other than on-board staff was at least as good if not better than that of administrations strongly supporting a high technical level of on-board maintenance.

4.43 The delegate of the Federal Republic of Germany, supported by the delegates of Finland and the Netherlands, suggested, as a compromise,that the word "minor" should be inserted before "faults".

4.44 Strong objections to the proposals of both Norway and the Federal Republic of Germany were voiced by the delegates of India, Greece, Argentina, Paraguay, Turkey and Nigeria.

4.45 In view of the conflicting opinions, the Chairman suggested that the three versions of paragraph d) which had each received some support should be inserted in the text in square brackets for a final decision at the next stage the text was examined.

It was so agreed.

4.46 The Chairman further suggested that a revised version of Article 55 incorporating the changes made and decisions left pending during the present meeting should be prepared for consideration by the next meeting of the Committee.

It was so agreed.

5. Consideration of Article 56 (Documents 232, 376)

Title

It was agreed to amend the title by including the words "and the Maritime Mobile-Satellite" before the word "Service".

Section I

It was agreed that the words "and Coast Earth Stations" should be added at the end of the title. It was further agreed that, as a consequential modification, the words "and in Coast Earth Stations" should be inserted in No. 3979.

5.1 The Chairman invited the Committee to consider what wording would need to be added to Article 56 in order to take account of the certificates mentioned in Article 55.

5.2 The delegate of the United Kingdom, making two general comments, said that in the first place, the Committee's work must be based on the assumption that all delegates had the same degree of concern for safety and it should not be suggested that different viewpoints implied a greater or lesser degree of concern. Secondly, if he considered it necessary, as the United Kingdom delegate, to refer to the work of the IMO or the SOLAS Convention or the International Convention on the Standards, Training and Certification of Watchkeepers, he was fully entitled to do so.

5.3 The delegate of Greece stressed that safety and flexibility were interconnected but an undue amount of flexibility might lead to anarchy. The prime concern of the Radio Regulations was safety and they must provide fixed guidelines for that purpose.

5.4 In response to a question by the United States delegate, the Representative of the International Maritime Organization (IMO) said that, as he had already indicated, the IMO Maritime Safety Committee had instructed two of its subsidiary bodies to consider, among other aspects, the operator function in the GMDSS. After lengthy consideration, the last session of the Maritime Safety Committee had decided that instead of specifying one method of maintenance a flexible approach should be adopted to the methods to be used by administrations to ensure the operational availability of GMDSS equipment on ships of their flag. The matter was still under consideration in the IMO Sub-Committee on Radiocommunications.

5.5 The delegate of Sweden said that there could be no question of equating flexibility with anarchy and the fact that most of his country's equipment maintenance work was done ashore had not led to anarchy. All countries should be entitled to establish the maintenance methods which were in line with their stage of technological development.

5.6 The delegate of the Netherlands said that he respected the viewpoints of the delegates of both Greece and Sweden. He pointed out that it was not the purpose of an international organization to impose one single method on governments, as was evidenced by the fact that the IMO had agreed to a number of different maintenance methods.

5.7 The delegate of Finland said that so far as flexibility and chaos were concerned, no one had contested the provisions of the new Chapter IX which would cover discipline in the GMDSS. What was under discussion at that stage was the simple technical issue of maintenance and the question was whether technology should be allowed to evolve or whether it would be of benefit to anyone to limit technological progress by adhering to existing technology. Flexibility in maintenance methods was required and administrations should be allowed to choose.

5.8 The delegate of the Federal Republic of Germany said there appeared to be general agreement that maintenance was essential but that there were different ways of achieving it. A flexible approach, to enable administrations to choose the method which best suited them, was essential and he believed that Provisions x and xx and draft Resolution xyz in Document 376 would reflect that.

5.9 The delegate of Greece said that radiocommunication was a valuable tool but it must be strong and solid in order to cope with the sudden and cruel attacks of the sea and any suggestion of flexibility should therefore be set aside.

He might be able to accept ADD [x] with the inclusion, after the words "whilst at sea", of "e.g. a first-class technical certificate (see No.) or a second-class technical certificate (see No.)...".

5.10 The delegate of Brazil supported that amendment since ADD [x] complemented the provision of 3986E.

5.11 The delegate of Denmark endorsed the need to respect the views of other delegations; all administrations were serious and responsible bodies and they must be allowed to follow what methods they judged appropriate for the maintenance of their ships' equipment.

5.12 The delegate of the United States, endorsing the views expressed by the delegates of the Federal Republic of Germany, Denmark and the United Kingdom, regarding the responsibility of administrations and their concern for the safety of life at sea, said that the principle of the sovereign right of each country, as enshrined in No. 1 of the International Telecommunication Convention (Nairobi, 1982), must also be borne in mind.

His Delegation was in general agreement with the text of ADD [x] in Document 376 but proposed a slight amendment to read: "Where a general operator's certificate is used under these provisions, administrations shall, for ship stations ... in accordance with relevant international agreements"; that amendment was applicable to the whole of Article 56. He would prefer not to include the amendment proposed by the delegate of Greece since it quoted certain examples, while in his view the Regulation should be as clear, concise and simple as possible.

5.13 The delegate of Japan supported the United States proposed amendment in view of the need for flexibility.

5.14 The delegate of Kenya said that his Delegation recognized the need for minimum regulatory provisions for the maintenance of radio equipment on ships, which would form a basis for the developing countries to train better qualified personnel. He also recognized that some countries were in a position to utilize the latest developments in equipment and maintenance. He proposed that the Committee should set up a Drafting Group to redraft Article 56 so as to provide the necessary balance between definite regulation and flexibility.

5.15 The delegate of the United Kingdom said that ADD [x] was essential to fill a gap in the texts since the general operator's certificate in Annex 3 contained no provision regarding maintenance. However, the cross-reference to No. 3986E was unnecessary. He shared the view that the amendment proposed by the Greek delegate was unnecessary.

5.16 After a further brief discussion, the Chairman said that the Kenyan delegate's proposal to set up a Drafting Group would be dealt with at the Committee's next meeting.

The meeting rose at 1225 hrs.

The Secretary: The Chairman:

S. CHALLO I.R. HUTCHINGS

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

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16 October 1987
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COMMITTEE 4

SUMMARY RECORD

OF THE

ELEVENTH MEETING OF COMMITTEE 4

(FREQUENCY)

Saturday, 10 October 1987, at 0900 hrs

Chairman : Dr. O. VILLANYI (Hungary)

Subjects discussed:		Documents
1.	Summary record of the seventh meeting of Committee 4	333
2.	Continuation of consideration of texts related to the need of inclusion of regional agreements in the Radio Regulations	369, DT/71
3.	Ninth report of Working Group 4-A to Committee 4	389

1. Summary record of the seventh meeting of Committee 4 (Document 333)

The summary record of the seventh meeting was approved.

2. Continuation of consideration of texts related to the need of inclusion of regional agreements in the Radio Regulations (Documents 369, DT/71)

2.1 The delegate of the United States, introducing Document 369, said that the United States continued to support the position that Resolution No. 704 had no place in the Radio Regulations.

2.2 The delegates of Canada and India associated themselves with the sponsors of the document.

2.3 The delegate of Japan, supported by the delegates of the Federal Republic of Germany and Mauritania, said that the Region 1 Agreement should be discussed point by point in accordance with paragraph 7.3).

2.4 The delegate of the Federal Republic of Germany, supported by the delegate of Saudi Arabia, said that the legal and regulatory problems arising from the binding force given the provisions of the Region 1 agreement through their inclusion in the Radio Regulations had been elegantly addressed by Working Group 4-B in Resolution [COM 4/9], reproduced as an annex to Document 363; that Resolution merely invited administrations to draw the arrangements to the attention of their national maritime communities, and was therefore not excessively forceful. Further discussion must take Resolution [COM 4/9] into account.

2.5 In response to a question from the delegate of Tunisia, the representative of the IFRB (Mr. Berrada) confirmed that inclusion of the pertinent information about the Region 1 agreement as an addendum to the Radio Regulations would make no difference to their binding force of the latter as the addendum would form an integral part of the Radio Regulations. There had in the past been additional Radio Regulations which had applied only to those countries which ratified them; that arrangement had been terminated by WARC-79.

2.6 The delegate of the United States said that the practical matters raised in Document 369 could not usefully be discussed until the principle had been decided; as Document 369 was in a sense contingent on Resolution [COM 4/5], he suggested that further discussion of Document 369 be postponed until the Resolution had been finalized.

It was so agreed.

Resolution [COM 4/5] (Document DT/71)

2.7 The Chairman proposed that, in view of the objections to Resolution [COM 4/5] as it stood, an ad hoc Working Group under the Chairmanship of Mr. Duxfield (New Zealand) be set up to redraft it.

It was so agreed.

3. Ninth report of Working Group 4-A to Committee 4 (Document 389)

3.1 The Chairman of Working Group 4-A introduced the report, observing that it would be advisable to incorporate the content of Annex 4 in a summary record of the Committee.

Annex 1

ADD 572A

3.2 The delegate of Switzerland asked for an explanation of the words "into parts of the bands"; he would have preferred the phrase to be replaced by "into these bands". That preference was seconded by the delegates of the United States and Sweden.

3.3 The Chairman of Working Group 4-A said that the words had been inserted because some of the bands contained allocations to aeronautical radionavigation services other than those using the ILS and were therefore unlikely to be completely vacated in the foreseeable future. It would not be necessary to wait for complete vacation of the bands, since they could not in any case be used until the implementation of Article 40, which fully covered the interests of neighbouring countries.

3.4 The delegate of Switzerland said that, in view of that explanation, his country's name should be added to the footnote. The delegates of Japan, Israel, Jordan, Afghanistan and Malta said that they too wished their countries' names to be added to the footnote.

3.5 The delegate of Swaziland confirmed the reservation that his Delegation had expressed in Working Group 4-A. The text could leave the way open to serious dangers: delegates would recall that in 1986 the Head of State of a country bordering on his own had died in an air crash probably caused by a radar fault.

3.6 The delegate of the USSR objected to the words "parts of the bands", because in effect they related only to the band 108 - 117.975 MHz, where two types of equipment were used, one to be taken out of operation earlier than the other. No part of the 74.8 - 75.2 MHz band could be vacated separately, since the equipment consisted of one radiobeacon and one on-board receiver, without channel distribution, and would either be operational or abandoned. In the 328.6 - 335.4 MHz band, only individual channels would be vacated for one type of equipment, at a rate which was very difficult to determine. Mobile service equipment was currently in preparation for all the bands to be vacated by the aeronautical radionavigation service, and very strict regulation was needed to avoid such dangerous consequences as that cited by the delegate of Swaziland. It was therefore technically incorrect to refer to parts of the bands with respect to the three blocks of frequencies in the table and, in the interests of safety, allocation to the mobile services should wait upon the complete vacation of the bands by the aeronautical radionavigation service. In any case, it was clearly very difficult to generalize on the subject, but since mass production of mobile service equipment was bound to be developed for the bands in which individual channels could be vacated, there was a great risk that unsanctioned use of such equipment might cause interference in channels not yet vacated by the aeronautical radionavigation service. He therefore considered that the words "parts of these bands" should be replaced by "these bands", as the delegate of Switzerland had originally suggested. The delegate of Tunisia supported those views.

3.7 The delegate of France said it was obvious that different equipment would be used in all the bands concerned and that it would be introduced as the bands were vacated. On the other hand, it was equally obvious that from the point of view of safety everything possible would be done to protect the aeronautical radionavigation service, since no administration wanted accidents to occur.

He was against entering any specific date in the footnote and suggested that the last part of the text should be amended to read " ... stations of the

mobile service shall only use those parts of these bands that are no longer required for the aeronautical radionavigation service". The delegate of Canada supported that amendment and said that he too was against the insertion of any specific date. The delegate of Algeria also opposed the inclusion of a date. The Chairman of Working Group 4-A said that 1998 had been proposed in the Group on the basis of the ICAO projected date for replacement of the ILS, but that the majority had thought it premature to mention that date, in view of the strong possibility that ICAO might change it in the future and of the fact that, even after its expiry with respect to international protection, the system would continue to be used nationally for many years to come.

3.8 In response to a question by the delegate of Tunisia, the observer for ICAO said that it was proposed to introduce the MLS as the international standard system in 1998. The protection date did not relate to frequencies, but to investments, for the ILS would certainly continue as a national system well after the MLS was adopted for international purposes; the question was therefore one of national requirements.

3.9 The delegate of the United Kingdom said that he was inclined to favour the French proposal, but in any case wished to stress the main purpose of the footnote, that of the future use of the mobile service in the bands concerned.

3.10 The delegate of the United States said that he shared the concerns expressed by the delegate of the USSR. The original suggestion by the delegate of Switzerland might be acceptable, or perhaps the last phrase of the sentence might be amended to read " ... stations of the mobile service shall only use the individual bands mentioned when they are no longer required for the aeronautical radionavigation service". The delegate of Pakistan associated himself with those views.

3.11 The delegate of Cuba, supported by the delegate of Tunisia, observed that the words "until they are no longer required by the aeronautical radionavigation service" introduced a dangerous ambiguity, since it was not clear who was to decide when the bands would no longer be required. It would be preferable to state that stations of the mobile service should not be introduced into the bands before the date mentioned in the Working Group by the Observer for ICAO for the replacement of the ILS. The Observer for ICAO said that it might be unwise to specify a date, since the ILS was likely to continue as a national system well beyond the year 2000.

3.12 The delegate of Sweden said that there was naturally some fear that, in the absence of primary allocations, the phasing out of the aeronautical radionavigation service could allow the vacated bands to be taken over by uncontrolled services. That was why the footnote had been worded so cautiously, with the proviso that no assignments could be implemented without coordination with neighbouring countries. It was for the countries listed in the footnote to judge when the bands would no longer be required by the aeronautical radionavigation service. He could therefore support the United States suggestion for a reference to individual bands.

3.13 The Chairman proposed that there should be three footnotes instead of one, the first paragraph of each referring to one of the bands concerned and the words "into parts of the bands until they are" in the second paragraph being replaced by "into the band until it is". The delegates of the United Kingdom, Belgium, France, Italy, Denmark and Papua New Guinea supported that proposal. The delegates of Turkey, Egypt and Syria also supported the proposal and said that they wished their countries' names to be entered in each footnote. The delegate of Belgium asked that his country's name should be entered in the first and third footnotes.

3.14 The delegate of Burkina Faso, supported by the delegates of Tunisia, Togo and Swaziland, proposed that ADD 572A should be deleted and replaced by a text stating that the bands should not be used by stations of the mobile service until their complete vacation by the aeronautical radionavigation service.

3.15 The delegate of Mauritania considered that a single footnote along the lines suggested by the USSR would be preferable. The delegate of Saudi Arabia said that it would be best not to change the allocations in any way until the dates of vacation of the bands by the aeronautical radionavigation service were definitely known.

3.16 The delegate of Switzerland supported the Chairman's proposal, but asked the IFRB to explain in greater detail what was meant by the phrase "until they are no longer required for the aeronautical radionavigation service". In any case, it was hard to believe that any country would not use all the technical means at its disposal to avoid jeopardizing safety services.

3.17 The representative of the IFRB (Mr. Berrada) said that the only possibility for the Board to know whether or not a band was required by the aeronautical radionavigation service was when an administration applied the Article 14 procedure and informed the Board that it considered its assignments to be affected. He suggested that the text might be clarified by inserting the words "to stations of the aeronautical radionavigation service" after "is not caused" in the second paragraph and by adding the words "by any administration which may be identified in the application of Article 14" at the end of that text. The Chairman observed that those additions clarified the footnote and provided a guarantee against harmful interference.

In reply to questions by the delegate of Tunisia, he said that the method of calculating the coordination distance for electromagnetic compatibility with the VOR system was described in the document on CCIR preparatory work for the 1984 Regional Conference and that the measures taken by the Board in the event that action by an administration resulted in an accident depended on the conditions under which the IFRB was requested to resolve interference problems.

The three footnotes replacing ADD 572A, with the amendments suggested by the representative of the IFRB, were approved.

3.18 The delegates of Tunisia, Burkina Faso, Togo and Swaziland confirmed their reservations to the text and the delegates of Pakistan, Argentina, Saudi Arabia, Libya, Iraq and Madagascar reserved the right to raise the matter again at a Plenary meeting.

3.19 The delegate of the Islamic Republic of Iran said that his Delegation intended to submit to the Plenary the proposal that the words "only in Region 1" should replace the names of the countries in all the footnotes.

ADD 722A

3.20 The Representative of the IFRB (Mr. Berrada) wondered whether the reference to No. 723 was intentional, since it did not appear to cover the band under consideration. The Chairman confirmed that No. 723 concerned Region 2 countries and was intended.

ADD 726A

3.21 The delegate of Pakistan wondered whether the use of the band 1 530 - 1 544 MHz was more accurately described in Document 389, DT/77 or Document 395. Since it would not be available until 1 January 1990, the situation was somewhat confusing.

3.22 The Chairman of Working Group 4-A said that ADD 726A was an additional footnote proposed and approved by Working Group 4-A and intended to preclude the use of the bands by the maritime mobile-satellite service or the aeronautical mobile-satellite service, at present allocated to them, for feeder-links between a fixed earth station and a satellite. The Working Group at its last meeting had in fact concluded that the footnote in Document 395, designated 726A, was not required, and it would not therefore be passed on to Committee 4.

3.23 The delegate of Pakistan reserved the right to return to the question in the Plenary Meeting.

3.24 The delegate of Canada withdrew the reservation he had made in the Working Group concerning 726A.

3.25 The delegate of Brazil said that some existing services in the bands under consideration might suffer if ADD 726A were adopted as it stood. Brazil, for example, used the bands for oil rigs and other uses, and, since it was not a mobile service as such, it was open to question whether it was a feeder-link or not. A number of countries used the mobile services through INMARSAT, however.

3.26 The delegate of New Zealand drew attention to No. 109 of the Radio Regulations where feeder-link was defined.

3.27 The delegate of the United States said that when the matter was raised in the Working Group, his Delegation had been concerned that some of the current flexibility might be lost if the proposal were adopted, particularly with low-cost terminals being developed, possibly for application in rural or remote areas, particularly in the larger developing countries: that type of proposal might not satisfy those needs. There were indeed particular applications which might arise even within the present INMARSAT system, where certain standard A ship-earth stations might be used at specified fixed points. As the delegate of Brazil had indicated, the question became one of interpretation as to whether those might be considered feeder-links in the strict definition of the word, or a temporary type of use which the present proposal seemed not to permit.

3.28 The delegate of Tunisia entered a reservation concerning the band 1 530 - 1 535 MHz which in his country was used, in accordance with Article 8, for certain fixed services.

3.29 The delegate of India said that the intention was not to prohibit such specific and special use, consequently in discussions with some delegations, including the United States, there had been some agreement that a clarifying sentence on the following lines, added to the end of the footnote, would help in such cases:

> "In exceptional circumstances land earth stations in the mobile satellite service may be authorized, as an interim measure, by an administration to communicate with other stations using these bands."

3.30 The delegates of Brazil and the United States indicated that such a text would be acceptable.

3.31 The delegate of Algeria asking what the special circumstances would be, the delegate of India replied that it would be for the administrations, as responsible authorities, to decide. They were not, for instance, limited to natural disasters or special requirements, where such a service could be most economical.

It was agreed that in view of the difficulties the Committee would resume its discussion of ADD 726A later on in the light of a revised text to be submitted by the delegate of India.

The meeting rose at 1210 hrs.

The Secretary: The Chairman:

T. GAVRILOV O. VILLANYI

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

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COMMITTEE 4

SUMMARY RECORD

OF THE

TWELFTH MEETING OF COMMITTEE 4

(FREQUENCY)

Saturday, 10 October 1987, at 1330 hrs

Chairman : Dr. O. VILLANYI (Hungary)

Subjects discussed:	Documents
1. Texts related to RDSS	373, 375, 377, Corr.1 to Document 5

1. Texts related to RDSS (Documents 373, 375, 377, Corr.1 to Document 5)

1.1 The delegate of France, introducing the French proposals for the modification of Article 8 (Document 377), said that the proposed modifications were essentially of concern to France and did not affect any point of substance; they involved the modification of existing footnotes to adjust to a possible new situation and would, of course, only be meaningful if one of the proposals presented in Document 373 was adopted. The delegate of Belgium suggested that the second sentence of existing footnote 753 should be added to the French proposal. The delegates of the Federal Republic of Germany, Switzerland and Italy supported the French proposals as modified by the delegate of Belgium.

The proposals contained in Document 377 were approved as amended.

1.2 The representative of the IFRB (Mr. Berrada) introducing Document 375, drew particular attention to paragraphs 2.3, 3.3 and 4.2. In reply to a question from the delegate of Algeria concerning possible harmful interference between satellite stations and stations of the terrestrial fixed or mobile services, he said that, although there was no coordination procedure, there were power flux-density limits for satellites to protect terrestrial services as well as restrictions on the latter to protect geostationary satellite networks.

1.3 The Chairman of Working Group 4-A, introducing Document 373, said that as the Working Group had not been able to reach consensus on the matter of allocation to the radiodetermination satellite service, it was submitting two proposals contained in Annexes 1 and 2.

1.4 The delegate of Argentina introduced Corrigendum 1 to Document 5 and stressed the need for caution in relation to new services which might affect existing allocations of bands. His Administration supported allocation to the radiodetermination-satellite service on a secondary basis in Region 2.

1.5 The delegate of Cuba supported the Argentine proposal; the radiodetermination-satellite service should be on a secondary basis in all three regions.

1.6 The delegate of Italy said that in a spirit of compromise he could accept the proposal contained in Annex 1 of Document 373 if his country was included in ADD 734B. The delegates of Australia, Ethiopia, Mali, Cote d'Ivoire, Swaziland, Kenya, Tanzania and Togo endorsed that comment. The delegate of the Netherlands supported the alternative offered in Annex 1 for its clear reflection of the current state of the art.

1.7 The delegate of Brazil, supported by the delegates of Surinam and Costa Rica, pointed out that Annex 1, with the additional footnotes gives all different possibilities for Regions 1 and 3. The majority of countries in Region 2 had expressed their wish to have services allocated on a primary basis. He supported Annex 1 as proposed.

1.8 The delegate of Liberia supported allocation on a primary basis in Region 1. However, if the other alternative should prevail, his Administration would not wish to be included in ADD 734B of Annex 1.

1.9 The delegate of the USSR expressed support for the proposal contained in Annex 2. ADD 734B as proposed therein provided a means of simplifying considerably any modifications which it was intended to introduce into the radiodetermination-satellite service and would avoid unnecessarily lengthy or complicated footnotes. Its text would make it possible for each country to

determine for itself an acceptable degree of participation in the radiodetermination-satellite service.

1.10 The delegates of the German Democratic Republic, Bulgaria and Afghanistan endorsed those comments. The delegate of the Islamic Republic of Iran could also support Annex 2 in a spirit of compromise.

1.11 The delegate of the Federal Republic of Germany said that his Delegation would prefer the text of Annex 2 but was prepared to consider a compromise.

1.12 The delegate of the United Kingdom said that Annex 1, with the regulatory mechanism introduced, seemed an acceptable compromise. The delegates of Thailand, Israel, Uruguay, Jordan, Mexico, Malta, Oman, China, India and Libya also expressed a preference for Annex 1, as did the delegate of Saudi Arabia, who pointed out that the NOC reference to the allocation tables in Annexes 1 and 2 should be changed, since some changes had in fact been made.

1.13 The delegates of Mauritania, Nigeria and Ireland said that their Delegations could support Annex 1, but did not wish to be covered by the provisions of ADD 734B. The delegate of Japan said that his Administration basically supported Annex 1 as a good compromise; however, it felt that the allocation to the RDSS in the band 2 500 - 2 516.5 MHz should be deleted from the Table, a footnote being inserted so as to allow any administrations which so wished to use the band for that service.

1.14 The delegate of France thought that Annex 1 offered the best compromise among the texts as they stood; he drew attention, however, to the text proposed by his Delegation, which had already been accepted in relation to the band 2 450 - 2 500 MHz.

1.15 The delegate of Sweden expressed preference for Annex 2 but could accept Annex 1 as a compromise, provided that the provisions of 731 were modified so as to allow an alternative allocation, for Sweden, of the band 1 590 - 1 626.5 MHz to the aeronautical radionavigation service on a primary basis, to the exclusion of RDSS.

1.16 The delegates of Pakistan, the Byelorussian SSR, Romania and Poland supported the retention of Annex 2.

1.17 The delegate of the USSR, supported by the delegate of Hungary, proposed as a compromise the adoption of Annex 2 including the text of ADD 734B with the deletion of the final sentence, beginning "However,".

1.18 The representative of the IFRB (Mr. Brooks) pointed out that the proposal would result in a lack of clarification of status, a situation which would create difficulty for the IFRB. Therefore, a clear decision should be taken so that, following the Article 14 procedure, the status would be identified.

1.19 The representative of the IFRB (Mr. Berrada) said that, pursuant to the text as it stood, agreement notified to the Board without qualification would be entered on a primary basis; but if an administration indicated agreement with another administration on a secondary basis, that agreement would be recorded in the Master Register. In other words, allocation on a secondary basis would be so recorded only if so indicated in the Notice.

1.20 The delegate of the United Kingdom said that the potential difficulty mentioned was a further reason for supporting Annex 1 and the relevant footnote relating to regulatory provisions, which would avoid the problem.

1.21 The delegate of the United States said that Annex 1 offered a possible compromise, with RDSS on a primary basis in Region 2.

1.22 The delegate of Cuba said that his Delegation found the Argentine Delegation's proposal acceptable; it could support Annex 2, with RDSS on a secondary basis in Region 2.

1.23 The delegate of Switzerland wondered whether both Annexes could be considered in conjunction, in a way in which preferences for the respective bands could be expressed, since his Delegation would prefer Annex 1 for certain frequencies and Annex 2 for others.

1.24 The delegate of Finland said that Annexes 1 and 2 alike were possible for his administration.

1.25 The delegate of Tunisia said that his Administration could reluctantly accept RDSS on a secondary basis, but he wondered whether, pursuant ADD 734B, the status would be the same as for the aeronautical radionavigation service.

1.26 The representative of the IFRB (Mr. Berrada) said that for the countries covered by ADD 734B in Annex 1, the services would have the same status, namely, primary; pursuant to ADD 734A, however, the provisions of No. 953 did not apply in the frequency band concerned.

1.27 The delegate of the USSR said that the Table relating to Region 1, in Annex 2, did provide for service on a primary basis through the appropriate footnote. The introduction of a single footnote to replace a large number would provide for greater freedom of choice, subject to agreements pursuant to the Article 14 procedure; RR 427 and RR 428 were clear in that regard.

1.28 The representative of the IFRB (Mr. Brooks) added that the reference to RR 428 was indeed appropriate; unless otherwise indicated, the IFRB would assume a primary basis subject to satisfactory completion of the Article 14 procedure.

1.29 The delegate of the USSR felt that, in any case, the footnote could state that secondary status would apply in regard to the aeronautical radionavigation service. But his Delegation was strongly opposed to including any new allocation in the Table, since the radio determination-satellite service was not sufficiently developed. Moreover, the provisions in Annex 1 would result in overloading the Radio Regulations and imposing undue rigidity throughout the period prior to a subsequent competent conference. He therefore reiterated his proposal, which was also justified technically since harmful interference would be neither caused nor suffered. If difficulties were felt with regard to deleting the last sentence of ADD 734B, perhaps the Board could assist in drafting some alternative. He also agreed that, in Region 2, RDSS should be on a secondary basis.

1.30 The delegate of Argentina pointed out that one of the guidelines proposed by the Chairman, in Document 184, was that the Conference might not introduce a new allocation which would unduly restrict the future use of a band already allocated to a service not included in the agenda for the Conference. The introduction of RDSS on a primary basis in Region 2, pursuant to the Annex 1 provisions, surely contravened that guideline.

1.31 The delegate of Paraguay said that his Delegation could support Annex 1, subject to the clarification referred to by the Argentine Delegation relating to ADD 734C and the observation made by the delegate of Cuba.

1.32 The delegate of Tunisia proposed that the second part of ADD 734B in Annex 2 be amended to read "subject, however, to causing no harmful interference to stations of the services operating in accordance with the Table and following agreement obtained under the procedure set forth .."

1.33 The delegates of the USSR and Bulgaria objected to the proposal.

1.34 The delegate of Italy wondered whether, if secondary status was to be applied as in the USSR Delegation's proposal, another series of notes could be prepared to cover the primary status, since the result would be a need for a whole series of contacts with other administrations.

1.35 The Chairman proposed, as a basis for compromise: Annex 1 - radiodetermination-satellite service on a secondary basis for Regions 1 and 3, and that service on a primary basis in Region 2; ADD 734B for additional categories of service in countries which wished to have it; in addition, two further footnotes to reflect the proposals made by the Argentine and Cuban Delegations; in ADD 734B of Annex 2, an amendment to the effect that the use of those bands for the radiodetermination-satellite service would be subject to agreement obtained under the procedure set forth in Article 14.

1.36 The delegate of the United States said that the proposal implied that any Table allocation would be subject to the Article 14 procedure; but he understood that the latter applied only to footnote or alternative allocations. The difference between Annexes 1 and 2 was very small with regard to secondary allocations; but there was a fundamental difference between a table and a footnote allocation. Care must be taken not to limit freedom of choice unduly. The delegate of the USSR said it should perhaps be added that in Region 1 the RDSS was not to be included in the Table; the Article 14 procedure might then have some significance. The Chairman felt that without inclusion of RDSS in Region 1, the text would be meaningless. The delegate of the USSR said that, if his proposal was followed, RDSS would not be included in the Table allocation in Region 1, but the provisions of ADD 734A and B could be taken from Annex 2 and, if necessary, footnotes could be added to enable administrations to introduce the service on a primary basis, subject, however, to mandatory application of the Article 14 procedure.

1.37 The delegate of Argentina, referring to Annex 1, said that ADD 734C related to a different category of service in his country; he understood that the item had been cancelled.

1.38 The delegate of Cuba said that he could not accept the Chairman's proposals.

1.39 The delegate of Pakistan said that inclusion of RDSS in the Table relating to Region 3 would cause difficulties for his Administration.

1.40 The delegates of Italy and the Netherlands felt that Annex 1 as it stood offered the best solution.

1.41 The representative of the IFRB (Mr. Berrada), replying to a query by the delegate of Burkina Faso, said that if the Table in Annex 1 was adopted together with ADD 734B of Annex 2 consisting of only the first sentence, that sentence would require deletion of the word "also" and would thus relate to a different category of service, since it might then be used for primary basis following the application of Article 14 procedures. If the first sentence alone was retained, but modified for secondary basis, it would be meaningless, since it would merely repeat what was already in the Table. Retention of the original text of that Note would likewise be meaningless, for the same reason.

1.42 The Chairman noted that the two approaches advocated were in fact not very different, one being based on Table allocation and the other on Footnote allocation.

The meeting rose at 1645 hours.

The Secretary: The Chairman:

T. GAVRILOV O. VILLANYI

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WARC FOR THE MOBILE SERVICES
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COMMITTEE 6

NOTE BY THE CHAIRMAN OF COMMITTEE 6

At the continuation of the tenth meeting of Committee 6 on Saturday, 10 October 1987, it was agreed that a revised Article 55 should be produced by the Chairman and the Secretariat based on the existing Article and the texts of Annexes 1-6 of Document 376 as modified by the Committee. This revised Article 55 is given in the annex.

I.R. HUTCHINGS
Chairman of Committee 6

Annex: 1

ANNEX

NOC ARTICLE 55

NOC

Operators' Certificates for Ship Stations and Ship Earth Stations

NOC 3860-3863

ADD 3862A (3a) The service of every ship station and ship earth station using the frequencies and techniques in accordance with Chapter N IX shall be controlled by a person holding a certificate issued or recognized by the government to which the station is subject. Provided the station is so controlled, other persons besides the holder of the certificate may use the equipment.

NOC 3864-3877

MOD **Section II. Categories of Certificates for Ship Station and Ship Earth Station Operators**

NOC 3878-3890

ADD **Section IIA. Categories of Certificates of Operators for Ship Stations and Ship Earth Stations using the frequencies and techniques prescribed in Chapter N IX**

ADD 3890B (1) There are four categories of certificates for operators of ship stations and ship earth stations which use the frequencies and techniques prescribed in Chapter N IX.

ADD 3890C a) First-Class Radio Electronic [Operator's] [Officer's] Certificate;

ADD 3890D b) Second-Class Radio Electronic [Operator's] [Officer's] Certificate;

ADD 3890E c) General Operator's Certificate;

ADD 3890F d) Restricted Operator's Certificate;

ADD 3890FA e) First-Class Technical Certificate;

ADD 3890FB f) Second-Class Technical Certificate.

ADD 3890G (2) The holder of the certificate specified in a), b) and c) may carry out the service of ship stations or ship earth stations using the frequencies and techniques prescribed in Chapter N IX.

ADD 3890H (3) The holder of a certificate specified in d) may carry out the service:

ADD 3890I a) Of ships for which a radio installation is made compulsory by international agreements and which are using the frequencies and techniques prescribed in Chapter N IX, sailing only within the range of VHF coast stations;

ADD 3890J b) Of ships for which a radio installation is not made compulsory by international agreements and which are using the frequencies and techniques prescribed in Chapter N IX, and sailing within the range of MF coast stations.

NOC **Section III. Conditions for the Issue of Operators' Certificates**

NOC 3891-3849

ADD 3949A A. First-Class Radio Electronic [Operator's] [Officer's] Certificate

ADD 3949B The First-Class Radio Electronic [Operator's] [Officers's] Certificate is issued to candidates who have given proof of the technical and professional knowledge and qualifications enumerated below:

ADD 3949BA a) knowledge of the principles of electricity and the theory of radio and electronics sufficient to meet the requirements specified in b), c) and d);

ADD 3949BB

b) theoretical knowledge of GMDSS radiocommunication equipment, including direct-printing telegraph and radiotelephone transmitters and receivers, digital selective calling equipment, ship earth stations, emergency position-indicating radiobeacons, marine antenna systems, radio equipment for lifeboats and other survival crafts together with all auxiliary items including power supplies as well as general knowledge of the principles of other equipment generally used for radionavigation, with particular reference to maintaining the equipment in service;

ADD 3949BC

c) practical knowledge of the operation and knowledge of the preventive maintenance of the equipment mentioned in b);

ADD 3949BD

d) practical knowledge necessary for the location and repairing (using appropriate testing equipment and tools) of faults in the equipment mentioned in b) which may occur during a voyage;

ADD 3949BE

e) detailed practical knowledge of the operation of all GMDSS sub-systems and equipment;

ADD 3949BF

f) ability to send and receive correctly by radiotelephone and direct-printing telegraphy;

ADD 3949BG

g) detailed knowledge of the regulations applying to radiocommunications, knowledge of the documents relating to charges for radiocommunications and knowledge of those provisions of the International Convention for the Safety of Life at Sea, 1974 which relate to radio;

ADD 3949BH

h) sufficient knowledge of one of the working languages of the Union. Candidates should be able to express themselves satisfactorily in that language, both orally and in writing. Each administration shall decide for itself the language required.

ADD 3949BI

B. Second-Class Radio Electronic [Operator's] [Officer's] Certificate

ADD 3949BJ

The Second-Class Radio Electronic [Operator's] [Officer's] Certificate is issued to candidates who have given proof of the technical and professional knowledge and qualifications enumerated below:

ADD 3949BK

a) general knowledge of the principles of electricity and the theory of radio and electronics sufficient to meet the requirements specified in b), c) and d);

ADD 3949BL

b) general theoretical knowledge of GMDSS radiocommunication equipment, including direct-printing telegraph and radiotelephone transmitters and receivers, digital selective calling equipment, ship earth stations, emergency position-indicating radiobeacons, marine antenna systems, radio equipment for lifeboats and other survival craft together with all auxiliary items including power supplies as well as general knowledge of other equipment generally used for radionavigation, [with particular reference to maintaining the equipment in service];

ADD 3949BM

c) practical knowledge of the operation and knowledge of the preventive maintenance of the equipment mentioned in b);

ADD 3949BN

d) practical knowledge sufficient for effecting repairs in the case of faults in the equipment mentioned in b), using the means available on board and if necessary replacing modular units;

ADD 3949BO

e) detailed practical knowledge of the operation of all GMDSS sub-systems and equipment;

ADD 3949BP

f) ability to send and receive correctly by radiotelephone and direct-printing telegraphy;

ADD 3949BQ

g) detailed knowledge of the regulations applying to radiocommunications, knowledge of the documents relating to charges for radiocommunications and knowledge of those provisions of the International Convention for the Safety of Life at Sea, 1974, which relate to radio;

ADD 3949BR

h) sufficient knowledge of one of the working languages of the Union. Candidates should be able to express themselves satisfactorily in that language, both orally and in writing. Each administration shall decide for itself the language required.

ADD 3949CA C. General Operator's Certificate

ADD 3949CB The General Operator's Certificate is issued to candidates who have given proof of the knowledge and qualifications enumerated below:

ADD 3949CC a) detailed practical knowledge of the operation of all GMDSS sub-systems and equipment;

ADD 3949CD b) ability to send and receive correctly by radiotelephone and direct-printing telegraphy;

ADD 3949CE c) detailed knowledge of the regulations applying to radiocommunications, knowledge of the documents relating to charges for radiocommunications and knowledge of those provisions of the International Convention for the Safety of Life at Sea, 1974, which relate to radio;

ADD 3949CF d) sufficient knowledge of one of the working languages of the Union. Candidates should be able to express themselves satisfactorily in that language, both orally and in writing. Each administration shall decide for itself the language required.

ADD 3949DA D. Restricted Operator's Certificate

ADD 3949DB The Restrited Operator's Certificate is issued to candidates who have given proof of the knowledge and qualifications enumerated below:

ADD 3949DC a) practical knowledge of the operation of the GMDSS sub-systems and equipment which is required while the ship is sailing within the range of VHF coast stations;

ADD 3949DD b) ability to send and receive correctly by radiotelephone;

ADD 3949DE c) knowledge of the regulations applying to radiotelephony communications and specifically of that part of those regulations relating to the safety of life;

ADD 3949DF

d) an elementary knowledge of one of the working languages of the Union. Candidates should be able to express themselves satisfactorily in that language, both orally and in writing. Each administration shall decide for itself the language required. Administrations may waive the above language requirements for holders of a restricted operating certificate when the ship station is confined to a limited area specified by the administration concerned. In such cases the certificate shall be suitably endorsed.

ADD 3949E

E. First-Class Technical Certificate

ADD 3949EA

The First-Class Technical [Officer's] Certificate is issued to candidates who have given proof of the technical and professional knowledge and qualifications enumerated below:

ADD 3949EB

a) knowledge of the principles of electricity and the theory of radio and electronics sufficient to meet the requirements specified in b), c) and d);

ADD 3949EC

b) theoretical knowledge of GMDSS radiocommunication equipment, including direct-printing telegraph and radiotelephone transmitters and receivers, digital selective calling equipment, ship earth stations, emergency position-indicating radiobeacons, marine antenna systems, radio equipment for lifeboats and other survival craft together with all auxiliary items including power supplies as well as general knowledge of the principles of other equipment generally used for radionavigation, with particular reference to maintaining the equipment in service;

ADD 3949ED

c) practical knowledge of the operation and knowledge of the preventive maintenance of the equipment mentioned in b);

ADD 3949EE

d) practical knowledge necessary for the location and repairing (using appropriate testing equipment and tools) of faults in the equipment mentioned in b) which may occur during a voyage;

ADD 3949F F. Second-Class Technical Certificate

ADD 3949FA The Second-Calss Technical [Officer's] Certificate is issued to candidates who have given proof of the technical and professional knowledge and qualifications enumerated below:

ADD 3949FB a) [general] [elementary] knowledge of the principles of electricity and the theory of radio and electronics sufficient to meet the requirements specified in b), c) and d);

ADD 3949FC b) [general] [elementary] theoretical knowledge of GMDSS radiocommunication equipment, including direct-printing telegraph and radiotelephone transmitters and receivers, digital selective calling equipment, ship earth stations, emergency position-indicating radiobeacons, marine antenna systems, radio equipment for lifeboats and other survival craft together with all auxiliary items including power supplies as well as a general knowledge of the principles of other equipment generally used for radionavigation, [with particular reference to maintaining the equipment in service];

ADD 3949FD c) practical knowledge of the operation and knowledge of the preventive maintenance of the equipment mentioned in b);

ADD 3949FE [d) practical knowledge sufficient for effecting repairs in the case of faults in the equipment mentioned in b), using the means available on board and if necessary, replacing modular units;]

ADD 3949FF [d) practical knowledge sufficient for effecting repairs in the case of minor faults in the equipment mentioned in b), using the means available on board and if necessary, replacing modular units;]

ADD 3949FG [d) location and repair of simple faults such as the replacement of blown fuses and indicator lamps;]

NOC 3950-3953

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COMMITTEE 4

NOTE FROM THE CHAIRMAN OF WORKING GROUP 4-C
TO THE CHAIRMAN OF COMMITTEE 4

Following the work carried out in Working Group 4-C, further consequential amendments have to be made to a number of existing Recommendations.

These Recommendations have not been discussed in Working Group 4-C.

It is proposed to take the following action:

NOC Recommendation No. 302.

MOD Recommendation No. 303: the only change to be made is to modify the frequency 6 215.5 kHz into 6 215 kHz.

NOC Recommendation No. 304.

SUP Recommendation No. 314.

A.R. VISSER
Chairman of Working Group 4-C

BLUE PAGES

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 411-E
10 October 1987

B.11 PLENARY MEETING

ELEVENTH 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	Documents	Title
COM.4	141 (166)	Article 12
COM.4	358 (390)	Appendix 18
Tech WG PL	392	Appendix 37 Appendix 39
COM.4	309 (390)	Resolution COM4/1
COM.4	358 (390)	Resolution COM4/2 Recommendation COM4/A Recommendation COM4/B

Y.C. MONGELARD
Chairman of Committee 7

Annex: 16 pages

ARTICLE 12

(MOD) 1314 The provisions of Nos. 1311 to 1313 do not apply to frequency assignments which are in conformity with the Allotment Plans appearing in Appendices 25, 26 and 27 Aer2 to these Regulations; such frequency assignments shall be entered in the Master Register on receipt of the notice by the Board.

SUP Footnote on page RR 12-16.

MOD 1332 (4A) Any notice which has received a favourable finding with respect to No. 1328 but an unfavourable finding with respect to No. 1329 shall be returned to the notifying administration unless the administration has initiated the procedure of Article 16 in accordance with No. 1719.

ADD 1332A (5) Any notice which makes reference to No. 1719 shall be recorded provisionally in the Master Register, if the finding with respect to No. 1328 is favourable. In this case the Board shall review the recording after the notifying administration has applied the procedure of Article 16.

(MOD) 1336 b) the frequency corresponds to one of the frequencies specified in Column 1 of the Allotment Plan for the aeronautical mobile (R) service contained in Appendix 27 Aer2 (Part II, Section II, Article 2), or the assignment is the result of a permitted change of class of emission and the necessary bandwidth of the new emission is within the channelling arrangement provided for in Appendix 27 Aer2;

SUP Footnote on page RR 12-18.

(MOD) 1338 d) the notice is in conformity with the technical principles of the Plan set forth in Appendix 27 Aer2;

SUP Footnote on page RR 12-19.

(MOD) 1341 In the case of a notice in conformity with the provisions of Nos. 1335, 1336 and 1338, but not with those of Nos. 1337 or 1339, the Board shall examine whether the protection specified in Appendix 27 Aer2 (Part I, Section IIA, paragraph 5) is afforded to the allotments in the Plan and to assignments already recorded in the Master Register with a favourable finding with respect to this present provision. In doing so, the Board shall assume that the frequency will be used in accordance with the "Sharing conditions between areas" specified in Appendix 27 Aer2 (Part I, Section IIB, paragraph 4).

ADD 1344A aa) the notice is in conformity with the provisions of No. 1240.

ADD 1348A (4) A notice which is not in conformity with the provisions of No. 1344A shall be examined with respect to Nos. 1267 and 1268. The date to be entered in Column 2b shall be determined in accordance with the relevant provisions of Section III of this Article.

MOD 1349 (5) Except for cases where No. 1268 applies, all frequency assignments referred to in No. 1343 shall be recorded in the Master Register according to the findings reached by the Board. The date to be entered in Column 2a or 2b shall be that determined in accordance with the relevant provisions of Section III of this Article.

MOD 1393 (3) For all other cases referred to in No. 1315, the date of receipt of the notice by the Board shall be entered in Column 2b.

(MOD) 1451 The provisions of Sections V, VI (excepting No. 1430) and VII of this Article shall not be applied to frequency assignments which are in conformity with the Allotment Plans contained in Appendices 25, 26 and 27 Aer2 to these Regulations.

SUP Footnote on page RR 12-34.

(MOD)

APPENDIX 18
Mob-87

Table of Transmitting Frequencies in the Band 156 - 174 MHz for Stations in the Maritime Mobile Service

(See Nos. 613, 613A and 613B and Articles 59 and 60)

MOD Note 1: For assistance in understanding the Table, see notes a) to q) below.

MOD Note 2: Channels 01 to 28, except 15 and 17, correspond to the channels of Appendix 18 to the Radio Regulations, Geneva, 1959, and channels 15, 17 and 60 to 88 correspond to those additional channels made available for assignment in accordance with the provisions of Appendix 18 Mar to the Radio Regulations, Geneva, 1967.

NOC Note 3: Channel designators 60 to 88 were chosen for the additional channels in order to separate them clearly from the original channels.

Channel designators	Notes	Transmitting frequencies (MHz)		Inter-ship	Port operations		Ship movement		Public correspondence
		Ship stations	Coast stations		Single frequency	Two frequency	Single frequency	Two frequency	
60	*h)*	156.025	160.625			17		9	25
01		156.050	160.650			10		15	8
61		156.075	160.675			23		3	19
02		156.100	160.700			8		17	10
62		156.125	160.725			20		6	22
03		156.150	160.750			9		16	9
63		156.175	160.775			18		8	24
04		156.200	160.800			11		14	7
64		156.225	160.825			22		4	20
05		156.250	160.850			6		19	12
65		156.275	160.875			21		5	21
06	*g)*	156.300		1					
66		156.325	160.925			19		7	23
07		156.350	160.950			7		18	11
67	*l)*	156.375	156.375	9	10		9		
08		156.400		2					
68	*n)*	156.425	156.425		6		2		
09	*m)*	156.450	156.450	5	5		12		
69	*n)*	156.475	156.475	8	11		4		
10	*l)*	156.500	156.500	3	9		10		
70	*p)*	156.525	156.525	Digital selective calling for distress, safety and calling					
11	*n)*	156.550	156.550		3		1		
71	*n)*	156.575	156.575		7		6		
12	*n)*	156.600	156.600		1		3		
72	*m)*	156.625		6					
13	q)	156.650	156.650	4	4		5		
73	*l)*	156.675	156.675	7	12		11		
14	*n)*	156.700	156.700		2		7		
74	*n)*	156.725	156.725		8		8		

Channel designators	Notes	Transmitting frequencies (MHz)		Inter-ship	Port operations		Ship movement		Public correspondence
		Ship stations	Coast stations		Single frequency	Two frequency	Single frequency	Two frequency	
15	*j)*	156.750	156.750	11	14		14		
75			Guardband 156.7625 – 156.7875 MHz						
16		156.800	156.800	DISTRESS, SAFETY AND CALLING					
76		Guardband 156.8125 - 156.8375 MHz							
17	*j)*	156.850	156.850	12	13		13		
77		156.875		10					
18	*f)*	156.900	161.500			3		22	
78		156.925	161.525			12		13	27
19	*f)*	156.950	161.550			4		21	
79	*f) n)*	156.975	161.575			14		1	
20	*f)*	157.000	161.600			1		23	
80	*f) n)*	157.025	161.625			16		2	
21	*f)*	157.050	161.650			5		20	
81		157.075	161.675			15		10	28
22	f)	157.100	161.700			2		24	
82		157.125	161.725			13		11	26
23		157.150	161.750						5
83		157.175	161.775						16
24		157.200	161.800						4
84		157.225	161.825			24		12	13
25		157.250	161.850						3
85		157.275	161.875						17
26		157.300	161.900						1
86	*o)*	157.325	161.925						15
27		157.350	161.950						2
87		157.375	161.975						14
28		157.400	162.000						6
88	*h)*	157.425	162.025						18

NOTES REFERRING TO THE TABLE

NOC a)

NOC b)

NOC c)

MOD d) The channels of the present Appendix, with the exception of channels 06, 13, 15, 16, 17, 70, 75 and 76, may also be used for highspeed data and facsimile transmissions, subject to special arrangement between interested and affected administrations.

MOD e) The channels of the present Appendix, preferrably two adjacent channels from the series 87, 28, 88, with the exception of channels 06, 13, 15, 16, 17, 70, 75 and 76, may be used for direct-printing telegraphy and data transmission, subject to special arrangement between interested and affected administrations.

NOC f)

MOD g) The frequency 156.300 MHz (channel 06) (see Nos. 2993, [N 2993] and 4154) may also be used for communication between ship stations and aircraft stations engaged in coordinated search and rescue operations. Ship stations shall avoid harmful interference to such communications on channel 06 as well as to communications between aircraft stations, ice-breakers and assisted ships during ice seasons.

NOC h)

NOC i)

NOC j)

MOD k) (Not allocated)

NOC l)

NOC m)

MOD n) These channels (68, 69, 11, 71, 12, 14, 74, 79 and 80) are the preferred channels for the ship movement service. They may, however, be assigned to the port operations service until required for the ship movement service if this should prove to be necessary in any specific area.

NOC o)

MOD p) This channel (70) is to be used exclusively for digital selective calling for distress, safety and calling (see Resolution [COM4/2]).

ADD q) Channel 13 is designated for use on a world-wide basis as a navigation safety communication channel, primarily for intership navigation safety. It may also be assigned to the ship movement and port operations services subject to the national regulations of the administrations concerned.

NOC APPENDIX 37

NOC APPENDIX 39

Resolutions

SUP RESOLUTION No. 302

SUP RESOLUTION No. 314

RESOLUTION COM4/1

Relating to the Use of the Band 136 - 137 MHz by the Services other than the Aeronautical Mobile (R) Service

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

noting

a) the provisions of No. 595 concerning the use of the band 136 - 137 MHz by the aeronautical mobile (R) service commencing on 1 January 1990;

b) that frequencies allocated to the aeronautical mobile (R) service are reserved for communications related to safety and regularity of flight and therefore require special measures to ensure freedom from harmful interference;

considering

a) that the Table of Frequency Allocations includes allocations in the band 136 - 137 MHz to the aeronautical mobile (R) service on a primary basis, to the aeronautical mobile (OR) service in some countries (No. 594A) on a permitted basis and to the fixed and mobile, except aeronautical mobile (R), services on a secondary basis;

b) that No. 595 also made provides for allocation to the space operation service (space-to-Earth), the meteorological-satellite service (space-to-Earth) and the space research service (space-to-Earth) on a primary basis up to 1 January 1990, and thereafter on a secondary basis, and that the aeronautical mobile (R) service can be introduced only after 1 January 1990;

c) that from that date the aeronautical mobile (R) service may be subject to interference harmful to the safety of air navigation and that it is therefore necessary to protect this service from harmful interference that might be caused by stations in the fixed service, the mobile except aeronautical mobile (R) service, the space research service (space-to-Earth), the space operation service (space-to-Earth) and the meteorological-satellite service (space-to-Earth);

resolves

1. that administrations operating or intending to operate, stations in the fixed service, the mobile except aeronautical mobile (R) service, the space research service (space-to-Earth), the space operation service (space-to-Earth) and the meteorological-satellite service (space-to-Earth) in the band 136 - 137 MHz from 1 January 1990, take all necessary steps to protect the aeronautical mobile (R) service;

2. to request administrations to refrain from authorizing new assignments, as from 1 January 1990, to the services to which the band 136 - 137 MHz is allocated on a secondary basis.

recommends

1. that administrations cease operation of stations of the other services to which the band is allocated on a secondary basis as and when the stations of the aeronautical mobile (R) service come into operation;

2. that a future competent world administrative radio conference consider the deletion of all secondary allocations from the band 136 - 137 MHz;

invites the Administrative Council

to place this matter on the agenda of the next competent world administrative radio conference.

RESOLUTION COM4/2

Relating to the Implementation and Use of Frequency 156.525 MHz for Digital Selective Calling for Distress, Safety and Calling

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

noting

that the World Administrative Radio Conference for the Mobile Services, 1983 designated, on an exclusive basis, the frequency 156.525 MHz for distress and safety calling by digital selective calling techniques;

considering

a) that the frequency 156.525 MHz became available for distress and safety calling using digital calling techniques on 1 January 1986;

b) that this Conference has decided that the frequency 156.525 MHz may also be used for other calling purposes using digital calling techniques;

c) that the Final Acts of this Conference will enter into force on [ ];

d) that there is an urgent need to implement, at the earliest possible date, use of digital selective calling techniques on 156.525 MHz for calling purposes in addition to distress and safety calling;

e) that every effort must be made to prevent the use of 156.525 MHz for purposes other than digital selective calling in the maritime mobile service;

f) that the use of 156.525 MHz for other maritime mobile communication purposes must cease as soon as practical;

resolves

that as of 1 January 1988, the frequency 156.525 MHz in the maritime mobile service shall be used exclusively for digital selective calling for distress, safety and calling;

urges administrations

to take all practical measures, including the possible use of technical means, to prevent, as soon as possible and not later than 1 January 1988, any maritime mobile use of the frequency 156.525 MHz other than indicated in the resolves;

instructs the Secretary-General

to communicate this Resolution to the International Maritime Organization.

RECOMMENDATION COM4/A

Relating to the Provision of Frequency Bands for Feeder Links in the Fixed-Satellite Service for the Mobile-Satellite Service or for the Aeronautical [,Land], or Maritime Mobile-Satellite Services in the Bands 1 530 - 1 559 MHz and 1 626.5 - 1 660.5 MHz

The World Administrative Radio Conference for Mobile Services, Geneva, 1987,

considering

a) that No. 726 of the Radio Regulations provides that the allocation to the maritime mobile-satellite service in the band 1 530 - 1 535 MHz shall be effective from 1 January 1990, and that up to that date the fixed service shall be on a primary basis in Regions 1 and 3;

b) that feeder links are required for the aeronautical mobile-satellite service, the [land mobile-satellite service], the maritime mobile-satellite service and the mobile-satellite service operating in the bands 1 530 - 1 559 MHz and 1 626.5 - 1 660.5 MHz;

c) that, although No. 27 of the Radio Regulations provides that such feeder links may be part of the mobile-satellite service, No. 22 of the Radio Regulations indicates that the fixed-satellite service may also include feeder links for the mobile-satellite services;

d) that the majority of such feeder links are in the bands 3 400 - 4 200 MHz and 5 925 - 7 075 MHz;

e) that the bands mentioned in considering d) above are becoming increasingly congested, thus causing some difficulties during the coordination process;

f) that the lack of inhomogeneity of the technical characteristics of the feeder links of the mobile-satellite services and the links of the fixed-satellite service results in coordination difficulties;

g) that distress and safety traffic is carried on feeder links of the mobile-satellite services;

h) that the extension of the spectrum necessary for feeder links in contiguous frequency bands would be desirable from a technical and economic point of view, but may cause significant problems of sharing or allocation, or both;

noting

that, at this Conference, certain administrations made proposals for sub-bands in the frequency bands 3 400 - 4 200 MHz and 5 925 - 7 075 MHz in which the feeder links for the aeronautical, [land], maritime and mobile-satellite services would have priority over other assignments to the fixed-satellite service, while other administrations considered that the frequency spectrum required for the feeder links for the mobile-satellite services can more readily be provided in the fixed-satellite service bands by the normal coordination process;

recommends

that the World Administrative Radio Conference on the Use of the Geostationary-Satellite Orbit and on the Planning of the Space Services Utilizing It (WARC ORB-88) take note of the concerns expressed in the considerings and noting above in its decisions with respect to feeder links for the aeronautical mobile-satellite service, [the land mobile-satellite service], the maritime mobile-satellite service and the mobile-satellite service in the bands 1 530 - 1 559 MHz and 1 626.5 - 1 660.5 MHz;

invites the CCIR

to continue its study relating to this matter;

instructs the Secretary-General

to forward this Recommendation to WARC ORB-88.

RECOMMENDATION COM4/B

Relating to Improved Efficiency in the Use of the Appendix 18 VHF Frequency Spectrum for Maritime Mobile Communications

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

a) that growth in the use of Appendix 18 VHF maritime mobile channels is expected to continue;

b) that in many parts of the world significant congestion already exists;

c) that increases in congestion could be harmful to the safe movement and operation of vessels and port operations and are a matter of concern to the International Association of Lighthouse Authorities, the International Maritime Organization and many administrations;

noting

a) that it may be possible to make more efficient use of the VHF maritime mobile spectrum with the development of existing or new technologies such as narrow-band FM, single sideband, compandored sideband, use of interleaved channels separated by 12.5 kHz, reduced channel spacing, etc.;

b) that a great number of mariners using low-cost transceivers rely on this band and the safety services that are thereby provided;

c) that any modification to Appendix 18 shall take account of the distress and safety utilization;

invites the CCIR

urgently to undertake studies to determine the most appropriate means of promoting a more efficient use of the frequency spectrum in the VHF maritime mobile band and to develop Recommendations covering the technical and operational characteristics of systems using this band;

invites administrations

to participate in these studies actively;

recommends

that a future competent administrative radio conference review and revise, if appropriate, the provisions of Appendix 18, taking into account the relevant CCIR Recommendations;

instructs the Secretary-General

to communicate this Recommendation to the International Association of Lighthouse Authorities and the International Maritime Organization.

VOIE N°	Bande des 12 MHz[5] (suite)	
	EMISSION	RECEPTION

CHANNEL No.	12 MHz BAND[5] (cont.)	
	TRANSMIT	RECEIVE

CANAL	BANDA DE 12 MHz[5]	
	TRANSMISION	RECEPCION

1	12579.5	12477
2	12580	12477.5
3	12580.5	12478
4	12581	12478.5
5	12581.5	12479
6	12582	12479.5
7	12582.5	12480
8	12583	12480.5
9	12583.5	12481
10	12584	12481.5
11	12584.5	12482
12	12585	12482.5
13	12585.5	12483
14	12586	12483.5
15	12586.5	12484
16	12587	12484.5
17	12587.5	12485
18	12588	12485.5
19	12588.5	12486
20	12589	12486.5
21	12589.5	12487
22	12590	12487.5
23	12590.5	12488
24	12591	12488.5
25	12591.5	12489
26	12592	12489.5
27	12592.5	12490
28	12593	12490.5
29	12593.5	12491
30	12594	12491.5
31	12594.5	12492
32	12595	12492.5
33	12595.5	12493
34	12596	12493.5
35	12596.5	12494
36	12597	12494.5
37	12597.5	12495
38	12598	12495.5
39	12598.5	12496
40	12599	12496.5
41	12599.5	12497
42	12600	12497.5
43	12600.5	12498
44	12601	12498.5
45	12601.5	12499
46	12602	12499.5
47	12602.5	12500

ADD 5 [5]Toutes les fréquences de réception des stations côtières sur les voies N[os] 58 à 156 inclusivement peuvent être utilisées par des stations de navire pour les émissions de télégraphie Morse de classes A1A et A1B (fréquences de travail) à l'exception de la voie N° 87 (voie N 2988F).

ADD 5 [5]Ship stations may use the coast station receiving frequencies of channels Nos. 58 up to and including 156 for transmitting A1A and A1B Morse telegraphy (working), with exception of channel No. 87, see N 2988F.

ADD 5 [5]Para la transmisión en telegrafía Morse de clase A1A y A1B (trabajo), las estaciones de barco podrán utilizar todas las frecuencias de recepción de los canales Nº 58 a 156 inclusive de las estaciones costeras, a excepción del canal 87, véase el número N 2988F.

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

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COMMITTEE 4

THIRD REPORT BY WORKING GROUP 4-C TO COMMITTEE 4

1. Working Group 4-C met ten times.

2. At its sixth meeting it established Sub-Working Group 4-C-2 in which representatives of the following delegations participated: Brazil, Canada, China, Japan, Morocco, United Kingdom, Ukraine, United States and USSR.

3. Sub-Working Group 4-C-2 met seven times and established, on the basis of the basic principles contained in Annex 1 to Document 227, a draft of a revised Appendix 31.

4. At its seventh meeting Working Group 4-C approved the revised Appendix 31 (see Annex 1).

5. In Annex 2 a compilation is given of the results of the work of Working Group 4-C for the HF bands allocated exclusively to the maritime mobile service together with the present situation in Appendix 31.

6. The attention of Committee 4 is drawn to the possibility that the frequencies (non-paired) assignable to ship stations for NBDP telegraphy may also be used for A1A and A1B Morse telegraphy (working) (see heading of the relevant columns in Appendix 31(Rev.)).

The Working Group decided that frequencies from those sub-bands may also be used for NBDP telegraphy, duplex operation, (see Appendix 33(Rev.) in Annex 6). When doing so, coast station frequencies should be selected by administrations from the sub-bands for coast station wideband telegraphy, A1A and A1B Morse telegraphy, facsimile, special and data transmission systems.

7. In order to maintain the possibilities for A1A and A1B Morse telegraphy (working) it was decided that the newly added frequencies (paired) assignable to ship stations for NBDP telegraphy may also be used for ship stations for A1A and A1B Morse telegraphy (working). The frequencies to which this applies are duly marked in Appendix 32(Rev.) (see Annex 5). However, in the 4 MHz band the Working Group decided that all frequencies (paired) assignable to ship stations for NBDP telegraphy may be used for A1A and A1B Morse telegraphy (working). This is to preserve, in the 4 MHz band, sufficient possibilities for A1A and A1B Morse telegraphy (working).

8. It was not possible to retain unchanged in all cases the frequencies for use in the GMDSS for DSC, NBDP telegraphy and single-sideband telephony. Annex 3 contains, among others, the list of frequencies for use in the GMDSS.

9. The frequency 8 364 kHz (see RR 501, RR 2987, RR 2988 and RR 3005) does not need to be changed.

10. The Working Group succeeded in maintaining the harmonic relationship between the common channels in the 4, 6, 8, 12 and 16 MHz bands while using a channel width of 0.5 kHz (see Appendix 34(Rev.) in Annex 7).

11. As can be seen in Annex 7 the format of Appendix 34(Rev.) is not changed, thus no changes need to be made in the annex to Resolution No. 312.

12. Following the decision of Committee 5 (Document 257 refers) the Working Group provided for an exclusive frequency in the 8 MHz band for the GMDSS for distress and safety traffic using single-sideband telephony (viz. 8 291 kHz).

13. One exclusive frequency in each of the 4, 6, 8, 12, 16, 18/19, 22 and 25/26 MHz bands was selected from the sub-bands for coast stations NBDP telegraphy (paired frequencies) for the transmission of Maritime Safety Information (MSI).

14. Following the decision in Committee 5 (Document 204), the Working Group selected from the sub-bands in the 4 MHz band for coast stations for NBDP (paired frequencies) an exclusive frequency for NAVTEX type information (see Annex 3).

15. Additional frequencies for radiotelephony, duplex operation, are provided in the 4 and 8 MHz bands. However, for only 1 of the 3 additional coast station frequencies in the 4 MHz band a corresponding ship station frequency is provided. In the 8 MHz band for only 1 of 5 additional coast station frequencies a corresponding ship station frequency is provided. The "missing" ship station frequencies (e.g. 2 in the 4 MHz band and 4 in the 8 MHz band) to be used for telephony duplex operation, should be selected by administrations from the sub-bands for radiotelephony, simplex operation, or from the shared bands 4 000 - 4 063 kHz or 8 100 - 8 195 kHz. However, it was noted that it may not be possible to use this option in all parts of the world.

16. Concerning the channelling in Appendix 31(Rev.) the Working Group decided to place the carrier frequencies for telephony on integer multiples of 1 kHz (see principle No. 1 in Annex 1 to Document 227).

17. Concerning the channelling for A1A and A1B Morse telegraphy (working and calling frequencies) and NBDP telegraphy the Working Group decided to place the "assignable frequencies" on multiples of both 0.5 kHz and 1 kHz.

18. Consideration has been given to a possible merging of Appendices 16, 32, 33, 34 and 35 in a revised Appendix 31. The Working Group decided not to merge these appendices.

19. The Working Group approved the revisions of Appendices 16, 32, 33, 34 and 35, which can be found in Annexes 4 to 8 respectively.

20. The attention of Committee 4 is drawn to amendments which are to be made in Articles 8 and 12 consequential to the revision of Appendix 31. The relevant amendments are shown in Annex 9.

21. Consequential amendments are also to be made to Chapters IX, N IX and XI.

22. Following the reduction of the channel-width for telephony from 3.1 kHz to 3 kHz, consequential changes have to be made to Appendix 25. The attention of Committee 4 is drawn to the fact that the allotments in the said Appendix can remain on the same channel numbers.

23. The Working Group decided that the implementation of the revision of Appendix 31 and the other appendices appearing in Annexes 1 and 4 to 8 to this document) should be done on a single date to be determined by this Conference. However, this date should not be before 1 July 1989 (see Resolution No. 8). It was noted that in case the Conference decides not to implement Appendices 16(Rev.), 31(Rev.), 32(Rev.), 33(Rev.), 34(Rev.) and 35(Rev.) on the same date as the date of coming into force of the Final Acts of this Conference, a Resolution is needed to regulate the implementation of the said appendices.

24. The Working Group approved the text of Recommendation COM4/E (see Annex 10).

A.R. VISSER
Chairman of Working Group 4-C

Annexes: 10

ANNEX 1

APPENDIX 31(Rev.)

AP31(Rev.)

MOD

Table of Frequencies to Be Used in the Bands
Between 4 000 kHz and 27 500 kHz
Allocated Exclusively to the
Maritime Mobile Service

Band MHz	Limits kHz	Frequencies assignable to ship stations for oceanographic data transmission	Limits kHz	Frequencies assignable to ship stations for telephony, duplex operation	Limits kHz	Frequencies assignable to ship and coast stations for telephony, simplex operation	Limits kHz	Frequencies assignable to ship stations for wide-band telegraphy, facsimile and special transmission systems	Limits kHz
		c)		a) i)		a)			
4	4063	4063.3 4064.8 6 f. 0.3 kHz	4065	4066.4 4144.4 27 f. 3 kHz	4146	4147.4 4150.4 2 f. 3 kHz	4152	4154 4170 5 f. 4 kHz	4172
6	6200		6200	6201.4 6222.4 8 f. 3 kHz	6224	6225.4 6231.4 3 f. 3 kHz	6233	6235 6259 7 f. 4 kHz	6261
8	8195		8195	8196.4 8292.4 32 f. 3 kHz	8294	8295.4 8298.4 2 f. 3 kHz	8300	8302 8338 10 f. 4 kHz	8340
12	12230		12230	12231.4 12351.4 41 f. 3 kHz	12353	12354.4 12366.4 5 f. 3 kHz	12368	12370 12418 13 f. 4 kHz	12420
16	16360		16360	16361.4 16526.4 56 f. 3 kHz	16528	16529.4 16547.4 7 f. 3 kHz	16549	16551 16615 17 f. 4 kHz	16617
18/19	18780		18780	18781.4 18823.4 15 f. 3 kHz	18825	18826.4 18844.4 7 f. 3 kHz	18846	18848 18868 6 f. 4 kHz	18870
22	22000		22000	22001.4 22157.4 53 f. 3 kHz	22159	22160.4 22178.4 7 f. 3 kHz	22180	22182 22238 15 f. 4 kHz	22240
25/26	25070		25070	25071.4 25098.4 10 f. 3 kHz	25100	25101.4 25119.4 7 f. 3 kHz	25121	25123 25159 10 f. 4 kHz	25161.25

f. = fréquences/frequencies/frecuencias

Band MHz	Limits kHz	Frequencies assignable to ship stations for oceanographic data transmission	Limits kHz	Frequencies (paired) assignable to ship stations for NBDP telegraphy and data transmission systems at speeds not exceeding 100 bauds for FSK and 200 bauds for PSK	Limits kHz	Calling frequencies assignable to ship stations for A1A or A1B Morse telegraphy	Limits kHz	Frequencies (paired) assignable to ship stations for NBDP telegraphy and data transmission systems at speeds not exceeding 100 bauds for FSK and 200 bauds for PSK	Limits kHz
		c)		d) j) m)		g)		d) m)	
4	4172		4172	4172.5 4181.5 19 f. 0.5 kHz	4181.75		4186.75		4186.75
6	6261	6261.3 6262.5 5 f. 0.3 kHz	6262.75	6263 6275.5 26 f. 0.5 kHz	6275.75		6280.75	6281 6284.5 8 f. 0.5 kHz	6284.75
8	8340	8340.3 8341.5 5 f. 0.3 kHz	8341.75		8341.75		8341.75		8341.75
12	12420	12420.3 12421.5 5 f. 0.3 kHz	12421.75		12421.75		12421.75		12421.75
16	16617	16617.3 16618.5 5 f. 0.3 kHz	16618.75		16618.75		16618.75		16618.75
18/19	18870		18870		18870		18870		18870
22	22240	22240.3 22241.5 5 f. 0.3 kHz	22241.75		22241.75		22241.75		22241.75
25/26	25161.25		25161.25		25161.25		25161.25		25161.25

f. = fréquences/frequencies/frecuencias

Bands MHz	Limits kHz	Working frequencies assignable to ship stations for A1A or A1B Morse telegraphy	Limits kHz	Calling frequencies assignable to ship stations for A1A or A1B Morse telegraphy	Limits kHz	Working frequencies assignable to ship stations for A1A or A1B Morse telegraphy	Limits kHz	Frequencies (paired) assignable to ship stations for NBDP telegraphy and data transmission systems at speeds not exceeding 100 bauds for FSK and 200 bauds for PSK	Limits kHz
		e) f)		g)		e) f)		d) j) m)	
4	4186.75	4187 4202 31 f. 0.5 kHz	4202.25		4202.25		4202.25		4202.25
6	6284.75	6285 6300 31 f. 0.5 kHz	6300.25		6300.25		6300.25		6300.25
8	8341.75	8342 8365.5 48 f. 0.5 kHz	8365.75		8370.75	8371 8376 40 f. 0.5 kHz	8376.25	8376.5 8396 40 f. 0.5 kHz	8396.25
12	12421.75	12422 12476.5 110 f. 0.5 kHz	12476.75		12476.75		12476.75	12477 12549.5 146 f. 0.5 kHz	12549.75
16	16618.75	16619 16683 129 f. 0.5 kHz	16683.25		16683.25		16683.25	16683.5 16733.5 101 f. 0.5 kHz	16733.75
18/19	18870		18870		18870		18870	18870.5 18892.5 45 f. 0.5 kHz	18892.75
22	22241.75	22242 22279 75 f. 0.5 kHz	22279.25		22284.25		22284.25	22284.5 22351.5 135 f. 0.5 kHz	22351.75
25/26	25161.25	25161.5 25171 20 f. 0.5 kHz	25171.25		25172.75		25172.75	25173 25192.5 40 f. 0.5 kHz	25192.75

f. = fréquences/frequencies/frecuencias

Band MHz	Limits kHz	Calling frequencies assignable to ship stations for A1A or A1B Morse telegraphy	Limits kHz	Frequencies (paired) assignable to ship stations for NBDP telegraphy and data transmission systems at speeds not exceeding 100 bauds for FSK and 200 bauds for PSK	Limits kHz	Frequencies (non-paired) assignable to ship stations for NBDP and A1A, A1B Morse telegraphy (working)	Limits kHz	Frequencies assignable to ship stations for Digital Selective Calling	Limits kHz
		g)		d) m)		b)		k) [l)]	
4	4202.25		4202.25		4202.25	4202.5 4207 10 f. 0.5 kHz	4207.25	4207.5 4209 4 f. 0.5 kHz	4209.25
6	6300.25		6300.25		6300.25	6300.5 6311.5 23 f. 0.5 kHz	6311.75	6312 6313.5 4 f. 0.5 kHz	6313.75
8	8396.25		8396.25		8396.25	8396.5 8414 36 f. 0.5 kHz	8414.25	8414.5 8416 4 f. 0.5 kHz	8416.25
12	12549.75		12554.75	12555 12559.5 10 f. 0.5 kHz	12559.75	12560 12576.5 34 f. 0.5 kHz	12576.75	12577 12578.5 4 f. 0.5 kHz	12578.75
16	16733.75		16738.75	16739 16784.5 92 f. 0.5 kHz	16784.75	16785 16804 39 f. 0.5 kHz	16804.25	16804.5 16806 4 f. 0.5 kHz	16806.25
18/19	18892.75		18892.75		18892.75	18893 18898 11 f. 0.5 kHz	18898.25	18898.5 18899.5 3 f. 0.5 kHz	18899.75
22	22351.75		22351.75		22351.75	22352 22374.5 46 f. 0.5 kHz	22374.75	22375 22376 3 f. 0.5 kHz	22376.25
25/26	25192.75		25192.75		25192.75	25193 25208 31 f. 0.5 kHz	25208.25	25208.5 25209.5 3 f. 0.5 kHz	25210

f. = fréquences/frequencies/frecuencias

Band MHz	Limits kHz	Frequencies (paired) assignable to coast stations for NBDP and data transmission systems, at speeds not exceeding 100 bauds for FSK and 200 bauds for PSK	Limits kHz	Frequencies assignable to coast stations for digital selective calling	Limits kHz	Frequencies assignable to coast stations for wide-band and A1A or A1B Morse telegraphy, facsimile, special and data transmission systems and direct-printing telegraphy systems	Limits kHz	Frequencies assignable to coast stations for telephony, duplex operation	Limits kHz
		d) o)						a)	
4	4209.25	4209.5 4219 20 f. 0.5 kHz	4219.25	4219.5 4220.5 3 f. 0.5 kHz	4221		4351	4352.4 4436.4 29 f. 3 kHz	4438
6	6313.75	6314 6330.5 34 f. 0.5 kHz	6330.75	6331 6332 3 f. 0.5 kHz	6332.5		6501	6502.4 6523.4 8 f. 3 kHz	6525
8	8416.25	8416.5 8436 40 f. 0.5 kHz	8436.25	8436.5 8437.5 3 f. 0.5 kHz	8438		8707	8708.4 8813.4 37 f. 3 kHz	8815
12	12578.75	12579 12656.5 156 f. 0.5 kHz	12656.75	12657 12658 3 f. 0.5 kHz	12658.5		13077	13078.4 13198.4 41 f. 3 kHz	13200
16	16806.25	16806.5 16902.5 0.5 kHz	16902.75	16903 16904 3 f. 0.5 kHz	16904.5		17242	17243.4 17408.4 56 f. 3 kHz	17410
18/19	19680.25	19680.5 19703 193 f. 0.5 kHz	19703.25	19703.5 19704.5 3 f. 0.5 kHz	19705		19755	19756.4 19798.4 15 f. 3 kHz	19800
22	22375.75	22376 22443.5 46 f. 0.5 kHz	22443.75	22444 22445 3 f. 0.5 kHz	22445.5		22696	22697.4 22853.4 53 f. 3 kHz	22855
25/26	26100.25	26100.5 26120.5 41 f. 0.5 kHz	26120.75	26121 26122 3 f. 0.5 kHz	26122.5		26145	26146.4 26173.4 10 f. 3 kHz	26175

f. = fréquences/frequencies/frecuencias

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ADD NOTES REFERRING TO THE TABLE

MOD a) See Appendix 16(Rev.).

MOD b) See Appendix 33(Rev.)

MOD c) The frequency bands may also be used by buoy stations for oceanographic data transmission and by stations interrogating these buoys.

MOD d) See Appendix 32(Rev.).

MOD e) In the frequency bands to be used by ship stations for A1A Morse telegraphy working at speeds not exceeding 40 bauds, administrations may assign additional frequencies interleaved between the assignable frequencies. Any frequencies so assigned shall be multiples of 100 Hz. Administrations shall ensure a uniform distribution of such assignments within the bands.

MOD f) See Appendix 35(Rev.).

MOD g) See Appendix 34(Rev.).

NOC h)

MOD i) For the use of the carrier frequencies 4 125 kHz, 6 215 kHz, 8 291 kHz, 12 290 kHz and 16 420 kHz in these sub-bands by ship and coast stations for distress and safety purposes, by single-sideband radiotelephony, see Articles 38 and N 38.

ADD j) For the use of the frequencies 4 177.5 kHz, 6 268 kHz, 8 376.5 kHz, 12 520 kHz and 16 695 kHz in these sub-bands by ship and coast stations for distress and safety purposes, by narrow-band direct-printing telegraphy, see Articles 38 and N 38.

ADD k) For the use of the frequencies 4 207.5 kHz, 6 312 kHz, 8 414.5 kHz, 12 577 kHz and 16 804.5 kHz in these sub-bands by ship and coast stations for distress and safety purposes, by digital selective calling.

ADD [l) The following paired frequencies (for ship/coast stations) 4 208/4 219.5 kHz, 6 312.5/6 331 kHz, 8 415/8 436.5 kHz, 12 577.5/12 657 kHz, 16 805/16 903 kHz, 18 898.5/19 703.5 kHz, 22 375/22 444 kHz and 25 208.5/26 121 kHz are the first choice international frequencies for digital selective calling (see Article 62).]

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ADD m) Frequencies from frequency bands may also be used for A1A and A1B Morse (working); see Appendix 32(Rev.).

ADD n) The frequencies 4 210 kHz, 6 314 kHz, 8 416.5 kHz, 12 579 kHz, 16 806.5 kHz, 19 680.5 kHz, 22 376 kHz and 26 100.5 kHz are the [international] frequencies for the transmission of Maritime Safety Information (MSI) (see Resolution COM5/5).

ADD o) The frequency 4 209.5 kHz is [an] [international] frequency for the transmission of NAVTEX type information (see Resolution COM5/4).

[ANNEX 2*

AP16(Rev.)

Summary Appendix 31 (Rev.)

SHIP STATIONS	4 MHz Present	4 MHz New	6 MHz Present	6 MHz New	8 MHz Present	8 MHz New	12 MHz Present	12 MHz New
Telephony, Duplex	26	27	6	8	31	32	32	41
Telephony, Simplex	1	2	2	3	2	2	3	5
NBDP Paired	14	18	23	33	27	39	57	155
NBDP Non-Paired	5	10	4	23	6	36	14	34
Wideband Telegraphy	5	5	7	7	10	10	12	13
Oceanographic Data (kHz)	3.5	2	3.5	1.75	3.5	1.75	3.5	1.75
A1A Morse Wkng	62	31	57	31	120	59	194	110
A1A Morse Calling (kHz)	7.5	5	11	5	14	5	22	5
Digital Selective Calling	2	3	2	3	2	3	3	3
GMDSS NBDP	1	1	1	1	1	1	1	1
GMDSS DSC	1	1	1	1	1	1	1	1
GMDSS radiotelephony (exclusive)					0	1		
Total Ship Spectrum	153	144.8	109	112.5	233.5	217	312	347.5
COAST STATIONS						0	1	
W'band Telegraphy Sp.Sys.(kHz)	130	130	168.5	168.5	269	269	418.5	418.5
NBDP Paired	14	18	23	33	27	39	57	155
DSC	1	3	1	3	2	3	2	3
Telephony, Duplex	26	29	6	8	31	36	32	41
NAVTEX	-	1	-	-	-	-	-	-
MSI	-	1	-	1	-	1	-	1

SHIP STATIONS	16 MHz Present	16 MHz New	18/19 MHz Present	18/19 MHz New	22 MHz Present	22 MHz New	25/26 MHz Present	25/26 MHz New
Telephony, Duplex	41	56		15	40	53		10
Telephony, Simplex	3	7		7	5	7		7
NBDP Paired	69	192		45	67	135	28	40
NBDP Non-Paired	22	39		11	2	45		31
Wideband Telegraphy	15	17		6	7	15		10
Oceanographic Data (kHz)	3.5	1.75		0	3.5	1.75		0
A1A Morse Wkng	234	129		0	118	75	35	20
A1A Morse Calling (kHz)	29	5		0	20	5	6	1.5
Digital Selective Calling	3	3		3	2	3		3
GMDSS NBDP	1	1		-	-	-	-	-
GMDSS DSC	1	1		-	-	-	-	-
GMDSS radiotelephony (exclusive)								
Total Ship Spectrum	388	445		119.5	274.5	376		139.5
COAST STATIONS								
W'band Telegraphy Sp.Sys.(kHz)	337.5	337.5		50	250.5	250.5		23
NBDP Paired	69	192		45	67	135		40
DSC	2	3		3	2	3		3
Telephony, Duplex	41	56		15	40	53		10
MSI	-	1		1	-	1	-	1

* This annex is for information only, it is not intended to be included in the Final Acts of this Conference.]

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[ANNEX 3*

List of frequencies for use in the GMDSS, for the transmission of Maritime Safety Information (MSI) and for NAVTEX type transmissions

1. GMDSS frequencies

Radiotelephony		DSC		NBDP	
Present (kHz) (carrier frequencies)	New (kHz) (carrier frequencies)	Present (kHz)	New (kHz)	Present (kHz)	New (kHz)
4 125	4 125	4 188	4 207.5	4 177.5	4 177.5
6 215.5	6 215	6 282	6 312	6 268	6 268
8 257	8 291	8 375	8 414.5	8 357.5	8 376.5
12 392	12 290	12 563	12 577	12 520	12 520
16 522	16 420	16 750	16 804.5	16 695	16 695

2. Frequencies for MSI (kHz)

4 210	16 806.5
6 314	19 680.5
8 416.6	22 376
12 579	26 100.5

3. Frequency for NAVTEX type transmissions (kHz)

4 209.5

* This annex is for information only, it is not intended to be included in the Final Acts of this Conference.]

ANNEX 4

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APPENDIX 16 (Rev.Mob-87)

MOD **Channelling of the Maritime Mobile Radiotelephone Bands Between 4 000 kHz and 27 500 kHz**

(See Article 60, Section IV)

MOD 1. Radiotelephone channelling arrangements for the frequencies to be used by coast and ship stations in the bands allocated to the maritime mobile service are indicated in the following sections:

Section A - Table of single-sideband transmitting frequencies (in kHz) for duplex (two-frequency) operation;

Section B - Table of single-sideband transmitting frequencies (in kHz) for simplex (single-frequency) operation and for intership cross-band (two-frequency) operation;

MOD Section C-1 - Table of recommended single-sideband transmitting frequencies (in kHz) for ship stations in the band 4 000 - 4 063 kHz shared with the fixed service;

MOD Section C-2 - Table of recommended single-sideband transmitting frequencies (in kHz) for ship and coast stations in the band 8 100 - 8 195 kHz shared with the fixed service.

NOC 2.

NOC 3.

NOC 4.

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MOD 5. The following frequencies in Section A are allocated for calling purposes:

- Channel No. 421 in the 4 MHz band;
- Channel No. 606 in the 6 MHz band;
- Channel No. 821 in the 8 MHz band;
- Channel No. 1221 in the 12 MHz band;
- Channel No. 1621 in the 16 MHz band;
- Channel No. 1806 in the 18 MHz band;
- Channel No. 2221 in the 22 MHz band,
- Channel No. 2510 in the 25 MHz band.

The remaining frequencies in Sections A, B, C-1 and C-2 are working frequencies.

MOD 5A For the use of the carrier frequencies:

4 125 kHz (Channel No. 421)

8 291 kHz (Channel No. 833)

6 215 kHz (Channel No. 606)

12 290 kHz (Channel No. 1221)

16 420 kHz (Channel No. 1621)

in Section A, by coast and ship stations for distress and safety purposes, see Articles 38 and N 38.

MOD 6. a) Maritime radiotelephone stations using single-sideband emissions in the bands between 4 000 and 27 500 kHz exclusively allocated to the maritime mobile service shall operate only on the carrier frequencies shown in Sections A and B in conformity with the technical characteristics specified in Appendix 17. The upper sideband mode shall always be employed.

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ADD b) Ship stations, when using frequencies for single-sideband radiotelephony from the bands 4 000 - 4 063 kHz and ship and coast stations, when using frequencies for single-sideband radiotelephony in the band 8 100 - 8 195 kHz should operate on the carrier frequencies indicated in Sections C-1 and C-2 respectively in conformity with the technical characteristics specified in Appendix 17. The upper sideband mode shall always be employed.

MOD c) Stations employing the single-sideband mode shall use only class J3E emissions.

NOC 7.

ADD 8. For the use and notification of channels Nos. 427, 428, 429, 607, 608, 832, 834, 835, 836, 837, 1233 up to and including 1241, 1642 up to and including 1656, 1801 up to and including 1815, 2241 up to and including 2253 and 2501 up to and including 2510; Resolution COM4/6.

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NOC

Section A

Table of Single-Sideband Transmitting Frequencies For Duplex (Two-Frequency) Operation (in kHz)

Channel No.	4 MHz Band			
	Coast stations		Ship stations	
	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency
401	4357	4358.4	4065	4066.4
402	4360	4361.4	4068	4069.4
403	4363	4364.4	4071	4072.4
404	4366	4367.4	4074	4075.4
405	4369	4370.4	4077	4078.4
406	4372	4373.4	4080	4081.4
407	4375	4376.4	4083	4084.4
408	4378	4379.4	4086	4087.4
409	4381	4382.4	4089	4090.4
410	4384	4385.4	4092	4093.4
411	4387	4388.4	4095	4096.4
412	4390	4391.4	4098	4099.4
413	4393	4394.4	4101	4102.4
414	4396	4397.4	4104	4105.4
415	4399	4400.4	4107	4108.4
416	4402	4403.4	4110	4111.4
417	4405	4406.4	4113	4114.4
418	4408	4409.4	4116	4117.4
419	4411	4412.4	4119	4120.4
420	4414	4415.4	4122	4123.4
421	4417*	4418.4*	4125* [4]	4126.4*
422	4420	4421.4	4128	4129.4
423	4423	4424.4	4131	4132.4
424	4426	4427.4	4134	4135.4
425	4429	4430.4	4137	4138.4
426	4432	4433.4	4140	4141.4
427 [2]	4435	4436.4	4143	4144.4
428 [1 2 3]	4351	4352.4	–	–
429 [1 2 3]	4354	4355.4	–	–

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Channel No.	6 MHz Band			
	Coast stations		Ship stations	
	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency
601	6501	6502.4	6200	6201.4
602	6504	6505.4	6203	6204.4
603	6507	6508.4	6206	6207.4
604	6510	6511.4	6209	6210.4
605	6513	6514.4	6212	6213.4
606	6516*	6517.4*	6215* [5]	6216.4*
607[2]	6519	6520.4	6218	6219.4
608[2]	6522	6523.4	6221	6222.4

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Channel No.	8 MHz Band			
	Coast stations		Ship stations	
	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency
801	8719	8720.4	8195	8196.4
802	8722	8723.4	8198	8199.4
803	8725	8726.4	8201	8202.4
804	8728	8729.4	8204	8205.4
805	8731	8732.4	8207	8208.4
806	8734	8735.4	8210	8211.4
807	8737	8738.4	8213	8214.4
808	8740	8741.4	8216	8217.4
809	8743	8744.4	8219	8220.4
810	8746	8747.4	8222	8223.4
811	8749	8750.4	8225	8226.4
812	8752	8753.4	8228	8229.4
813	8755	8756.4	8231	8232.4
814	8758	8759.4	8234	8235.4
815	8761	8762.4	8237	8238.4
816	8764	8765.4	8240	8241.4
817	8767	8768.4	8243	8244.4
818	8770	8771.4	8246	8247.4
819	8773	8774.4	8249	8250.4
820	8776	8777.4	8252	8253.4
821	8779*	8780.4*	8255*	8256.4*
822	8782	8783.4	8258	8259.4
823	8785	8786.4	8261	8262.4
824	8788	8789.4	8264	8265.4
825	8791	8792.4	8267	8268.4
826	8794	8795.4	8270	8271.4
827	8797	8798.4	8273	8274.4
828	8800	8801.4	8276	8277.4
829	8803	8804.4	8279	8280.4
830	8806	8807.4	8282	8283.4
831	8809	8810.4	8285	8286.4
832 2	8812	8813.4	8288	8289.4
833	8291[9]	8292.4	-	-
834[6] 2 3	8707	8708.4	-	-
835[6] 2 3	8710	8711.4	-	-
836[6] 2 3	8713	8714.4	-	-
837[6] 2 3	8716	8717.4		

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Channel No.	12 MHz Band			
	Coast stations		Ship stations	
	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency
1201	13077	13078.4	12230	12231.4
1202	13080	13081.4	12233	12234.4
1203	13083	13084.4	12236	12237.4
1204	13086	13087.4	12239	12240.4
1205	13089	13090.4	12242	12243.4
1206	13092	13093.4	12245	12246.4
1207	13095	13096.4	12248	12249.4
1208	13098	13099.4	12251	12252.4
1209	13101	13102.4	12254	12255.4
1210	13104	13105.4	12257	12258.4
1211	13107	13108.4	12260	12261.4
1212	13110	13111.4	12263	12264.4
1213	13113	13114.4	12266	12267.4
1214	13116	13117.4	12269	12270.4
1215	13119	13120.4	12272	12273.4
1216	13122	13123.4	12275	12276.4
1217	13125	13126.4	12278	12279.4
1218	13128	13129.4	12281	12282.4
1219	13131	13132.4	12284	12285.4
1220	13134	13135.4	12287	12288.4
1221	13137 *	13138.4 *	12290 * 7	12291.4 *
1222	13140	13141.4	12293	12294.4
1223	13143	13144.4	12296	12297.4
1224	13146	13147.4	12299	12300.4
1225	13149	13150.4	12302	12303.4
1226	13152	13153.4	12305	12306.4
1227	13155	13156.4	12308	12309.4
1228	13158	13159.4	12311	12312.4
1229	13161	13162.4	12314	12315.4
1230	13164	13165.4	12317	12318.4
1231	13167	13168.4	12320	12321.4
1232	13170	13171.4	12323	12324.4
1233	13173	13174.4	12326	12327.4
1234	13176	13177.4	12329	12330.4
1235	13179	13180.4	12332	12333.4
1236	13182	13183.4	12335	12336.4
1237	13185	13186.4	12338	12339.4
1238	13188	13189.4	12341	12342.4
1239	13191	13192.4	12344	12345.4
1240	13194	13195.4	12347	12348.4
1241	13197	13198.4	12350	12351.4

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Channel No.	16 MHz Band			
	Coast stations		Ship stations	
	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency
1601	17242	17243.4	16360	16361.4
1602	17245	17246.4	16363	16364.4
1603	17248	17249.4	16366	16367.4
1604	17251	17252.4	16369	16370.4
1605	17254	17255.4	16372	16373.4
1606	17257	17258.4	16375	16376.4
1607	17260	17261.4	16378	16379.4
1608	17263	17264.4	16381	16382.4
1609	17266	17267.4	16384	16385.4
1610	17269	17270.4	16387	16388.4
1611	17272	17273.4	16390	16391.4
1612	17275	17276.4	16393	16394.4
1613	17278	17279.4	16396	16397.4
1614	17281	17282.4	16399	16400.4
1615	17284	17285.4	16402	16403.4
1616	17287	17288.4	16405	16406.4
1617	17290	17291.4	16408	16409.4
1618	17293	17294.4	16411	16412.4
1619	17296	17297.4	16414	16415.4
1620	17299	17300.4	16417	16418.4
1621	17302*	17303.4*	16420* 8	16421.4*
1622	17305	17306.4	16423	16424.4
1623	17308	17309.4	16426	16427.4
1624	17311	17312.4	16429	16430.4
1625	17314	17315.4	16432	16433.4
1626	17317	17318.4	16435	16436.4
1627	17320	17321.4	16438	16439.4
1628	17323	17324.4	16441	16442.4
1629	17326	17327.4	16444	16445.4
1630	17329	17330.4	16447	16448.4
1631	17332	17333.4	16450	16451.4
1632	17335	17336.4	16453	16454.4
1633	17338	17339.4	16456	16457.4
1634	17341	17342.4	16459	16460.4
1635	17344	17345.4	16462	16463.4
1636	17347	17348.4	16465	16466.4
1637	17350	17351.4	16468	16469.4
1638	17353	17354.4	16471	16472.4
1639	17356	17357.4	16474	16475.4
1640	17359	17360.4	16477	16478.4

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Channel No.	16 MHz Band (cont.)			
	Coast stations		Ship stations	
	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency
1641	17362	17363.4	16480	16481.4
1642	17365	17366.4	16483	16484.4
1643	17368	17369.4	16486	16487.4
1644	17371	17372.4	16489	16490.4
1645	17374	17375.4	16492	16493.4
1646	17377	17378.4	16495	16496.4
1647	17380	17381.4	16498	16499.4
1648	17383	17384.4	16501	16502.4
1649 } 2	17386	17387.4	16504	16505.4
1650	17389	17390.4	16507	16508.4
1651	17392	17393.4	16510	16511.4
1652	17395	17396.4	16513	16514.4
1653	17398	17399.4	16516	16517.4
1654	17401	17402.4	16519	16520.4
1655	17404	17405.4	16522	16523.4
1656	17407	17408.4	16525	16526.4

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Channel No.	18/19 MHz Band			
	Coast stations		Ship stations	
	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency
1801	19755	19756.4	18780	18781.4
1802	19758	19759.4	18783	18784.4
1803	19761	19762.4	18786	18787.4
1804	19764	19765.4	18789	18790.4
1805	19767	19768.4	18792	18793.4
1806	19770*	19771.4*	18795*	18796.4*
1807	19773	19774.4	18798	18799.4
1808 } 2	19776	19777.4	18801	18802.4
1809	19779	19780.4	18804	18805.4
1810	19782	19783.4	18807	18808.4
1811	19785	19786.4	18810	18811.4
1812	19788	19789.4	18813	18814.4
1813	19791	19792.4	18816	18817.4
1814	19794	19795.4	18819	18820.4
1815	19797	19798.4	18822	18823.4

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Channel No.	22 MHz Band			
	Coast stations		Ship stations	
	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency
2201	22696	22697.4	22000	22001.4
2202	22699	22700.4	22003	22004.4
2203	22702	22703.4	22006	22007.4
2204	22705	22706.4	22009	22010.4
2205	22708	22709.4	22012	22013.4
2206	22711	22712.4	22015	22016.4
2207	22714	22715.4	22018	22019.4
2208	22717	22718.4	22021	22022.4
2209	22720	22721.4	22024	22025.4
2210	22723	22724.4	22027	22028.4
2211	22726	22727.4	22030	22031.4
2212	22729	22730.4	22033	22034.4
2213	22732	22733.4	22036	22037.4
2214	22735	22736.4	22039	22040.4
2215	22738	22739.4	22042	22043.4
2216	22741	22742.4	22045	22046.4
2217	22744	22745.4	22048	22049.4
2218	22747	22748.4	22051	22052.4
2219	22750	22751.4	22054	22055.4
2220	22753	22754.4	22057	22058.4
2221	22756*	22757.4*	22060*	22061.4*
2222	22759	22760.4	22063	22064.4
2223	22762	22763.4	22066	22067.4
2224	22765	22766.4	22069	22070.4
2225	22768	22769.4	22072	22073.4
2226	22771	22772.4	22075	22076.4
2227	22774	22775.4	22078	22079.4
2228	22777	22778.4	22081	22082.4
2229	22780	22781.4	22084	22085.4
2230	22783	22784.4	22087	22088.4
2231	22786	22787.4	22090	22091.4
2232	22789	22790.4	22093	22094.4
2233	22792	22793.4	22096	22097.4
2234	22795	22796.4	22099	22100.4
2235	22798	22799.4	22102	22103.4

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Channel No.	22 MHz Band (cont.)			
	Coast stations		Ship stations	
	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency
2236	22801	22802.4	22105	22106.4
2237	22804	22805.4	22108	22109.4
2238	22807	22808.4	22111	22112.4
2239	22810	22811.4	22114	22115.4
2240	22813	22814.4	22117	22118.4
2241	22816	22817.4	22120	22121.4
2242	22819	22820.4	22123	22124.4
2243	22822	22823.4	22126	22127.4
2244	22825	22826.4	22129	22130.4
2245	22828	22829.4	22132	22133.4
2246	22831	22832.4	22135	22136.4
2247 } 2	22834	22835.4	22138	22139.4
2248	22837	22838.4	22141	22142.4
2249	22840	22841.4	22144	22145.4
2250	22843	22844.4	22147	22148.4
2251	22846	22847.4	22150	22151.4
2252	22849	22850.4	22153	22154.4
2253	22852	22853.4	22156	22157.4

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Channel No.	25/26 MHz Band			
	Coast stations		Ship stations	
	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency
2501	26145	26146.4	25070	25071.4
2502	26148	26149.4	25073	25074.4
2503	26151	26152.4	25076	25077.4
2504	26154	26155.4	25079	25080.4
2505	26157	26158.4	25082	25083.4
2506 (2)	26160	26161.4	25085	25086.4
2507	26163	26164.4	25088	25089.4
2508	26166	26167.4	25091	25092.4
2509	26169	26170.4	25094	25095.4
2510	26172*	26173.4*	25097*	25098.4*

NOTES TO THE TABLE

NOC * The frequencies followed by an asterisk are Calling frequencies (see Nos. 4375 and 4376).

ADD 1 These coast station frequencies may be paired with a ship station frequency from the table of simplex frequencies for ship and coast stations (see Section B) or with a frequency from the band 4 000 - 4 063 kHz (see Section C-1) to be selected by the administration concerned.

ADD 2 For the use and notification of these frequencies; see Resolution COM4/6.

ADD 3 These channels may also be used for simplex (single frequency) operation.

MOD 4 For the conditions of use of the carrier frequency 4 125 kHz, see Nos. 2982, N 2982, N 2982A, 4379 and 4380.

MOD 5 For the conditions of use of the carrier frequency 6215 kHz, see Nos. 2986 and N 2986B.

ADD 6 These coast station frequencies may be paired with a ship station frequency from the table of simplex frequencies for ship and coast stations (see Section B) or with a frequency from the band 8 100 - 8 195 kHz (see Section C-2) to be selected by the administration concerned.

ADD 7 For the conditions of use of the carrier frequency 12 290 kHz, see No. N 2988D.

ADD 8 For the conditions of use of the carrier frequency 16 420 kHz, see No. N 2988J,

ADD 9 For the conditions of use of the carrier frequency 8 291 kHz, see No. N 2986F.

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NOC

SECTION B

Table of Single-Sideband Transmitting Frequencies for Simplex (Single-Frequency) Operation and for Intership Cross-Band (Two-Frequency) Operation (in kHz)

(See paragraph 4 of this Appendix)

MOD

4 MHz Band[1]		6 MHz Band		8 MHz Band[2]		12 MHz Band		16 MHz Band		18/19 MHz Band		22 MHz Band		25/26 MHz Band	
Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency
4 146	4 147.4	6 224	6 225.4	8 294	8 295.4	12 353	12 354.4	16 528	16 529.4	18 825	18 826.4	22 159	22 160.4	25 100	25 101.4
4 149	4 150.4	6 227	6 228.4	8 297	8 298.4	12 356	12 357.4	16 531	16 532.4	18 828	18 829.4	22 162	22 163.4	25 103	25 104.4
		6 230	6 231.4			12 359	12 360.4	16 534	16 535.4	18 831	18 832.4	22 165	22 166.4	25 106	25 107.4
						12 362	12 363.4	16 537	16 538.4	18 834	18 835.4	22 168	22 169.4	25 109	25 110.4
						12 365	12 366.4	16 540	16 541.4	18 837	18 838.4	22 171	22 172.4	25 112	25 113.4
								16 543	16 544.4	18 840	18 841.4	22 174	22 175.4	25 115	25 116.4
								16 546	16 547.4	18 843	18 844.4	22 177	22 178.4	25 118	25 119.4

ADD 1) These frequencies may be used for duplex operation with coast stations operating on Channels 428 and 429 (see Section A).

ADD 2) These frequencies may be used for duplex operation with coast stations operating on Channels 834 up to and including 837 (see Section A).

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SECTION C-1

MOD

Table of Recommended Single-Sideband Transmitting Frequencies (in kHz) for Ship Stations in the Band 4 000 - 4 063 kHz Shared with the Fixed Service

MOD

The frequencies in this Section may be used:

- for supplementing ship-to-shore channels for duplex operation in Section A;
- for intership simplex (single-frequency) and cross-band operation;
- for cross-band working with coast stations on channels in Section C-2;
- for duplex operation with coast stations working in the band 4 438 - 4 650 kHz.
- for duplex operation with Channels Nos. 428 and 429.

Channel No.	Carrier Frequency	Assigned Frequency	Channel No.	Carrier Frequency	Assigned Frequency
1	4 000 *	4 001.4 *	12	4 033	4 034.4
2	4 003 *	4 004.4 *	13	4 036	4 037.4
3	4 006	4 007.4	14	4 039	4 040.4
4	4 009	4 010.4	15	4 042	4 043.4
5	4 012	4 013.4	16	4 045	4 046.4
6	4 015	4 016.4	17	4 048	4 049.4
7	4 018	4 019.4	18	4 051	4 052.4
8	4 021	4 022.4	19	4 054	4 055.4
9	4 024	4 025.4	20	4 057	4 058.4
10	4 027	4 028.4	21	4 060	4 061.4
11	4 030	4 031.4			

NOC *

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SECTION C-2

MOD

Table of Recommended Single-Sideband Transmitting Frequencies (in kHz) for Ship and Coast Stations in the Band 8 100 - 8 195 kHz Shared with the Fixed Service

MOD

The frequencies in this Section may be used:

- for supplementing ship-to-shore and shore-to-ship channels for duplex operation in Section A;
- for intership simplex (single frequency) and cross-band operation;
- for cross-band working with ship stations on channels in Section C-1;
- for ship-to-shore or shore-to-ship simplex operation;
- for duplex operation with Channel Nos. 834, 835, 836 and 837.

Channel No.	Carrier Frequency	Assigned Frequency	Channel No.	Carrier Frequency	Assigned Frequency
1	8 101	8 102.4	17	8 149	8 150.4
2	8 104	8 105.4	18	8 152	8 153.4
3	8 107	8 108.4	19	8 155	8 156.4
4	8 110	8 111.4	20	8 158	8 159.4
5	8 113	8 114.4	21	8 161	8 162.4
6	8 116	8 117.4	22	8 164	8 165.4
7	8 119	8 120.4	23	8 167	8 168.4
8	8 122	8 123.4	24	8 170	8 171.4
9	8 125	8 126.4	25	8 173	8 174.4
10	8 128	8 129.4	26	8 176	8 177.4
11	8 131	8 132.4	27	8 179	8 180.4
12	8 134	8 135.4	28	8 182	8 183.4
13	8 137	8 138.4	29	8 185	8 186.4
14	8 140	8 141.4	30	8 188	8 189.4
15	8 143	8 144.4	31	8 191	8 192.4
16	8 146	8 147.4			

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ANNEX 5

APPENDIX 32 (Rev.Mob-87)

MOD

Channelling of the Maritime Mobile Bands Between 4 000 kHz and 27 500 kHz Used for Narrow-Band Direct-Printing Telegraphy and Data Systems (Paired Frequencies)

MOD

(See Article 60 and Resolution No. 300(Rev.)

MOD

1. Each coast station which uses paired frequencies is assigned one or more frequency pairs from the following series; each pair consists of a transmitting and a receiving frequency.

MOD

2. The speed of the narrow-band direct-printing telegraphy and data systems shall not exceed 100 bauds for FSK and 200 bauds for PSK.

Table of Frequencies for Two-Frequency Operation by Coast Stations (kHz)

CHANNEL No.	4 MHz BAND[1]	
	TRANSMIT	RECEIVE
1	4210.5	4172.5
2	4211	4173
3	4211.5	4173.5
4	4212	4174
5	4212.5	4174.5
6	4213	4175
7	4213.5	4175.5
8	4214	4176
9	4214.5	4176.5
10	4215	4177
11	4177.5[2]	4177.5[2]
12	4215.5	4178
13	4216	4178.5
14	4216.5	4179
15	4217	4179.5
16	4217.5	4180
17	4218	4180.5
18	4218.5	4181
19	4219	4181.5

ADD

[1]Ship stations may use the coast station receiving frequencies for transmitting A1A and A1B Morse telegraphy (working), with the exception of channel No. 11 (see N 2982C).

ADD

[2]For the condition of use of this frequency, see Article N 38.

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CHANNEL No.	6 MHz BAND[3]	
	TRANSMIT	RECEIVE
1	6314.5	6263
2	6315	6263.5
3	6315.5	6264
4	6316	6264.5
5	6316.5	6265
6	6317	6265.5
7	6317.5	6266
8	6318	6266.5
9	6318.5	6267
10	6319	6267.5
11	6268[2]	6268[2]
12	6319.5	6268.5
13	6320	6269
14	6320.5	6269.5
15	6321	6270
16	6321.5	6270.5
17	6322	6271
18	6322.5	6271.5
19	6323	6272
20	6323.5	6272.5
21	6324	6273
22	6324.5	6273.5
23	6325	6274
24	6325.5	6274.5
25	6326	6275
26	6326.5	6275.5
27	6327	6281
28	6327.5	6281.5
29	6328	6282
30	6328.5	6282.5
31	6329	6283
32	6329.5	6283.5
33	6330	6284
34	6330.5	6284.5

ADD [2]For the condition of use of this frequency, see Article N 38.

ADD [3]Ship stations may use the coast station receiving frequencies of channels Nos. 25 up to and including 34 for transmitting A1A and A1B Morse telegraphy (working).

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CHANNEL No.	8 MHz BAND[4]	
	TRANSMIT	RECEIVE
1	8376.5[2]	8376.5[2]
2	8417	8377
3	8417.5	8377.5
4	8418	8378
5	8418.5	8378.5
6	8419	8379
7	8419.5	8379.5
8	8420	8380
9	8420.5	8380.5
10	8421	8381
11	8421.5	8381.5
12	8422	8382
13	8422.5	8382.5
14	8423	8383
15	8423.5	8383.5
16	8424	8384
17	8424.5	8384.5
18	8425	8385
19	8425.5	8385.5
20	8426	8386
21	8426.5	8386.5
22	8427	8387
23	8427.5	8387.5
24	8428	8388
25	8428.5	8388.5
26	8429	8389
27	8429.5	8389.5
28	8430	8390
29	8430.5	8390.5
30	8431	8391
31	8431.5	8391.5
32	8432	8392
33	8432.5	8392.5
34	8433	8393
35	8433.5	8393.5
36	8434	8394
37	8434.5	8394.5
38	8435	8395
39	8435.5	8395.5
40	8436	8396

ADD [2]For the condition of use of this frequency, see Article N 38.

ADD [4] Ship stations may use the coast station receiving frequencies of channels Nos. 29 up to and including 40 for transmitting A1A and A1B Morse telegraphy (working).

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CHANNEL No.	12 MHz BAND[5]	
	TRANSMIT	RECEIVE
1	12579.5	12477
2	12580	12477.5
3	12580.5	12478
4	12581	12478.5
5	12581.5	12479
6	12582	12479.5
7	12582.5	12480
15	12586.5	12484
16	12587	12484.5
17	12587.5	12485
18	12588	12485.5
19	12588.5	12486
20	12589	12486.5
21	12589.5	12487
22	12590	12487.5
28	12593	12490.5
29	12593.5	12491
30	12594	12491.5
31	12594.5	12492
32	12595	12492.5
33	12595.5	12493
33	12595.5	12493
34	12596	12493.5
35	12596.5	12494
36	12597	12494.5
37	12597.5	12495
38	12598	12495.5
39	12598.5	12496
40	12599	12496.5
47	12602.5	12500

ADD

[5]Ship stations may use the coast station receiving frequencies of channels Nos. 58 up to and including 156 for transmitting A1A and A1B Morse telegraphy (working), with exception of channel No. 87, see N 2988F.

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CHANNEL No.	12 MHz BAND[5] (cont.)	
	TRANSMIT	RECEIVE
48	12603	12500.5
49	12603.5	12501
50	12604	12501.5
51	12604.5	12502
52	12605	12502.5
53	12605.5	12503
54	12606	12503.5
55	12606.5	12504
56	12607	12504.5
57	12607.5	12505
58	12608	12505.5
59	12608.5	12506
60	12609	12506.5
61	12609.5	12507
62	12610	12507.5
63	12610.5	12508
64	12611	12508.5
65	12611.5	12509
66	12612	12509.5
67	12612.5	12510
68	12613	12510.5
69	12613.5	12511
70	12614	12511.5
71	12614.5	12512
72	12615	12512.5
73	12615.5	12513
74	12616	12513.5
75	12616.5	12514
76	12617	12514.5
77	12617.5	12515
78	12618	12515.5
79	12618.5	12516
80	12619	12516.5
81	12619.5	12517
82	12620	12517.5

ADD

[5]Ship stations may use the coast station receiving frequencies of channels Nos. 58 up to and including 156 for transmitting A1A and A1B Morse telegraphy (working), with exception of channel No. 87, see N 2988F.

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CHANNEL No.	12 MHz BAND[5] (cont.)	
	TRANSMIT	RECEIVE
83	12620.5	12518
84	12621	12518.5
85	12621.5	12519
86	12622	12519.5
87	12520[2]	12520[2]
88	12622.5	12520.5
89	12623	12521
90	12623.5	12521.5
91	12624	12522
92	12624.5	12522.5
93	12625	12523
94	12625.5	12523.5
95	12626	12524
96	12626.5	12524.5
97	12627	12525
98	12627.5	12525.5
99	12628	12526
100	12628.5	12526.5
101	12629	12527
102	12629.5	12527.5
103	12630	12528
104	12630.5	12528.5
105	12631	12529
106	12631.5	12529.5
107	12632	12530
108	12632.5	12530.5
109	12633	12531
110	12633.5	12531.5
111	12634	12532
112	12634.5	12532.5
113	12635	12533
114	12635.5	12533.5
115	12636	12534
116	12636.5	12534.5
117	12637	12535

ADD [2]For the condition of use of this frequency, see Article N 38.

ADD [5]Ship stations may use the coast station receiving frequencies of channels Nos. 58 up to and including 156 for transmitting A1A and A1B Morse telegraphy (working), with exception of channel No. 87, see N 2988F.

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CHANNEL No.	12 MHz BAND[5] (cont.)	
	TRANSMIT	RECEIVE
118	12637.5	12535.5
119	12638	12536
120	12638.5	12536.5
121	12639	12537
122	12639.5	12537.5
123	12640	12538
124	12640.5	12538.5
125	12641	12539
126	12641.5	12539.5
127	12642	12540
128	12642.5	12540.5
129	12643	12541
130	12643.5	12541.5
131	12644	12542
132	12644.5	12542.5
133	12645	12543
134	12645.5	12543.5
135	12646	12544
136	12646.5	12544.5
137	12647	12545
138	12647.5	12545.5
139	12648	12546
140	12648.5	12546.5
141	12649	12547
142	12649.5	12547.5
143	12650	12548
144	12650.5	12548.5
145	12651	12549
146	12651.5	12549.5
147	12652	12555
148	12652.5	12555.5
149	12653	12556
150	12653.5	12556.5
151	12654	12557
152	12654.5	12557.5
153	12655	12558
154	12655.5	12558.5
155	12656	12559
156	12656.5	12559.5

ADD

[5]Ship stations may use the coast station receiving frequencies of channels Nos. 58 up to and including 156 for transmitting A1A and A1B Morse telegraphy (working), with exception of channel No. 87, see N 2988F.

AP32(Rev.)

CHANNEL No.	16 MHz BAND[6]	
	TRANSMIT	RECEIVE
1	16807	16683.5
2	16807.5	16684
3	16808	16684.5
4	16808.5	16685
5	16809	16685.5
6	16809.5	16686
7	16810	16686.5
8	16810.5	16687
9	16811	16687.5
10	16811.5	16688
11	16812	16688.5
12	16812.5	16689
13	16813	16689.5
14	16813.5	16690
15	16814	16690.5
16	16814.5	16691
17	16815	16691.5
18	16815.5	16692
19	16816	16692.5
20	16816.5	16693
21	16817	16693.5
22	16817.5	16694
23	16818	16694.5
24	16695[2]	16695[2]
25	16818.5	16695.5
26	16819	16696
27	16819.5	16696.5
28	16820	16697
29	16820.5	16697.5
30	16821	16698
31	16821.5	16698.5
32	16822	16699
33	16822.5	16699.5
34	16823	16700
35	16823.5	16700.5
36	16824	16701
37	16824.5	16701.5
38	16825	16702
39	16825.5	16702.5

ADD [2]For the condition of use of this frequency, see Article N 38.

ADD [6]Ship stations may use the coast station receiving frequencies of channels Nos. 71 up to and including 193 for transmitting A1A and A1B Morse telegraphy (working).

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CHANNEL No.	16 MHz BAND[6] (cont.)	
	TRANSMIT	RECEIVE
40	16826	16703
41	16826.5	16703.5
42	16827	16704
43	16827.5	16704.5
44	16828	16705
45	16828.5	16705.5
46	16829	16706
47	16829.5	16706.5
48	16830	16707
49	16830.5	16707.5
50	16831	16708
51	16831.5	16708.5
52	16832	16709
53	16832.5	16709.5
54	16833	16710
55	16833.5	16710.5
56	16834	16711
57	16834.5	16711.5
58	16835	16712
59	16835.5	16712.5
60	16836	16713
61	16836.5	16713.5
62	16837	16714
63	16837.5	16714.5
64	16838	16715
65	16838.5	16715.5
66	16839	16716
67	16839.5	16716.5
68	16840	16717
69	16840.5	16717.5
70	16841	16718
71	16841.5	16718.5
72	16842	16719
73	16842.5	16719.5
74	16843	16720
75	16843.5	16720.5
76	16844	16721
77	16844.5	16721.5
78	16845	16722
79	16845.5	16722.5
80	16846	16723
81	16846.5	16723.5
82	16847	16724
83	16847.5	16724.5
84	16848	16725
85	16848.5	16725.5

ADD

[6]Ship stations may use the coast station receiving frequencies of channels Nos. 71 up to and including 193 for transmitting A1A and A1B Morse telegraphy (working).

AP32(Rev.)

CHANNEL No.	16 MHz BAND[6] (cont.)	
	TRANSMIT	RECEIVE
86	16849	16726
87	16849.5	16726.5
88	16850	16727
89	16850.5	16727.5
90	16851	16728
91	16851.5	16728.5
92	16852	16729
93	16852.5	16729.5
94	16853	16730
95	16853.5	16730.5
96	16854	16731
97	16854.5	16731.5
98	16855	16732
99	16855.5	16732.5
100	16856	16733
101	16856.5	16733.5
102	16857	16739
103	16857.5	16739.5
104	16858	16740
105	16858.5	16740.5
106	16859	16741
107	16859.5	16741.5
108	16860	16742
109	16860.5	16742.5
110	16861	16743
111	16861.5	16743.5
112	16862	16744
113	16862.5	16744.5
114	16863	16745
115	16863.5	16745.5
116	16864	16746
117	16864.5	16746.5
118	16865	16747
119	16865.5	16747.5
120	16866	16748
121	16866.5	16748.5
122	16867	16749
123	16867.5	16749.5
124	16868	16750
125	16868.5	16750.5
126	16869	16751

ADD

[6]Ship stations may use the coast station receiving frequencies of channels Nos. 71 up to and including 193 for transmitting A1A and A1B Morse telegraphy (working).

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CHANNEL No.	16 MHz BAND[6] (cont.)	
	TRANSMIT	RECEIVE
127	16869.5	16751.5
128	16870	16752
129	16870.5	16752.5
130	16871	16753
131	16871.5	16753.5
132	16872	16754
133	16872.5	16754.5
134	16873	16755
135	16873.5	16755.5
136	16874	16756
137	16874.5	16756.5
138	16875	16757
139	16875.5	16757.5
140	16876	16758
141	16876.5	16758.5
142	16877	16759
143	16877.5	16759.5
144	16878	16760
145	16878.5	16760.5
146	16879	16761
147	16879.5	16761.5
148	16880	16762
149	16880.5	16762.5
150	16881	16763
151	16881.5	16763.5
152	16882	16764
153	16882.5	16764.5
154	16883	16765
155	16883.5	16765.5
156	16884	16766
157	16884.5	16766.5
158	16885	16767
159	16885.5	16767.5
160	16886	16768
161	16886.5	16768.5

ADD.

[6]Ship stations may use the coast station receiving frequencies of channels Nos. 71 up to and including 193 for transmitting A1A and A1B Morse telegraphy (working).

AP32(Rev.)

CHANNEL No.	16 MHz BAND[6] (cont.)	
	TRANSMIT	RECEIVE
162	16887	16769
163	16887.5	16769.5
164	16888	16770
165	16888.5	16770.5
166	16889	16771
167	16889.5	16771.5
168	16890	16772
169	16890.5	16772.5
170	16891	16773
171	16891.5	16773.5
172	16892	16774
173	16892.5	16774.5
174	16893	16775
175	16893.5	16775.5
176	16894	16776
177	16894.5	16776.5
178	16895	16777
179	16895.5	16777.5
180	16896	16778
181	16896.5	16778.5
182	16897	16779
183	16897.5	16779.5
184	16898	16780
185	16898.5	16780.5
186	16899	16781
187	16899.5	16781.5
188	16900	16782
189	16900.5	16782.5
190	16901	16783
191	16901.5	16783.5
192	16902	16784
193	16902.5	16784.5

ADD

[6]Ship stations may use the coast station receiving frequencies of channels Nos. 71 up to and including 193 for transmitting A1A and A1B Morse telegraphy (working).

AP32(Rev.)

CHANNEL No.	18/19 MHz BAND	
	TRANSMIT	RECEIVE
1	19681	18870.5
2	19681.5	18871
3	19682	18871.5
4	19682.5	18872
5	19683	18872.5
6	19683.5	18873
7	19684	18873.5
8	19684.5	18874
9	19685	18874.5
10	19685.5	18875
11	19686	18875.5
12	19686.5	18876
13	19687	18876.5
14	19687.5	18877
15	19688	18877.5
16	19688.5	18878
17	19689	18878.5
18	19689.5	18879
19	19690	18879.5
20	19690.5	18880
21	19691	18880.5
22	19691.5	18881
23	19692	18881.5
24	19692.5	18882
25	19693	18882.5
26	19693.5	18883
27	19694	18883.5
28	19694.5	18884
29	19695	18884.5
30	19695.5	18885
31	19696	18885.5
32	19696.5	18886
33	19697	18886.5
34	19697.5	18887
35	19698	18887.5
36	19698.5	18888
37	19699	18888.5
38	19699.5	18889
39	19700	18889.5
40	19700.5	18890
41	19701	18890.5
42	19701.5	18891
43	19702	18891.5
44	19702.5	18892
45	19703	18892.5

AP32(Rev.)

CHANNEL No.	22 MHz BAND[7]	
	TRANSMIT	RECEIVE
1	22376.5	22284.5
2	22377	22285
3	22377.5	22285.5
4	22378	22286
5	22378.5	22286.5
6	22379	22287
7	22379.5	22287.5
8	22380	22288
9	22380.5	22288.5
10	22381	22289
11	22381.5	22289.5
12	22382	22290
13	22382.5	22290.5
14	22383	22291
15	22383.5	22291.5
16	22384	22292
17	22384.5	22292.5
18	22385	22293
19	22385.5	22293.5
20	22386	22294
21	22386.5	22294.5
22	22387	22295
23	22387.5	22295.5
24	22388	22296
25	22388.5	22296.5
26	22389	22297
27	22389.5	22297.5
28	22390	22298
29	22390.5	22298.5
30	22391	22299
31	22391.5	22299.5
32	22392	22300
33	22392.5	22300.5
34	22393	22301
35	22393.5	22301.5

ADD

[7]Ship stations may use the coast station receiving frequencies of channels Nos. 68 up to and including 135 for transmitting A1A and A1B Morse telegraphy (working).

AP32(Rev.)

CHANNEL No.	22 MHz BAND[7] (cont.)	
	TRANSMIT	RECEIVE
36	22394	22302
37	22394.5	22302.5
38	22395	22303
39	22395.5	22303.5
40	22396	22304
41	22396.5	22304.5
42	22397	22305
43	22397.5	22305.5
44	22398	22306
45	22398.5	22306.5
46	22399	22307
47	22399.5	22307.5
48	22400	22308
49	22400.5	22308.5
50	22401	22309
51	22401.5	22309.5
52	22402	22310
53	22402.5	22310.5
54	22403	22311
55	22403.5	22311.5
56	22404	22312
57	22404.5	22312.5
58	22405	22313
59	22405.5	22313.5
60	22406	22314
61	22406.5	22314.5
62	22407	22315
63	22407.5	22315.5
64	22408	22316
65	22408.5	22316.5
66	22409	22317
67	22409.5	22317.5
68	22410	22318
69	22410.5	22318.5
70	22411	22319
71	22411.5	22319.5
72	22412	22320
73	22412.5	22320.5
74	22413	22321
75	22413.5	22321.5
76	22414	22322
77	22414.5	22322.5

ADD

[7]Ship stations may use the coast station receiving frequencies of channels Nos. 68 up to and including 135 for transmitting A1A and A1B Morse telegraphy (working).

AP32(Rev.)

CHANNEL No.	22 MHz BAND[7] (cont.)	
	TRANSMIT	RECEIVE
78	22415	22323
79	22415.5	22323.5
80	22416	22324
81	22416.5	22324.5
82	22417	22325
83	22417.5	22325.5
84	22418	22326
85	22418.5	22326.5
86	22419	22327
87	22419.5	22327.5
88	22420	22328
89	22420.5	22328.5
90	22421	22329
91	22421.5	22329.5
92	22422	22330
93	22422.5	22330.5
94	22423	22331
95	22423.5	22331.5
96	22424	22332
97	22424.5	22332.5
98	22425	22333
99	22425.5	22333.5
100	22426	22334
101	22426.5	22334.5
102	22427	22335
103	22427.5	22335.5
104	22428	22336
105	22428.5	22336.5
106	22429	22337
107	22429.5	22337.5
108	22430	22338
109	22430.5	22338.5
110	22431	22339
111	22431.5	22339.5
112	22432	22340
113	22432.5	22340.5

ADD

[7]Ship stations may use the coast station receiving frequencies of channels Nos. 68 up to and including 135 for transmitting A1A and A1B Morse telegraphy (working).

AP32(Rev.)

CHANNEL No.	22 MHz BAND [7] (cont.)	
	TRANSMIT	RECEIVE
114	22433	22341
115	22433.5	22341.5
116	22434	22342
117	22434.5	22342.5
118	22435	22343
119	22435.5	22343.5
120	22436	22344
121	22436.5	22344.5
122	22437	22345
123	22437.5	22345.5
124	22438	22346
125	22438.5	22346.5
126	22439	22347
127	22439.5	22347.5
128	22440	22348
129	22440.5	22348.5
130	22441	22349
131	22441.5	22349.5
132	22442	22350
133	22442.5	22350.5
134	22443	22351
135	22443.5	22351.5

ADD

[7]Ship stations may use the coast station receiving frequencies of channels Nos. 68 up to and including 135 for transmitting A1A and A1B Morse telegraphy (working).

AP32(Rev.)

CHANNEL No.	25/26 MHz BAND	
	TRANSMIT	RECEIVE
1	26101	25173
2	26101.5	25173.5
3	26102	25174
4	26102.5	25174.5
5	26103	25175
6	26103.5	25175.5
7	26104	25176
8	26104.5	25176.5
9	26105	25177
10	26105.5	25177.5
11	26106	25178
12	26106.5	25178.5
13	26107	25179
14	26107.5	25179.5
15	26108	25180
16	26108.5	25180.5
17	26109	25181
18	26109.5	25181.5
19	26110	25182
20	26110.5	25182.5
21	26111	25183
22	26111.5	25183.5
23	26112	25184
24	26112.5	25184.5
25	26113	25185
26	26113.5	25185.5
27	26114	25186
28	26114.5	25186.5
29	26115	25187
30	26115.5	25187.5
31	26116	25188
32	26116.5	25188.5
33	26117	25189
34	26117.5	25189.5
35	26118	25190
36	26118.5	25190.5
37	26119	25191
38	26119.5	25191.5
39	26120	25192
40	26120.5	25192.5

APP33(Rev.)

ANNEX 6

APPENDIX 33 (Rev.Mob-87)

MOD

Channelling of the Maritime Mobile Bands Between 4 000 kHz and 27 500 kHz used for Narrow-Band Direct-Printing Telegraphy and Data Transmission (Non-Paired Frequencies)

MOD

(See Article 60)

MOD 1. One or more frequencies are assigned to each ship station as transmitting frequencies.

ADD 2. All frequencies in this Appendix may also be used by ship stations for transmitting A1A and A1B Morse telegraphy (working).

ADD 3. All frequencies appearing in this Appendix may be used for NBDP duplex operation.

The corresponding coast station frequencies should be selected by the administration concerned from the sub-bands for coast station wideband telegraphy, A1A and A1B Morse telegraphy, facsimile, special and data transmission systems and direct-printing telegraphy systems.

ADD 4. The speed of the narrow-band direct-printing telegraphy and data systems shall not exceed 100 bauds for FSK and 200 bauds for PSK.

APP33(Rev.)

Table of Ship Station Transmitting Frequencies (kHz)

Channel No.	Frequency Bands							
	4 MHz	6 MHz	8 MHz	12 MHz	16 MHz	18/19 MHz	22 MHz	25/26 MHz
1	4202.5	6300.5	8396.5	12560	16785	18893	22352	25193
2	4203	6301	8397	12560.5	16785.5	18893.5	22352.5	25193.5
3	4203.5	6301.5	8397.5	12561	16786	18894	22353	25194
4	4204	6302	8398	12561.5	16786.5	18894.5	22353.5	25194.5
5	4204.5	6302.5	8398.5	12562	16787	18895	22354	25195
6	4205	6303	8399	12562.5	16787.5	18895.5	22354.5	25195.5
7	4205.5	6303.5	8399.5	12563	16788	18896	22355	25196
8	4206	6304	8400	12563.5	16788.5	18896.5	22355.5	25196.5
9	4206.5	6304.5	8400.5	12564	16789	18897	22356	25197
10	4207	6305	8401	12564.5	16789.5	18897.5	22356.5	25197.5
11		6305.5	8401.5	12565	16790	18898	22357	25198
12		6306	8402	12565.5	16790.5		22357.5	25198.5
13		6306.5	8402.5	12566	16791		22358	25199
14		6307	8403	12566.5	16791.5		22358.5	25199.5
15		6307.5	8403.5	12567	16792		22359	25200
16		6308	8404	12567.5	16792.5		22359.5	25200.5
17		6308.5	8404.5	12568	16793		22360	25201
18		6309	8405	12568.5	16793.5		22360.5	25201.5
19		6309.5	8405.5	12569	16794		22361	25202
20		6310	8406	12569.5	16794.5		22361.5	25202.5
21		6310.5	8406.5	12570	16795		22362	25203
22		6311	8407	12570.5	16795.5		22362.5	25203.5
23		6311.5	8407.5	12571	16796		22363	25204
24			8408	12571.5	16796.5		22363.5	25204.5
25			8408.5	12572	16797		22364	25205
26			8409	12572.5	16797.5		22364.5	25205.5
27			8409.5	12573	16798		22365	25206
28			8410	12573.5	16798.5		22365.5	25206.5
29			8410.5	12574	16799		22366	25207
30			8411	12574.5	16799.5		22366.5	25207.5
31			8411.5	12575	16800		22367	25208
32			8412	12575.5	16800.5		22367.5	
33			8412.5	12576	16801		22368	
34			8413	12576.5	16801.5		22368.5	
35			8413.5		16802		22369	
36			8414		16802.5		22369.5	
37					16803		22370	
38					16803.5		22370.5	
39					16804		22371	
40							22371.5	
41							22372	
42							22372.5	
43							22373	
44							22373.5	
45							22374	

ANNEX 7

APPENDIX 34 (Rev.Mob-87)

MOD

Table of Calling Frequencies Assignable to Ship Stations for A1A Morse Telegraphy at Speeds Not Exceeding 40 Bauds*

(See Article 60 and Resolution No. 312)

(kHz)

GROUP	CHANNEL SERIES	4 MHz BAND	6 MHz BAND	8 MHz BAND	12 MHz BAND	16 MHz BAND	22 MHz BAND	25/26 MHz BAND
I	1 2	4 182 4 182.5	6 277 6 277.5	8 366 8 366.5	12 550 12 550.5	16 734 16 734.5	22 279.5 22 280	Channel A 25 171.5 Groups I and II
Common Channel Common Channel	3 4	4 184 4 184.5	6 276 6 276.5	8 368 8 369	12 552 12 553.5	16 736 16 738	22 280.5 22 281	Common Channel C 25 172
II	5 6	4 183 4 183.5	6 278 6 278.5	8 367 8 367.5	12 551 12 551.5	16 735 16 735.5	22 281.5 22 282	Channel A 25 171.5 Groups I and II
III	7 8	4 185 4 185.5	6 279 6 279.5	8 368.5 8 369.5	12 552.5 12 553	16 736.5 16 737	22 282.5 22 283	Channel B 25 172.5
IV	9 10	4 186 4 186.5	6 280 6 280.5	8 370 8 370.5	12 554 12 554.5	16 737.5 16 738.5	22.283.5 22 284	Groups III and IV

ADD * Channel width in every band: 0.5 kHz

Notes

ADD 1 Only the common channels in the 4, 6, 8, 12 and 16 MHz for A1A Morse telegraphy are harmonically related.

ADD 2 Administrations should assign the frequencies as they appear in this Appendix only to ship stations equipped with crystal controlled oscillators.

ADD 3 However, administrations may subdivide each appropriate group channel and common channel into specific calling frequencies on every full 100 Hz in the channel and assign these discrete frequencies to ships with synthesized transmitters.

MOD Examples of subdivision of channels (centre frequencies are underlined)

4 181.8	6 276.8	8 365.8	12 549.8	16 733.8	22 279.3	25 171.3
4 181.9	6 276.9	8 365.9	12 549.9	16 733.9	22 279.4	25 171.4
4 182	6 277	8 366	12 550	16 734	22 279.5	25 171.5
4 182.1	6 277.1	8 366.1	12 550.1	16 734.1	22 279.6	25 171.6
4 182.2	6 277.2	8 366.2	12 550.2	16 734.2	22 279.7	25.171.7

ADD 4 Administrations should avoid as far as possible, assigning the two frequencies at ±100 Hz from the harmonically related common channel.

ADD 5 In the 22 MHz and 25/26 MHz bands the channels are not harmonically related to those in the 4 to 16 MHz bands. However, the principle of subdivision of channels into specific calling frequencies on 100 Hz applies.

APP35(Rev.)

ANNEX 8

APPENDIX 35 (Rev.Mob-87)

MOD

**Table of Working Frequencies, in kHz,
Assignable to Ship Stations
for A1A and A1B Morse Telegraphy
at Speeds Not Exceeding 40 Bauds**

(See also Note e) to Appendix 31(Rev.)

SUP Note:

Frequency Bands							
Channel No.	4 MHz	6 MHz	8 MHz	12 MHz	16 MHz	22 MHz	25/26 MHz
1	4187	6285	8342	12422	16619	22242	25161.5
2	4187.5	6285.5	8342.5	12422.5	16619.5	22242.5	25162
3	4188	6286	8343	12423	16620	22243	25162.5
4	4188.5	6286.5	8343.5	12423.5	16620.5	22243.5	25163
5	4189	6287	8344	12424	16621	22244	25163.5
6	4189.5	6287.5	8344.5	12424.5	16621.5	22244.5	25164
7	4190	6288	8345	12425	16622	22245	25164.5
8	4190.5	6288.5	8345.5	12425.5	16622.5	22245.5	25165
9	4191	6289	8346	12426	16623	22246	25165.5
10	4191.5	6289.5	8346.5	12426.5	16623.5	22246.5	25166
11	4192	6290	8347	12427	16624	22247	25166.5
12	4192.5	6290.5	8347.5	12427.5	16624.5	22247.5	25167
13	4193	6291	8348	12428	16625	22248	25167.5
14	4193.5	6291.5	8348.5	12428.5	16625.5	22248.5	25168
15	4194	6292	8349	12429	16626	22249	25168.5
16	4194.5	6292.5	8349.5	12429.5	16626.5	22249.5	25169
17	4195	6293	8350	12430	16627	22250	25169.5
18	4195.5	6293.5	8350.5	12430.5	16627.5	22250.5	25170
19	4196	6294	8351	12431	16628	22251	25170.5
20	4196.5	6294.5	8351.5	12431.5	16628.5	22251.5	25171
21	4197	6295	8352	12432	16629	22252	
22	4197.5	6295.5	8352.5	12432.5	16629.5	22252.5	
23	4198	6296	8353	12433	16630	22253	
24	4198.5	6296.5	8353.5	12433.5	16630.5	22253.5	
25	4199	6297	8354	12434	16631	22254	
26	4199.5	6297.5	8354.5	12434.5	16631.5	22254.5	
27	4200	6298	8355	12435	16632	22255	
28	4200.5	6298.5	8355.5	12435.5	16632.5	22255.5	
29	4201	6299	8356	12436	16633	22256	
30	4201.5	6299.5	8356.5	12436.5	16633.5	22256.5	
31	4202	6300	8357	12437	16634	22257	
32			8357.5	12437.5	16634.5	22257.5	
33			8358	12438	16635	22258	
34			8358.5	12438.5	16635.5	22258.5	
35			8359	12439	16636	22259	
36			8359.5	12439.5	16636.5	22259.5	
37			8360	12440	16637	22260	
38			8360.5	12440.5	16637.5	22260.5	
39			8361	12441	16638	22261	
40			8361.5	12441.5	16638.5	22261.5	
41			8362	12442	16639	22262	
42			8362.5	12442.5	16639.5	22262.5	
43			8363	12443	16640	22263	
44			8363.5	12443.5	16640.5	22263.5	
45			8364	12444	16641	22264	

APP35(Rev.)

Frequency Bands							
Channel No.	4 MHz	6 MHz	8 MHz	12 MHz	16 MHz	22 MHz	25/26 MHz
46			8364.5	12444.5	16641.5	22264.5	
47			8365	12445	16642	22265	
48			8365.5	12445.5	16642.5	22265.5	
49			8371	12446	16643	22266	
50			8371.5	12446.5	16643.5	22266.5	
51			8372	12447	16644	22267	
52			8372.5	12447.5	16644.5	22267.5	
53			8373	12448	16645	22268	
54			8373.5	12448.5	16645.5	22268.5	
55			8374	12449	16646	22269	
56			8374.5	12449.5	16646.5	22269.5	
57			8375	12450	16647	22270	
58			8375.5	12450.5	16647.5	22270.5	
59			8376	12451	16648	22271	
60				12451.5	16648.5	22271.5	
61				12452	16649	22272	
62				12452.5	16649.5	22272.5	
63				12453	16650	22273	
64				12453.5	16650.5	22273.5	
65				12454	16651	22274	
66				12454.5	16651.5	22274.5	
67				12455	16652	22275	
68				12455.5	16652.5	22275.5	
69				12456	16653	22276	
70				12456.5	16653.5	22276.5	
71				12457	16654	22277	
72				12457.5	16654.5	22277.5	
73				12458	16655	22278	
74				12458.5	16655.5	22278.5	
75				12459	16656	22279	
76				12459.5	16656.5		
77				12460	16657		
78				12460.5	16657.5		
79				12461	16658		
80				12461.5	16658.5		
81				12462	16659		
82				12462.5	16659.5		
83				12463	16660		
84				12463.5	16660.5		
85				12464	16661		
86				12464.5	16661.5		
87				12465	16662		
88				12465.5	16662.5		
89				12466	16663		
90				12466.5	16663.5		

AP35(Rev.)

Frequency Bands							
Channel No.	4 MHz	6 MHz	8 MHz	12 MHz	16 MHz	22 MHz	25/26 MHz
91				12467	16664		
92				12467.5	16664.5		
93				12468	16665		
94				12468.5	16665.5		
95				12469	16666		
96				12469.5	16666.5		
97				12470	16667		
98				12470.5	16667.5		
99				12471	16668		
100				12471.5	16668.5		
101				12472	16669		
102				12472.5	16669.5		
103				12473	16670		
104				12473.5	16670.5		
105				12474	16671		
106				12474.5	16671.5		
107				12475	16672		
108				12475.5	16672.5		
109				12476	16673		
110				12476.5	16673.5		
111					16674		
112					16674.5		
113					16675		
114					16675.5		
115					16676		
116					16676.5		
117					16677		
118					16677.5		
119					16678		
120					16678.5		
121					16679		
122					16679.5		
123					16680		
124					16680.5		
125					16681		
126					16681.5		
127					16682		
128					16682.5		
129					16683		

ANNEX 9

Consequential amendments to the Radio Regulations

ARTICLE 8

MOD 500A The frequencies 2 187.5 kHz, 4 207 kHz, 6 312 kHz, 8 414.5 kHz, 12 577 kHz and 16 804.5 kHz are international distress frequencies for digital selective calling. The conditions for the use of these frequencies are prescribed in Article N 38.

MOD 500B The frequencies 2 174.5 kHz, 4 177.5 kHz, 6 268 kHz, 8 356.5 kHz, 12 520 kHz and 16 695 kHz are international distress frequencies for narrow-band direct-printing telegraphy. The conditions for the use of these frequencies are prescribed in Article N 38.

ADD 520A The frequency 4 209.5 kHz is [an] [international] frequency for the transmission of NAVTEX type information (see Resolution COM5/4, Appendix 31(Rev.)).

ADD 520B The frequencies 4 210 kHz, 6 314 kHz, 8 416.5 kHz, 12 579 kHz, 16 806.5 kHz, 19 680.5 kHz, 22 376 kHz, 26 100.5 kHz are the [international] frequencies for the transmission of Maritime Safety Information (MSI) (see Resolution COM5/5, Appendix 31(Rev.)).

MOD 529A The conditions for the use of the carrier frequency 8 291 kHz, 12 290 kHz and 16 420 kHz are prescribed in Articles 38, N 38 and 60.

[Note for the Editorial Committee

The new footnote 520B has to be included in the bands 4 063 - 4 438 kHz, 6 200 - 6 525 kHz, 8 195 - 8 815 kHz, 12 230 - 13 200 kHz, 16 360 - 17 410 kHz, 19 680 - 19 800 kHz, 22 000 - 22 855 kHz and 26 100 - 26 175 kHz.]

MOD

Sub-Section IIB. Procedure to Be Followed for Coast Radiotelephone Stations Operating in the Bands Allocated Exclusively to the Maritime Mobile Service Between 4 000 kHz and 27 500 kHz

MOD **1315** § 24. (1) *Examination of Notices Concerning Frequency Assignments to Coast Radiotelephone Stations in the Bands Allocated Exclusively to the Maritime Mobile Service Between 4 000 kHz and 27 500 kHz for Coast Radiotelephone Stations (see No.* **1239***).*

MOD **1326** § 25. (1) *Examination of Notices Concerning Frequencies Used for Reception by Coast Radiotelephone Stations in the Bands Allocated Exclusively to the Maritime Mobile Service Between 4 000 kHz and 27 500 kHz for Ship Radiotelephone Stations (see Nos.* **1219** *and* **1239***).*

MOD **1388** § 40. (1) *Frequency Bands:*

9 - 2 850 kHz
3 155 - 3 400 kHz
3 500 - 3 900 kHz in Region 1
3 500 - 4 000 kHz in Region 2
3 500 - 3 950 kHz in Region 3
4 221 - 4 351 kHz
6 332.5 - 6 501 kHz
8 438 - 8 707 kHz
12 658.5 - 13 077 kHz
16 904.5 - 17 242 kHz
19 705 - 19 755 kHz
22 445.5 - 22 696 kHz
26 122.25 - 26 145 kHz

MOD **1391** § 41. (1) *Frequency Bands Allocated Exclusively to the Maritime Mobile Service Between 4 000 kHz and 27 500 kHz for Coast Radiotelephone Stations.*

MOD **1395** § 42. (1) *Frequency Bands Allocated Exclusively to the Maritime Mobile Service Between 4 000 kHz and 27 500 kHz for Ship Radiotelephone Stations.* 27 500

MOD **1399** § 43. (1) *Frequency Bands Allocated Exclusively to the Maritime Mobile Service Between 4 000 kHz and 27 500 kHz for Radiotelegraph Ship Stations (see No.* **1220***).*

ANNEX 10

DRAFT RECOMMENDATION [COM 4/E]

Relating to the Need for Technical Improvements to Minimize the Risk of Adjacent Channel Harmful Interference Between Assignments Used for Narrow-Band Direct-Printing (NBDP) Telegraphy and Data Systems in Accordance with Appendix 32 and Resolution No. 300(Rev.)

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

a) that Appendix 32(Rev.) of the Radio Regulations contains the channelling arrangement for NBDP telegraphy and data systems (paired frequencies);

b) that the use of these frequency pairs is subject to the provisions of Article 60 of the Radio Regulations and Resolution No. 300(Rev.);

c) that the spacing between the frequencies listed in Appendix 32(Rev.) is 500 Hz;

d) that the present Conference has decided to adopt No. 4321B which specifies the maximum mean powers to be used by coast stations for F1B and/or J2B emissions in bands exclusively allocated to the maritime mobile service between 4 000 kHz and 27 500 kHz;

recommends

that administrations cooperate to the fullest extent possible in resolving harmful interference in the adjacent channels used for NBDP telegraphy and data systems (paired frequencies);

requests the CCIR

1. to study the matter of technical compatibility between adjacent channels and make appropriate Recommendations;

2. to take into account the maximum mean powers for coast radiotelegraph stations employing class F1B and/or J2B emissions in the bands exclusively allocated to the maritime mobile service between 4 000 and 27 500 kHz (see No. 4321B);

3. to present the results of its studies to the next competent conference.

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 413-E
10 October 1987
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COMMITTEE 4

TENTH REPORT OF WORKING GROUP 4-A TO COMMITTEE 4

1. In addition to the items already reported, the Working Group approved the modifications to Article 8 as contained in Annex 1 to this report.

2. With the exception of ADD 726B and MOD 728, all other modifications are mainly of an editorial nature (to make reference to Articles in Chapter N IX).

3. ADD 726B and MOD 728 are drafted in response to the note from the Chairman of the Technical Working Group of the Plenary (Documents 327 and 328). In this connection please note that this proposal for MOD 728 replaces that contained in the ninth report (Document 389).

4. The Working Group considered the remaining Resolutions from the Radio Regulations, attributed to it, and proposes to modify Resolutions Nos. 200 (Mob-83) and 205 (Mob-83), as contained in Annexes 2 and 3.

5. The Working Group reviewed Resolution GT-TEC PLEN/3 (Document 298), as requested by the fifth Plenary Meeting, and proposes to modify it as contained in Annex 4.

6. The Working Group considered also the remaining proposals concerning new Resolutions and new Recommendations and agreed upon the texts which are contained in Annexes 5 and 6.

J. KARJALAINEN
Chairman of Working Group 4-A

Annexes: 6

ANNEX 1

MOD 472 The frequency 500 kHz is an international distress and calling frequency for Morse radiotelegraphy. The conditions for its use are prescribed in Articles 37, 38, N 38 and 60.

MOD 474 The conditions for the use of frequency 518 kHz by the maritime mobile service are prescribed in Articles 38, N 38 and 60 [(see Resolution No. [COM4/3] and Article 14A)].

MOD 500 The carrier frequency 2 182 kHz is an international distress and calling frequency for radiotelephony. The conditions for the use of the band 2 173.5 - 2 190.5 kHz are prescribed in Articles 37, 38, N 38 and 60.

MOD 500A The frequencies [2 187.5] kHz, [4 188] kHz, [6 282] kHz, [8 375] kHz, [12 563] kHz and [16 750] kHz are international distress frequencies for digital selective calling. The conditions for the use of these frequencies are prescribed in Articles 38 and N 38.

MOD 500B The frequencies [2 174.5] kHz, [4 177.5] kHz, [6 268] kHz, [8 357.5] kHz, [12 520] kHz and [16 695] kHz are international distress frequencies for narrow-band direct-printing telegraphy. The conditions for the use of these frequencies are prescribed in Article N 38.

[MOD] 501 The carrier frequencies 2 182 kHz, 3 023 kHz, 5 680 kHz, 8 364 kHz and the frequencies 121.5 MHz, 156.8 MHz and 243 MHz may also be used, in accordance with the procedures in force for terrestrial radiocommunication services, for search and rescue operations concerning manned space vehicles. The conditions for the use of the frequencies are prescribed in Articles 38 and N 38.

The same applies to the frequencies 10 003 kHz, 14 993 kHz and 19 993 kHz, but in each of these cases emissions must be confined in a band of ± 3 kHz about the frequency.

MOD 505 The carrier (reference) frequencies 3 023 kHz and 5 680 kHz may also be used, in accordance with Articles 38 and N 38 by stations of the maritime mobile service engaged in coordinated search and rescue operations.

MOD 520 The conditions for the use of the carrier frequencies 4 125 kHz and 6 215 kHz are prescribed in Articles 37, 38, N 38 and 60.

[ADD 520A The conditions for the use of the frequency [4 229] kHz are prescribed in Article N 38.]

MOD 529A The conditions for the use of the carrier frequencies [8 257] kHz, [12 392] kHz and [16 522] kHz are prescribed in Articles 38, N 38 and 60.

MOD 593 In the band 117.975 - 136 MHz, the frequency 121.5 MHz is the aeronautical emergency frequency and, where required, the frequency 123.1 MHz is the aeronautical frequency auxiliary to 121.5 MHz. Mobile stations of the maritime mobile service may communicate on these frequencies under the conditions laid down in Articles 38 and N 38 for distress and safety purposes with stations of the aeronautical mobile service.

MOD 613A In the maritime mobile VHF service the frequency 156.525 MHz is to be used exclusively ~~as from 1 January 1986~~ for digital selective calling for distress, ~~and~~ safety ~~communications~~. and calling. ~~The frequency 156.825 MHz is used exclusively for direct-printing telegraphy in the maritime mobile VHF service for distress and safety purposes~~. The conditions for the use of the frequency are prescribed in Articles 38, N 38 and 60 and in Appendix 18.

MOD 642 The frequency 243 MHz is the frequency in this band for use by survival craft stations and equipment used for survival purposes (see Article 38).

MOD 649 The use of the band 406 - 406.1 MHz by the mobile-satellite service is limited to low-power satellite emergency position-indicating radiobeacons (see also Articles 38 and N 38).

ADD 726B The use of the band 1 544 - 1 545 MHz (space-to-Earth) by the mobile-satellite service is limited to distress and safety traffic (see Article N 38).

MOD 728 The use of the bands ~~1 544 - 1 545 MHz (space-to-Earth) and~~ 1 645.5 - 1 646.5 MHz (Earth-to-space) by the mobile-satellite service and for intersatellite links is limited to distress and safety ~~operations~~ traffic (see Article N 38).

ADD 823A In the band 9 200 - 9 500 MHz, search and rescue transponders (SART) may be used, having due regard to the appropriate CCIR Recommendation (see also Article N 38).

ANNEX 2

RESOLUTION No. 200 (Rev.Mob-~~83)~~ 87)

Relating to the Class of Emission to be Used for Distress and Safety Purposes on the Carrier Frequency 2 182 kHz

The World Administrative Radio Conference for the Mobile Services, Geneva, ~~1983,~~ 1987,

noting

a) the requirements of No. **2973** of the Radio Regulations concerning the class of emission to be used on the carrier frequency 2 182 kHz;

b) that the main objective of this provision is to permit the orderly introduction of the new and improved global maritime distress and safety system using advanced techniques whilst at the same time maintaining reliable distress and safety communications using existing and proven techniques;

recognizing

a) that the use of class J3E emission on the carrier frequency 2 182 kHz would provide the operational advantages, inherent in single-sideband techniques, which are being obtained on other frequencies;

b) that, however, provision for the transmission and reception of the radiotelephone alarm signal on the carrier frequency 2 182 kHz will be required until, and for some time after, the introduction of the ~~future~~ global maritime distress and safety system (~~F~~GMDSS);

c) that there are many uncertain factors relating to the date of introduction of the ~~F~~GMDSS;

d) that the Radio Regulations as revised by this Conference provide frequencies in the band 2 173.5 kHz to 2 190.5 kHz for the orderly introduction of the ~~F~~GMDSS without calling for the interruption or cessation of present distress and safety communication systems using existing and proven techniques;

e) that the requirement for direction finding and homing must be satisfied under all conditions;

resolves that

the question of the date for transferring entirely to J3E emissions on the carrier frequency 2 182 kHz for distress and safety communications be referred to the next competent world administrative radio conference;

SUP ~~*further resolves to invite the International Maritime Organization (IMO)*~~

SUP ~~to consider the~~ matter ~~as part of its on-going studies of the FGMDSS;~~

SUP ~~*requests the CCIR*~~

SUP ~~to continue its studies on making provisions for direction finding~~ and homing requirements ~~when using J3E emissions, on the carrier frequency~~ 2 182 kHz, ~~as a matter of urgency and, if possible, to issue Recommendations sufficiently in advance of the above-mentioned conference to permit their full consideration;~~

SUP ~~*requests the Secretary-General*~~

SUP ~~to communicate this Resolution to the~~ IMO.

ANNEX 3

RESOLUTION No. 205 (Mob-~~83~~) 87)

Relating to the Protection of the Band 406 - 406.1 MHz Allocated to the Mobile-Satellite Service

The World Administrative Radio Conference for the Mobile Services, Geneva, ~~1983,~~ 1987,

considering

NOC *a)* that the World Administrative Radio Conference, Geneva, 1979, allocated the band 406 - 406.1 MHz to the mobile-satellite service in the Earth-to-space direction;

NOC *b)* that No. **649** of the Radio Regulations limits the use of the band 406 - 406.1 MHz to low power satellite emergency position-indicating radiobeacons (EPIRBs);

the World Administrative Radio for the Mobile Services, Geneva, 1983,

MOD *c)* that ~~this~~ Conference ~~has~~ made provision in the Radio Regulations for the introduction and development of a global distress and safety system;

NOC *d)* that the use of satellite emergency position-indicating radiobeacons is an essential element of this system;

NOC *e)* that, like any frequency band reserved for a distress and safety system, the band 406 - 406.1 MHz is entitled to full protection against all harmful interference;

the World Administrative Radio for the Mobile Services, Geneva, 1983,

MOD *f)* that ~~this~~ Conference ~~has~~ adopted Recommendation **604 (Rev.Mob-83)** which recommends that the CCIR continue its studies in the technical and operational questions for EPIRBs, including those using the frequencies in the band 406 - 406.1 MHz;

ADD g) that the CCIR has initiated a study of the compatibility between satellite EPIRBs in the band 406 - 406.1 MHz and services using adjacent bands;

considering further

MOD ~~g)~~ h) that some administrations ~~are participating in the development of a~~ have developed and implemented an operational low-altitude, near-polar orbiting satellite system (COSPAS-SARSAT) operating in the band 406 - 406.1 MHz to provide alerting and to aid in the locating of distress incidents;

i) that the International Maritime Organization (IMO) has decided that the carriage of EPIRBs operating in the COSPAS-SARSAT system should be mandatory in the Global Maritime Distress and Safety System (GMDSS);

~~h)~~ j) that observations of the use of frequencies in the band 406 - 406.1 MHz show that they are being used by stations other than those authorized by No. 649 of the Radio Regulations, and that these stations have ~~could~~ caused harmful interference to the mobile-satellite service and particularly to the reception of satellite EPIRB signals by the COSPAS-SARSAT system ~~being developed to aid those in distress;~~

~~i)~~ k) that in the future, new satellite systems which may be either geostationary or non-geostationary may be introduced in this band;

recognizing

that it is essential for the protection of human life and property that bands allocated exclusively to a service for distress and safety purposes be kept free from harmful interference;

resolves

to instruct the IFRB

to organize monitoring programmes in the band 406 - 406.1 MHz in order to identify the source of any unauthorized emission in that band;

to urge administrations

1. to take part in monitoring programmes requested by the IFRB in accordance with No. **1874** of the Radio Regulations, in the band 406 - 406.1 MHz, with a view to identifying and locating stations of services other than those authorized in this band;

2. to ensure that stations other than those operated under No. **649** abstain from using frequencies in the band 406 - 406.1 MHz;

3. to take the appropriate measures to eliminate harmful interference caused to the distress and safety system;

invites the CCIR

to continue on an urgent basis its study ~~urgently conditions~~ of compatibility between satellite EPIRBs in the band 406 - 406.1 MHz and services using adjacent bands.

ANNEX 4

RESOLUTION GT-TEC PLEN/3

Relating to the Operation of Fixed and Maritime Mobile Services in the Band 90 - 110 kHz

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

a) the need to protect phased pulse hyperbolic radionavigation systems (Loran-C) operating in the band 90 - 110 kHz used as a safety service for both maritime and aeronautical services;

b) the studies made by the CCIR in this band;

c) that harmful interference affecting safety of flight and ship navigation may be caused to this service by the operation of fixed and maritime mobile services having a secondary allocation in this band;

d) that, notwithstanding to No. 453A of the Radio Regulations, this Conference has removed the allocation for the maritime mobile service from this band;

noting

that this Conference is not competent to affect significantly the allocation of the fixed service;

resolves

to invite the next competent conference to review the fixed service allocation in this band, and No. 453A of the Radio Regulations, with a view to their possible deletion;

invites

the Administrative Council to place this matter on the agenda of the next competent world administrative radio conference.

ANNEX 5

RESOLUTION [COM4/17]

Relating to Frequencies for Routine (Non-Distress) Calling in the Bands Between 1 605 kHz and 4 000 kHz

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987

noting

a) that after the full implementation of the GMDSS the carrier frequency 2 182 kHz may be required exclusively for distress and safety purposes (see Resolution [COM5/1]);

b) that as a consequence there may be a need to provide a frequency for routine (non-distress) calling by radiotelephony; however, this Conference was not in a position to identify a specific frequency for this purpose in the bands between 1 605 kHz and 4 000 kHz;

c) that this Conference has provided the frequency pair 2 177 kHz (coast stations) and 2 189.5 kHz (ship stations) for routine (non-distress) calling using digital selective-calling techniques;

considering

that as this Conference has provided frequencies for routine (non-distress) calling using digital selective-calling techniques, there may no longer be a need to provide a frequency for routine (non-distress) calling by radiotelephony in the bands between 1 605 kHz and 4 000 kHz after the full implementation of the GMDSS;

resolves

to recommend that a future competent world administrative radio conference should consider whether there is a need to provide a frequency for routine (non-distress) calling by radiotelephony in the bands between 1 605 kHz and 4 000 kHz,

invites the Administrative Council

to include this question in the agenda of the next competent world administrative radio conference;

requests the Secretary-General

to communicate this Resolution to the International Maritime Organization.

ANNEX 6

RECOMMENDATION [COM4/18]

Relating to Future Public Land Mobile Telecommunication Systems

The World Administrative Radio Conference for Mobile Services, Geneva 1987,

considering

a) that present techniques used by land mobile cellular systems allow for a significant degree of spectrum efficiency;

b) that new applications involving digital techniques are being introduced in public switched networks and that these applications will be introduced also in the land mobile service;

c) that there is a need for world-wide interoperability especially for hand-held (personal) terminals;

d) that the demand for mobile services will continue to increase making it necessary to develop techniques to increase spectrum utilization;

e) that the spectrum needs will be relatively small for systems serving short range, low power hand-held (personal) terminals due to the high spectrum efficiency inherent with the small cells in such systems;

f) that a high degree of equipment standardization is desirable;

g) that land mobile system techniques may also be used to provide telecommunications services for fixed services applications in remote areas;

h) that future systems which provide service to hand-held (personal) terminals may evolve from existing or currently planned systems;

noting

a) Recommendation No. 310 of the World Administrative Radio Conference, Geneva, 1979, relating to an automated UHF maritime mobile system;

b) CCIR Question 39/8 and Study Programme 39A on public land mobile telephone systems;

c) CCIR Decision 69 initiating a study of future public land mobile telecommunication systems within the current study period;

d) relevant CCITT studies and Recommendations;

recommends

that the next competent world administrative radio conference should consider designating suitable band or bands for international use by future public land mobile telecommunication systems taking into account the relevant CCIR Recommendations and reports;

invites the CCIR

to continue to study, as a matter of urgency, the technical characteristics and suitable frequency bands for the equipment and systems providing public land mobile services;

invites the CCITT

to continue studies to permit the interworking of future public land mobile telecommunication systems with the public switched telecommunication networks;

invites the Administrative Council

to take the necessary action to place this matter on the agenda of the next competent world administrative radio conference.

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 414-E
10 October 1987
Original: English

COMMITTEE 4

ELEVENTH AND LAST REPORT OF THE CHAIRMAN OF WORKING GROUP 4-A TO COMMITTEE 4

1. Working Group held 21 meetings and considered all the proposals submitted, to this Conference, relating to frequency allocation matters. The conclusions of the Working Group are contained in ten reports to Committee 4, which are to be found in Documents 147, 178, 206, 235, 281, 309, 358, 373, 389 and 413.

2. Working Group 4-A created eleven Drafting Groups whose reports facilitated the consideration of the very diverse proposals.

3. Working Group 4-A was, however, unable to reach conclusion on the following proposals:

3.1 The United States proposal USA/24/48 concerning the introduction of the mobile service, on a secondary basis, in the band 18 168 - 18 780 kHz.

3.2 The proposals: CEPT-3/10/7-8, I/97/21, USA/24/85, AUS/40/34 and related proposals concerning the use of the band 5 000 - 5 250 MHz by the aeronautical radionavigation, mobile and radiodetermination-satellite services (feeder links). In this respect, the Working Group took note of the statement of the ICAO representative which is reproduced in the annex.

3.3 On the request of the United States Delegation, the proposal USA/24/818 was not considered, pending the decision on the appropriate allocation to the RDSS.

3.4 The proposals concerning the modifications to Article 60 were not considered, due to the fact that the approved text of Article 60 was not available to the Working Group. However, the Working Group considered the proposal CEPT-11/18/8, concerning MOD RR 4237, based on the decisions of RARC-MM-R1 (this proposal was objected to by a number of delegations from Regions 2 and 3). The French Delegation preferred that their proposals (F/46/1-9) should be considered directly in Committee 4.

3.5 The Working Group was unable to consider the proposals concerning the APC contained in Document 383, due to lack of time. The Working Group proposes that the relevant proposals from that document should be forwarded to Working Group 4 ad hoc 3 and Working Group 4 ad hoc 6.

3.6 The Working Group has not considered the proposal J/60/622 concerning the new Appendix 27A, since it was unable to decide whether that proposal was within the terms of reference of the Working Group.

J. KARJALAINEN
Chairman of Working Group 4-A

Annex: 1

ANNEX

The ICAO international standard microwave landing system (MLS) is in the early stages of implementation. Experience in such world-wide implementation projects shows that a degree of flexibility is essential to solve operational problems that are revealed during implementation. Spectrum constraints therefore would prevent, or seriously hinder, efforts to resolve any problems. For this reason ICAO recommends that no changes should be made to the 5 000 - 5 250 MHz allocation.

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 415-E
10 October 1987
Original: English

COMMITTEE 6

SEVENTEENTH REPORT OF THE CHAIRMAN OF WORKING GROUP 6-A TO THE CHAIRMAN OF COMMITTEE 6

The Working Group has reviewed the following parts of the Radio Regulations with little or no impact on the existing provisions.

The below-mentioned items were retained in their present form (NOC), or suppressed (SUP), or modified (MOD), or not acted upon (NA) as follows:

Item	Action	Decided by meeting	Remarks
Article 1	NA	12	Contained one item "land earth station" that falls within the terms of reference of Working Group 6-A. This new provision (ADD 67A) has however already been attended to by Committee 6 (Document 304 refers). It was consequently stricken from the agenda during the 12th meeting of Working Group 6-A.
Appendix 38	NA		- (See Document 392).
Appendix 39	NA		- TECH WG PL (see Document 238, including DT/19).
Appendix 44	NOC	10	
Resolution No. 204	SUP	12	
Resolution No. 304	SUP	12	
Resolution No. 311	SUP	11	
Resolution No. 312	MOD	10	See Annex 1.
Resolution No. 314	NOC	12	

Item	Action	Decided by meeting	Remarks
Resolution No. 320	SUP	12	- (Included in AP43) 14th meeting did however query this decision. Certain administrations had preferred to maintain this Resolution until the revised Radio Regulations have entered into force.
Recommendation No. 7	NOC	14	- Document 312 refers. A note to cover SES and AES was however added during the Plenary.
Recommendation No. 203	SUP	12	
Recommendation No. 301	SUP	12	
Recommendation No. 302	MOD	14	See Annex 2.
Recommendation No. 305	SUP		
Recommendation No. 310	NA	11	See Document 392.
Recommendation No. 312	NA	11	See Document 280.
Recommendation No. 315	SUP	10	

R. SWANSON
Chairman of Working Group 6-A

Annexes: 2

ANNEX 1

RESOLUTION No. 312

MOD **Relating to the ~~Introduction of New~~ Calling Procedures for HF A1A Morse Telegraphy**[1]

MOD The World Administrative Radio Conference for the Mobile Services, Geneva, ~~1979~~ 1987

NOC considering a)

MOD b) that it is desirable to continue to improve the effectiveness of calling in the HF A1A Morse telegraphy bands;

MOD c) that ..... (Article 60 [and Table C of Appendix 34 31A)];

MOD d) that the effectiveness of the new calling ..... specified in [Table C of Appendix ~~34~~ 31A] in ..... basis;

NOC e)

NOD invites

NOC administrations ..... channels;

NOC invites further

NOC administrations ..... Coast Stations;

NOC instructs the Secretary-General

SUP 1

MOD ~~2~~ ~~in the light ..... concerned~~ as necessary, to update ..... Coast Stations;

SUP 3

NOC ANNEX TO RESOLUTION No. 312

MOD [1]Replaces Resolution No. ~~Mar2 — 5~~ 312 of the World ~~Maritime~~ Administrative Radio Conference, Geneva, ~~1974~~ 1979.

RECOMMENDATION No. 302

NOC **Relating to the Improved Use of the HF Radiotelephone Channels for Coast Stations in the Bands Allocated Exclusively to the Maritime Mobile Service**[1]

MOD The World Administrative Radio Conference <u>for the Mobile Services</u>, Geneva, ~~1979~~ <u>1987</u>,

NOC <u>considering</u> a)

MOD b) that the number of channels resulting from the revision of [Appendix 16] <u>by that Conference</u> ~~is~~ <u>has</u> not <u>been</u> sufficient to satisfy ~~these~~ <u>those</u> requirements in optimum conditions;

NOC c)

MOD d) that ~~after~~ since the ~~present~~ <u>World Administrative Radio Conference, Geneva 1979</u> the optimal use of the HF radiotelephony channels in the bands allocated exclusively to the maritime mobile service ~~will be~~ <u>has been</u> of even greater importance;

NOC e) - f)

ADD g) that this Conference has provided a number of additional channels for radiotelephony in the HF bands allocated exclusively to the maritime mobile service [(see Resolution No. D)] but that these additional channels may not be sufficient to satisfy all requirements

NOC <u>recommends that administrations</u>

NOC 1 - 2

NOC <u>invites administrations</u>

NOC 1 - 2

NOC <u>invites the CCIR</u>

NOC to continue ..... to the channels.

MOD [1]Replaces Recommendation No. ~~Mar2 — 7~~ <u>302</u> of the World ~~Maritime~~ Administrative Radio Conference, Geneva, ~~1974~~ <u>1979</u>.

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COMMITTEE 6

EIGHTEENTH REPORT BY THE CHAIRMAN OF WORKING GROUP 6-A TO THE CHAIRMAN OF COMMITTEE 6

The Working Group recommends the following modifications to Article 63.

R. SWANSON
Chairman of Working Group 6-A

ARTICLE 63

MOD **General Morse Radiotelegraph Procedure in the Maritime Mobile Service**

NOC **Section I. General Provisions**

NOC 4711-4712

NOC **Section II. Preliminary Operations**

MOD 4713 4. (1) Before transmitting, a station shall take precautions to ensure that its emissions will not interfere with transmission already in progress; if such interference is likely, the station shall await an appropriate break in the communications in progress. This obligation does not apply to stations where unattended operation is possible through automatic means (see No. 3863) on frequencies dedicated to narrow-band direct-printing.

NOC 4714-4717

MOD **Section III. Calls by Morse Radiotelegraphy**

NOC 4718 A. General

SUP 4719

NOC 4720-4744

NOC 4745 B. Calls to Several Stations

SUP 4746

NOC 4747-4753

NOC **Section IV. Method of Calling, Reply to Calls and Signals Preparatory to Traffic**

NOC 4754-4786

NOC **Section V. Forwarding (Routing) of Traffic**

NOC 4787-4801

NOC **Section VI. End of Traffic and Work**

NOC 4802-4810

NOC **Section VII. Control of Working**

NOC 4811-4813

NOC **Section VIII. Tests**

NOC 4814-4815

NOC 4816 to 4840 NOT allocated.

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COMMITTEE 7

FIFTH SERIES OF TEXTS FROM COMMITTEE 6 TO THE EDITORIAL COMMITTEE

Committee 6 has considered the following documents and decided on them as follows:

Document 270

Article 25: Approved.

Document 349

Appendix 10: Approved with minor modifications.

Document 379

Article 26: Approved with modifications which have been given to the Editorial Committee.

Document 284

Article 59: Approved with minor modifications.

Document 378

Appendix 9: Approved with minor modifications.

Document 381

Appendix 11: Approved with minor modifications.

Document 382

Appendix 43: Approved.

Document 382

Resolution 320: Suppressed.

Document 352

Resolution [COM6/3]: Approved with modifications which have been given to the Editorial Committee.

I.R. HUTCHINGS
Chairman of Committee 6

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
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COMMITTEE 4

FIRST REPORT OF WORKING GROUP 4 AD HOC 6
TO COMMITTEE 4

DRAFT RESOLUTION [COM4/16]

Relating to the Use of Frequency Bands Allocated Exclusively to the Aeronautical Mobile Service for Various Forms of Public Correspondence

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

a) that some administrations have notified the IFRB of assignments in the frequency bands allocated exclusively to the aeronautical mobile service where such assignments relate to public correspondence, limited public correspondence and correspondence of a private agency;

b) that such assignments are in contravention of No. 3633 which prohibits public correspondence in frequency bands allocated exclusively to the aeronautical mobile service;

c) that such assignments are capable of causing harmful interference to the aeronautical mobile service;

d) that radio is the sole means of communication available to the aeronautical mobile service and that this service is concerned with the safety and regularity of flight;

recognizing

a) that this conference has made appropriate amendments to Article 12 to allow the IFRB the flexibility required in dealing with notices not in conformity with No. 3633;

b) that it is of paramount importance that frequencies directly concerned with the safe and regular conduct of aircraft operations be kept free from harmful interference, since they are essential for the safety of life and property;

resolves

1) to urge administrations

a) to refrain from making assignments to stations for various forms of public correspondence in frequency bands allocated exclusively to the aeronautical mobile service;

b) to cease current operations for such use and to delete present assignments for such use for the Master Register;

2) to request the IFRB

a) to advise administrations concerned of those assignments contained in the Master Register which are in contravention of No. 3633 of the Radio Regulations;

b) to seek the cooperation of administrations in the cessation of operations in contravention of No. 3633 of the Radio Regulations and consequent deletion of the assignments concerned from the Master Register.

K. BJÖRNSJÖ
Chairman of Working Group 4 ad hoc 6

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COMMITTEE 7

SIXTH SERIES OF TEXTS FROM COMMITTE 6
TO THE EDITORIAL COMMITTEE

Revisions to Article 62, as approved by Committee 6 are shown in the attached annex.

It is noted that DSC frequencies contained in Nos. 4679A, 4681A, 4683 and 4684 may need to be aligned with decisions of Committee 4. At this stage all of the frequencies contained in square brackets have been aligned with tentative decisions of Committee 4's Working Group 4-C as contained in DT/68 and its Corrigendum 1.

The Committee proposes a new Resolution [COM 6/4] to conform to MOD 4685, in order to permit an early introduction of digital selective calling prior to the date at which the modifications to the Radio Regulations made by this Conference come into force.

The USSR Delegation expressed its concern by the decision proposed by Sub-Working Group 4-C relating to an allocation of international channels for exclusive DSC utilization for purposes other than distress and safety [3 channels in each HF band]. In the opinion of the USSR Delegation the allocation of 3 channels is inadequate to develop a satisfactory operation system since it contradicts the CCIR studies (see Report 908-1). At the same time RR 4685 permits administrations to use practically any working frequency in the HF band for the DSC purposes.

Based on the above considerations the USSR Delegation considers it possible to reduce the number of international channels to one with due regard to the right of any administration to apply RR 4685 with a publication of appropriate information in the List of Coast Stations.

I.R. HUTCHINGS
Chairman of Committee 6

Annex: 1

ANNEX

ARTICLE 62

NOC **Selective Calling Procedure in the Maritime Mobile Service**

NOC **Section I. General**

SUP 4665

NOC 4665A

SUP 4666

NOC 4666A

NOC **Section II. Sequential Single-Frequency Code System**

NOC 4667 A. General

NOC 4668

NOC 4668A § 2A. The sequential single-frequency code system may be in operation until it is superseded by the digital selective calling system referred to in Section III.

NOC 4669 B. Method of Calling

NOC 4670-4674

NOC 4675 C. Reply to Calls

NOC 4676

MOD 4677 a) Nos. 4767 and 4769 when using Morse radiotelegraphy.

NOC 4678

NOC 4679

D. Frequencies to Be Used

MOD 4679A § 4A.

Selective calling may be carried out on:

a) the following calling frequencies:

[	500	kHz
2	170.5	kHz
4	125	kHz
4	417	kHz
6	516	kHz
8	779	kHz
13	137	kHz
17	302	kHz
19	770	kHz
22	765	kHz
26	172	kHz
	156.8	MHz[1]

SUP 4679B-4679C

SUP 4680

NOC 4679A.1

SUP 4680.1 and 4680.2

NOC

Section III. Digital Selective Calling System

ADD 4680A

A. General

MOD 4681 § 6. The technical characteristics of equipment used for digital selective calling shall be in conformity with the relevant CCIR Recommendations.

MOD 4681A The frequencies used for distress and safety purposes using digital selective calling are as follows (see also Article 38):

2	187.5	kHz
4	207.5	kHz
6	312	kHz
8	414.5	kHz
12	577	kHz
16	804.5	kHz
	156.525	MHz[1]]

MOD 4682 § 7. The frequencies assignable on an international basis to ship and coast stations for digital selective calling, for purposes other than distress and safety, are as follows:

SUP 4681A.1

ADD 4681A.1 [1]In addition to its use for distress and safety purposes, the frequency 156.525 MHz may also be used for other digital selective calling purposes.

MOD 4683 a) Ship stations

[2 177			kHz
4 208	4 208.5	4 209	kHz
6 312.5	6 313	6 313.5	kHz
8 415	8 415.5	8 416	kHz
12 577.5	12 578	12 578.5	kHz
16 805	16 805.5	16 806	kHz
18 898.5	18 899	18 899.5	kHz
22 375	22 375.5	22 376	kHz
25 208.5	25 209	25 209.5	kHz]
		156.525	MHz[1]

MOD 4684 b) Coast stations

[2 177			kHz
4 219.5	4 220	4 220.5	kHz
6 331	6 331.5	6 332	kHz
8 436.5	8 437	8 437.5	kHz
12 657	12 657.5	12 658	kHz
16 903	16 903.5	16 904	kHz
19 703.5	19 704	19 704.5	kHz
22 444.5	22 445	22 445.5	kHz
26 121	26 121.5	26 122	kHz]
		156.525	MHz[2]

MOD 4685 In addition to the frequencies listed in Nos. 4683 and 4684, appropriate working frequencies in the following bands may be used for digital selective calling:

415	-	526.5	kHz (Regions 1 and 3)
415	-	525	kHz (Region 2)
1 606.5	-	4 000	kHz (Regions 1 and 3)
1 605*	-	4 000	kHz (Region 2)
4 000	-	27 500	kHz
156	-	174	MHz

---

* For the band 1 605 - 1 625 kHz, see Nos. 480 and 481.

ADD 4683.1) [1.2]156.525 MHz is also used for distress and safety
4684.1) purposes (see No. 4681A.1).

ADD 4686 B. Method of Calling

ADD 4686A § 9. (1) The procedures set out in this section are applicable to the use of digital selective calling techniques, except in cases of distress, urgency or safety, to which the provisions of Chapter N IX are applicable.

ADD 4686B (2) The call shall contain information indicating to which station or stations the call is directed, and the identification of the calling station.

ADD 4686C (3) The call should also contain information indicating the type of communication to be set up and may include supplementary information such as a proposed working frequency or channel, which shall always be included in the case of calls from coast stations, which shall have priority for that purpose.

ADD 4686D (4) The technical format of the call sequence shall be in conformity with the relevant CCIR Recommendations.

ADD 4686E (5) The call shall be transmitted once on a single appropriate calling channel or frequency only. Only in exceptional circumstances may a call be transmitted simultaneously on more than one frequency.

ADD 4686F (6) When calling ship stations, coast stations may transmit the call sequence twice at the same calling frequency, whichever it may be, with an interval of at least 45 seconds between the two calls, provided that they receive no acknowledgement within that interval.

ADD 4686G (7) When calling on nationally assigned frequencies, coast stations may transmit a call attempt consisting of up to five calls at the same frequency.

ADD 4686H (8) If the station called does not acknowledge the call, the call may be transmitted again on the same or another calling frequency after a period of at least five minutes (five seconds in automated VHF/UHF systems) and should then normally not be renewed until after a further interval of 15 minutes.

ADD 4686I (9) When initiating a call to a coast station, a ship station should preferably use the coast station's nationally assigned calling channels, for which purpose it shall send a single calling sequence on the selected frequency.

ADD 4687 C. Acknowledgement of calls

ADD 4688 C.1 Content and transmission procedure of acknowledgements

ADD 4688A § 10. (1) The reply to a digital selective call requesting an acknowledgement shall be made by transmitting an appropriate acknowledgement using digital selective calling techniques.

ADD 4688B (2) Transmission of the calling signal shall cease as soon as an acknowledgement is received.

ADD 4688C (3) Acknowledgements may be manual or automatic. When an acknowledgement can be transmitted automatically, it shall be in conformity with the relevant CCIR Recommendations.

ADD 4688D (4) Acknowledgements shall normally be transmitted on the frequency paired with the frequency of the received call. If the same call is received on several calling channels, the most appropriate shall be chosen for transmission of the acknowledgement.

ADD 4688E (5) The technical format of the acknowledgement sequence shall be in conformity with the relevant CCIR Recommendations.

ADD 4688F (6) If the call includes a proposal for a working channel or frequency, which can be used immediately by the station called, the latter should transmit an acknowledgement indicating this possibility.

ADD 4688G (7) If, in the above case, the station called is not able immediately to use the working frequency or channel proposed in the received call, it should indicate this in its acknowledgement, which may also include supplementary information in that respect.

ADD 4688H (8) Coast stations not able to comply immediately on a proposed working frequency or channel may include a proposal of an alternative working frequency or channel in the acknowledgement specified in No. 4688G.

ADD 4688I (9) If no working frequency or channel was proposed in the call, the station called should include a proposal for a working frequency or channel in its acknowledgement of the call.

ADD 4689 C.2. Mode of transmission of acknowledgements

ADD 4689A § 11. (1) Acknowledgements may be initiated either manually or automatically. Where automatic transmission of acknowledgement takes place, this should be in conformity with the relevant CCIR Recommendations.

ADD 4689B (2) If the ship station is unable to acknowledge a received call within a time limit of five minutes, the ship station's reply to the call should be made by transmitting a call in accordance with the provisions of No. 4686 to the calling station. Where automated or semi-automated systems are used, a time limit in accordance with the relevant Recommendation of the CCIR should apply.

ADD 4690 D. Preparation for Exchange of Traffic

ADD 4690A § 12. (1) The procedures described in this sub-section are applicable for manual operation. Where automated or semi-automated digital selective calling VHF/UHF systems are used, these should operate in conformity with relevant CCIR Recommendations.

ADD 4690B (2) After having transmitted an acknowledgement indicating that it can use the proposed working frequency or channel, the station called transfers to the working frequency or channel and prepares for receiving the traffic.

ADD 4690C (3) The calling station shall prepare for transmitting traffic on the working channel or frequency it has proposed.

ADD 4690D (4) The calling station and the called station then exchange traffic on the appropriate working frequency or channel.

ADD 4690E (5) If the ship station is unable to use the working frequency or channel proposed in an acknowledgement transmitted by the coast station, the ship station should then transmit a new call in accordance with the provisions of Nos. 4686H and 4686I, indicating that it is unable to comply.

ADD 4690F (6) The coast station shall then transmit an acknowledgement indicating an alternative working frequency or channel.

ADD 4690G (7) On reception, the operator of the ship station shall then apply the provisions of Nos. 4690C or 4690E as appropriate.

ADD 4690H (8) For communication between a coast station and a ship station, the coast station shall finally decide the working frequency or channel to be used.

(MOD) 4686 4691 to 4709 NOT allocated.

ADD

RESOLUTION [COM6/4]

Relating to Early Implementation of the Use of Digital Selective Calling on Maritime HF Radiotelephone Channels

The World Administrative Conference for the Mobile Services, Geneva, 1987,

considering

a) that it is desirable for ship stations capable of operating radiotelephony to also be able to signal using digital selective calling;

b) that at present digital signals are not allowed to be emitted on maritime HF radiotelephony channels;

c) that nevertheless this Conference has adopted a modification to provision 4685 to permit the use of digital selective calling on HF Radiotelephone working channels;

d) that it is probable that equipment capable of satisfying the requirement will be available before the date of implementation of the Final Acts of the Conference;

resolves

that, with effect from 1 January 1988 on the maritime HF radiotelephony working channels digital selective calling may be emitted in accordance with Radio Regulation 4685 as modified by this Conference.

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 420-E
12 October 1987

B.12

PLENARY MEETING

TWELFTH 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	Documents	Title
COM.4	308 (390)	Article 9
COM.4	372 (405)	Resolution No. 300 (Rev.Mob-87) Resolution COM4/6 Resolution COM4/7
COM.4	DT/75 (405)	Resolution COM4/10

Y.C. MONGELARD
Chairman of Committee 7

Annex: 8 pages

ARTICLE 9

MOD 962 § 6. In certain cases provided for in Article 38, N 38 and 59, aircraft stations are authorized to use frequencies in the bands allocated to the maritime mobile service for the purpose of communicating with stations of that service (see No. 4148).

(MOD) RESOLUTION No. 300 (Rev.Mob-87)

MOD **Relating to the Use and Notification of the Paired Frequencies Reserved for Narrow-Band Direct-Printing Telegraph and Data Transmission Systems in the HF Bands Allocated on an Exclusive Basis to the Maritime Mobile Service (see Appendix 32)**

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

NOC a) that certain sections of the HF bands allocated to the maritime mobile service have been reserved for narrow-band direct-printing telegraph and data transmission systems for use on a paired frequency basis only;

MOD b) that Appendix 32 of the Radio Regulations contains a channelling arrangement in the maritime HF bands for narrow-band direct-printing telegraphy and data systems (paired frequencies);

MOD c) that this Conference has made available an increased number of paired frequencies reserved for narrow-band direct-printing telegraphy and data transmission systems for use on a paired basis only, and has modified Appendix 32 accordingly;

MOD d) that the World Maritime Administrative Radio Conference (WMARC), Geneva, 1974, established interim measures for the orderly bringing into use of the paired frequencies;

MOD e) that the WMARC established a provisional procedure for the use and notification of paired frequencies for narrow-band direct-printing telegraphy and that the application of this procedure by administrations and by the IFRB was satisfactory;

resolves

(MOD) 1. that paired frequencies in the HF bands reserved for narrow-band direct-printing telegraphy between coast stations and ship stations shall be used by these stations, notified to the IFRB and recorded in the Master International Frequency Register in the following manner:

NOC 1.1 assignments of pairs of frequencies for transmission and reception shall be made solely to coast stations. Ship stations of any nationality shall use by right for their transmissions the receiving frequencies of the coast stations with which they exchange traffic;

MOD [1.2 each administration shall choose the pairs of frequencies for its requirements, if necessary with the assistance of the IFRB;]

MOD 1.3 the assignments thus selected shall be notified to the IFRB in notices as shown in Appendix 1 to the Radio Regulations and administrations shall supply the basic characteristics listed in Section A or B of that Appendix, as appropriate;

MOD 1.4 whenever practicable, each notice should reach the Board before the date on which the assignment is brought into use. It must reach the Board not earlier than one year before the date on which it is to be brought into use but in any case not later than 30 days after it is actually brought into use;

MOD 1.5 assignments which are in conformity with the Radio Regulations, and in particular Appendix 32, shall be examined by the Board from the viewpoint of the probability of harmful interference to be caused by or to other existing or proposed uses. The Board shall inform the administration concerned of the results of its examination and shall record the notified assignment with reference to this Resolution and without any date in Column 2. The date of receipt of the notice by the Board and the date of putting into use of the assignment shall be entered in the Remarks Column. In cases where the Board reaches an unfavourable finding, it shall make such suggestions as will resolve the incompatibilities;

MOD 1.6 any notice not in conformity with the Radio Regulations shall be returned to the notifying administration by the IFRB, together with any suggestion which the Board may be able to submit in this respect;

MOD 1.7 should difficulties arise between administrations using the same channel, or adjacent channels, the matter shall be settled by agreement between the administrations concerned taking into account the information published by the IFRB;

MOD 2. that a future competent conference be invited to review this Resolution and examine any difficulties which may have arisen in its application;

MOD 3. that the entries made in the Master Register under this Resolution shall in no way prejudge any decisions which may be taken by the aforementioned conference;

<u>invites the Administrative Council</u>

to place this Resolution on the agenda of the next competent conference in order to examine any difficulties which may have arisen in its applications.

RESOLUTION COM4/6

Relating to the Use of the Additional Channels Reserved for Duplex Radiotelephony in the HF Bands Allocated to the Maritime Mobile Service

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

a) that there is an increasing demand for additional duplex channels for radiotelephony in the HF bands allocated on an exclusive basis to the maritime mobile service;

b) that this Conference has modified Appendices 16 and 31 of the Radio Regulations and has provided a number of additional duplex channels for radiotelephony (channel Nos.:

from 427 to 429
from 607 to 608
832 and
from 834 to 837
from 1233 to 1241
from 1642 to 1656
from 1801 to 1805 and
from 1807 to 1815
from 2241 to 2253
from 2501 to 2509)

c) that it is necessary to develop procedures for the establishment of initial duplex radiotelephony allotments for the newly available channels, as well as for the updating of the use of these channels;

noting

that the current Appendix 25 allotment plan together with Article 16 of the Radio Regulations have effectively served the maritime mobile service and the latter may be used for the updating of the use of the new channels;

resolves

1. that the newly available channels shall be initially allotted in accordance with the procedure contained in the Annex to this Resolution;

2. that Appendix 25 shall be updated by including in it the allotments resulting from the application of the provisions of the Annex to this Resolution;

3. that, following the application of resolves 2 above, the administrations shall apply the procedure of Article 16 for any modification to existing allotments or the addition of new allotments.

ANNEX TO RESOLUTION COM4/6

Procedure for Establishing an Initial Allotment Arrangement in the Newly Available Channels for Duplex Radiotelephony in the HF bands

1. Administrations intending to use one of the new channels indicated in considering b) shall send their requirements to the Board by providing the information listed in Appendix 5 of the Radio Regulations before [1 May 1988].*

2. Following the receipt of this information, the Board shall examine these requirements and, if necessary, request the Administrations to communicate any missing information. Only those requirements which are complete will be taken into account in this procedure.

3. Using its Technical Standards, the Board shall prepare an initial allotment arrangement following the order indicated in paragraph 4 below.

4. The initial allotment arrangement for the new channels shall include for a given band and a given allotment area the requirements in the following order:

4.1 requirements of administrations having no allotments in Appendix 25 of the Radio Regulations and which require such allotments;

4.2 requirements of administrations which, following the application of Article 16, could not be given an allotment in the current Appendix 25 with the required protection criteria;

4.3 requirements of administrations asking for additional allotments to supplement their existing allotments in order to satisfy an increase in radiotelephony traffic.

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* Note - Administrations that cannot use channels Nos. [428, 429, 834, 835, 836, 837] shall indicate accordingly when submitting their requirements.

5. The Board shall consult those administrations whose requirements could not be included in the allotment arrangement for the new channels and, if an administration insists, the Board shall determine from all the channels available for duplex radiotelephony the channel which is the least affected, and shall include the requirement in this channel.

6. Not later than [1 February 1989] the Board shall publish the allotment arrangement for the new channels so that administrations may comment on it.

7. If within a period of [60 days] following this publication, an administration informs the Board that its proposed allotment is not acceptable to it, the Board shall endeavour to identify an alternative channel as indicated in paragraph 5 above.

8. If following the application of paragraph 7 above, the administration concerned is not in a position to accept the Board's recommendation, the requirement will be returned to the administration concerned with the suggestion that it apply the Article 16 procedure.

9. At [Date D3] the Board shall enter the allotment arrangement for the new channels in Appendix 25 and shall prepare a revised version of Appendix 25 for publication by the Secretary-General.

RESOLUTION COM4/7

Relating to the Transfer of Frequency Assignments of Stations Operating in Accordance with Appendix 25

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

a) that this Conference has modified Appendices 16 and 31 of the Radio Regulations and has placed the paired frequencies reserved for radiotelephony in the HF bands allocated to the maritime mobile service at intervals of 3.0 kHz as opposed to 3.1 kHz;

b) that it will be necessary to make a consequential modification to Appendix 25 of the Radio Regulations;

c) that coast and ship radiotelephone stations will need to change their transmitting and receiving frequencies to bring them into conformity with the corresponding channels in Appendix 16 (Mob-87) (Section A);

d) that there should be an orderly transition to the revised paired frequencies reserved for radiotelephony in the HF bands allocated to the maritime mobile service;

resolves

1. that, at 0001 hours UTC on [Date D4], coast and ship radiotelephone stations shall change their transmitting and receiving frequencies to the replacement frequencies indicated for the same channel number in Appendix 16 (Mob-87);

2. that within three months prior to [Date D4] the administrations shall notify the Board of the transfer of their assignments to the replacement frequencies;

3. that an assignment for a replacement frequency, the other basic characteristics of which are not modified, shall be recorded with the date 1 July 1989 in column 2a;

4. that frequency assignments for which the Board received no notification for the frequency indicated in Appendix 16 (Mob-87) shall bear a symbol to indicate that they will no longer be taken into account. The Board shall apply the provisions of Article 16 to the corresponding allotment appearing in Appendix 25.

RESOLUTION COM4/10

Relating to the Transfer of Paired Frequency Assignments Reserved for Narrow-Band Direct-Printing Telegraph and Data Transmission Systems

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

that it has provided for additional narrow-band direct-printing and data transmission channels;

recognizing

a) that the transfer of frequency assignments from the channels established by the World Maritime Administrative Radio Conference, Geneva, 1974 and already in use, to the channels adopted by this Conference, should be made with the least possible disruption of the service provided by each station;

b) that a satisfactory procedure for the use and notification of paired frequencies for narrow-band direct-printing telegraph and data transmission has been established in Resolution No. 300 (Rev.Mob-87);

c) that the present coast station assignment arrangements for paired narrow-band direct-printing telegraphy and data transmission have been effective;

resolves

1. that, at 0001 hours UTC on [Date D4], coast and ship stations using paired narrow-band direct-printing and data transmission shall change their transmitting and receiving frequencies to bring them into conformity with Appendix 32 (Rev.Mob-87);

2. that, within three months prior to [Date D4], administrations shall notify the Board of the transfer of their assignments to the frequency indicated for the same channel number in Appendix 32 (Rev.Mob-87);

3. that notices of frequency assignments whose basic characteristics, other than the frequency, are not modified, shall be recorded in the Master International Frequency Register;

4. that frequency assignments for which the Board has received no notification for the frequency indicated in Appendix 32 (Rev.Mob-87) shall bear a symbol to show that they will no longer be taken into account in the application of Resolution No. 300 (Rev.Mob-87).

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 421 (Rev.1)-E
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COMMITTEE 4

REPORT OF WORKING GROUP 4 AD HOC 3 TO COMMITTEE 4

This revision concerns only the French text.

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

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10 October 1987
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Source: Document DT/77

COMMITTEE 4

REPORT OF WORKING GROUP 4 AD HOC 3 TO COMMITTEE 4

Working Group 4 ad hoc 3 held four meetings and agreed to forward a compromise approach to the MSS and Satellite APC in the bands 1.5/1.6 GHz as outlined in the attached Annexes 1 and 2. A related draft Resolution is attached in Annex 3.

The square brackets relating to frequencies refer to the decision to be taken on the amount of spectrum to be reallocated to the LMSS. Although no final decision on that amount could be taken in the Working Group, it was unanimously agreed to forward the annexes for final decision in Committee 4.

J.F. BROERE
Chairman of Working Group 4 ad hoc 3

Annexes: 3

ANNEX 1

MHz

Allocation to Services		
Region 1	Region 2	Region 3
1 545 - [1 555]	AERONAUTICAL MOBILE-SATELLITE (R) (space-to-Earth) 722 727 729 730 729[B]	
[1 555] - 1 559	LAND MOBILE-SATELLITE (space-to-Earth) 722 727 ~~729~~ 730 730[A]	

(MOD) 729 Change band limits to 1 545 - [1 555].

1 646.5 - [1 656.5]	AERONAUTICAL MOBILE-SATELLITE (R) (Earth-to-space) 722 727 730 735 729[B]
[1 656.5] - 1 660.0	LAND MOBILE-SATELLITE (Earth-to-space) 722 727 730 730[A] ~~735~~ 730[B]
1 660.0 - 1 660.5	RADIO ASTRONOMY LAND MOBILE-SATELLITE (Earth-to-space) 722 ~~735~~ 736 730[A]

ADD 729[B] Notwithstanding any other provisions of the Radio Regulations relating to restrictions in the use of the bands allocated to the aeronautical mobile-satellite (R) service for public correspondence, the bands [1 545 - 1 555 and 1 646.5 - 1 656.5 MHz] may be authorized by administrations for public correspondence with aircraft earth stations. Such communications must cease immediately, if necessary, to permit transmission of messages with priority 1 to [6] in Article 51.

ADD 730[A] In the bands [1 555 - 1 559 and 1 656.5 - 1 660.5 MHz] administrations may also authorize [aircraft earth stations and] ship earth stations to communicate with space stations in the land mobile-satellite service (see Resolution COM4/14).

MOD 735 Change band limits to 1 646.5 - [1 656.5].

ANNEX 2

Allocation to Services		
Region 1	Region 2	Region 3
1 530 — ~~1 535~~ [1 533] SPACE OPERATION (space-to-Earth) MARITIME MOBILE-SATELLITE (space-to-Earth) Earth Exploration-Satellite Fixed Mobile except aeronautical mobile LAND MOBILE-SATELLITE (space-to-Earth) 722 726	1 530 — ~~1 535~~ [1 533] SPACE OPERATION (space-to-Earth) MARITIME MOBILE-SATELLITE (space-to-Earth) Earth Exploration-Satellite Fixed Mobile 723 LAND MOBILE-SATELLITE (space-to-Earth) 722 726	

~~1 530~~ — 1 535 [1 533] SPACE OPERATION (space-to-Earth) MARITIME MOBILE-SATELLITE (space-to-Earth) Earth Exploration-Satellite Fixed Mobile except aeronautical mobile Land Mobile-Satellite (space-to-Earth) 726[A] 722 726	~~1 530~~ — 1 535 [1 533] SPACE OPERATION (space-to-Earth) MARITIME MOBILE-SATELLITE (space-to-Earth) Earth Exploration-Satellite Fixed Mobile 723 Land Mobile-Satellite (space-to-Earth) 726[A] 722 726

ADD 726[A] The use of the bands [1 533 - 1 544, 1 626.5 - 1 631.5 and 1 634.5 - 1 645.5] MHz by the land mobile-satellite service is limited to non-speech low bit-rate data transmissions.

ADD 730[B] Land earth stations and ship earth stations in the mobile-satellite services operating in the bands [1 631.5 - 1 634.5 and 1 656.5 - 1 660] MHz shall not cause harmful interference to the stations in the fixed service operating as the countries listed in No. 730.

Allocation to Services		
Region 1	Region 2	Region 3
1 535 - 1 544	MARITIME MOBILE-SATELLITE (space-to-Earth) Land Mobile-Satellite (space-to-Earth) 726[A] 722 727	

1 626.5 - ~~1 645.5~~ [1 631.5]	MARITIME MOBILE-SATELLITE (Earth-to-space) Land mobile-satellite (Earth-to-space) 726[A] 722 727 730

[1 631.5] - [1 634.5]	MARITIME MOBILE-SATELLITE (Earth-to-space) LAND MOBILE-SATELLITE (Earth-to-space) 722 727 730 730[B]

~~1 626.5~~ [1 634.5] - 1 645.5	MARITIME MOBILE-SATELLITE (Earth-to-Space) Land Mobile-Satellite (Earth-to-space) 726[A] 722 727 730

ANNEX 3

DRAFT RESOLUTION [COM4/14]

Relating to the Extension of the Frequency Bands Allocated to the Mobile-Satellite and Mobile Services and Their Conditions of Use

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987

considering

a) that the demand for frequency allocations for the various mobile-satellite services has increased during the last few years;

b) that the allocations for the mobile-satellite services at 1.5 GHz are the only allocations generally available for those services below 10 GHz;

c) that ICAO studies indicate that future AMSS(R) systems will require the use of all spectrum presently allocated to that service;

d) that since AMSS(R) systems may not fully utilize before 1992 all of the spectrum allocated to that service, a portion of that spectrum has been reallocated to the LMSS;

e) that in view of the growing demand for frequency bands for satellite communications with mobile stations, it is necessary to revise the allocations in parts of the frequency spectrum to cover the needs beyond 1992;

f) that the most suitable frequencies for the operation of mobile and mobile-satellite services are below about 3 GHz;

g) that the CCIR is studying the possibility and need for maritime, aeronautical and land mobile-satellite systems to use common frequency bands of the mobile-satellite service;

h) Resolutions Nos. 2 and 4 of the Radio Regulations;

resolves

1. that mobile satellite systems operating in the bands [1 530 - 1 544 MHz, 1 555 - 1 559 MHz, 1 626.5 - 1 645.5 MHz and 1 656.5 - 1 660.5 MHz] shall be limited to providing national service or, with the agreement of administrations concerned, to providing multinational service;

2. that in devising the characteristics of the antennas of such systems all technical means available shall be used to reduce to the maximum extent practicable, the radiation over the territories of other countries unless an agreement has been previously reached with such countries;

resolves

to recommend to the Plenipotentiary Conference, 1989, to take appropriate steps for the convening of a world administrative radio conference, not later than 1992, to consider revising certain parts of the frequency allocation table in Article 8 of the Radio Regulations in the approximate range 1 - 3 GHz and other relevant provisions of the Radio Regulations with a view to providing the necessary spectrum for the mobile-satellite services as well as for the mobile services taking into account Resolutions Nos. 2 and 4 of the Radio Regulations;

invites

1. the CCIR to study as a matter of urgency the technical and operational issues related to geostationary and non-geostationary mobile-satellite systems. These studies should include applications, spectrum requirements, available and future technology and intersystem and intrasystem sharing aspects concerning the mobile-satellite systems;

2. IMO, ICAO and other interested international and national organizations to cooperate in these studies and to make the results of their own studies available to the CCIR;

3. the WARC-ORB-88 to consider the particular characteristics of the mobile-satellite services when dealing with provisions relating to improved procedures;

requests the Secretary-General

1. to bring this Resolution to the attention of IMO and ICAO;

2. to forward this Resolution to WARC-ORB-88;

requests the Administrative Council

to bring this Resolution to the attention of the Plenipotentiary Conference, 1989.

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

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10 October 1987
Original: French

COMMITTEE 4

REPORT OF WORKING GROUP 4 AD HOC 5 TO COMMITTEE 4

1. Representatives of the following delegations took part in the work of the Group: Federal Republic of Germany, Australia, Burkina Faso, Cameroon, Canada, Cuba, Spain, the United States, France, Netherlands, United Kingdom and IATA.

2. The Group considered the draft definitions given in Document 357 together with a number of proposals put forward by participants.

3. After a long and lively discussion and despite some different views expressed by some delegates, the proposals set out in the attached annex were finally approved by the Working Group.

R. BISNER
Chairman of Working Group 4 ad hoc 5

Annex: 1

ANNEX

ADD 34A Aeronautical mobile (R) service

An aeronautical mobile service reserved for communications between aircraft stations and aeronautical stations, related to safety and regularity of flight, primarily along national or international civil air routes.

ADD 34B Aeronautical mobile (OR) service

An aeronautical mobile service intended for communications, including those related to flight coordination, primarily outside national or international civil air routes.

ADD 35A Aeronautical mobile-satellite (R) service

An aeronautical mobile-satellite service reserved for communications between aircraft stations and aeronautical earth stations, related to safety and regularity of flights, primarily along national or international civil air routes.

ADD 35B Aeronautical mobile-satellite (OR) service

An aeronautical mobile-satellite service intended for communications, including those related to flight coordination, primarily outside national and international civil air routes.

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

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19 October 1987
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COMMITTEE 4

SUMMARY RECORD

OF THE

THIRTEENTH MEETING OF COMMITTEE 4

(FREQUENCY)

Monday, 12 October 1987, at 0905 hrs

Chairman : Dr. O. VILLANYI (Hungary)

Subjects discussed:	Documents
1. Third report of Drafting Group 4-B-1 to Committee 4 (texts related to NAVTEX)	394
2. Note from the Chairman of Committee 4	404
3. Third report of Working Group 4-C to Committee 4	412
4. Note from the Chairman of Working Group 4-C	410

1. Third report of Drafting Group 4-B-1 to Committee 4 (texts related to NAVTEX) (Document 394)

1.1 The Chairman of Drafting Group 4-B-1, introducing the report, said that in developing coordination procedures for the two NAVTEX type frequencies, 490 kHz and 4 209.5 kHz, the Group had endeavoured to use the new provisions of Article 14A as far as possible. Some exemptions had had to be made, however, particularly with the B1 characters to be used by the coast stations. The Resolution contained in Annex 1 (COM4/12) had been drafted to ensure that there was a smooth coordination procedure for the Article 14A exemptions in the 490 kHz and 4 MHz frequencies. It also requested the IMO to provide information wherever possible and to coordinate in the same way as for the frequency 518 kHz. The two footnotes in Annex 2 - MOD 427A and ADD 518A, related to the use of the frequency 490 kHz and 4 209.5 kHz respectively. Committee 5 had also approved a text concerning the use of these two frequencies, which would combine without difficulty with that appearing in Document 394.

Draft Resolution [COM4/12]

It was agreed to add the exact frequency (4 209.5 kHz).

considering b)

It was agreed to replace the word "NAVTEX" by "the International NAVTEX system".

resolves 2

At the suggestion of the representative of the IFRB (Mr. Berrada), it was agreed to repeat the frequencies after "Article 14A."

1.2 The delegate of Greece proposed that the word "strongly" be deleted. Taking up a point made by the delegate of Brazil, the Chairman proposed that the word "only" should also be deleted.

1.3 The Observer for the IMO, supported by the delegate of Norway, said that as there was no technical basis for the frequencies 490 kHz and 4 MHz for NAVTEX-type transmissions, on the assumption that the procedure used for the frequency 518 kHz could be applied, the words "where applicable" might usefully be inserted after "additional characteristics".

1.4 The delegate of Saudi Arabia opposed the deletion of the words "only strongly", but supported the IMO suggestion.

1.5 The delegate of the Netherlands said that if requests 3 referring to CCIR studies were taken into consideration, the words "where applicable" would be superfluous.

1.6 The representative of the IFRB (Mr. Berrada) said that IMO's concerns might be met if the words "or any alternative characteristics" were inserted after "No. 1632" to make it clear that if the coordination procedure required different characteristics, administrations might communicate them. It would also mean that if CCIR studies resulted in characteristics different from those in No. 1632, they were still recommended.

It was finally agreed to delete the words "only strongly" and leave the text otherwise unchanged.

1.7 The delegate of the United States said that the guard band for the 490 kHz transmit frequency had been set at 1 000 Hz. Since the spacing at that range was 500 Hz, with the necessary bandwidth around 300 Hz, he proposed that the guard band protection should read: 489.75 - 490.25.

It was so agreed.

1.8 The delegate of the USSR pointed out that there was already an allocation on the frequencies 489.5 and 490 kHz as working frequencies in Region 1. The maritime mobile service should therefore be excluded from that guard band. In addition, Committee 5 had decided on a new status for the frequency 490 kHz, and the wording of footnote 472A should therefore be that which appeared in Document 401.

1.9 The delegate of the Federal Republic of Germany said that in No. 1635 the band in question related to another service, assumed to be the aeronautical radionavigation service and not the maritime mobile service. However, the Table of Frequency Allocations for the 490 kHz band indicated that it was allocated on a primary basis to the maritime mobile service and only on a secondary basis in Region 1 to the aeronautical radionavigation service.

It was agreed that the text would remain in abeyance for the time being.

Annex 2

MOD 472A

1.10 The Chairman of Working Group 4-A said that the text produced by Drafting Group 4-A-8, as it appears in Document 395, should be simply added to the end of the text appearing in Document 394.

1.11 The delegate of the USSR said that the text of N 3195AFB as it appeared in Document 401 could also be used for footnote 472A.

1.12 The representative of the IFRB (Mr. Berrada) suggested that "the frequency 490 kHz" be replaced by "the frequency band 489.25 - 490.25 kHz".

At the suggestion of the Chairman, the meeting was suspended at 1035 hours and resumed at 1100 hours.

1.13 The Chairman then suggested that MOD 472A should be replaced by a composite text derived from MOD 472A as it appeared in Annex 2 to Document 394 and MOD 472A and ADD 472B as set out in Document 395. The provision would read as follows:

"MOD 472A

In the maritime mobile service, the frequency band 489.75 - 490.25 kHz is, from the date of full implementation of GMDSS (see Resolution COM5/1), to be used exclusively for the transmission by coast stations of navigational and meteorological warnings and urgent information to ships, by means of narrow-band direct-printing telegraphy. The conditions for the use of the frequency 490 kHz are prescribed in Articles N 38, N 40 and 60 and in Resolution COM4/12. In using the band 415 - 495 kHz for the aeronautical radionavigation service, administrations are requested to take every possible precaution to ensure that no harmful interference is caused to the frequency 490 kHz."

1.14 The Observer for the IMO pointed out that in Article N 40 permissive language was used with regard to the use of the frequency 490 kHz. The Chairman said that Article N 40 was mentioned in the proposed composite text because it did contain conditions for the use of the frequency 490 kHz.

1.15 The representative of the IFRB (Mr. Berrada) said he had two questions to raise in connection with the new text. In the first place, the last sentence requesting administrations to take every possible precaution to avoid interference to the frequency 490 kHz weakened the overall prohibition of emissions causing harmful interference to distress, alarm, urgency or safety communications on a number of frequencies listed in MOD 3010 as it appeared in Document 228. Secondly, in the original text of MOD 472A in Annex 2 to Document 394, the exclusive use of the frequency 490 kHz for NAVTEX purposes would occur only after the full implementation of GMDSS, so that the use of that frequency during the period between the entry into force of the Final Acts of the Conference and the implementation of GMDSS was not clearly defined.

1.16 The Chairman suggested that the second difficulty might be overcome by deleting the last sentence of the provision and inserting a reference to Article 38. The representative of the IFRB (Mr. Berrada) said that in that case all other uses of the frequency 490 kHz would be prohibited. The Chairman of Working Group 4-A said that the difficulty seemed to be an academic one, since the provisions of Articles 8 and 38 concerning the exclusive use of the frequency 490 kHz for distress and safety calls approved by the 1983 Conference related to digital selective calling techniques, would now not form part of GMDSS.

1.17 The delegate of Thailand said he did not agree to the replacement of the frequency 490 kHz by the band 489.75 - 490.25 kHz in MOD 472A in Document 394.

1.18 The representative of the IFRB (Mr. Berrada) said that he would like to discuss the whole matter informally with the Chairman of Working Group 4-A and the delegate of Thailand.

It was agreed to defer the discussion.

ADD 518A

Approved, with the frequency placed in square brackets pending a decision by Working Group 4-C.

2. Note from the Chairman of Committee 4 (Document 404)

The Committee noted the modification of Nos. 1392 and 1396 consequent upon the decision to set the date of 1 July 1989 for the assignments in conformity with the new Appendix 25.

3. Third report by Working Group 4-C to Committee 4 (Document 412)

3.1 The Chairman of Working Group 4-C, introducing the report, indicated a number of errors throughout the text. Annex 1 of the document contained the revised Appendix 31 approved at the Group's seventh meeting. Particular attention was drawn to the decisions taken by the Working Group and referred to in detail in paragraphs 6, 7, 8, 12 to 15, 18 to 20, 22 and 23 of the report. Annex 2 contained a summary Appendix 31(Rev.) which was intended for the information for Committee 4 only and not for inclusion in the Final Acts of the Conference. A number of items had been placed in square brackets in Annex 9 pending confirmation of the character of the frequencies concerned. Annex 10

contained the draft Recommendation relating to the need for technical improvements which the Committee had requested it to prepare the previous week.

3.2 The Chairman thanked and congratulated the Chairman and members of the Working Group on their achievements.

Appendix 31(Rev.)

It was agreed that a reference to the 1987 Mobile Conference should be added in the title.

Notes referring to the Table

Approved, with the deletion of the square brackets in Notes (1), (o) and (n) and the insertion of the word "these" before "frequency bands" in Note (m).

Summary Appendix 31(Rev.) (Annex 2) and
List of Frequencies for use in the GMDSS (Annex 3)

3.3 The delegate of India suggested that in view of its usefulness, Annex 3 might be retained as an addendum to Appendix 1.

3.4 The Chairman of Working Group 4-C agreed on the usefulness of the annex. Although it could not appear in its present form, it could be prepared and updated where necessary.

3.5 The representative of the IFRB (Mr. Berrada), said that the Annex would be even more useful if all the frequencies, not only those in the HF bands, were added.

3.6 The delegate of the USSR said that an addendum to Appendix 31 could not include all the frequencies relating to the GMDSS as Appendix 31 dealt only with the HF bands. If such a document were prepared, it would have to be entirely separate.

3.7 The Chairman suggested that the attention of the Plenary Meeting might be drawn to the need for such an addition which could easily be prepared if necessary.

The Committee approved the principle of having a text prepared on the lines of Annex 3, containing all the frequencies as suggested by the representative of the IFRB. The Spanish text would be aligned with the English.

Appendix 16

ADD (b)

3.8 After a discussion which revealed a translation error in the French text, the delegate of the Federal Republic of Germany proposed that "should operate" be retained in connection with the carrier frequencies, but that the words "shall operate" be used in connection with the technical characteristics specified in Appendix 17.

3.9 The delegate of Finland supported that proposal. In addition, he proposed that the first sentence of the paragraph be divided into two, the first part ending after "respectively". The second sentence would then read: "The technical characteristics shall be in conformity with Appendix 17". The last sentence was superfluous and should be deleted. The delegates of the USSR and India supported that proposal.

It was so agreed. It was further agreed that, for consistency, the last sentence in MOD 6 a) should also be deleted.

Appendix 32(Rev.)

3.10 The Chairman drew attention to a Corrigendum to the table for the 12 MHz band on page 32.

Appendices 33(Rev.), 34(Rev.) and 35(Rev.)

Approved, with editorial amendments.

Consequential amendments to the Radio Regulations

Article 8

3.11 The Chairman of Working Group 4-C said that ADD 520A could be deleted in view of the approval of ADD 518A in Annex 2 to Document 394.

It was so agreed.

3.12 The delegate of Greece said he had no objection to that deletion but pointed out that during the consideration of the notes to Appendix 31(Rev.) it had been suggested that the square brackets round the word "international" should be removed. Meanwhile, he had looked through Resolution COM5/4, Articles N 38, N 40 and 14A and Document 394 and had been unable to find any indication that the frequency 4 209.5 kHz was an international frequency for the transmission of NAVTEX type information. In the interests of aligning the relevant texts, it might be best to delete the word "international" from note ADD o) to Appendix 31. The delegate of Norway supported that statement.

3.13 The delegate of the USSR pointed out that on page B.10/2 of Document 403, a provision relating to another frequency used exclusively for NAVTEX-type transmissions by coast stations did not refer to an international frequency. Perhaps such a reference should be proposed in Plenary when that document was discussed.

3.14 The delegate of Brazil said he was opposed to the deletion.

3.15 The delegate of Greece said that, although the deletion of the word in a note to an appendix might have no direct significant effect, it should be borne in mind that the frequency 4 209.5 kHz was being described as international for the first time in that note. The implications of that text for more important provisions of the Radio Regulations must be considered.

3.16 The delegate of France considered that the qualification "international" was out of place in ADD o), since whereas a service could be international, a frequency could not.

3.17 The Chairman suggested that the square brackets round the word "international" should be removed in ADD 520B as they had been in ADD n).

3.18 The delegate of Argentina observed that it had just been decided to delete the word "international" from ADD o) and that it would be desirable to be consistent and to keep the word in all cases. The delegate of the USSR agreed, adding that "international frequency" was a standard term, used inter alia for the frequency 2 182 kHz in RR 500. The Chairman of Working Group 4-A said it would be for Committee 7 to decide whether a frequency could be qualified as international. If that Committee decided against such qualification, the decisions of Committee 4 on RR 472 and RR 500, for which it had recommended no change, would have to be reviewed. The delegate of the Netherlands endorsed that view.

3.19 The delegate of France, supported by the delegate of Tunisia, suggested that the difficulty might be overcome by using the word "world-wide" instead of "international".

3.20 The representative of the IFRB (Mr. Berrada) confirmed that in many provisions of the Radio Regulations reference was made to international common frequencies or international frequencies, meaning that the frequencies in question could be used by all countries. On the other hand, the term did not necessarily mean that those frequencies had to be coordinated at the international level: some international common frequencies, such as 518 kHz, were subject to international coordination, while others were not.

3.21 In reply to the delegate of France, who wished to know whether the term "international" imposed any watchkeeping constraints on ships, the representative of the IFRB (Mr. Berrada) said that "international" was a qualification designed to distinguish frequencies, which were common to all countries, but that watchkeeping conditions were determined separately for each frequency.

3.22 The delegate of Brazil said that, in the light of the discussion and in the interests of consistency, it seemed advisable to retain the word "international" in ADD o).

It was so agreed.

3.23 The representative of the IFRB (Mr. Berrada) drew attention to a problem which might arise in Plenary in accordance with Document 394: the only frequency that was subject to international coordination for NAVTEX-type transmission was 518 kHz, and it would therefore be appropriate for Committee 4 to ask Committee 7 to find a way of indicating that 518 kHz was the internationally coordinated frequency for NAVTEX and that the other NAVTEX frequencies were not subject to international coordination.

It was so agreed.

Sub-Section IIB

3.24 The delegate of the Federal Republic of Germany pointed out that the presentation of the text gave the erroneous impression that all the provisions set out therein belonged to Sub-Section IIB, whereas that applied only to MOD 1315 and MOD 1326. The heading "NOC Section III. Recording of Dates and Findings in the Master Register" should therefore be inserted before MOD 1388.

It was so agreed.

Draft Recommendation COM4/E

Approved.

Document 412 as a whole was approved, as amended.

4. Note from the Chairman of Working Group 4-C (Document 410)

4.1 The Chairman of Working Group 4-C said that the proposals in the document had not been discussed in the Working Group, but had been prepared by himself and were of a consequential nature. The recommends and invites paragraphs of Recommendation No. 302 would apply to the revised Appendix 32 and therefore no change was required. The change from the frequency 6 215.5 kHz proposed in Recommendation No. 303 was consequential upon decisions taken with regard to Appendix 31(Rev.). No change was proposed for Recommendation No. 304 relating to the frequencies in Appendix 16B, and it was proposed to suppress Recommendation No. 314, the provisions of which had been superseded by decisions on revised Appendix 31.

4.2 The delegate of the United Kingdom observed that a Working Group of another Committee had examined Recommendation No. 302 and that some amendments to that text appeared in Document 415.

4.3 The Chairman said that Committee 4 would recommend no change to the Recommendation in the Plenary, which would then have to choose between that proposal and the one from the other Committee.

Document 410 was approved.

The meeting rose at 1210 hours.

The Secretary: The Chairman:

A. GAVRILOV O. VILLANYI

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 424-E
19 October 1987
Original: English

COMMITTEE 6

SUMMARY RECORD

OF THE

ELEVENTH MEETING OF COMMMITTEE 6

(MOBILE AND RADIODETERMINATION SERVICES
- EXCEPT DISTRESS AND SAFETY)

Monday, 12 October 1987, at 0905 hours

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

Subjects discussed:		Documents
1.	Eighth (final) report of Working Group 6-B	402, 244
2.	Seventeenth and eighteenth reports of Working Group 6-A	415, 416
3.	Approval of the summary record of the seventh meeting	351
4.	Continuation of consideration of Articles 55 and 56	409, 232
5.	Statement by the delegate of Sweden	

1. Eighth (final) report of Working Group 6-B (Documents 402, 244)

1.1 The Chairman of Working Group 6-B presented the report contained in Document 402. He thanked the Chairmen and participants of the Sub-Working Groups and the Drafting Group for their cooperation.

1.2 The Chairman said that the Committee had completed its work on the definition of aeronautical mobile (R) and (OR) services in Article 1 and noted that the matter was under consideration in Committee 4. He pointed out that no proposals had been submitted concerning Appendices 41 and 42 and therefore he proposed NOC for these appendices. Concerning Article 35 and the definition of maritime, land and aeronautical RDSS in Article 1, he proposed that the subject be taken up at a later stage, after Committee 4 had completed its work. On Article 50 he reported that Committee 4 had primary responsibility and were handling the matter.

It was so agreed.

2. Seventeenth and eighteenth reports of Working Group 6-A (Documents 415, 416)

2.1 The Chairman of Working Group 6-A introduced the seventeenth report contained in Document 415. He pointed out that in Resolution No. 312, under MOD d), the number "34" should not be deleted and that the terms in square brackets were to be amended in the light of the work of Committee 4.

2.2 The Chairman informed the Committee that Committee 4 had proposed the suppression of Resolution No. 314: the delegates of the United States and the United Kingdom thought that while the channels remained available, the Resolution should be retained.

It was so agreed.

2.3 The delegate of Chile pointed out a translation error in the Spanish text of Recommendation No. 302.

The action proposed by the Working Group with respect to all the items listed in Document 415 was approved.

2.4 The Chairman of Working Group 6-A introduced the eighteenth report contained in Document 416. He pointed out that the last sentence of MOD 4713 in Article 63 should be deleted. On the basis of discussion in the Working Group, he suggested that the Committee propose that RR 347 and RR 348 be included in the ITU's manual for the Mobile Services, and that the appropriate modifications be made to Article 26 and Appendices 9 and 11.

3. Approval of the summary record of the seventh meeting (Document 351)

The summary record of the seventh meeting was approved as amended (see Corrigendum 1 to Document 351).

4. Continuation of consideration of Articles 55 and 56
(Documents 409, 232)

At the Chairman's suggestion, it was agreed that revised Articles 55 and 56 would be submitted to the Plenary Meeting together.

ARTICLE 55

3860 and 3861

4.1 The delegates of Norway and the United Kingdom proposed the insertion of the words "using Morse telegraphy and the frequencies of Chapter IX" after the words "radiotelegraph station", in both provisions.

It was so agreed.

NOC 3867

It was agreed to delete the words "signals of" and insert the word "alerts" after the first occurrence of the word "safety", as proposed in Document 17.

Title of Section II

It was agreed to amend the title to read: "Categories of Certificates for Ship Station and Ship Earth Station Personnel".

NOC 3885

4.2 On a proposal by the delegate of the United States it was agreed to add the words "or the holder of a general operator's certificate" after "certificate".

Title of Section IIA

It was agreed to replace the word "Operators" by "Personnel".

ADD 3890B

It was agreed to replace "four" by "six" and "Operators" by "Personnel". The term personnel would also be used in other sections of the new text where appropriate.

ADD 3890C, ADD 3890D

4.3 After some discussion, in which the delegates of the United Kingdom, New Zealand, Australia, Paraguay, Norway and the United States expressed some reservations, it was agreed to delete the square brackets and the text therein.

ADD 3890E, ADD 3890F

It was agreed to delete the word "Operator's", with the same reservations expressed as above.

ADD 3890G, ADD 3890H, ADD 3890I and ADD 3890J

4.4 The delegate of Japan suggested that the words "and in 3890B of this Section and in 3879-3881" be inserted after "c)".

4.5 The delegate of Greece suggested that that concern would better be addressed by adding the following two paragraphs:

"(4) The holder of a certificate specified in e) and f) may carry out the technical service of ship stations or ship earth stations using the frequencies and techniques prescribed in Chapter N IX"

plus the text of MOD 3893A from Document 232.

4.6 The delegate of Finland said that the sovereignty of administrations was recognized in the Convention; in the absence of a restriction it was not necessary to state what administrations could do. He did not, however, oppose the proposal by Greece.

4.7 The delegates of the Federal Republic of Germany, the United Kingdom, Japan and Cuba found the proposal acceptable.

4.8 The delegate of the United Kingdom proposed that the text of MOD 3893A (from Document 232) be amended by replacing the word "recertified" by "certified".

The Greek proposal as thus amended was approved.

4.9 The delegate of Australia, supported by the delegates of Norway and the United States, said that 3890J implied an incursion into the sovereign rights of administrations and should be deleted.

4.10 The delegate of Spain, supported by the delegates of Argentina, Brazil, Greece, Libya and Morocco, argued that 3890J should be retained, as the qualifying "may" in 3890H indicated that the provisions of 3890J were not obligatory, and the incorrect use of frequencies would itself be an incursion into national sovereignty.

4.11 The delegate of the Federal Republic of Germany, supported by the delegate of Papua New Guinea, pointed out that the precise application of that provision would be covered in Article 56. He therefore proposed that "d)" be included after "c)" in 3890G, and that 3890H, 3890I and 3890J be deleted.

It was so agreed.

Section III

4.12 The Chairman recalled that it had been agreed to use the word "personnel" instead of "operator" or "officer" throughout as appropriate.

ADD 3949BL

It was agreed to delete the square brackets.

ADD 3949DF

4.13 The delegate of the United States pointed out that the third sentence "Each administration shall decide for itself the language required.", was superfluous and could be deleted.

It was so agreed.

4.14 The Chairman added that that sentence would be deleted consistently throughout the text.

5. Statement by the delegate of Sweden

5.1 The delegate of Sweden strongly protested against an anonymous document circulated to some delegations and referring to his country: the document had no connection whatsoever with the Swedish Delegation and contained erroneous information. From the content of the document, he inferred that it had been drawn up by the ITF. He stressed that documents circulated during the Conference should clearly indicate authorship and should be circulated to all.

The Chairman noted, following a request from the ITF to make some observations, that there was no administration which spoke to support the introduction of the ITF's observations.

The meeting rose at 1215 hrs.

The Secretary: The Chairman:

S. CHALLO I.R. HUTCHINGS

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 425(Rev.1)-E
12 October 1987
Original: English

Source: Document DT/75

COMMITTEE 4

THIRD REPORT OF WORKING GROUP 4 AD HOC 2-1

The attached draft Resolutions are submitted for further consideration.

As regards "resolves 5", the Board expressed the view that the expanded text given herein is preferred.

F.K. WILLIAMS
Chairman of Working Group 4 ad hoc 2-1

RESOLUTION [COM4/11]

Transfer of Frequency Assignments of Coast Stations for Wideband and A1A or A1B Morse Telegraphy, Facsimile Special and Data Transmission Systems and Direct-Printing Telegraphy Systems Operating in the Bands Allocated Exclusively to the Maritime Mobile Service Between 4 000 and 27 500 kHz

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

a) that the frequency bands allocated to the maritime mobile service for coast stations have been changed as a result of the general review of the HF maritime mobile service bands;

b) that new frequency limits for coast stations for wideband and A1A or A1B Morse telegraphy, facsimile, special and data transmission systems and direct-printing telegraphy systems further referred to as "wideband telegraphy", are laid down in the revised provisions of Appendix 31(Rev.);

c) that this Conference has not established a channelling arrangement for these bands;

d) that there should be an orderly transition of the frequency assignments to the newly allocated bands;

e) that, in order to effect this transfer, a fixed translation frequency should be determined in each of the frequency bands;

resolves

1. that those frequency assignments recorded in the Master Register having an assigned frequency band which is totally within the part of the band which is no longer allocated to coast station wideband telegraphy shall be transferred in blocks:

4 MHz band from 4 219.4 - 4 221 to 4 349.4 - 4 351

6 MHz band from 6 325.4 - 6 332.5 to 6 493.9 - 6 501

8 MHz band from 8 435.4 - 8 438 to 8 704.4 - 8 707

12 MHz band from 12 652.3 - 12 658.5 to 13 070.8 - 13 077

16 MHz band from 16 859.4 - 16 904.5 to 17 196.9 - 17 242

22 MHz band from 22 310.5 - 22 445.5 to 22 561 - 22 696

2. that the IFRB shall identify those frequency assignments recorded in the Master Register having an assigned frequency band overlapping the part of the band which is no longer allocated to coast station wideband telegraphy and shall search for an alternative frequency in accordance with RR 1445 - 1450; and shall propose it to the administration concerned;

3. that when the uniform frequency transfer results in a degradation of operating conditions of any of these coast stations, the IFRB shall search for an alternative frequency in accordance with RR 1445-1450 and shall propose it to the administration concerned;

4. that at 0001 UTC, on [Date D4] administrations shall transfer the transmitting frequencies of their stations to the newly designated frequencies, notifying the IFRB of these transfers, in accordance with the provisions of Article 12 of the Radio Regulations;

5. that replacement frequency assignments whose basic characteristics, other than the frequency, are not modified, shall be recorded with the date without modifying the date appearing in column 2;

6. that frequency assignments for which the Board received no notification of changeover shall be examined under Article 12 of the Radio Regulations with respect to all the transferred assignments irrespective of the date of their notification to the Board. [Following this examination the Board shall modify the findings if necessary and shall enter a symbol to indicate that the assignment is not in conformity with this Resolution.]

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 425-E
12 October 1987
Original: English

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COMMITTEE 4

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The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

a) that the frequency bands allocated to the maritime mobile service for coast stations have been changed as a result of the general review of the HF maritime mobile service bands;

b) that new frequency limits for coast stations for wideband and A1A or A1B Morse telegraphy, facsimile special and data transmission systems and direct-printing telegraphy systems further referred to as "wideband telegraphy", are laid down in the revised provisions of Appendix 31(Rev.);

c) that this Conference has not established a channelling arrangement for these bands;

d) that there should be an orderly transition of the frequency assignments to the newly allocated bands;

e) that, in order to effect this transfer, a fixed translation frequency should be determined in each of the frequency bands;

resolves

1. that those frequency assignments recorded in the Master Register having an assigned frequency band which is totally within the part of the band which is no longer allocated to coast station wideband telegraphy or which overlaps this part of the band, shall be transferred in blocks:

4 MHz band from 4 219.4 - 4 221 to 4 349.4 - 4 351

6 MHz band from 6 325.4 - 6 332.5 to 6 493.9 - 6 501

8 MHz band from 8 435.4 - 8 438 to 8 704.4 - 8 707

12 MHz band from 12 652.3 - 12 658.5 to 13 070.8 - 13 077

16 MHz band from 16 859.4 - 16 904.5 to 17 196.9 - 17 242

22 MHz band from 22 310.5 - 22 445.5 to 22 561 - 22 696

2. that when the uniform frequency transfer results in a degradation of operating conditions of any of these coast stations, the IFRB shall search for an alternative frequency in accordance with RR 1445-1450 and shall propose it to the administration concerned;

3. that at 0001 UTC, on [Date D4] administrations shall transfer the transmitting frequencies of their stations to the newly designated frequencies, notifying the IFRB of these transfers, in accordance with the provisions of Article 12 of the Radio Regulations;

4. that notices of replacement frequency assignments whose basic characteristics, other than the frequency, are not modified, shall be recorded with the date without modifying the date appearing in column 2;

5. that frequency assignments for which the Board received no notification of changeover shall be examined under Article 12 of the Radio Regulations with respect to all the transferred assignments irrespective of the date of their notification to the Board. Following this examination the Board shall modify the findings if necessary and shall enter a symbol to indicate that the assignment is not in conformity with this Resolution;

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

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12 October 1987
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COMMITTEE 4

REPORT OF WORKING GROUP 4 AD HOC 7 TO COMMITTEE 4

DRAFT RESOLUTION [COM4/5]

1. Working Group 4 ad hoc 7 met on 10 October 1987. Present were representatives of Canada, Cuba, the United States, France, Japan and the United Kingdom.

2. The Working Group considered the text contained in the annex to Document DT/71 and a draft prepared by France and the United Kingdom. The result of the consideration of these texts is the new draft presented in the annex to this report. This text is a compromise between the disparate points of view of the delegations represented.

3. During consideration of the draft Resolution, a point of procedure was raised by the United Kingdom. On this point, the Working Group agreed to communicate to Committee 4 that Resolution [COM4/9] (Document 363, Annex 4) should be considered by the Conference before Resolution [COM4/5] in order that consideration of Resolution [COM4/9] is not prejudiced by the decision reached regarding Resolution [COM4/5]. Acceptance of the text in the annex by the United Kingdom is conditional upon this procedure being followed.

4. Considering b) of the draft in the annex is enclosed within square brackets pending a decision by the Conference regarding Resolution [COM4/9]. If Resolution [COM4/9] is not adopted, the text in square brackets should be deleted.

A.B. DUXFIELD
Chairman of Working Group 4 ad hoc 7

Annex: 1

ANNEX

RESOLUTION [COM4/5]

Relating to the Need to Study the Question of Including Decisions of Regional Administrative Radio Conferences in the Radio Regulations

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

a) that this Conference had as an item on its agenda Resolution No. 704;

b) that this Conference has adopted Resolution [COM4/9];

c) that the general question of inclusion of decisions of regional conferences in the Radio Regulations was raised;

d) that there is a need for general guidance on the question to ensure consistency of approach;

recognizing

a) that the question of including decisions of regional conferences in the Radio Regulations, in order to render these decisions applicable to all the members of a particular region, raises a question of principle which affects all Members of the Union;

b) that the best source of guidance on this question is the supreme organ of the Union;

resolves

to submit to the next Plenipotentiary Conference the consideration of the question of including in the Radio Regulations the decisions of Regional Administrative Radio Conferences and the implications of such inclusion on all country-Members of the Union;

requests the IFRB

to prepare a report on the radio regulatory aspects of this question for the information of the Administrative Council and administrations;

invites the Secretary-General

to prepare a report on the legal aspects of this question for the Administrative Council and administrations;

invites the Administrative Council

to bring to the attention of the Plenipotentiary Conference the need for a decision by that Conference on the possible inclusion of decisions of Regional Administrative Radio Conferences in the Radio Regulations;

recommends to the Plenipotentiary Conference

that it consider the question of including in the Radio Regulations decisions of Regional Administrative Conferences in order to obtain general guidance on this subject.

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 427-E
15 October 1987
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COMMITTEE 2

SUMMARY RECORD

OF THE

SECOND AND LAST MEETING OF COMMITTEE 2

(CREDENTIALS)

Monday, 12 October 1987, at 1640 hrs

Chairman: Mr. V.A. RASAMIMANANA (Madagascar)

Subjects discussed:		Documents
1.	Approval of the summary record of the first meeting	157
2.	First to fourth reports by Working Group 2-A	187, 245, 332, 396
3.	Fifth (oral) report by Working Group 2-A	-
4.	Draft report to the Plenary Meeting	DT/76

1. Summary record of the first meeting (Document 157)

Approved.

2. First to fourth reports by Working Group 2-A (Documents 187, 245, 332 and 396)

Approved.

3. Fifth (oral) report by Working Group 2-A

3.1 The Chairman said that Working Group 2-A had held a further meeting to consider the credentials of Mali and of Peru which had been found in order. In addition, the Delegation of Haiti had just arrived at the Conference but had not yet deposited its credentials.

The Committee took note of the above information.

4. Draft report to the Plenary Meeting (Document DT/76)

4.1 Introducing the report to the Plenary, the Chairman said that as a result of the updated situation, the Report should be amended by adding Mali to the list of countries in Section 1 and Peru in Section 2: those two countries were thus to be deleted from Section 4 in which Haiti was to be added.

He also drew attention to the Recommendation in paragraph 4 of the report to the effect that the Chairman and Vice-Chairman be authorized to verify any further credentials which will be submitted and to report thereon direct to the Plenary.

The Committee approved the draft report.

4.2 The Chairman expressed his appreciation to the Working Group and to the officials of the ITU Secretariat who had assisted him in his task. He then declared the work of the Committee completed.

The meeting rose at 1645 hrs.

The Secretary: The Chairman:

R. MACHERET V.A. RASAMIMANANA

BLUE PAGES

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GENEVA, September-October 1987

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B.13

PLENARY MEETING

THIRTEENTH 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	Documents	Title
COM.5	215) 228) (289) 229) 231) 317	Article 38

Y.C. MONGELARD
Chairman of Committee 7

Annex: 11 pages

NOC ARTICLE 38

NOC **Frequencies for Distress and Safety**

NOC **Section I. Availability of Frequencies**

SUP 2967

SUP 2968 § 0.

(MOD) 2969 A. 500 kHz

MOD 2970 The frequency 500 kHz is the international distress frequency for Morse telegraphy (see also No. 472); it shall be used for this purpose by ship, aircraft and survival craft stations which employ Morse telegraphy on frequencies in the bands between 415 kHz and 535 kHz when requesting assistance from the maritime services. It shall be used for the distress call and distress traffic, for the urgency signal and urgency messages, for the safety signal and, outside regions of heavy traffic, for short safety messages. When practicable, safety messages shall be transmitted on the working frequency after a preliminary announcement on 500 kHz (see also No. 4236). For distress and safety purposes, the classes of emission to be used on 500 kHz shall be A2A, A2B, H2A or H2B (see also No. 3042 [and Resolution COM5/1]).

NOC 2971 (2)

(MOD) 2971A B. 518 kHz

MOD 2971B § 1A. In the maritime mobile service, the frequency 518 kHz is used exclusively for the transmission by coast stations of meteorological and navigational warnings and urgent information to ships, by means of narrow-band direct-printing telegraphy using the international NAVTEX system.

SUP 2971C

SUP 2971D

(MOD) 2972 C. 2 182 kHz

MOD 2973 § 2. (1) The carrier frequency 2 182 kHz[1] is an international distress frequency for radiotelephony (see also Nos. 500 and 501); it shall be used for this purpose by ship, aircraft and survival craft stations and by emergency position-indicating radiobeacons using frequencies in the authorized bands between 1 605 kHz and 4 000 kHz when requesting assistance from the maritime services. It is used for distress calls and distress traffic, for signals of emergency position-indicating radiobeacons, for the urgency signal and urgency messages and for the safety signal. Safety messages shall be transmitted, where practicable, on a working frequency after a preliminary announcement on 2 182 kHz. The class of emission to be used for radiotelephony on the frequency 2 182 kHz shall be H3E. Class of emission A3E may continue to be used by apparatus intended solely for distress, urgency and safety purposes (see No. 4127). The class of emission to be used by emergency position-indicating radiobeacons shall be as specified in Appendix 37 (see also No. 3265). The class of emission J3E may be used for the exchange of distress traffic on 2 182 kHz following the acknowledged reception of a distress call using digital selective calling techniques on 2 187.5 kHz taking into account that other shipping in the vicinity may not be able to receive this traffic. (See also No. N 2973 [and Resolution COM5/1].)

MOD 2974 (2) If a distress message on the carrier frequency 2 182 kHz has not been acknowledged, the radiotelephone alarm signal, whenever possible followed by the distress call and message, may be transmitted again on a carrier frequency of 4 125 kHz or [6 215 kHz], as appropriate (see Nos. 2982, 2986 and 3054).

MOD 2975 (3) However, ship and aircraft stations which can transmit neither on the carrier frequency 2 182 kHz nor, in accordance with No. 2974, on the carrier frequencies 4 125 kHz or [6 215 kHz], should use any other available frequency on which attention might be attracted.

SUP 2976

NOC 2977 (5)

NOC 2978 (6)

SUP 2978A

SUP 2978B § 2A.

NOC 2973.1

(MOD) 2979 D. 3 023 kHz

NOC 2980 § 3.

(MOD) 2981 E. 4 125 kHz

MOD 2982 § 4. (1) The carrier frequency 4 125 kHz is used to supplement the carrier frequency 2 182 kHz for distress and safety purposes and for call and reply (see also No. 520). This frequency is also used for distress and safety traffic by radiotelephony (see also No. N 2982 [and Resolution COM5/1]).

MOD 2982A (2) The carrier frequency 4 125 kHz may be used by aircraft stations to communicate with stations of the maritime mobile service for distress and safety purposes, including search and rescue (see No. 2943).

SUP 2982B

SUP 2982C § 4A.

SUP 2982D

SUP 2982E § 4B.

(MOD) 2983 F. 5 680 kHz

NOC 2984 § 5.

MOD 2985 G. [6 215 kHz]

MOD 2986 § 6. The carrier frequency [6 215 kHz] is used to supplement the carrier frequency 2 182 kHz for distress and safety purposes and for call and reply (see also No. 520). This frequency is also used for distress and safety traffic by radiotelephony (see also No. N 2986 [and Resolution COM 5/1]).

SUP 2986A

SUP 2986B § 6A.

SUP 2986C

SUP 2986D § 6B.

SUP 2986E

SUP 2986F § 6C.

SUP 2986G

SUP 2986H § 6D.

(MOD) 2987 H. 8 364 kHz

MOD 2988 § 7. The frequency 8 364 kHz is designated for use by survival craft stations if they are equipped to transmit on frequencies in the bands between 4 000 kHz and 27 500 kHz and if they wish to establish communications relating to search and rescue operations with stations of the maritime and aeronautical mobile services (see also No. 501 [and Resolution COM5/1]).

SUP 2988A

SUP 2988B § 7A.

SUP 2988C

SUP 2988D § 7B.

SUP 2988E

SUP 2988F § 7C.

SUP 2988G

SUP 2988H § 7D.

SUP 2988I

SUP 2988J § 7E.

SUP 2988K

SUP 2988L § 7F.

SUP 2988M

SUP 2988N § 7G.

(MOD) 2989 I. 121.5 MHz and 123.1 MHz

SUP 2990

NOC 2990A § 8.

NOC 2990B (1B)

NOC 2991 (2)

NOC 2990A.1

(MOD) 2992 J. 156.3 MHz

NOC 2993 § 9.

SUP 2993A

SUP 2993B § 9A.

(MOD) 2993C K. 156.650 MHz

MOD 2993D § 9B. The frequency 156.650 MHz is used for ship-to-ship communications relating to the safety of navigation in accordance with note n) of Appendix 18.

(MOD) 2993E L. 156.8 MHz

MOD 2994 § 10. (1) The frequency 156.8 MHz is the international distress, safety and calling frequency for radiotelephony for stations of the maritime mobile service when they use frequencies in the authorized bands between 156 MHz and 174 MHz (see also Nos. 501 and 613). It is used for the distress signal, the distress call and distress traffic, as well as for the urgency signal, urgency traffic and the safety signal (see also No. 2995A). Safety messages shall be transmitted where practicable on a working frequency after a preliminary announcement on 156.8 MHz (see No. N 2994, Appendix 19 [and also Resolution COM5/1]).

NOC 2995 (2)

NOC 2995A (3)

SUP 2995B

SUP 2995C § 10A.

(MOD) 2996 M. 243 MHz

(See Nos. 501 and 642)

(MOD) 2997 N. 406 - 406.1 MHz Band

NOC 2997A § 10B.

(MOD) 2998 O. 1 544 - 1 545 MHz Band

2998A § 10C. Use of the band 1 544 - 1 545 MHz (space-to-Earth) is limited to distress and safety operations (see No. 728), including:

2998B a) feeder links of satellites needed to relay the emissions of satellite emergency position-indicating radiobeacons to earth stations;

2998C b) narrow-band (space-to-Earth) links from space stations to mobile stations.

(MOD) 2998D P. 1 645.5 - 1 646.5 MHz Band

2998E § 10D. Use of the band 1 645.5 - 1 646.5 MHz (Earth-to-space) is limited to distress and safety operations (see No. 728), including:

ADD 2998EA a) transmissions from satellite EPIRBs;

ADD 2998EB b) relay of distress alerts received by satellites in low polar earth orbits to geostationary satellites.

(MOD) 2999 Q. Aircraft in Distress

NOC 3000

(MOD) 3001 R. Survival Craft Stations

NOC 3002 to 3008

SUP 3008A

SUP 3008B

SUP 3008C

SUP 3008D

NOC **Section II. Protection of Distress and Safety Frequencies**

NOC 3009 A. General

MOD 3010 Except as provided for in these Regulations, any emission capable of causing harmful interference to distress, alarm, urgency or safety communications on the frequencies 490 kHz, 500 kHz, 518 kHz, 2 174.5 kHz, 2 182 kHz, 2 187.5 kHz, 4 125 kHz, 4 177.5 kHz, 4 207.5 kHz, [6 215 kHz], 6 268 kHz, 6 312 kHz, 8 291 kHz, 8 376.5 kHz, 8 414.5 kHz, 12 290 kHz, 12 520 kHz, 12 997.5 kHz, 16 420 kHz, 16 695 kHz, 16 804.5 kHz, 156.525 MHz or 156.8 MHz (see also No. N 3010) is prohibited. Any emission causing harmful interference to distress and safety communications on any of the other frequencies identified in Section I of this Article and in Section I of Article N 38 is prohibited.

NOC 3011

NOC 3012 to 3015

MOD 3016 (2) It is not permitted to transmit complete alarm signals for testing purposes on any frequency except for essential tests coordinated with the competent authorities. As an exception, such tests are permitted for radiotelephone equipment which can operate only on either of the international distress frequencies 2 182 kHz and 156.8 MHz, in which case a suitable artificial antenna shall be employed.

NOC 3016A

NOC 3016B

NOC 3017 B. 500 kHz

MOD 3018 § 15. (1) Apart from the transmissions authorized on 490 kHz and 500 kHz, and taking account of No. 4226, all transmissions on the frequencies included between 490 kHz and 510 kHz are forbidden (see No 471 [and Resolution COM5/3]).

NOC 3019

NOC 3020 and 3021

NOC 3022 C. 2 182 kHz

MOD 3023 § 16. (1) Except for transmissions authorized on the carrier frequency 2 182 kHz and on the frequencies 2 174.5 kHz, [2 177 kHz], and 2 187.5 kHz [and 2 189.5 kHz], all transmissions on the frequencies between 2 173.5 kHz and 2 190.5 kHz are forbidden (see also No. N 3023).

NOC 3024 to 3031

(MOD) 3031A D. 121.5 MHz, 123.1 MHz and 243 MHz

NOC 3031B

ADD 3031C In order to avoid unjustified alerts in automatic emergency systems, transmissions of non-operational test signals on the emergency frequencies 121.5 MHz and 243 MHz should be coordinated with the competent authorities and carried out only during the first five minutes of each hour, with each test transmission lasting no longer than ten seconds (see also No. 3011).

MOD 3032 E. 156.7625 - 156.8375 MHz Band

MOD 3033 § 18. (1) All emissions in the band 156.7625 - 156.8375 MHz capable of causing harmful interference to the authorized transmissions of stations of the maritime mobile service on 156.8 MHz are forbidden.

NOC 3034 to 3036

NOC **Section III. Watch on Distress Frequencies**

NOC 3037

MOD 3038 § 19. (1) In order to increase the safety of life at sea and over the sea, all stations of the maritime mobile service normally keeping watch on frequencies in the authorized bands between 415 kHz and 526.5 kHz which employ Morse telegraphy shall, during their hours of service, take the necessary measures to ensure watch on the international distress frequency 500 kHz for three minutes twice an hour beginning at x h 15 and x h 45, Coordinated Universal Time (UTC), by an operator using headphones or loudspeaker [(see also Resolution COM5/1).]

ADD 3038A (2) No. 3038 does not apply to a coast station open to public correspondence when its operational area for distress purposes is covered by one or more coast stations keeping watch on 500 kHz in accordance with an agreement between the administrations concerned. These administrations shall inform the Secretary-General of the details of such agreements for publication in the List of Coast Stations (see Article 26 and Appendix 9).

NOC 3039

MOD 3040 a) transmissions shall cease in the band between 490 kHz and 510 kHz (see also Resolution COM5/3);

MOD 3041 b) outside these bands, transmissions of stations of the mobile service may continue; stations of the maritime mobile service may listen to these transmissions on the express condition that they first ensure watch on the distress frequency as required by No. 3038 [(see also Resolution COM5/1).]

MOD 3042 § 20. (1) Stations of the maritime mobile service open to Morse telegraphy public correspondence and using frequencies in the authorized bands between 415 kHz and 526.5 kHz shall, during their hours of service, remain on watch on 500 kHz except in the situation referred to in No. 3038A. This watch is obligatory only for class A2A and H2A emissions [(see also Resolution COM5/1).]

MOD 3043 (2) These stations, while observing the provisions of No. 3038, are authorized to relinquish this watch only when they are engaged in communications on other frequencies.

NOC 3044 to 3046

MOD 3046A (4) Ship stations, while observing the provisions of No. 3038, are also authorized to relinquish this watch[1] when it is impractical to listen by split headphones or by loudspeaker, and by order of the master in order to repair or carry out maintenance required to prevent imminent malfunction of:

NOC 3046B

NOC 3046C

NOC 3046D

NOC 3046E

MOD 3046A.1 [1]For additional information see the relevant provisions of the International Convention for the Safety of Life at Sea. [(See also Resolution COM5/1.)]

NOC 3047

B. 2 182 kHz

MOD 3048 § 21. (1) Coast stations which are open to public correspondence and which form an essential part of the coverage of the area for distress purposes on 2 182 kHz shall, during their hours of service, maintain a watch on 2 182 kHz [(see also Resolution COM5/1).]

NOC 3049 to 3051

MOD 3052 § 23. In order to increase the safety of life at sea and over the sea, all stations of the maritime mobile service normally keeping watch on frequencies in the authorized bands between 1 605 kHz and 2 850 kHz shall, during their hours of service, and as far as possible, take steps to keep watch on the international distress carrier frequency 2 182 kHz for three minutes twice each hour beginning at x h 00 and x h 30 Coordinated Universal Time (UTC) (see also Resolution COM5/1).

MOD 3052A § 23A. During the periods referred to in No. 3052 all transmissions in the band 2 173.5 - 2 190.5 kHz shall cease, except those on [2 177 kHz and 2 189.5] kHz and those provided for in this Chapter and in Chapter N IX.

(MOD) 3053

C. 4 125 kHz and [6 215 kHz]

MOD 3054 § 24. (1) All coast stations which are open to public correspondence and which form an essential part of the coverage of the area for distress purposes may, during their hours of service, maintain a watch on the carrier frequencies 4 125 kHz or [6 215 kHz] or both (see Nos. 2982 and 2986). Such watch should be indicated in the List of Coast Stations.

NOC 3055 to 3056

MOD 3057 § 25. (1) A coast station providing an international maritime mobile radiotelephone service in the band 156 - 174 MHz and which forms an essential part of the coverage of the area for distress purposes should, during its working hours in that band, maintain an efficient aural watch on 156.8 MHz. (See also [Resolution COM5/1] and Recommendation No. 306.)

MOD 3058 (2) Ship stations should, where practicable, maintain watch on 156.8 MHz when within the service area of a coast station providing international maritime mobile radiotelephone service in the band 156 - 174 MHz. Ship stations fitted only with VHF radiotelephone equipment operating in the authorized bands between 156 MHz and 174 MHz, should maintain watch on 156.8 MHz when at sea [(see also Resolution COM5/1).]

MOD 3059 (3) Ship stations, when in communication with a port station, may, on an exceptional basis and subject to the agreement of the administration concerned, continue to maintain watch, on the appropriate port operations frequency only, provided that watch on 156.8 MHz is being maintained by the port station [(see also Resolution COM5/1).]

MOD 3060 (4) Ship stations, when in communication with a coast station in the ship movement service and subject to the agreement of the administrations concerned, may continue to maintain watch on the appropriate ship movement service frequency only, provided the watch on 156.8 MHz is being maintained by the coast station [(see also Resolution COM5/1).]

3061 to 3085 NOT allocated.

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 429-E
3 February 1988
Original: English

PLENARY MEETING

MINUTES

OF THE

SIXTH PLENARY MEETING

Monday, 12 October 1987, at 1750 hours

Chairman : Mr. J.W. EGAN (Canada)

Subjects discussed:		Documents
1.	Sixth Series of texts submitted by the Editorial Committee for first reading	334, pp. 9 - 13, 16-19
2.	Seventh Series of texts submitted by the Editorial Committee for first reading (Series B.7)	336
3.	Ninth Series of texts submitted by the Editorial Committee for first reading (Series B.9)	401
4.	Tenth Series of texts submitted by the Editorial Committee for first reading (Series B.10)	403
5.	General statements	

1. Sixth Series of texts submitted by the Editorial Committee for first reading (Document 334, pp. 9-13, 16-19)

Resolution No. 38 (Rev. MOB-87)

Approved.

Resolution COM5/2

resolves

1.1 The delegate of Mexico drew attention to the use of the words "in uninhabited and remote areas" and expressed his preference for the term "sparsely inhabited" which appeared in the 1983 Resolution No. 203. After discussion between the delegates of Brazil, Mexico, and Spain, it was finally agreed to refer to "sparsely inhabited, uninhabited and remote areas" ("aislados" in the Spanish version) and otherwise to align the text on that of the original Resolution. There would be a consequential change also in the section.

requests the CCIR

Resolution COM5/2 was approved, as amended.

Resolution COM5/3

Approved.

Resolution COM5/5

Title

It was agreed to delete the square brackets and to replace the words "marine" and "broadcast" by "maritime" and "transmission" wherever they occurred.

considering c)

Square brackets removed.

invites the Administrative Council

1.2 The Chairman of the Editorial Committee, on a suggestion by the Chairman of Committee 5, proposed that the following phrase be added at the end of the sub-paragraph:

"with a view to examining and if necessary modifying the coordination procedures".

It was so agreed.

The Resolution was approved with the above amendments.

Recommendation No. 317

Approved.

Page 19

List of Resolutions and Recommendations

Approved with deletion of footnote 1) related to Resolution No. 318 (Mob 83).

The above parts of the Sixth Series of texts submitted by the Editorial Committee were approved, as amended, on first reading.

2. Seventh Series of texts submitted by the Editorial Committee for first reading (Series B.7) (Document 336)

Articles 1, 19(NOC) and 24

Approved.

Article 42A

NOC 3363

2.1 The delegate of the Federal Republic of Germany recalled that there had been several proposals to delete this provision because it was hoped that the detailed revision of the Chapter would include the aeronautical mobile satellite service. The Chairman of Committee 6 confirmed that 3363 had been deleted so it was agreed to replace NOC by SUP.

Articles 43 and 48

Approved.

Article 51

2.2 The delegate of the Federal Republic of Germany said that his Delegation had agreed to the wording of number 10 in the order of priority on the understanding that the expression "Other aeronautical communications" included public correspondence with aircraft.

SUP Article 52

Approved

Article N 52

3655 and 3656

It was agreed that the Editorial Committee would amend the French version as suggested by the delegate of Burkina Faso.

SUP Article 53
NOC Article 54
NOC Article 57

Chapter XII

Article 67

ADD 5134, ADD 5135 and ADD 5136

The Chairman indicated a minor editorial amendment to the first-named provision and said that in the other two the word "possible" should be replaced by "practicable".

NOC Article 68
NOC AP 12
NOC AP 13

Appendix 14

It was pointed out that the title should bear the reference Mob-87 and not Mob-83.

List of Recommendations

Delete the line NOC Recommendation No. 7.

The Seventh Series of texts submitted by the Editorial Committee was approved, with the above amendments, on first reading.

3. Ninth Series of texts submitted by the Editorial Committee for first reading (Series B.9)(Document 401)

Article N 39

Approved.

Article N 40

N 3195XC, N 3195XD

3.1 The delegate of the United States of America said that since Section II concerned urgency communications, the phrase "the distress signal MAY DAY" should be replaced by "the urgency signal PAN PAN" and the words "by the ship in distress and should be" were to be deleted.

N 3195AEA, N 3195AEB

Similarly, the phrase "distress signal MAY DAY" should be replaced by "safety signal SECURITE" and the words "by the ship in distress and should be" should be deleted, since Section IV related to safety communications.

N 3219A

3.2 The Chairman of the Editorial Committee said that as a consequence of Document 397, the reference "(see Recommendation COM5/A)" should be added.

N 3195AF

3.3 The delegate of Australia suggested that the reference "(see No. 1632 for coordination procedures)" be added so that Resolution No. 308 could be suppressed. It was so agreed.

3.4 The Chairman of Committee 4 read out the correct frequencies to be inserted in Section V as a result of decisions taken in his Committee:

- in sub-section C, replace 4 339.5 kHz by 4 209.5 kHz;
- in sub-section D, replace the frequencies listed by: 4 210, 6 314,, 8 416.5, 12 579, 16 806.5, 19 680.5, 22 376 and 26 100.5 kHz.

N 3195AJ

3.5 The delegate of the United States of America pointed out that "note n)" should be replaced by "note q)".

Article N 40 was approved with the above amendments.

Resolution No. 322 (Rev. Mob-87)

recognizing a)

3.6 The Chairman of the Editorial Committee said that the text should read:

"that in order for the implementation of any new system to be fully successful, it is necessary to have an adequate geographical distribution of coast earth stations and coast stations keeping watch on the appropriate frequencies and it is necessary to continue to keep watch on frequencies already used for this purpose".

3.7 The delegate of the United Kingdom explained that the reason for the change was to make it clear that the watchkeeping that had to be maintained was that on the frequencies appropriate to the existing system.

It was agreed to leave it to the Editorial Committee to produce the final wording and sub-paragraph a) was thus left in square brackets.

resolves to invite and instructs the Secretary-General

3.8 The Secretary-General said that in the first line of resolves to invite 1, "the ITU" should be replaced by "the Secretary-General"; the third sub-paragraph should become the first of instructs the Secretary-General as follows:

instructs the Secretary-General

1. to indicate in the List of Coast Stations ...

2. to communicate this Resolution to the IMO"

It was so agreed.

Resolution No. 322 (Rev. Mob-87) was approved as amended, subject to final drafting by the Editorial Committee.

The ninth series of texts submitted by the Editorial Committee was approved as amended on first reading.

4. Tenth Series of texts submitted by the Editorial Committee for first reading (Series B.10) (Document 403)

Article N 38

Section I

4.1 The Chairman of Committee 4 indicated the following changes to the frequencies given in the Section:

- IA. 4 339.5 kHz to be changed to 4 209.5 kHz
- IB. 4 340 kHz to be changed to 4 210 kHz
- K. delete the square brackets around 6 215 kHz
- MA. 6 482.5 kHz to be changed to 6 314 kHz
- PA. 8 685.5 kHz to be changed to 8 416.5 kHz
- SA. 12 997.5 kHz to be changed to 12 579 kHz
- VA. 17 144 kHz to be changed to 16 806.5 kHz
- VB. 19 730.5 kHz to be changed to 19 680.5 kHz
- VC. 22 626.5 kHz to be changed to 22 376 kHz
- VD. 26 123.5 kHz to be changed to 26 100.5 kHz

4.2 the Chairman of the Editorial Committee said that the reference to Resolution COM5/1 wherever it occurred should be replaced by COM5/5.

N 2968

4.3 the delegate of Paraguay pointed out that the entire provision should be in square brackets since it related to the frequency 490 kHz.

N 2971, N 2973 and N 2978B

4.4 The delegate of New Zealand said that in N 2973 the cross-reference should be to No. 4343 as well as to No. 2973.

4.5 The delegate of Saudi Arabia asked why the word "traffic" was used in two of the above three provisions and "calls" in the third.

4.6 The Chairman of Committee 5 said that the intention was to have calling (which established the communication) on one frequency using one technique, followed by the passing of a message (traffic) on two frequencies using two different techniques.

4.7 The delegate of Tunisia thought it would be preferable to use the term "call" in N 2973, rather than "traffic"; in the old Article 9 the frequency 2 182 kHz was reserved for distress and safety, whereas under the new Chapter N IX that frequency would be encumbered if it were used for traffic which had other means available to it.

It was agreed to leave the text as it stood, since it had been agreed upon in Committee 5, bu the Plenary took note of the reservation expressed by the delegate of Tunisia.

4.8 The representative of the IFRB (Mr. Berrada) drew attention to the fact that there was still a footnote (RR 500) in the Table of Frequency Allocations which related to the use of 2 182 kHz. Similar provisions to those in Section I had just been adopted in documents in Series B.9 with different wording, e.g., "may be used" where N 2968 had "will be used" and a reference to a particular provision where N 2971B had "see Article 14A". The Chairman pointed out that parts of the earlier document were still in square brackets and the Chairman of Committee 4 said he would review the matter and put forward a correct version.

N 2982 EB

4.9 The delegate of Brazil, supported by the delegate of Argentina, proposed that the wording should be the same as that in N 2968.

4.10 The Chairman, having pointed out that N 2968 was still in square brackets, the Chairman of Committee 5 undertook to align N 2982EB as appropriate.

N 2986

It was agreed to add a cross-reference to No. 4375.

N 2990A

It was agreed that the Editorial Committee would sub-divide the final sentence into two separate sentences and incorporate the words "use the frequency 121.5 MHz and use class of emission A3X."

N 2993D

Note n) should be replaced by note q).

Section II

N 3010

4.11 The delegate of India said that the phrase "any emission capable of causing harmful interference... on the frequencies ... is prohibited" gave him cause for concern. In the earlier Radio Regulations, the frequencies identified had been few in number and the bandwidth small but now the bandwidth identified was very much larger.

4.12 The Chairman of Committee 5 explained that it was not the intention to refer to entire bands but to the discrete frequencies identified in specific Articles; he would therefore suggest inserting the word "discrete" before "frequencies" in the third line from the bottom of the paragraph.

4.13 The delegate of India said he was still not sure whether the intention was to eliminate certain bands (406 MHz, 1.5 and 1.6 GHz) for use as distress and safety bands.

4.14 The Chairman of Committee 5 replied that the bands to be used for EPIRBs were referred to in the first sentence. The purpose of N 3010 was to provide safeguards against interference of two slightly different degrees.

4.15 The delegate of Brazil observed that all the bands listed were reserved exclusively for the mobile service except 518 kHz. The aeronautical radionavigation service could also use the band containing the frequency 518 kHz in Region 2 without causing harmful interference, so he did not believe such use should be prohibited and he therefore suggested its deletion from the list in the first sentence. He was perfectly aware of the need to protect the frequency in question, but if N 3010 were retained as it stood, no other use would be possible. In Brazil that frequency was already being used and it would not be fair to prevent the tropical zone countries from continuing to use the frequency even if they could protect the Navtex system, as provided for in the second sentence of N 3010.

4.16 The delegate of Costa Rica supported the proposal as did the delegate of Australia who did not think the use of 518 kHz in a country such as Brazil was likely to cause harmful interference to the Navtex system.

4.17 The delegate of the USSR, on the other hand, was against the deletion of 518 kHz from the first sentence of N 3010 since it was vital for distress and safety purposes and supported the suggestion to refer to the discrete frequencies. The delegates of Sweden and of Norway shared that view.

4.18 The Chairman of the IFRB said that the frequencies listed, being common frequencies, were not examined or recorded by the Board but the Board distinguished the two different situations by the wording "capable of causing harmful interference" and "causing harmful interference". In the case in point, he believed that since 518 kHz was used in Region 2 by another service on a primary basis, it was covered adequately in the second sentence rather than in the Table.

4.19 The Chairman asked if the Plenary could agree to that understanding, recognizing that the frequency was still listed in Section I of Article N 38.

It was so agreed, 518 kHz was deleted in the fourth line and "discrete" inserted at the end of the provision.

N 3023

4.20 The Chairman of Committee 5 drew attention to the two pairs of square brackets: if Committee 6 had agreed to include additional frequencies within the existing guardband, then Committee 4 would have to decide which ones.

It was agreed to retain the square brackets pending decisions by the other Committees.

N 3038

4.21 The delegate of Mauritania thought it had been agreed to insert a reference to Resolution COM5/5; the Chairman of Committee 5 said that to his recollection the reference to Resolution No. 322, as revised by the present Conference, was correct but he would check that point.

Article N 38 was thus approved, as amended and with a number of items remaining in square brackets.

Article 44

MOD 3443

Approved, subject to deletion of the square brackets and the words therein.

Article 49

Approved.

Article 64

Approved, subject to the addition of "NOC 4842" after "NOC 4841".

Appendix 19

Paragraph 4

4.22 The Chairman of the Technical Working Group said that the words "in the Table" should be deleted from paragraph 4.

Paragraph 6

He also said that the last phrase of paragraph 6 was misleading; the "facililty" in question was that of power reduction capability, which might not have been properly reflected.

4.23 The representative of the Editorial Committee said that with that explanation, the Editorial Committee would redraft the text, which should be left in square brackets for the time being.

It was so agreed.

Paragraph 9

4.24 The delegate of Israel said that if the "automatic service" referred to was automatic telephony under Appendix 18, then the paragraph should be deleted since there were not enough channels available.

4.25 The delegate of Norway said he could not see that the paragraph served any purpose and suggested that it be deleted altogether. That suggestion was supported by the delegate of Israel and of Paraguay.

4.26 The Chairman of the Technical Working Group pointed out that the matter had been debated at great length at Working Group level and the reference in question had been added to Appendix 19 on the advice of Committee 6 following its consideration of ADD 4326A and MOD 4910. While it was true that it might be useful to explain what was meant by automatic service, which was not a service in the meaning of the definition in Article 1, he did not think the text in Appendix 19 should be modified. In his view, such a service was one that involved automatic connection from a public switched telephone network to the maritime mobile service.

4.27 The delegate of France suggested that "automatic system" would be just as appropriate. Such systems were described not in the Radio Regulations but in CCIR Reports and Recommendations. He believed that paragraph 9 must be retained in order to harmonize the Radio Regulations and the texts of the CCIR.

4.28 Further to a suggestion by the delegate of Spain, supported by the delegate of Saudi Arabia, it was agreed to leave the text in square brackets for the time being pending further consideration.

Appendix 19 was approved on that understanding and subject to editorial amendment.

Appendix 26

ADD ALG

4.29 The delegate of Algeria asked for his country's name to be correctly listed in the French text.

Approved, as amended.

Resolution GT-TEC PLEN/4

Approved.

Recommendation No. 316 (Rev. Mob-87)

4.30 The delegate of the United States of America recalled that WARC-79 had adopted an allocation to the maritime mobile satellite service in the 1 530 - 1 535 MHz band which did not become primary until 1 January 1990. He suggested that the words "and effective 1 January 1990 the band 1 530 - 1 535 MHz" be inserted in the sub-paragraphs recalling and is of the opinion so that ships could operate on the full range of frequencies allocated to the service.

4.31 That suggestion was supported by the delegate of Sri Lanka and the Chairman confirmed that that would be consistent with other texts and the footnotes to the Table. It was so agreed.

recommends

4.32 The delegate of India suggested adding "in the bands mentioned above" at the end of ADD 1. The delegate of Israel said that for the sake of consistency with considering c), the words "to the extent possible" should be inserted. The delegate of Tunisia felt that the whole of the recommends part was superfluous since it repeated what was already stated under is of the opinion.

4.33 The delegates of Norway and Sweden urged the Plenary not to revert to matters already discussed in Working Groups and in Committee but to concentrate on amendments which were necessary in order to avoid misunderstanding and misinterpretation.

It was agreed to request the Editorial Committee to ensure that the texts were established correctly and properly aligned in all three languages.

The list of Resolutions and Recommendations was approved.

The Tenth Series of texts, as amended and subject to a number of items being left pending, was approved on first reading.

5. General statements

5.1 The delegate of Sweden said that he had learnt that morning that some delegates had received in their pigeon-holes an anonymous paper entitled "The Swedish Approach to Maritime Electronics Services". He wished to make it clear that the Swedish Delegation had nothing to do with that paper; from the contents he understood that the source was the Observer of the IFT and the latter had confirmed that he was in fact the author.

The paper had been distributed without consulting any member of the Swedish Delegation. It contained considerable errors and erroneous statements and also some insinuations about the shore-based system for maintainance of radio equipment which had been applied to hundreds of Swedish ships to their full satisfaction for some twenty years.

He protested strongly against such a practice. Arguments should be put forward in official Conference documents so that they were available to everyone and their authorship known.

5.2 The Secretary-General drew attention to the fact that the Steering Committee at its meeting the previous week had discussed the need to curtail documentation, except in the case of proposals from particular administrations designed to bring about the convergence of viewpoints in areas of difficulty. The usual practice with regard to information from international organizations was that during the course of a conference, papers were published subject to the authority of the Chairman and/or Secretary of the Conference.

5.3 The delegate of Togo said that if some parts of No. 3026 were not deleted, he would wish to take up discussion again on No. 2973, since distress traffic on 2 182 kHz would interfere with the system at present in service.

5.4 The Chairman said that that view would be noted. It was true that certain provisions of the Radio Regulations had been deleted rather hastily when it would have been prudent to modify them: No. 2947 was another example of a provision whose deletion could be prejudicial to the safety of life at sea.

The meeting rose at 2110 hours

The Secretary-General: The Chairman:

R.E. BUTLER J.W. EGAN

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Corrigendum 3 to
Document 430-E
16 October 1987
Original: French

AMENDMENTS TO THE REPORT OF COMMITTEE 2 TO THE PLENARY

Following the oral report by the Chairman of Committee 2 to the twelfth Plenary Meeting the following changes should be made in the annex to Document 430:

Section 1

Insert Pakistan (Islamic Republic of)

Section 3

Delete Pakistan (Islamic Republic of)

V.A. RASAMIMANANA
Chairman of Committee 2

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Corrigendum 2 to
Document 430-E
14 October 1987
Original: French

AMENDMENTS TO THE
REPORT OF COMMITTEE 2 TO THE PLENARY

Following the oral report by the Chairman of Committee 2 to the ninth Plenary Meeting the following changes should be made in the annex to Document 430:

Add the following Section 3

3. Provisional credentials found to be in order, deposited by the delegations of countries having the right to vote (see No. 383 of the Convention)

Haiti (Republic of)
Pakistan (Islamic Republic of)

Conclusion: The delegations of these countries are entitled to vote but will only be able to sign the Final Acts if confirmation of the provisional credentials, issued by one of the authorities referred to in No. 382 of the Convention, is received before the signing ceremony.

Section 4

Delete

Haiti (Republic of)
Pakistan (Islamic Republic of)

V.A. RASAMIMANANA
Chairman of Committee 2

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Corrigendum 1 to
Document 430-E
13 October 1987
Original: French

AMENDMENTS TO THE

REPORT OF COMMITTEE 2 TO THE PLENARY MEETING

Following the oral report by the Chairman of Committee 2 to the seventh Plenary Meeting the following changes should be made in the annex to Document 430:

Section 1

Insert PHILIPPINES (REPUBLIC OF THE)

Section 3

Delete all entries

V.A. RASAMIMANANA
Chairman of Committee 2

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 430-E
12 October 1987
Original : French

PLENARY MEETING

REPORT OF COMMITTEE 2 TO THE PLENARY MEETING
(CREDENTIALS)

1. Terms of reference of the Committee

The terms of reference of the Committee are set out in Document 102.

2. Meetings

The Committee met twice, on 17 September and 12 October 1987.

At its first meeting, it set up a Working Group consisting of the Chairman and Vice-Chairman of the Committee and one delegate from the United Kingdom, from Poland and from Canada, to verify delegations' credentials in accordance with Article 67 of the International Telecommunication Convention, Nairobi (1982).

3. Conclusions

The conclusions reached by the Committee are reproduced in the Annex attached hereto and submitted to the Plenary Meeting for approval.

4. Final remark

The Committee recommends that the Plenary Meeting authorize the Chairman and Vice-Chairman of Committee 2 to verify the credentials received after the date of the present Report and to submit their conclusions to the Plenary Meeting on the matter.

V.A. RASAMIMANANA

Chairman of Committee 2

Annex : 1

ANNEX

1. Credentials found to be in order, deposited by the delegations of countries having the right to vote

(In French alphabetical order)

Afghanistan (Democratic Republic of)
Albania (Socialist People's Republic of)
Algeria (People's Democratic Republic of)
Germany (Federal Republic of)
Antigua and Barbuda
Saudi Arabia (Kingdom of)
Argentine Republic
Australia
Belgium
Byelorussian Soviet Socialist Republic
Bulgaria (People's Republic of)
Burkina Faso
Cameroon (Republic of)
Canada
Chile
China (People's Republic of)
Cyprus (Republic of)
Vatican City State
Colombia (Republic of)
Korea (Republic of)
Côte d'Ivoire (Republic of)
Cuba
Denmark
Egypt (Arab Republic of)
Spain
United States of America
Ethiopia
Finland
France
Greece
Hungarian People's Republic
India (Republic of)
Indonesia (Republic of)
Iran (Islamic Republic of)
Iraq (Republic of)
Israel (State of)
Italy
Japan
Jordan (Hashemite Kingdom of)
Kenya (Republic of)
Kuwait (State of)
Lebanon
Libya (Socialist People's Libyan Arab Jamahiriya)
Madagascar (Democratic Republic of)
Malaysia
Mali (Republic of)
Malta (Republic of)
Mexico
Monaco
Nigeria (Federal Republic of)
Norway
New Zealand

Oman (Sultanate of)
Panama (Republic of)
Papua New Guinea
Paraguay (Republic of)
Netherlands (Kingdom of the)
Poland (People's Republic of)
Portugal
Qatar (State of)
Syrian Arab Republic
German Democratic Republic
Democratic People's Republic of Korea
Ukrainian Soviet Socialist Republic
Romania (Socialist Republic of)
United Kingdom of Great Britain and Northern Ireland
San Marino (Republic of)
Senegal (Republic of)
Singapore (Republic of)
Sri Lanka (Democratic Socialist Republic of)
Sweden
Switzerland (Confederation of)
Suriname (Republic of)
Swaziland (Kingdom of)
Tanzania (United Republic of)
Czechoslovak Socialist Republic
Thailand
Trinidad and Tobago
Tunisia
Turkey
Union of Soviet Socialist Republics
Uruguay (Eastern Republic of)
Venezuela (Republic of)
Viet Nam (Socialist Republic of)
Yugoslavia (Socialist Federal Republic of)
Zambia (Republic of)

Conclusion : The delegations of these countries are entitled to vote and to sign the Final Acts.

2. Credentials found to be in order, deposited by the delegations of countries which do not have the right to vote (see Document 91)

(In French alphabetical order)

Angola (People's Republic of)
Austria
Bahamas (Commonwealth of the)
Brazil (Federative Republic of)
Burundi (Republic of)
Costa Rica
Ecuador
Guinea (Republic of)
Ireland
Liberia (Republic of)
Morocco (Kingdom of)
Mauritania (Islamic Republic of)
Peru
Togolese Republic

Conclusion : The delegations of these countries are not entitled to vote, but may sign the Final Acts.

./..

3. Provisional credentials found to be in order, deposited by the delegations of countries having the right to vote (see No. 383 of the Convention)

Philippines (Republic of the)

Conclusion : The delegation of this country is entitled to vote but will only be able to sign the Final Acts if confirmation of the provisional credentials, issued by one of the authorities referred to in No. 382 of the Convention, is received before the signing ceremony.

4. Delegations attending the Conference which have not deposited credentials

*Dominican Republic
Haiti (Republic of)
*Honduras (Republic of)
Pakistan (Islamic Republic of)
*Sudan (Republic of the)
*Zaire (Republic of)

Conclusion : The delegations of these countries are neither entitled to vote nor to sign the Final Acts.

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* Appears in the list of countries which have lost their right to vote (see Document 91)

BLUE PAGES

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 431-E
12 October 1987

B.14

PLENARY MEETING

FOURTEENTH 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	Documents	Title
COM.6	270 (417)	Article 25
COM.6	379 (417)	Article 26
COM.6	284 (417)	Article 59

Y.C. MONGELARD
Chairman of Committee 7

Annex: 8 pages

ARTICLE 25

NOC **Identification of Stations**

NOC **Section I. General Provisions**

NOC 2055-2064

ADD 2064A (4A) All transmissions by satellite emergency position-indicating radiobeacons operating in the band 406 - 406.1 MHz or the band 1 645.5 - 1 646.5 MHz, or by EPIRBs using digital selective calling techniques, shall carry identification signals.

NOC 2065-2067

MOD 2068 b) emergency position-indicating radiobeacons (except for those in No. 2064A).

(MOD) 2069 § 3. In transmissions ..... Appendix 43 or by ..... internationally.

SUP 2069.1

ARTICLE 26

Service Documents

NOC 2180 to 2200

NOC 2201 § 5. List IV. List of Coast Stations

ADD 2201A (1) This list shall contain particulars of coast stations and coast earth stations providing a public correspondence service, and

MOD 2202 a) an annex containing a table of inland telegraph rates, rates for telegrams destined for adjacent countries, etc. taking into account the relevant CCITT Recommendations;

ADD 2202A b) an annex giving important information concerning the operation of maritime mobile-satellite systems which may be forwarded to the Secretary-General by participating administrations;

ADD 2202B c) an annex[1] giving in tabulated form the following particulars of coast stations and coast earth stations participating in the Global Maritime Distress and Safety System (GMDSS);

ADD 2202C i) coast stations participating in VHF, MF and HF watchkeeping using digital selective calling techniques;

ADD 2202D ii) coast earth stations operating in the geostationary satellite system and capable of providing distress and safety communications with ship earth stations including distress alerting using radiotelephony and/or direct-printing, or transmitting maritime safety information using direct-printing techniques;

ADD 2202E iii) coast stations transmitting navigational and meteorological warnings and urgent information to ships using narrow-band direct-printing techniques;

ADD 2202B.1 [1]The annex shall be first published following entry into force of Chapter N IX (see Resolution [COM5/1]), and updated as necessary.

NOC 2203 to 2214

MOD 2215 § 8. List VIIA. List of Call Signs and Numerical Identities of Stations Used by the Maritime Mobile and Maritime Mobile-Satellite Services.

MOD 2216 (1) This list shall contain an alphabetical list of call signs and a numerical table of identities of stations used by the maritime mobile service and maritime mobile-satellite service (coast, coast earth, ship, ship earth, radiodetermination and special service stations), maritime mobile service identities and selective call numbers or signals of ship and ship earth stations, and maritime mobile service identities and identification numbers or signals of coast and coast earth stations.

(MOD) 2217 (2) This list shall be preceded by the Table of Allocation of International Call Sign Series and the Table of Maritime Identification Digits Series given in Appendices 42 and 43 respectively and a table of signals characterizing the emissions of radiobeacons used in the maritime mobile service.

(MOD) 2218 (3) List VIIA shall be republished every two years and kept up to date by recapitulative supplements every three months.

(MOD) 2219 § 8.A List VIIB. Alphabetical List of Call Signs of Stations Other than Amateur Stations, Experimental Stations and Stations of the Maritime Mobile Service.

ARTICLE 59

NOC **Conditions to be Observed in the Maritime Mobile Service and in the Maritime Mobile-Satellite Service**

NOC **Section I. Maritime Mobile Service**

NOC 4096-4103

MOD 4104 § 7. Ship stations and ship earth stations other than survival craft stations shall be provided with the documents enumerated in the appropriate section of Appendix 11.

NOC 4105

MOD 4106 B. Ship Stations Using Morse Radiotelegraphy

NOC 4107-4109

MOD 4110 § 11. All ship stations equipped with Morse radiotelegraph apparatus to work in the authorized bands between 415 kHz and 535 kHz shall be able to:

NOC 4111

NOC 4112-4115

MOD 4116 § 13. In Region 2, any Morse radiotelegraph station installed on board a ship which uses frequencies in the band 2 089.5 - 2 092.5 kHz for call and reply shall be provided with at least one other frequency in the authorized bands between 1 605 kHz and 2 850 kHz.

NOC 4117

MOD 4118 § 14. In ship stations, all apparatus using class A1A emissions for Morse telegraphy on frequencies in the authorized bands between 4 000 kHz and 27 500 kHz shall satisfy the following conditions:

NOC 4119-4121

MOD 4122 C. <u>Ship Stations Using Digital Selective Calling</u>

SUP 4123

(MOD) 4123A § 15. The characteristics of the digital selective calling equipment shall be in accordance with the Recommendations of the CCIR.

ADD 4123B C1. Bands Between 415 kHz and 535 kHz

ADD 4123C § 15A. All ship stations equipped with apparatus for digital selective calling to work in the authorized bands between 415 kHz and 535 kHz shall be able to send and receive class F1B or J2B emissions on at least two digital selective calling channels necessary for their service.

ADD 4123D C2. Bands Between 1 605 kHz and 4 000 kHz

ADD 4123E § 15B. All ship stations equipped with digital selective calling apparatus to work in the authorized bands between 1 605 kHz and 4 000 kHz shall be able to:

ADD 4123F a) send and receive class F1B or J2B emissions on the frequency 2 187.5 kHz;

ADD 4123G b) in addition, send and receive class F1B or J2B emissions on other digital selective calling frequencies in this band necessary to carry out their service.

ADD 4123H C3. Bands Between 4 000 kHz and 27 500 kHz

ADD 4123I § 15C. All ship stations equipped with digital selective calling apparatus to work in the authorized bands between 4 000 kHz and 27 500 kHz shall be able to:

ADD 4123J a) send and receive class F1B or J2B emissions on the frequencies designated for digital selective distress calling in each of the maritime HF bands in which they are operating (see also N 3172);

ADD 4123K b) send and receive class F1B or J2B on an international calling channel (see Nos. 4683 and 4684) in each of the HF maritime mobile bands necessary for their service;

ADD 4123L c) send and receive class F1B or J2B on other digital selective calling channels in each of the HF maritime mobile bands necessary for their service.

ADD 4123M C4. Bands Between 156 MHz and 174 MHz

ADD 4123N § 15D. All ship stations equipped with apparatus for digital selective calling to work in the authorized bands between 156 MHz and 174 MHz shall be able to send and receive class G2B emissions on the frequency 156.525 MHz.

ADD 4123O D. Ship Stations Using Narrow-Band Direct-Printing Telegraphy

ADD 4123P § 15E.(1) All ship stations using narrow-band direct-printing telegraphy equipment shall be able to send and receive on the frequency designated for distress traffic by narrow-band direct-printing telegraphy in the frequency bands in which they are operating.

(MOD) 4123 (2) The characteristics of the narrow-band direct-printing equipment shall be in accordance with Appendix 38.

ADD 4123Q D1. Bands Between 415 kHz and 535 kHz

ADD 4123R § 15F. All ship stations equipped with narrow-band direct-printing telegraphy apparatus to work in the authorized bands between 415 kHz and 535 kHz shall be able to:

ADD 4123S a) send and receive class F1B or J2B emissions on the working frequencies necessary to carry out their service;

ADD 4123T b) receive class F1B emissions on 518 kHz, if complying with the provisions of Chapter N IX.

ADD 4123U D2. Bands Between 1 605 kHz and 4 000 kHz

ADD 4123V § 15G. All ship stations equipped with narrow-band direct-printing telegraphy apparatus to work in the authorized bands between 1 605 kHz and 4 000 kHz shall be able to send and receive class F1B or J2B emissions on working frequencies necessary to carry out their service.

ADD 4123W D3. Bands Between 4 000 kHz and 27 500 kHz

ADD 4123X § 15H. All ship stations equipped with narrow-band direct-printing telegraphy apparatus to work in the authorized bands between 4 000 and 27 500 kHz shall be able to send and receive class F1B or J2B emissions on working frequencies in each of the HF maritime mobile bands necessary to carry out their service.

NOC 4124 E. Ship Stations Using Radiotelephony

(MOD) 4125 E1. Bands Between 1 605 kHz and 4 000 kHz

NOC 4126

MOD 4127 a) send class J3E or H3E emissions on a carrier frequency of 2 182 kHz and receive class J3E or H3E emissions on a carrier frequency of 2 182 kHz, except for such apparatus as is referred to in No. 4130 (see also MOD 2945 and MOD 2973).

NOC 4128-4130

MOD 4131 E2. Bands Between 4 000 kHz and 27 500 kHz

MOD 4132 § 18. All ship stations equipped with radiotelephony to work in the authorized bands between 4 000 kHz and 27 500 kHz and which do not comply with the provisions of Chapter N IX should be able to send and receive on the carrier frequencies 4 125 kHz and 6 215 kHz (see Nos. 2982 and 2986). However, all ship stations which comply with the provisions of Chapter N IX shall be able to send and receive on the carrier frequencies designated in Article N 38 for distress and safety traffic by radiotelephony for the frequency bands in which they are operating.

(MOD) 4133 E3. Bands Between 156 MHz and 174 MHz

MOD 4134 § 19. All ship stations equipped with radiotelephony to work in the authorized bands between 156 MHz and 174 MHz (see No. 613 and Appendix 18) shall be able to send and receive class G3E emissions on:

NOC 4135-4136

ADD 4136A c) the intership navigation safety frequency 156.65 MHz;

(MOD) 4137 d) all the frequencies necessary for their service.

MOD **Section II. Maritime Mobile-Satellite Service**

NOC 4138

SUP 4139

NOC 4140-4141

MOD **Section III. Stations on Board Aircraft Communicating with Stations of the Maritime Mobile Service and the Maritime Mobile-Satellite Service**

NOC 4142-4145

MOD 4146 § 25. In the case of communication between stations on board aircraft and stations of the maritime mobile service, radiotelephone calling may be renewed as specified in Nos. 4933 and 4934 and radiotelegraph calling may be renewed after an interval of five minutes, notwithstanding No. 4735.

NOC 4147-4153

MOD 4154 (2) The frequency 156.3 MHz may be used by stations on board aircraft for safety purposes. It may also be used for communication between ship stations and stations on board aircraft engaged in coordinated search and rescue operations (see Nos. 2993 and N 2993).

ADD 4155 (2A) The frequency 156.8 MHz may be used by stations on board aircraft for safety purposes only (see Nos. 2995A and N 2995A).

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
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COMMITTEE 6

NINETEENTH REPORT OF THE CHAIRMAN OF WORKING GROUP 6-A TO THE CHAIRMAN OF COMMITTEE 6

Working Group 6-A has completed its review of Article 60 and the following are called to the attention of Committee 6:

1. Provisions relating to the incorporation of Region 1 MF telephone and telegraph arrangements into Article 60, are shown in [ ]. Article provisions are: Nos. 4183, 4184C, 4188B, 4188C, 4315C, 4319C, 4368A and 4368B;

2. Alignment of frequencies depending on Committee 4 decisions also are shown in [ ].

3. The frequencies and provisions shown in [ ] at this stage have been editorially reviewed taking preliminary decisions of Committee 4 into account. These preliminary decisions are shown in Document DT/68 and its Corrigendum 1. Final alignment with Document 412 will be conducted prior to submitting this Article to Committee 7.

This matter should be called to the attention of Committee 4.

With respect to new Section IV, Use of Frequencies for Digital Selective Calling, the Drafting Group notes that Recommendation COM5/B (MM) of the Regional Administrative Conference for the Planning of the Maritime Mobile and Aeronautical Radionavigation Services in Region 1 requests MOB-87 to:

a) designate the frequency pair 455.5/458.5 kHz, designated for international DSC calling in Region 1, as an international DSC calling channel on a global basis.

A need also has been identified for a simplex DSC channel for ship to ship calling in the band 1 606.5 - 4 000 kHz (see 4419F).

This matter is currently under review in Committee 4.

4. The Canadian Delegation proposed a text establishing criteria to permit the use of marking signals for the NBDP channels. Several administrations objected to the text citing several reasons as follows:

a) for MF and HF there is no technical justification for the use of marking channels for automatic systems which are operating in accordance with the Recommendations of the CCIR;

b) for systems using such signals the Radio Regulations provide sufficient guidance to avoid harmful interference to co-channel users;

c) the Radio Regulations should be silent on the matter since many administrations may be able to use marking signals on a non-interference basis.

Canada therefore requested that the Committee consider the addition of the following to the NBDP, Section III, GENERAL:

"ADD 4313A Coast stations in the MF and HF bands may emit marking signals. The emission power of the signals shall, however, be limited to the minimum value necessary for effective operation of the signalling."

The Delegation of Greece supported the Canadian proposal citing as a reason that the emission power should be limited to the minimum necessary for effective operation of the signalling in order to avoid interference.

R. SWANSON
Chairman of Working Group 6-A

Attachment: 1

ATTACHMENT

ARTICLE 60

NOC **Special Rules Relating to the Use of Frequencies in the Maritime Mobile Service**

NOC **Section I. General Provisions**

MOD 4180 A. Single-Sideband ~~Morse~~ Radiotelegraph Transmissions

ADD 4181A Where in this Article provisions specify A1A emission, class A1B or J2A emissions shall be considered equivalent.

ADD 4181B Where in this Article provisions specify class F1B emission, class J2B emission shall be considered equivalent.

NOC 4182 B. Bands Between 415 kHz and 535 kHz

MOD 4183 § 2. Except as provided ..... (see No. 4237) [(see also Nos. 4184C and 4315C)].

SUP 4184

MOD 4184A § 3A. In the maritime mobile service on the frequency 518 kHz no assignments shall be made other than for transmission by coast stations of meteorological and navigational warnings and urgent information to ships by means of automatic narrow-band direct-printing telegraphy ~~(NAVTEX) (see Resolution No. 318 (MOB-83)~~ Article 14A).

[MOD 4184B § 3B. In the maritime mobile service ~~The~~ the frequency 490 kHz is also used exclusively for ~~distress and safety calls in the shore-to-ship direction by digital selective calling techniques (see No. 2944)~~ the transmission by coast stations of navigational and meteorological warnings and urgent information to ships by means of automatic narrow-band direct-printing telegraphy. ~~Additional conditions concerning the use of this frequency are given in Resolution 206 (Mob-83).~~]

[ADD 4184C § 3C. The channelling arrangements for Morse telegraphy, narrow-band direct-printing telegraphy and digital selective calling in the band 415 - 526.5 kHz in Region 1 are shown in Table A of Appendix A.]

SUP 4185 and 4186

NOC 4187 C. Bands Between 1 605 kHz and 4 000 kHz

NOC 4188-4188A

[ADD 4188B (1B) The channelling arrangements for narrow-band direct-printing telegraphy and digital selective calling in the bands 1 606.5 - 1 625 kHz and 2 141.5 - 2 160 kHz in Region 1 are shown in Table B of Appendix A.]

[ADD 4188C (1C) The channelling arrangements for radiotelephony in the bands 1 635 - 1 800 kHz and 2 045 - 2 141.5 kHz in Region 1 are shown in Table C of Appendix A.]

SUP 4189-4192

NOC 4193

SUP 4194

NOC 4195 D. Bands Between 4 000 kHz and 27 500 kHz

NOC 4196 § 9. (1) The bands exclusively allocated to the maritime mobile service between 4 000 kHz and 27 500 kHz (see Article 8) are subdivided into the following categories:

MOD 4197 a) Ship stations, duplex operation (two-frequency channels)[1]

4 065 - 4 146	kHz
6 200 - 6 224	kHz
8 195 - 8 294	kHz
12 230 - 12 353	kHz
16 360 - 16 528	kHz
18 780 - 18 825	kHz
22 000 - 22 159	kHz
25 070 - 25 100	kHz

MOD 4198 b) Coast stations, telephony, duplex operation (two-frequency channels)

4 351 - 4 438	kHz
6 501 - 6 525	kHz
8 707 - 8 815	kHz
13 077 - 13 200	kHz
17 242 - 17 410	kHz
19 755 - 19 800	kHz
22 696 - 22 855	kHz
26 145 - 26 175	kHz

MOD 4197.1 [1]For the use of some of the frequencies in these sub-bands by ship and coast stations for distress and safety purposes, see Article 38 and Article N 38.

MOD 4199

c) Ship and coast stations, telephony, simplex operation (single-frequency channels) and intership cross-band operation (two frequencies)

4 146 - 4 152 kHz
6 224 - 6 233 kHz
8 294 - 8 300 kHz
12 353 - 12 368 kHz
16 528 - 16 549 kHz
18 825 - 18 846 kHz
22 159 - 22 180 kHz
25 100 - 25 121 kHz

MOD 4200

d) Ship stations, wide-band telegraphy, facsimile and special transmission systems

4 152 - 4 172 kHz
6 233 - 6 261 kHz
8 300 - 8 340 kHz
12 268 - 12 420 kHz
16 549 - 16 617 kHz
18 846 - 18 870 kHz
22 180 - 22 240 kHz
25 121 - 25 161.25 kHz

MOD 4201

e) Ship stations, oceanographic data transmission (see note c) in Appendix 31)

4 063 - 4 065 kHz
6 261 - 6 262.75 kHz
8 340 - 8 341.75 kHz
12 420 - 12 421.75 kHz
16 617 - 16 618.75 kHz
22 240.3 - 22 241.75 kHz

MOD 4202

f) Ship stations, narrow-band direct-printing telegraph and data transmission systems, at speeds not exceeding 100 bauds for FSK and 200 bands for PSK (frequencies paired with those in No. 4207).

4 172 - 4 181.75 kHz
6 262.75 - 6 275.75 kHz
6 280.75 - 6 284.75 kHz
8 376.25 - 8 396.25 kHz
12 476.75 - 12 549.75 kHz
12 554.75 - 12 559.75 kHz
16 683.25 - 16 733.75 kHz
16 738.75 - 16 784.75 kHz
18 870 - 18 892.75 kHz
22 284.25 - 22 351.75 kHz
25 172.75 - 25 192.75 kHz

MOD 4203

g) Ship stations, narrow-band direct-printing telegraph and A1A Morse telegraphy ~~data transmission systems~~, at speeds not exceeding 100 bauds for FSK and 200 bauds for PSK (non-paired frequencies)[1]

4 202.25	-	4 207.25	kHz
6 300.25	-	6 311.75	kHz
8 396.25	-	8 414.25	kHz
12 559.75	-	12 576.75	kHz
16 784.75	-	16 804.25	kHz
18 892.75	-	18 898.25	kHz
22 351.75	-	22 374.25	kHz
25 192.75	-	25 208.25	kHz

MOD 4203.1

[1]For the use of some of the frequencies in these sub-bands by ship and coast stations for distress and safety purposes, see Article 38 and Article N 38.

MOD 4204

h) Ship stations, A1A Morse telegraphy, calling

4 181.75	-	4 186.75	kHz
6 275.75	-	6 280.75	kHz
8 365.75	-	8 370.75	kHz
12 549.75	-	12 554.75	kHz
16 733.75	-	16 738.75	kHz
22 279.25	-	22 284.25	kHz
25 171.25	-	25 172.75	kHz

MOD 4205

i) Ship stations, digital selective calling[1]

4 207.25	-	4 209.25	kHz
6 311.75	-	6 313.75	kHz
8 414.25	-	8 416.25	kHz
12 576.75	-	12 578.75	kHz
16 804.25	-	16 806.25	kHz
18 898.25	-	18 899.75	kHz
22 374.25	-	22 375.75	kHz
25 208.25	-	25 210	kHz

MOD 4205.1

[1]For the use of some of the frequencies in these sub-bands by ship and coast stations for distress and safety purposes, see Article 38 and Article N 38.

MOD 4206

j) Ship stations, A1A Morse telegraphy, working

4 186.75 - 4 202.75 kHz
6 284.75 - 6 300.25 kHz
8 341.75 - 8 365.75 kHz
8 370.75 - 8 376.25 kHz
12 421.75 - 12 476.75 kHz
16 618.75 - 16 683.25 kHz
22 241.75 - 22 279.25 kHz
25 161.25 - 25 171.25 kHz

MOD 4207

k) Coast stations, narrow-band direct-printing telegraph and data transmission systems, at speeds not exceeding 100 bauds for FSK and 200 bauds for PSK (frequencies paired with those in No. 4202)

4 339.25 - 4 349.25 kHz
6 482.25 - 6 499.25 kHz
8 685.25 - 8 705.25 kHz
12 997.25 - 13 075.25 kHz
17 143.75 - 17 240.25 kHz
19 730.25 - 19 753.25 kHz
22 626.25 - 22 694.25 kHz
26 122.75 - 26 143.25 kHz

MOD 4208

l) Coast stations, digital selective calling

4 349.25 - 4 351 kHz
6 499.25 - 6 501 kHz
8 705.25 - 8 707 kHz
13 075.25 - 13 077 kHz
17 240.25 - 17 242 kHz
19 753.25 - 19 755 kHz
22 694.25 - 22 696 kHz
26 143.25 - 26 145 kHz

MOD 4209

m) Coast stations, wide-band and A1A Morse telegraphy, facsimile, special and data transmission systems and direct-printing telegraph systems

4 209.25 - 4 339.25 kHz
6 313.75 - 6 482.25 khz
8 416.25 - 8 685.25 kHz
12 578.75 - 12 997.25 kHz
16 806.25 - 17 143.75 kHz
19 680 - 18 730.25 kHz
22 375.75 - 22 626.25 kHz
26 100 - 26 122.75 kHz

MOD 4210

(2) Frequencies in the bands 25 010 - 25 070 kHz, ~~25 110 - 25 600~~ 25 210 - 25 600 kHz and ~~26 100~~ 26 175 - 27 500 Khz may be assigned to coast stations.

NOC 4211

NOC 4212

MOD 4212A (3) The bands 4 000 - 4 063 kHz and 8 100 - 8 195 kHz, allocated on a shared basis to the maritime mobile service (see Article 8), shall be used in accordance with Sections C-1 and C-2 of Appendix 16.

NOC 4213 E. Bands Between 156 MHz and 174 MHz

NOC 4214

NOC **Section II. Use of Frequencies for Morse Radiotelegraphy**

NOC 4215 A. General

ADD 4215A § 11A. Stations employing single-sideband Morse radiotelegraph transmissions shall use upper-sideband emissions. The frequencies specified in these Regulations for class H2A and H2B* emissions such as 500 kHz and 8 364 kHz shall be used as carrier frequencies.

NOC 4216

NOC 4217 B. Bands Between 415 kHz and 535 kHz

NOC * This is to cater for the automatic reception of the radiotelegraph alarm signal.

NOC ** This is to cater for the automatic reception of the radiotelegraph alarm signal and for selective calling.

NOC B1. Call Reply

MOD 4218 The frequency 500 kHz is the international distress frequency for Morse radiotelegraphy (see No. 2970 for details of its use for distress, urgency and safety purposes).

NOC 4219-4231

NOC B2. Traffic

NOC 4232-4236

MOD 4237 § 20. (1) Ship stations operating in the authorized bands between ~~405~~ 415 kHz and 535 kHz shall use working frequencies chosen from the following: 425 kHz[1], 454 kHz, 468 kHz, 480 kHz and 512 kHz, except as permitted by No. 961.

[ADD 4237A With effect from 1 April 1992, the provisions of No. 4237 with the exception of the reference to No. 961, do not apply to Region 1, which is covered by the Frequency Plan of the Regional Administrative Conference for the Planning of the MF Maritime Mobile and Aeronautical Radionavigation Services (Region 1) (Geneva, 1985, RARC MM-R1).]

NOC 4238-4243

MOD 4244 C. Bands Between 1 605 kHz and 4 000 kHz

Additional Provisions Applicable
in Region 3 Areas
North of the Equator Only

SUP C1. Region 2

SUP 4245

SUP C2. Additional Provisions Applicable in Region 3 Areas North of the Equator Only

MOD 4246 § 22. (1) The band 2 089.5 - 2 092.5 kHz is the calling and safety band for Morse radiotelegraphy in those parts of the bands between 1 605 kHz and 2 850 kHz in which Morse radiotelegraphy is authorized.

NOC 4247-4248

MOD 4249 (4) Coast stations which use frequencies in the band 2 089.5 - 2 092.5 kHz for calling shall be able to use at least one other frequency in those parts of the band between 1 605 kHz and 2 850 kHz in which Morse radiotelegraphy is authorized.

NOC 4250-4251

[ADD 4237.1 [1]458 kHz will replace 425 kHz on 1 April 1992.]

NOC 4252 D. Bands Between 4 000 kHz and 27 500 kHz

NOC D1. General

MOD 4253 § 23. (1) Ship Morse radiotelegraph stations equipped to operate in the bands specified in Nos. 4204 and 4206 shall employ only classes of emissions mentioned in 4181A for Morse telegraphy at speeds not exceeding ... (continues unchanged).

SUP 4254

MOD 4255 (3) Except as provided for in No. 4376.1, coast Morse radiotelegraph stations operating in the maritime mobile exclusive bands between 4 000 kHz and 27 500 kHz shall not use Type 2 emissions (see No. 4216).

MOD 4256 (4) Coast Morse radiotelegraph stations employing single-channel class A1A ~~or F1B~~ emissions and operating in the maritime mobile exclusive bands between 4 000 kHz and 27 500 kHz shall at no time use a mean power in excess of the following:

Band	Maximum mean power
4 MHz	5 kW
6 MHz	5 kW
8 MHz	10 kW
12 MHz	15 kW
16 MHz	15 kW
22 MHz	15 kW
25 MHz	15 kW

SUP 4257

MOD 4258 § 24. Nos. ~~4208 to 4209~~ 4200 to 4209 and the corresponding columns of Appendix 31 show those parts of the bands between 4 000 kHz and 27 500 kHz exclusively allocated to the maritime mobile service which are to be used by coast stations and ship stations for Morse radiotelegraphy.

NOC D2. Call and Reply

MOD 4259 § 25. (1) In order to establish communication with a coast station, each ship station shall use an appropriate Morse radiotelegraphy calling frequency in one of the bands listed in No. 4204.

NOC 4260-4262

MOD 4263 § 28. (1) The calling frequency to be used for Morse radiotelegraphy by a coast station, in each of the bands for which it is equipped, is its normal working frequency as shown in heavy type in the List of Coast Stations.

NOC 4264

SUP 4265

NOC 4266-4270

MOD 4271 § 33. In order to reduce interference on Morse radiotelegraphy calling frequencies, a coast station shall take adequate steps to ensure, under normal conditions, the prompt receipt of Morse radiotelegraphy calls (see Nos. 4755).

NOC D3. Traffic

MOD 4272 § 34. (1) A ship station, after establishing communication on a Morse radiotelegraphy calling frequency (see No. 4259), shall change to a Morse radiotelegraphy working frequency for the transmission of traffic. The use of frequencies in the Morse radiotelegraphy calling bands for any purpose other than Morse radiotelegraphy calling shall be prohibited.

MOD 4273 (2) Morse radiotelegraphy working frequencies shall be assigned to ship stations in accordance with the provisions of Nos. ~~4288 to~~ 4291 and 4306 ~~inclusive~~.

NOC 4274

MOD 4275 (2) Countries which share a Morse radiotelegraphy channel in one of the exclusive maritime mobile bands between 4 000 kHz and 27 500 kHz should give special consideration to the countries among them which have no other Morse radiotelegraphy channel in the same band and should endeavour to use their primary Morse radiotelegraphy channel to the greatest extent possible, in order to permit the latter countries to satisfy their minimum communication requirements.

NOC 4276

E. Assignment of Frequencies to Ship Stations

NOC

E1. Calling Frequencies of Ship Stations

MOD 4277 § 36. Each Morse radiotelegraphy calling band between 4 000 kHz and ~~23 000~~ 27 500 kHz indicated in No. 4204 is divided into four groups of channels and two common channels. The 25 MHz band is divided into three channels of which one is a common channel (see Appendix 34).

MOD 4278 § 37. (1) Coast stations shall, when providing international service as published in the List of Coast Stations, keep watch on the Morse radiotelegraphy common calling channels in each band throughout their hours of service in the bands concerned, and on the appropriate Morse radiotelegraphy group channel or channels during busy periods. The times during which watch will be kept on the Morse radiotelegraphy group channel or channels shall be published for each country in the List of Coast Stations.

MOD 4279 (2) If necessary, an indication of the Morse radiotelegraphy channels on which watch is kept may be included in the coast station transmissions.

MOD 4280 § 38. In the bands between 4 000 kHz and ~~23 000~~ 27 500 kHz, the administration to which a ship station is subject shall assign to it at least two Morse radiotelegraphy calling frequencies in each band in which the station is equipped to transmit. One of the calling frequencies in each band shall be within one of the common coast station receiving channels contained in Appendix 34; another in each band shall be selected from within the other channels in Appendix 34; taking account of the receiving channel or channels of the coast station with which the ship station most frequently communicates. In the 25 MHz band, administrations shall assign to ship stations under their control a frequency within the common channel. Another calling frequency in this band shall be selected from ~~within Channel A or B of~~ Appendix 34; taking account of the receiving channel of the coast station with which the ship station most frequently communicates.

SUP 4280.1

MOD 4281 § 39. A ship station should, wherever possible, be assigned additional Morse radiotelegraphy calling frequencies (see No. 4262).

MOD 4282 § 40. If it is not intended to maintain watch on all the Morse radiotelegraphy receiving ..... (Resolution No. 312).

MOD 4283 § 41. Administrations which assign to their ships frequencies in two or more Morse radiotelegraphy calling ..... use.

MOD 4284 § 42. In order to ensure an even distribution of Morse radiotelegraphy calls ..... ships.

MOD 4285 § 43. Administrations ..... assigned Morse radiotelegraphy channels (see Appendix 7).

SUP 4286

NOC E2. Working Frequencies of Ship Stations

NOC 4287 a) Channel Spacing and Assignment of Frequencies

SUP 4288-4290

MOD 4291 § 48. In all bands, ~~except the 6 MHz band~~, the working frequencies for ship stations using A1A Morse telegraphy, at speeds not exceeding 40 bauds, are spaced 0.5 kHz apart. ~~in the 6 MHz band they are spaced 0.75 kHz apart (see also note e) to Appendix 31).~~

SUP 4292-4304

(MOD) 4305 ~~f)~~ b) Working Frequencies for Ship Stations Using A1A Morse Telegraphy

MOD 4306 § 56. Each administration ..... sufficient number of Morse radiotelegraphy working frequencies in any ..... not less than two Morse radiotelegraphy working frequencies should ..... throughout the bands.

MOD 4306A § 56A. In cases ..... on the Morse radiotelegraphy working frequency stated ..... transmission on any other Morse radiotelegraphy working frequency, whenever ..... QOO.

MOD 4307 § 57. For the exclusive purpose of communication by Morse radiotelegraphy with stations of the maritime mobile service, an aircraft station may be assigned one or more Morse radiotelegraphy working frequencies in the bands shown in No. 4206. These ..... as for ship stations.

MOD 4308 ~~g)~~ c) Abbreviations for the Indication of Morse Radiotelegraphy Working Frequencies

MOD 4309 § 58. In the ..... designate a Morse Radiotelegraphy working frequency:

NOC 4310-4311

NOC **Section III. Use of Frequencies for Narrow-Band Direct-Printing Telegraphy**

NOC 4312 A. General

MOD 4313 § 59. Frequencies assigned to coast stations for narrow-band direct-printing telegraphy shall be indicated ..... each coast station.

NOC 4314 B. Bands Between 415 kHz and 535 kHz

MOD 4315 § 60. (1) All ship stations equipped with narrow-band direct-printing ~~transmitting~~ apparatus to work in the authorized bands between 415 kHz and 535 kHz shall be able to send and receive class F1B emissions ~~on at least two working frequencies for narrow-band direct-printing telegraphy (see No. 4237)~~[1] as specified in No. 4123S. Additionally, ship stations complying with the provisions of Chapter N IX shall be able to receive class F1B emissions on 518 kHz (see No. 4123T).

SUP 4315A

*[ADD 4315C § 60B. The channelling arrangements for narrow-band direct-printing telegraphy and digital selective calling in the band 415 - 526.5 kHz in Region 1 are shown in Table A of Appendix A.]

NOC 4316

NOC 4317 C. Bands Between 1 605 kHz and 4 000 kHz

NOC 4318

MOD 4319 (2) Narrow-band ..... No. ~~2971B~~ [N2971F].

*[ADD 4319C § 61B. The channelling arrangements for narrow-band direct-printing telegraphy and digital selective calling in the bands 1 606.5 - 1 625 kHz and 2 145 - 2 160 kHz in Region 1 are shown in Table B of Appendix A.]

SUP 4315.1

NOC 4320 D. Bands Between 4 000 kHz and 27 500 kHz

MOD 4321 § 62. All ship ..... F1B emissions ~~on at least two frequencies in each band as required by their service~~ as specified in No. 4123. The assignable frequencies are indicated in Appendices 32 and 33.

SUP 4321A

ADD 4321B § 62B. Coast stations employing class F1B emissions and operating in the maritime mobile exclusive bands between 4 000 kHz and 27 500 kHz shall at no time use mean powers in excess of the following:

Band	Maximum mean power
4 MHz	5 kW
6 MHz	5 kW
8 MHz	10 kW
12 MHz	15 kW
16 MHz	15 kW
18 MHz	15 kW
22 MHz	15 kW
25 MHz	15 kW

ADD 4321C (1) In all bands, the working frequencies for ship stations using narrow-band direct-printing telegraphy at speeds not exceeding 100 bauds for FSK and 200 bauds for PSK, including those paired with the working frequencies assignable to coast stations (see No. 4207), are spaced 0.5 kHz apart. The frequencies assignable to ship stations which are paired with those used by coast stations are shown in No. 4202. The frequencies assignable to ship stations which are not paired with those used by coast stations are shown in No. 4203.

[ADD 4321D (2) When assigning frequencies listed in No. 4202 for narrow-band direct-printing telegraphy, administrations shall apply the procedure described in Resolution No. C]

ADD 4321E (3) Each administration, if necessary, shall assign to each ship station under its jurisdiction and employing non-paired narrow-band direct-printing telegraphy one or more frequencies reserved for this purpose and shown in No. 4203.

NOC 4322 E. Bands Between 156 MHz and 174 MHz

MOD 4323 § 63. All ship stations equipped with narrow-band direct-printing telegraph apparatus may work in the authorized bands between 156 MHz and 174 MHz and shall conform to the provisions of Appendix 18.

ADD **Section IIIA. Use of Frequencies for Digital Selective Calling**

ADD 4323A

A. General

ADD 4323B The provisions described in this section are applicable to calling and acknowledgement using digital selective calling techniques, except in cases of distress, urgency and safety, to which the provisions of Chapter N IX are applicable.

ADD 4323C The characteristics of the digital selective calling equipment shall be in accordance with the relevant Recommendations of the CCIR.

ADD 4323D The frequencies on which coast stations provide services using digital selective calling techniques shall be indicated in the List of Coast Stations, which shall also indicate any other useful information concerning such services.

ADD 4323E

B. Bands Between 415 kHz and 526.5 kHz

ADD B1. Mode of Operation

ADD 4323F The class of emission to be used for digital selective calling and acknowledgement in the authorized bands between 415 kHz and 526.5 kHz shall be F1B.

ADD 4323G Coast stations should, when transmitting digital selective calls and acknowledgements in the bands between 415 kHz and 526.5 kHz, use the minimum power necessary to cover their service area.

ADD 4323H Transmissions of digital selective calls and acknowledgements by ship stations shall be limited to a mean power of 400 Watts.

ADD B2. Call and Acknowledgement

ADD 4323I For call and acknowledgement by digital selective calling techniques an appropriate channel shall be used.

ADD [4323J The international digital selective calling frequency [455.5] kHz may be assigned to any coast station. In order to reduce interference on this frequency, it may be used as a general rule by coast stations to call ships of another nationality or if it is not known on which digital selective calling frequencies within these bands the ship station is maintaining watch.]

ADD [4323K The international digital selective calling frequency [458.5] kHz may be used by any ship station. In order to reduce interference on this frequency, it shall only be used when calling cannot be made on national frequencies assigned to the coast station.]

ADD 4323L The frequency to be used for transmission of an acknowledgement shall normally be the frequency paired with the calling frequency used.

ADD B3. Watch

ADD 4323M A coast station providing international public correspondence service using digital selective calling techniques within the bands between 415 kHz and 526.5 kHz should, during its hours of service, maintain automatic digital selective calling watch on appropriate national and/or international calling frequencies. The hours and frequencies shall be indicated in the List of Coast Stations.

ADD 4323N Ship stations equipped with apparatus for digital selective calling to work in the authorized bands between 415 kHz and 526.5 kHz should, when within coverage area of coast stations providing services using digital selective calling techniques in these bands, maintain an automatic digital selective calling watch on one or more appropriate digital selective calling frequencies within these bands, taking into account the digital selective calling frequencies operated by the coast stations.

ADD 4323O C. Bands Between 1 605 kHz and 4 000 kHz

ADD C1. Mode of Operation

ADD 4323P The class of emission to be used for digital selective calling and acknowledgement in the bands between 1 605 kHz and 4 000 kHz shall be F1B.

ADD 4323Q Coast stations should, when transmitting digital selective calls and acknowledgements in the bands between 1 605 kHz and 4 000 kHz, use the minimum power necessary to cover their service area.

ADD 4323R [In Region 1, transmissions of digital selective calls and acknowledgements by ship stations shall be limited to a mean power of 400 Watts.]

ADD C2. Call and Acknowledgement

ADD 4323S When calling a coast station by digital selective calling techniques, ship stations should use for the call, in the order of preference:

a) a national digital selective calling channel on which the coast station is maintaining watch;

b) subject to the provisions of No. 4323J, the international digital selective calling frequency 2 189.5 kHz.

ADD [4323T The international digital selective calling frequency [2 189.5] kHz may be assigned to any ship station. In order to reduce interference on this frequency, it may be used as a general rule by ship stations to call coast stations of another nationality.]

[ADD 4323U A ship station calling another ship station by using digital selective calling techniques should use the intership calling frequency [...] kHz for the call.]

ADD 4323V When calling ship stations by digital selective calling techniques, coast stations should use for the call, in the order of preference:

a) a national digital selective calling channel on which the coast station is maintaining watch;

b) subject to the provisions of No. 4323W the international digital selective calling frequency 2 177 kHz.

ADD 4323W The international digital selective calling frequency 2 177 kHz may be assigned to any coast station. In order to reduce interference on this frequency, it may be used as a general rule by coast stations to call ships of another nationality or if it is not known on which digital selective calling frequencies within the bands between 1 605 kHz and 4 000 kHz the ship station is maintaining watch.

ADD 4323X The frequency for transmission of an acknowledgement shall normally be the frequency paired with the frequency used for the call received.

ADD

C3. Watch

ADD 4323Y

The provisions detailed in this sub-section are applicable to digital selective calling watchkeeping except for distress, urgency and safety purposes, to which the provisions of Section III of Article N 38 are applicable.

ADD 4323Z

A coast station providing international public correspondence service using digital selective calling techniques within the bands between 1 605 kHz and 4 000 kHz should, during its hours of service, maintain automatic digital selective calling watch on appropriate national and/or international calling frequencies. The hours and frequencies shall be indicated in the List of Coast Stations.

ADD 4323AA

Ship stations equipped with apparatus for digital selective calling to work in the authorized bands between 1 605 kHz and 4 000 kHz should, when within coverage area of coast stations providing services using digital selective calling techniques in these bands, maintain an automatic digital selective calling watch on one or more appropriate digital selective calling frequencies within these bands, taking into account the digital selective calling frequencies operated by the coast stations.

ADD 4323AB

D1. Bands Between 4 000 kHz and 27 500 kHz

ADD

D1. Mode of Operation

ADD 4323AC

The class of emission to be used for digital selective calling and acknowledgement in the authorized bands between 4 000 kHz and 27 500 kHz shall be F1B.

ADD 4323AD

When transmitting digital selective calls and acknowledgements in the bands between 4 000 kHz and 27 500 kHz, coast stations shall, in no event, use mean power in excess of the following values:

Band	Maximum mean power
4 MHz	5 kW
6 MHz	5 kW
8 MHz	10 kW
12 MHz	15 kW
16 MHz	15 kW
18 MHz	15 kW
22 MHz	15 kW
25 MHz	15 kW

ADD 4323AE

Transmissions of digital selective calls and acknowledgements by ship stations in the bands between 4 000 kHz and 27 500 kHz shall be limited to a mean power of 1.5 kW.

ADD

D2. Call and Acknowledgement

ADD 4323AF

A station calling another station by digital selective calling techniques within the authorized bands between 4 000 kHz and 27 500 kHz should choose an appropriate digital selective calling frequency, taking into account propagation characteristics.

ADD 4323AG

When calling a coast station by digital selective calling techniques on frequencies within the authorized bands between 4 000 kHz and 27 500 kHz ship stations should use for the call, in the order of preference:

a) a national digital selective calling channel on which the coast station is maintaining watch;

b) subject to the provisions of No. 4323AH one of the international digital selective calling frequencies mentioned in No. 4683.

ADD 4323AH

The international digital selective calling frequencies indicated in No. 4683 may be used by any ship station. In order to reduce interference on these frequencies, it shall only be used when calling cannot be made on nationally assigned frequencies.

ADD 4323AI

When calling ship stations by digital selective calling techniques on frequencies within the bands between 4 000 kHz and 27 500 kHz coast stations should use for the call, in the order of preference:

a) a national digital selective calling channel on which the coast station is maintaining watch;

b) subject to the provisions of No. 4323AJ one of the international digital selective calling frequencies indicated in No. 4684.

ADD 4323AJ

The international digital selective calling frequencies indicated in No. 4684 may be assigned to any coast station. In order to reduce interference on these frequencies, they may be used as a general rule by coast stations to call ships of another nationality or if it is not known on which digital selective calling frequencies within the bands concerned the ship station is maintaining watch.

ADD

D3. Watch

ADD 4323AK

The provisions detailed in this sub-section are applicable to digital selective-calling watchkeeping except for distress, urgency and safety purposes, to which the provisions of Section III of Article N 38 are applicable.

ADD 4323AL A coast station providing international public correspondence service using digital selective calling techniques within the bands between 4 000 kHz and 27 500 kHz should, during its hours of service, maintain automatic digital selective calling watch on the appropriate digital selective calling frequencies as indicated in the List of Coast Stations.

ADD 4323AM Ship stations equipped with apparatus for digital selective calling to work in the authorized bands between 4 000 kHz and 27 500 kHz should maintain automatic digital selective-calling watch at appropriate digital selective calling frequencies within these bands, taking into account propagation characteristics and calling frequencies for coast stations providing service using digital selective calling techniques.

ADD 4323AN

E. Bands Between 156 MHz and 174 MHz

ADD E1. Mode of Operation

ADD 4323AO The class of emission to be used for digital selective calling and acknowledgement in the authorized bands between 156 MHz and 174 MHz shall be G2B.

ADD E2. Call and Acknowledgement

ADD 4323AP The frequency 156.525 MHz is an international frequency in the maritime mobile service used for distress, urgency, safety and calling by digital selective calling techniques (see No. N 2993B and Nos. N 3195P, N 3230, 4686 to 4689B).

ADD 4323AQ When calling by digital selective calling techniques within the authorized bands between 156 MHz and 174 MHz, the calling from ship to coast station, from coast station to ship and from ship to ship should, as a general rule, be made on the digital selective calling frequency 156.525 MHz.

ADD E3. Watch

ADD 4323AR Information concerning automatic digital selective calling watchkeeping on the frequency 156.525 MHz by coast stations shall be given in the List of Coast Stations (see also No. N 3038).

ADD 4323AS Ship stations equipped with apparatus for digital selective calling to work in the authorized bands between 156 MHz and 174 MHz should, while at sea, maintain an automatic digital selective calling watch on the frequency 156.525 MHz (see also No. N 3041).

ADD **Section IIIB. Use of Frequencies for Wide-Band Telegraphy, Facsimile, Special Transmission Systems and Oceanographic Data Transmissions**

ADD 4323AT A. Wide-Band Telegraphy, Facsimile and Special Transmission Systems

ADD 4323AU A1. Bands Between 1 605 kHz and 4 000 kHz

ADD 4323AV § 63A. In Region 2, the frequencies in the band 2 068.5 - 2 078.5 kHz are assigned to ship stations using wide-band telegraphy, facsimile and special transmission systems. The provisions of No. 4323BB are applicable.

ADD 4323AW A2. Bands Between 4 000 kHz and 27 500 kHz

ADD 4323AX § 63B. In all bands, the working frequencies for ship stations equipped to use wide-band telegraphy, facsimile and special transmission systems are spaced 4 kHz apart. The frequencies assignable are shown in No. 4200.

ADD 4323AY § 63C.(1) Each administration shall assign to each ship station under its jurisdiction and employing wide-band telegraphy, facsimile and special transmission systems one or more series of the working frequencies reserved for this purpose shown in No. 4200. The total number of series assigned to each ship station shall be determined by traffic requirements.

ADD 4323AZ (2) When ship stations employing wide-band telegraphy, facsimile and special transmission systems are assigned less than the total number of working frequencies in a band, the administration concerned shall assign working frequencies to such ships in accordance with an orderly system of rotation that will ensure approximately the same number of assignments on any one working frequency.

ADD 4323BA (3) However, within the limits of the bands given in No. 4200, administrations may, to meet the needs of specific systems, assign frequencies in a different manner from that shown in No. 4200. Nevertheless administrations shall take into account, as far as possible, the provisions of No. 4200, concerning channelling and 4 kHz spacing.

ADD 4323BB § 63D. Ship stations equipped for wide-band telegraphy, facsimile and special transmission systems may, in the frequency bands reserved for such use, employ any class of emission provided that such emissions can be contained within the wide-band channels indicated in No. 4200. However, A1A Morse telegraphy and telephony are excluded except for circuit alignment purposes.

ADD 4323BC § 63E. Coast radiotelegraph stations employing multichannel telegraph emissions and operating in the maritime mobile exclusive bands between 4 000 kHz and 27 500 kHz shall at no time use a mean power in excess of 2.5 kW per 500 Hz bandwidth.

ADD 4323BD B. Oceanographic Data Transmission Systems

ADD 4323BE § 63F. In all bands, the frequencies assignable for oceanographic data transmissions are spaced 0.3 kHz apart. The frequencies assignable are shown in No. 4201.

ADD 4323BF § 63G. The frequency bands for oceanographic data transmission systems (see No. 4201) may also be used by buoy stations for oceanographic data transmission and by stations interrogating these buoys.

NOC **Section IV. Use of Frequencies for Radiotelephony**

NOC 4324 A. General

NOC 4325-4326

ADD 4326A However, coast stations in an automatic service in the VHF or UHF band may emit marking signals. The emission power of the signals shall however be limited to the minimum value necessary for effective operation of the signalling. Such emissions shall not cause harmful interference to maritime mobile service in other countries (see Appendix 19).

NOC 4327

MOD 4328 § 67. Single-sideband apparatus in radiotelephone stations of the maritime mobile service operating in the bands between 1 605 kHz and 4 000 kHz allocated to this service between 4 000 kHz and <u>27 500</u> ~~23 000~~ kHz shall satisfy the technical and operational conditions specified in Appendix 17 [and Resolution No. 307].

SUP 4329

SUP 4330

NOC 4331 B. Bands Between 1 605 kHz and 4 000 kHz

NOC

B1. Mode of Operation of Stations

SUP 4332-4334

MOD 4335 § 70A.(1A) ~~However, unless~~ Unless otherwise specified in the present Regulations (see Nos. 2973, 3004, 4127, 4342, 4343 and 4354) the class of emission to be used in the bands between 1 605 kHz and 4 000 kHz shall be J3E.

SUP 4336

SUP 4337

NOC 4338-4342

NOC

B2. Call and Reply

MOD 4343 § 71. (1) The frequency 2 182 kHz[1] is ~~the~~ an international distress frequency for radiotelephony (see No. 2973 for details of use for distress, urgency, safety and emergency position-indicating radiobeacon (EPIRB) purposes). The class of emission to be used for radiotelephony on the frequency 2 182 kHz shall be ~~A3E~~ J3E or H3E (see No. 4127) except for such apparatus as is referred to in No. 4130.

MOD 4343.1 [1]Where administrations provide at their coast stations a watch on 2 182 kHz for receiving class ~~R3E and~~ J3E emissions as well as class A3E and H3E emissions, ship stations ~~beyond the A3E or H3E communication range of such coast stations~~ may call them for safety purposes using class ~~R3E~~ H3E or J3E emissions. ~~This procedure shall only be used when calling by the use of class A3E and H3E emissions has not been successful~~ (see also Resolution No. A).

NOC 4344-4347

MOD 4348 § 72. To facilitate the ~~reception~~ use of ~~distress calls~~ the frequency 2 182 kHz for distress traffic, all transmissions on 2 182 kHz shall be kept to a minimum (see also Resolution No. A).

SUP 4349

NOC 4350-4351

NOC

B3. Traffic

NOC 4352-4356

NOC

B4. Additional Provisions Applying to Region 1

NOC 4357

NOC 4358

MOD 4359 a) the following ship-to-shore working ~~frequencies~~ frequency, if required by their service:

MOD 4360 - carrier frequency ~~2 046~~ 2 045 kHz (assigned frequency ~~2 047.4~~ 2 046.4 kHz) ~~and carrier frequency 2 049 kHz (assigned frequency 2 058.4 kHz)~~ for class ~~R3E and~~ J3E emissions;

SUP 4361

MOD 4362 b) the following intership ~~frequencies~~ frequency, if required by their service:

MOD 4363 - carrier frequency ~~2 053~~ 2 048 kHz (assigned frequency ~~2 054.5~~ 2 049.4 kHz) ~~and carrier frequency 2 056 kHz (assigned frequency 2 057.4 kHz)~~ for class ~~R3E and~~ J3E emissions.

SUP 4364

MOD 4365 ~~These frequencies~~ This frequency may be used as an additional ship-to-shore ~~frequencies~~ frequency.

MOD 4366 (2) ~~These frequencies~~ This frequency shall not be used for working between stations of the same nationality.

MOD 4367 § 78. (1) Ships frequently exchanging correspondence with a coast station of a nationality other than their own may use the same frequencies as ships of the nationality of the coast station:

- where mutually agreed by the administrations concerned; or

- where the facility is open to ships of all nationalities by virtue of a note against each of the frequencies concerned in the List of Coast Stations.

NOC 4368

[ADD 4368A The following ship-to-shore frequencies:

- carrier frequency 2 051 kHz (assigned frequency 2 052.4 kHz),

- carrier frequency 2 054 kHz (assigned frequency 2 055.4 kHz), and

- carrier frequency 2 057 kHz (assigned frequency 2 058.4 kHz),

may be assigned to coast stations as receiving frequencies under the procedure in [Article 12].]

[ADD 4368B § 78A. The channelling arrangements for radiotelephony in the bands 1 635 - 1 800 kHz and 2 045 - 2 141.5 kHz in Region 1 are shown in [Table C of Appendix A].]

NOC B5. Additional Provisions Applying to Regions 2 and 3

NOC 4369

MOD 4370 C. Bands Between 4 000 kHz and ~~23 000~~ 27 500 kHz

NOC C1. Mode of Operation of Stations

MOD 4371 § 80. (1) The class of emission to be used for radiotelephony in the bands between 4 000 kHz and ~~23 000~~ 27 500 kHz shall be J3E.

SUP 4371.1

NOC 4372

MOD 4373 (3) Coast radiotelephone stations employing class J3E emissions in the bands between 4 000 and 27 500 ~~23 000~~ kHz shall use the minimum power necessary to cover their service area and shall at no time use a peak envelope power in excess of 10 kW per channel.

MOD 4374 (4) Ship radiotelephone stations employing class J3E emissions in the bands between 4 000 kHz and 27 500 ~~23 000~~ kHz shall at no time use a peak envelope power in excess of 1.5 kW per channel.

SUP 4373.1 and 4374.1

NOC C2. Call and Reply

MOD 4375 § 81. (1) Ship stations may use the following carrier frequencies for calling in radiotelephony:

4 125 kHz[1,2,3]
6 215 kHz[2,3]
8 255 kHz
12 290 kHz[3]
16 420 kHz[3]
18 795 kHz
22 060 kHz
25 085 kHz
25 097 kHz

NOC 4375.1

MOD 4375.2 [2]The carrier frequencies 4 125 kHz and 6 215 ~~6 215.5~~ kHz are also authorized by common use by coast and ship stations for single-sideband radiotelephony on a simplex basis for call and reply purposes, provided the peak envelope power of such stations does not exceed 1 kW. The use of these frequencies for working purposes is not permitted (see also Nos. 2982 and 4375.1).

MOD 4375.3 [3]The carrier frequencies 4 125 kHz, 6 215 ~~6 215.5~~ kHz, 8 291 kHz, ~~8 257 kHz,~~ 12 290 ~~12 392~~ kHz and 16 420 ~~16 522~~ kHz are also authorized for common use by coast and ship stations for single-sideband radiotelephony on a simplex basis for distress and safety traffic.

MOD 4376 (2) Coast stations may use the following carrier frequencies for calling in radiotelephony[1]:

4 417 kHz[2]
6 516 kHz[2]
8 779 kHz
13 137 kHz
17 302 kHz
19 770 kHz
22 765 kHz
26 172 kHz

NOC 4376.1

MOD 4376.2 [2]The carrier frequencies 4 417 ~~4 419.4~~ kHz and 6 516 ~~6 521.9~~ kHz are also authorized for common use by coast and ship stations for single-sideband radiotelephony on a simplex basis, provided the peak envelope power of such stations does not exceed 1 kW. The use of 6 516 ~~6 521.9~~ kHz for this purpose should be limited to daytime use (see also No. 4375.1).

SUP 4377

NOC 4378

MOD 4379 § 84. (1) Before transmitting on the carrier frequencies 4 125 kHz, 6 215 ~~6 215.5~~ kHz, 8 291 ~~8 257~~ kHz, 12 290 ~~12 392~~ kHz or 16 420 ~~16 522~~ kHz a station shall listen on the frequency for a reasonable period to make sure that no distress traffic is being sent (see No. 4915).

NOC 4380

NOC C3. Traffic

NOC 4381-4383

MOD 4384 (4) The technical characteristics of transmitters used for radiotelephony in the bands between 4 000 kHz and ~~23 000~~ 27 500 kHz are specified in Appendix 17.

NOC 4385 D. Bands Between 156 MHz and 174 MHz

NOC D1. Call and Reply

MOD 4386 The frequency 156.8 MHz is the international ~~distress, safety and calling~~ frequency for distress traffic and for calling by radiotelephony when using frequencies in the authorized bands between 156 MHz and 174 MHz (see ~~No.~~ Nos. 2994 and N 2994 for details of use). The class of emission to be used for radiotelephony on the frequency 156.8 MHz shall be G3E (see Appendix 19).

NOC 4387-4389

MOD 4390 (3) The frequency 156.8 MHz may be used by ship stations and coast stations for selective calling as defined in Appendix 39.

NOC 4391-4392

MOD 4393 (6) All emissions in the band 156.7625 - 156.8375 MHz capable of causing harmful interference to the authorized transmissions of stations of the maritime mobile service on 156.8 MHz are forbidden. ~~The frequency 156.825 MHz may, however, be used for the purposes described in No. 2995C subject to not causing harmful interference to authorized transmissions on 156.8 MHz (see also note k) of Appendix 18).~~

SUP 4393.1

MOD 4394 To facilitate the reception of distress calls and distress traffic all transmissions on 156.8 MHz shall be kept to a minimum and shall not exceed one minute.

NOC 4395-4396

NOC D2. Watch

NOC 4397-4403

NOC D3. Traffic

NOC 4404

MOD 4405 (2) The method ... services ~~(see Resolution No. 388)~~.

NOC 4406-4408

MOD 4409 (2) In the band ... necessary ~~(see Resolution No. 398)~~.

NOC 4410 [(3) The normal sequence in which channels should be put into use in the band 156 - 174 MHz is indicated by the figures in the relevant columns of Appendix 18.]

SUP 4411

NOC 4412

MOD 4413 (6) Channels are ... Appendix 18 ~~(see Resolution No. 388)~~.

NOC 4414

MOD 4415 (2) The use ... such services ~~(see Resolution No. 308)~~.

NOC 4416

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Corrigendum 1 to
Document 433-E
13 October 1987
Original : English

Replace the text of the first page of Document 433 by the following text :

PLENARY MEETING

NOTE FROM THE CHAIRMAN OF COMMITTEE 6 TO THE PLENARY MEETING

It was agreed that Articles 55 (see Annex) and 56 (see Document 438) should be forwarded together to the Plenary.

The square brackets relate to substantive matters which will need to be considered by the Plenary.

I.R. HUTCHINGS
Chairman of Committee 6

Annex : 1

Pages 2 to 9 remain unchanged.

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 433-E
12 October 1987
Original: English

COMMITTEE 7

SEVENTH SERIES OF TEXTS FROM COMMITTEE 6
TO THE EDITORIAL COMMITTEE

The revision of Article 55 is attached for consideration by the Editorial Committee.

The square brackets relate to substantive matters which will need to be considered by the Plenary.

It was agreed that Articles 55 and 56 should be forwarded together to the Plenary, and they should accordingly be combined in a single document to the Plenary.

I.R. HUTCHINGS
Chairman of Committee 6

Annex: 1

ANNEX

NOC

ARTICLE 55

NOC

Certificates for Personnel of Ship Stations and Ship Earth Stations

NOC

Section I. General Provisions

MOD 3860 § 1. (1) The service of every ship Morse radiotelegraph station using the frequencies and techniques prescribed in Chapter IX shall be performed by an operator holding a certificate issued or recognized by the government to which the station is subject.

MOD 3861 (2) The service of every ship radiotelephone station using the frequencies and techniques prescribed in Chapter IX shall be controlled by an operator holding a certificate issued or recognized by the government to which the station is subject. Provided the station is so controlled, other persons besides the holder of the certificate may use the radiotelephone equipment.

NOC 3862

ADD 3862A (3a) The service of every ship station and ship earth station using the frequencies and techniques prescribed in Chapter N IX shall be controlled by a person holding a certificate issued or recognized by the government to which the station is subject. Provided the station is so controlled, other persons besides the holder of the certificate may use the equipment.

NOC 3863-3866

MOD 3867 (2) When it is necessary to employ a person without a certificate or an operator not holding an adequate certificate as a temporary operator, his performance as such must be limited solely to signals of distress, distress alerting, urgency and safety, messages relating thereto, messages relating directly to the safety of life and urgent messages relating to the movement of the ship. Persons employed in these cases are bound by the provisions of No. 3877 regarding the secrecy of correspondence.

NOC 3868-3877

MOD **Section II. Categories of Certificates for Personnel of Ship Stations and Ship Earth Stations Using the Frequencies and Techniques Prescribed in Chapter IX**

NOC 3878-3890

ADD **Section IIA. Categories of Certificates for Personnel of Ship Stations and Ship Earth Stations Using the Frequencies and Techniques Prescribed in Chapter N IX**

ADD 3890B (1) There are six categories of certificates for personnel of ship stations and ship earth stations which use the frequencies and techniques prescribed in Chapter N IX.

ADD 3890C a) First-Class Radio Electronic Certificate;

ADD 3890D b) Second-Class Radio Electronic Certificate;

ADD 3890E c) General Operator's Certificate;

ADD 3890F d) Restricted Operator's Certificate;

ADD 3890FA e) First-Class Technical Certificate;

ADD 3890FB f) Second-Class Technical Certificate.

ADD 3890G (2) The holder of the certificate specified in a), b), c) and d) may carry out the service of ship stations or ship earth stations which use the frequencies and techniques prescribed in Chapter N IX.

ADD 3890H (3) The holder of a certificate specified in e) and f) may carry out the technical service of ship stations and ship earth stations which use the frequencies and techniques prescribed in Chapter N IX.

MOD **Section III. Conditions for the Issue of Certificates for Personnel of Ship Stations and Ship Earth Stations Using the Frequencies and Techniques Prescribed in Chapter IX**

NOC 3891-3893

ADD 3893A Each administration may determine the conditions under which personnel holding certificates specified in Nos. 3879-3883 may be granted certificates under Nos. ADD 3890C-3890FB.

NOC 3894-3949

ADD **Section IIIA. Conditions for the Issue of Certificates for Personnel of Ship Stations and Ship Earth Stations Using the Frequencies and Techniques Prescribed in Chapter N IX**

ADD 3949A A. First-Class Radio Electronic Certificate

ADD 3949B The First-Class Radio Electronic Certificate is issued to candidates who have given proof of the technical and professional knowledge and qualifications enumerated below:

ADD 3949BA a) knowledge of the principles of electricity and the theory of radio and electronics sufficient to meet the requirements specified in b), c) and d);

ADD 3949BB b) theoretical knowledge of GMDSS radiocommunication equipment, including direct-printing telegraph and radiotelephone transmitters and receivers, digital selective calling equipment, ship earth stations, emergency position-indicating radiobeacons, marine antenna systems, radio equipment for lifeboats and other survival crafts together with all auxiliary items including power supplies as well as general knowledge of the principles of other equipment generally used for radionavigation, with particular reference to maintaining the equipment in service;

ADD 3949BC c) practical knowledge of the operation and knowledge of the preventative maintenance of the equipment mentioned in b);

ADD 3949BD d) practical knowledge necessary for the location and repairing (using appropriate testing equipment and tools) of faults in the equipment mentioned in b) which may occur during a voyage;

ADD 3949BE e) detailed practical knowledge of the operation of all GMDSS sub-systems and equipment;

ADD 3949BF f) ability to send and receive correctly by radiotelephone and direct-printing telegraphy;

ADD 3949BG g) detailed knowledge of the regulations applying to radiocommunications, knowledge of the documents relating to charges for radiocommunications and knowledge of those provisions of the International Convention for the Safety of Life at Sea, 1974 which relate to radio;

ADD 3949BH h) sufficient knowledge of one of the working languages of the Union. Candidates should be able to express themselves satisfactorily in that language, both orally and in writing.

ADD 3949BI B. Second-Class Radio Electronic Certificate

ADD 3949BJ The Second-Class Radio Electronic Certificate is issued to candidates who have given proof of the technical and professional knowledge and qualifications enumerated below:

ADD 3949BK a) general knowledge of the principles of electricity and the theory of radio and electronics sufficient to meet the requirements specified in b), c) and d);

ADD 3949BL b) general theoretical knowledge of GMDSS radiocommunication equipment, including direct-printing telegraph and radiotelephone transmitters and receivers, digital selective calling equipment, ship earth stations, emergency position-indicating radiobeacons, marine antenna systems, radio equipment for lifeboats and other survival craft together with all auxiliary items including power supplies as well as general knowledge of other equipment generally used for radionavigation, with particular reference to maintaining the equipment in service;

ADD 3949BM c) practical knowledge of the operation and knowledge of the preventative maintenance of the equipment mentioned in b);

ADD 3949BN d) practical knowledge sufficient for effecting repairs in the case of faults in the equipment mentioned in b), using the means available on board and if necessary replacing modular units;

ADD 3949BO e) detailed practical knowledge of the operation of all GMDSS sub-systems and equipment;

ADD 3949BP f) ability to send and receive correctly by radiotelephone and direct-printing telegraphy;

ADD 3949BQ g) detailed knowledge of the regulations applying to radiocommunications, knowledge of the documents relating to charges for radiocommunications and knowledge of those provisions of the International Convention for the Safety of Life at Sea, 1974, which relate to radio;

ADD 3949BR h) sufficient knowledge of one of the working languages of the Union. Candidates should be able to express themselves satisfactorily in that language, both orally and in writing.

ADD 3949CA C. General Operator's Certificate

ADD 3949CB The General Operator's Certificate is issued to candidates who have given proof of the knowledge and qualifications enumerated below:

ADD 3949CC a) detailed practical knowledge of the operation of all GMDSS sub-systems and equipment;

ADD 3949CD b) ability to send and receive correctly by radiotelephone and direct-printing telegraphy;

ADD 3949CE c) detailed knowledge of the regulations applying to radiocommunications, knowledge of the documents relating to charges for radiocommunications and knowledge of those provisions of the International Convention for the Safety of Life at Sea, 1974, which relate to radio;

ADD 3949CF d) sufficient knowledge of one of the working languages of the Union. Candidates should be able to express themselves satisfactorily in that language, both orally and in writing.

ADD 3949DA D. Restricted Operator's Certificate

ADD 3949DB The Restricted Operator's Certificate is issued to candidates who have given proof of the knowledge and qualifications enumerated below:

ADD 3949DC a) practical knowledge of the operation of the GMDSS sub-systems and equipment which is required while the ship is sailing within the range of VHF coast stations;

ADD 3949DD b) ability to send and receive correctly by radiotelephone;

ADD 3949DE c) knowledge of the regulations applying to radiotelephony communications and specifically of that part of those regulations relating to the safety of life;

ADD 3949DF d) an elementary knowledge of one of the working languages of the Union. Candidates should be able to express themselves satisfactorily in that language, both orally and in writing. Administrations may waive the above language requirements for holders of a restricted operating certificate when the ship station is confined to a limited area specified by the administration concerned. In such cases the certificate shall be suitably endorsed.

ADD 3949E E. First-Class Technical Certificate

ADD 3949EA The First-Class Technical Certificate is issued to candidates who have given proof of the technical and professional knowledge and qualifications enumerated below:

ADD 3949EB a) knowledge of the principles of electricity and the theory of radio and electronics sufficient to meet the requirements specified in b), c) and d);

ADD 3949EC

b) theoretical knowledge of GMDSS radiocommunication equipment, including direct-printing telegraph and radiotelephone transmitters and receivers, digital selective calling equipment, ship earth stations, emergency position-indicating radiobeacons, marine antenna systems, radio equipment for lifeboats and other survival craft together with all auxiliary items including power supplies as well as general knowledge of the principles of other equipment generally used for radionavigation, with particular reference to maintaining the equipment in service;

ADD 3949ED

c) practical knowledge of the operation and knowledge of the preventative maintenance of the equipment mentioned in b);

ADD 3949EE

d) practical knowledge necessary for the location and repairing (using appropriate testing equipment and tools) of faults in the equipment mentioned in b) which may occur during a voyage;

ADD 3949F

F. Second-Class Technical Certificate

ADD 3949FA

The Second-Class Technical Certificate is issued to candidates who have given proof of the technical and professional knowledge and qualifications enumerated below:

ADD 3949FB

a) basic knowledge of the principles of electricity and the theory of radio and electronics sufficient to meet the requirements specified in b), c) and d);

ADD 3949FC

b) basic theoretical knowledge of GMDSS radiocommunication equipment, including direct-printing telegraph and radiotelephone transmitters and receivers, digital selective calling equipment, ship earth stations, emergency position-indicating radiobeacons, marine antenna systems, radio equipment for lifeboats and other survival craft together with all auxiliary items including power supplies as well as a general knowledge of the principles of other equipment generally used for radionavigation, [with particular reference to maintaining the equipment in service];

ADD 3949FD

c) practical knowledge of the operation and knowledge of the preventative maintenance of the equipment mentioned in b);

ADD 3949FF

d) practical knowledge sufficient for effecting repairs in the case of minor faults in the equipment mentioned in b), using the means available on board and if necessary, replacing modular units;

NOC

Section IV. Qualifying Service

NOC 3950-3953

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 434-E
12 October 1987
Original: English

COMMITTEE 6

FIRST REPORT OF THE CHAIRMAN OF COMMITTEE 6 AD HOC 3 TO THE CHAIRMAN OF COMMITTEE 6

1. Attached is a draft proposed new Resolution [COM6/6] for consideration by the Committee. Editorially all Resolutions and Recommendations affected could be included.

R. SWANSON
Chairman of Committee 6 ad hoc 3

Annex: 1

ANNEX

RESOLUTION [COM6/6]

Relating to Resolutions and Recommendations Eventually to be Suppressed, but are Desired to Remain in Effect Until the Provisions of the Radio Regulations as Partially Revised by the MOB WARC-87 will Come Into Effect

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

a) that the essential parts of Resolution No. 320(Mob-83) have been embodied into the Radio Regulations as partially revised by MOB WARC-87; and

b) that, consequentially, this Conference decided that Resolutions Nos. [304 and 320(Mob-83)] and Recommendations Nos. [302 and 312] shall eventually be suppressed; and

noting

a) that Resolutions and Recommendations become, as a general rule, effective at the time of the signing of the Final Acts of the Conference; and

b) that the provisions of the Radio Regulations, as partially revised by this Conference, will become effective only at a much later date; and

noting further

that Resolutions and Recommendations, the suppression of which has been decided by a WARC become, as a general rule, ineffective at the time of the signing of the Final Acts of the Conference;

recognizing

a) that such a suppression, in accordance with the general rule, would effectively remove the guidance contained in the said Resolutions and Recommendations after the signing of the Final Acts; and

b) that this guidance is, however, desired to remain in effect and applicable until the entry into force of the provisions of the Radio Regulations as partially revised by this Conference;

resolves

a) that Resolutions Nos. [304 and 320(Mob-83)] and Recommendations Nos. [302 and 312], which this Conference decided to be eventually suppressed, shall remain in effect and applicable until the date of entry into force of the provisions of the Radio Regulations as partially revised by this Conference, at which date they shall become ineffective and definitely suppressed.

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MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 435-E
12 October

B.15 PLENARY MEETING

FIFTEENTH 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	Documents	Title
COM.6	378	Appendix 9
COM.6	349	Appendix 10
COM.6	381	Appendix 11
COM.6	382 (417)	Appendix 43
COM.5	398	Resolution COM5/4
COM.6	352 (417)	Resolution COM6/3
COM.5	397	Recommendation COM5/A

Y.C. MONGELARD
Chairman of Committee 7

Annex: 23 pages

APPENDIX 9

NOC **Service Documents**[1]

(See Articles 10, 12, 13 17 and 26)

NOC **List I. International Frequency List**

NOC List II. List of Fixed Stations Operating International Circuits

NOC List IV. List of Coast Stations

NOC Part I. Tables of general or specific interest

NOC Part II. Alphabetical index of coast stations

NOC Part III. Particulars of coast stations

MOD Part IV. Inland telegraph rates and rates for telegrams destined for adjacent countries, etc.

ADD The Annex containing a List of Coast Stations and Coast Earth Stations Participating in the GMDSS (see No. 2202C) shall be published as shown below:

Part A. Particulars of coast stations participating in MF, HF and VHF watch-keeping using digital selective calling techniques

Name of the coast station	Maritime mobile service identity	Emission				Service		Geographical coordinates of the transmitting antenna (longitude and latitude in degrees, minutes and seconds)	Remarks
		Frequencies (kHz or MHz)		Class	Power (kW)[3]	Mode of operation[4]	Hours of service (UTC)		
1	2	3b[1]	3b[2]	4	5	6	7	8	9

1. Transmitting frequencies.

2. Watch and/or receiving frequencies or channels.

3. In the case of directive antennas, indicate under "power" the azimuth of the direction or directions of maximum gain, in degrees, clockwise beginning from True North.

4. Indicate whether radiotelephony and/or a narrow-band direct-printing system is provided.

ADD Part B. Particulars of coast earth stations

Name of the coast earth station	Ocean region[1]	Service			Geographical coordinates of the transmitting antenna (longitude and latitude in degrees, minutes and seconds	Remarks
		Nature of service[2]	Hours of service (UTC)	Charges[3]		
1	2	3	4	5	6	7

1. Indicate the ocean region(s) in which the service is provided.

2. Indicate whether the station is capable of providing:

   a) distress and safety communications, including distress alerting with ship earth stations capable of using direct-printing techniques only.

   b) the transmission of marine safety information.

3. Indicate the charges, if any, applicable to subsequent distress and safety communications after the initial distress alert.

ADD

Part C. Particulars of coast stations transmitting to ships navigational and meteorological warnings and urgent information by means of narrow-band direct-printing techniques

1	2	3	4	5	6	7	8	9
Nature of the coast station	Frequencies (kHz)[1]	Call sign/identification character[2]	Times of transmission	Nature of service[3]	Language used	Power (kW)[4]	Geographical coordinates of the transmitting antenna (longitude and latitude in degrees, minutes and seconds)	Remarks

1. Indicate on which frequency(ies) information is transmitted.

2. Indicate the maritime mobile service identity number or the identification number. In the case of the international NAVTEX service, indicate the B1 character.

3. Indicate which kinds of broadcasts (navigational and meteorological warnings, ice reports, etc.) are provided.

4. In the case of directive antennas, indicate under "power" the azimuth of the direction or directions of maximum gain, in degrees, clockwise beginning from True North.

NOC

List V. List of Ship Stations

MOD

Particulars of Ship Stations
and Ship Earth Stations

MOD

The information concerning these stations shall be published as shown below:

1	2	3	4	5	6	7	8	9	10	11
Name of ship	Call sign	Country	Auxiliary installations	Class of ship	Nature of service	Hours of service	Telegraph transmission frequency bands	Telephone transmission frequency bands	Accounting authority	Remarks

NOC Column 1

MOD Column 2

Call sign. This column also contains the maritime mobile service identity and/or the selective call number, where appropriate.

NOC Column 3

NOC Column 4 Auxiliary installations, including information concerning:

NOC a) number of lifeboats fitted with radio apparatus, and

MOD b) optionally, types and number of emergency position-indicating radiobeacons and search and rescue transponders, the operating frequency or frequency band being indicated by one of the following letters:

A = 2 182 kHz
B = 121.5 MHz
C = 243 MHz
D = 156.525 MHz
E = 406 - 406.1 MHz
F = 1 645.5 - 1 646.5 MHz
G = 9 200 - 9 500 MHz

A figure following the letter indicates the number of radiobeacons.

MOD Columns 5 to 7 In the form of service symbols (see Appendix 10). In addition, the symbols used in Column 5 to designate the class of ship are given in Part I of the List.

MOD Columns 8 and 9 Indication of the frequency bands and classes of emission by means of the following symbols:

Radiotelegraphy

S = Frequency bands used in the maritime mobile-satellite service
W = 110 - 150 kHz
X = [415] - 535 kHz
Y = 1 605 - 3 800 kHz
Z = 4 000 - 27 500 kHz

Radiotelephony

S = Frequency bands used in the maritime mobile-satellite service
T = 1 605 - 4 000 kHz
U = 4 000 - 27 500 kHz
V = 156 - 174 MHz

These symbols should, where necessary, be followed by references to brief notes and indications of the frequencies for which the transmitters are adjusted, which shall appear at the end of the List.

MOD Column 10 The accounting authority identification code (AAIC).

MOD Column 11 When two or more ship stations of the same nationality bear the same name, and no distinguishing particulars are shown in Columns 1, 2 or 5, the name of the licensee or the owner of the ship shall be given in this column.

In addition, if there is no room in the appropriate column, further information relating to Columns 1 to 10 may be given in Column 11 by means of a note reference. This column may comprise several lines.

If narrow-band direct-printing telegraphy is provided, indicate the system employed.

SUP Column 12

NOC **List VI. List of Radiodetermination and Special Service Stations**

NOC Part A. Alphabetical index of stations

NOC Part B. Particulars of stations

NOC 1 - 11

MOD 12. Fixed earth stations in the maritime radiodetermination-satellite service.

MOD Columns 3a, 3b, 3c Transmission of radiodetermination information.

MOD Columns 4a, 4b Reception of radiodetermination information.

MOD Column 7 Remarks: Special methods of modulation, charges, etc. All stations listed provide a maritime radiodetermination-satellite service except where otherwise indicated, in which case a station provides only a radiolocation or radionavigation-satellite service.

MOD 13. Space stations in the maritime radiodetermination-satellite service.

MOD Columns 2a, 2b, 2c — Transmission of radiodetermination information to ships.

MOD Columns 3a, 3b — Reception of radiodetermination information from ships.

MOD Column 7 — Remarks: Orbital information, special channelling arrangements, special modulation methods, charges, etc. All stations listed provide a maritime radiodetermination-satellite service except where otherwise indicated, in which case a station provides only a radiolocation-satellite service or radionavigation-satellite service.

NOC **List VIII. List of International Monitoring Stations**

NOC **List VIIIA. List of Space Radiocommunication Stations and Radio Astronomy Stations**

APPENDIX 10

Proposed list of service document symbols

ADD	FD	Aeronautical station in the aeronautical mobile (R) service
ADD	FG	Aeronautical station in the aeronautical mobile (OR) service
NOC	FA	Aeronautical station
NOC	MA	Aircraft station
ADD	TB	Aeronautical earth station in the aeronautical mobile-satellite service
ADD	TJ	Aircraft earth station in the aeronautical mobile-satellite service
ADD	EJ	Space station in the aeronautical mobile-satellite service
NOC	FC	Coast station
NOC	MS	Ship station
NOC	FP	Port station
MOD	TI	Coast earth station in the maritime mobile-satellite service
MOD	TG	Ship earth station in the maritime mobile-satellite service
NOC	EG	Space station in the maritime mobile-satellite service
MOD	TE	Typical satellite EPIRB in the mobile-satellite service
ADD	EI	Space station in the mobile-satellite service
ADD	UA	Mobile earth station in the mobile-satellite service
ADD	VA	Land earth station (fixed earth station in the mobile-satellite services)

NOC	FB	Base station
NOC	ML	Land mobile station
ADD	EU	Space station in the land mobile-satellite service
ADD	TY	Base earth station in the land mobile-satellite service
ADD	TU	Land mobile earth station in the land mobile-satellite service
ADD	RN	Radionavigation land station
ADD	NM	Radionavigation mobile station
NOC	RC	Non-directional radiobeacon
NOC	RD	Directional radiobeacon
NOC	RT	Revolving radiobeacon
NOC	RG	Radio direction-finding station
NOC	LR	Radiolocation land station
NOC	MR	Radiolocation mobile station
NOC	AL	Aeronautical radionavigation land station
NOC	AM	Aeronautical radionavigation mobile station
NOC	NL	Maritime radionavigation land station
NOC	RM	Maritime radionavigation mobile station
ADD	EF	Space station in the radiodetermination-satellite service
NOC	TF	Fixed earth station in the radiodetermination-satellite service
NOC	TL	Mobile earth station in the radiodetermination-satellite service

MOD	EN	Space station in the radionavigation-satellite service
MOD	TN	Fixed earth station in the radionavigation-satellite service
ADD	UM	Mobile earth station in the radionavigation-satellite service
ADD	EO	Space station in the aeronautical radionavigation-satellite service
ADD	TZ	Fixed earth station in the aeronautical radionavigation-satellite service
ADD	TO	Mobile earth station in the aeronautical radionavigation-satellite service
ADD	EQ	Space station in the maritime radionavigation-satellite service
ADD	TX	Fixed earth station in the maritime radionavigation-satellite service
ADD	TQ	Mobile earth station in the maritime radionavigation-satellite service
NOC	OD	Oceanographic data station
NOC	OE	Oceanographic data interrogation station

APPENDIX 11

MOD **Documents with Which Stations on Board Ships and Aircraft Shall be Provided**

NOC (see Articles 24, 26, 44, 46, 49, 55, 57, 59 and Appendix 9)

MOD **Section I. Ship Stations for Which a Morse Radiotelegraph Installation is Required by International Agreement**

NOC These stations shall be provided with:

NOC 1. and 2.

MOD 3. A log in which the following are recorded as they occur, together with the time of the occurrence, unless administrations have adopted other arrangements for recording all information which the log should contain:

NOC a) to g)

NOC 4. to 9.

MOD **Section II. Other Ship Stations with Morse Radiotelegraph Facilities**

NOC These stations shall be provided with the documents mentioned in items 1 to 6, 8 and 9 of Section I.

NOC **Section III. Ship Stations for Which a Radiotelephone Installation Is Required by International Agreement**

NOC These stations shall be provided with:

NOC 1. and 2.

MOD 3. A log in which the following are recorded as they occur, together with the time of the occurrence, unless administrations have adopted other arrangements for recording all information which the log should contain:

NOC a)

SUP b)

(MOD) b)

(MOD) c)

NOC 4. and 5.

NOC **Section IV. Other Ship Radiotelephone Stations**

NOC These stations shall be provided with:

NOC 1. and 2.

NOC **Section V. Ship Stations Equipped with Multiple Installations**

NOC These stations shall be provided with:

NOC 1. and 2.

ADD **Section VA. Stations on Board Ships for which a GMDSS Installation is Required by by International Agreement**

These stations shall be provided with:

1. the license prescribed by Article 24;

2. the operators' certificates;

3. a log in which the following are recorded as they occur, together with the time of their occurrence, unless administrations have adopted other arrangements for recording all information which the log should contain;

   a) a summary of communications relating to distress, urgency and safety traffic,

   b) a reference to important service incidents,

   c) if the ship's rules permit, the position of the ship at least once a day;

4. the Alphabetical List of Call Signs and/or Numerical Table of Identities of Stations Used by the Maritime Mobile Service and Maritime Mobile-Satellite Service (Coast, Coast Earth, Ship, Ship Earth, Radiodetermination and Special Service Stations), Ship and Ship Earth Stations, Maritime Mobile Service Identities and Selective Call Numbers or Signals, and Coast and Coast Earth Stations, Maritime Mobile Service Identities and Identification Numbers or Signals (List VIIA);

5. the annex referred to in No. 2202C giving the particulars of coast stations and coast earth stations participating in the GMDSS (see also N 3038 and N 3038B); a list of coast stations and coast earth stations with which communications are likely to be established, showing watch-keeping hours, frequencies and charges; and a list of coast stations and coast earth stations providing navigational and meteorological warnings and other urgent information for ships (see Article 26 and Appendix 9);

6. the List of Ship Stations (the carriage of the supplement is optional);

7. the Manual for Use by the Maritime Mobile and Maritime Mobile-Satellite Services.

Note - Administrations may, under appropriate circumstances (for example, when ships are sailing only within range of VHF coast stations) exempt ships from the carriage of the documents mentioned in paragraphs 4 to 7 above.

MOD **Section VI. Stations on Board Aircraft**

NOC These stations shall be provided with:

NOC 1.

MOD 2. The log, unless administrations have adopted other arrangements for recording all information which the log should contain.

NOC 3.

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APPENDIX 43

MOD **Maritime Mobile Service Identities**[1]

NOC 1. and 1.1

NOC 1.2

MOD 1.3 These identities are formed in such a way that the identity or part thereof can be used by telephone and telex subscribers connected to the general telecommunications network principally to call ships automatically in the shore-to-ship direction.

MOD 1.4 There are four kinds of maritime mobile service identities:

i) ship station identities,

ii) group ship station call identities,

iii) coast station identities,

iv) group coast station call identities.

NOC 1.5

NOC 2. Maritime Identification Digits (MID)

MOD 2.1 Table 1 gives the Maritime Identification Digits (MID) allocated to each country. In accordance with No. 2087, the Secretary-General is responsible for allocating Maritime Identification Digits to countries not included in this table. No. 2087A authorizes the Secretary-General to allocate additional MIDs to countries in accordance with this appendix within the limits specified,[2] provided that he is satisfied that the possibilities offered by the MIDs allocated to an administration will soon be exhausted despite judicious ship station identity assignment as outlined in 3.1 below and in conformity with the guidelines contained in the relevant CCIR and CCITT Recommendations.

ADD 2.2 A single MID has been allocated to each country. A second MID should not be requested unless the MID first allocated is more than 80% exhausted in the basic category of three trailing zeros and the rate of assignments is such that 90% exhaustion is foreseen. The same criteria should be applied to subsequent requests for MIDs.

ADD [1]In this Appendix a reference to a ship station or a coast station may include the respective earth stations.

ADD [2]In no cicumstances may a country claim more MIDs than the total number of its ship stations shown in the ITU List of Ship Stations (List V) divided by 1000.

ADD 2.3 These guidelines do not require an administration to assign numerical identities until it determines that such identities are necessary. They do not concern the assignment of ship station identities without trailing zeros, since it is assumed that there is enough capacity inherent in the system to provide for the assignment of such identities to all ship stations which an administration may wish to identify in this manner.

NOC 3. Ship Station Identities

ADD 3.1 Administrations should:

ADD 3.1.1 follow the guidelines contained in the relevant CCIR and CCITT Recommendations for the assignment of ship station identities;

ADD 3.1.2 make optimum use of the possibilities of forming identities from the single MID allocated to them;

ADD 3.1.3 take particular care in assigning ship station identities with six significant digits (three-trailing-zero identities), which should be assigned only to ship stations which can reasonably be expected to require such an identity for automatic access on a world-wide basis for public switched networks;

ADD 3.1.4 assign one-trailing-zero or two-trailing-zero identities to vessels when they require automatic access only on a national or regional level, as defined in the relevant CCITT Recommendations;

ADD 3.1.5 assign ship station identities without trailing zeros to all other vessels requiring a numerical identification.

(MOD) 3.2 The 9-digit code constituting a ship station identity is formed as follows:

$$M_1\ I_2\ D_3\ X_4\ X_5\ X_6\ X_7\ X_8\ X_9$$

wherein

$$M_1\ I_2\ D_3$$

represent the Maritime Identification Digits and X is any figure from 0 to 9.

MOD

4. Group Ship Station Call Identities

Group ship station call identities for calling simultaneously more than one ship are formed as is follows:

$0_1\ M_2\ I_3\ D_4\ X_5\ X_6\ X_7\ X_8\ X_9$

where the first figure is zero and X is any figure from 0 to 9.

The particular MID represents only the country assigning the group ship station call identity and so does not prevent group calls to fleets containing more than one ship nationality.

NOC

5.

ADD

6. Group Coast Station Call Identities

Group coast station call identities for calling simultaneously more than one coast station are formed as a subset of coast station identities, as follows:

$0_1\ 0_2\ M_3\ I_4\ D_5\ X_6\ X_7\ X_8\ X_9$

where the first two figures are zeros and X is any figure from 0 to 9.

The particular MID represents only the country assigning the group coast station call identity. The identity may be assigned to stations of one administration which are located in only one geographical region as indicated in the relevant CCITT Recommendation.

NOC

TABLE 1

RESOLUTION COM5/4

Relating to the Use of the Frequency [4 MHz] for NAVTEX-type Transmissions in the Maritime Mobile Service

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

a) that, inter alia, high atmospheric noise levels in the 500 kHz band, mainly in the tropical and sub-tropical regions, will limit the range at which NAVTEX signals transmitted on 518 kHz can be received in these regions;

b) that atmospheric noise levels in the tropical and sub-tropical regions are significantly lower in the 4 MHz band than at 518 kHz;

c) that a non-paired narrow-band direct-printing (NBDP) channel in the 4 MHz maritime mobile band is needed to provide such transmissions in a predominantly ground wave mode;

noting

a) that NAVTEX-type transmissions include navigational and meteorological warnings and urgent information to ships;

b) that the International Maritime Organization (IMO) has agreed that there is a need for NAVTEX-type transmissions on a 4 MHz NBDP channel;

recognizing

a) that the frequency [...] has been allocated by this Conference for this purpose;

b) that the IMO, the World Meteorological Organization (WMO) and the International Hydrographic Organization (IHO) are the competent organizations to develop a plan for the global use of the HF NBDP marine NAVTEX-type transmission channel;

resolves to invite the IMO, WMO and IHO

1. to develop jointly, in consultation with the IFRB, a plan for the global coordination of NAVTEX-type transmissions using NBDP techniques;

2. to assume joint responsibility for maintaining the plan in consultation with the IFRB;

urges administrations

which need to use this channel to assign the frequency in conformity with the procedures set out in Resolution [COM4/12] and the Recommendations of the IMO, WMO and IHO for that part of the system over which they hold jurisdiction;

invites the Administrative Council

to place this Resolution on the agenda of the next competent world administrative radio conference for review and any other action that may be required;

requests the CCIR

to develop the technical characteristics to allow these transmissions to be received using automated techniques;

requests the Secretary-General

to communicate this Resolution to the IMO, IHO and WMO for consideration and comments.

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RESOLUTION COM6/3

Relating to Technical Cooperation with Developing Countries in the Field of Aeronautical Telecommunications

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

[a) that the allocations of the frequency bands and the provisions concerning the various aeronautical mobile services have been revised;]

[b) that some of these frequency bands and provisions are intended for the world-wide implementation of new aeronautical telecommunication systems;]

c) that these new systems will employ more advanced techniques, such as satellite communications, in combination with modern information transmission media;

d) that this technological modernization should serve to improve the safety and regularity of international civil aviation, the accuracy and security of aeronautical radionavigation and the efficiency of distress and rescue systems;

e) that the developing countries may require assistance in improving the training of technical staff, as well as in introducing new systems, in coping with technological modernization and enhancing the operation of aeronautical telecommunications;

recognizing

the value of the assistance which, in conjunction with other international organizations, the Union has provided and may continue to provide to developing countries in the field of telecommunications;

requests the Secretary-General

1. to encourage ICAO to continue its assistance to developing countries which are endeavouring to improve their aeronautical telecommunications, in particular by providing them with technical advice for the planning, establishment, operation and maintenance of equipment, as well as help with the training of staff, essentially in matters relating to the new technologies;

2. for this purpose, to seek the continued collaboration of ICAO, the United Nations Conference for Trade and Development (UNCTAD) and other specialized agencies of the United Nations, as appropriate;

3. to inform ICAO that this Conference has recognized the valuable cooperation provided by that organization to developing countries in its technical assistance programmes;

4. to continue to give special attention to seeking the aid of the United Nations Development Programme and other sources of financial support, to enable the Union to render sufficient and effective technical assistance in the field of aeronautical telecommunications;

invites the developing countries

so far as possible, to give a high level of priority to and include in their national programmes of requests for technical assistance projects relating to aeronautical telecommunications and to support multinational projects in that field.

RECOMMENDATION COM5/A

Relating to the Identification and Location of Special Vessels, such as Medical Transports, by Means of Standard Maritime Radar Transponders

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

a) the desirability of implementing modern techniques in standard maritime radar transponders for the identification and location of vessels at sea;

b) Radio Regulations 3219A and N 3219A which provide that the identification and location of medical transports at sea may be effected by means of appropriate standard maritime radar transponders;

c) that transponders designed to be compatible with radiolocation radars are not necessarily compatible with radars used by the maritime and aeronautical radionavigation services; nor is their coding for identification technically defined;

d) that if maritime radar transponders of the type described in CCIR Report 775-2 and CCIR Recommendations 628 and 630, or using the technology described in CCIR Report 774-2, were to be encoded for the identification of special vessels such as medical transports, they would probably be incompatible with most radiolocation radars;

invites the CCIR

to study the question of the identification and location of special vessels such as medical transports by means of standard maritime radar transponders, taking into account also the technical and economic impact of their introduction;

invites administrations

to provide the CCIR with information on this question;

requests the Administrative Council

to include this Recommendation in the agenda of the next competent world administrative radio conference for review and, if appropriate, to amend the Radio Regulations.

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MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
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R.3

PLENARY MEETING

THIRD SERIES OF TEXTS SUBMITTED BY THE EDITORIAL COMMITTEE TO THE PLENARY MEETING

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

Source	Documents	Title
COM.7	336 (B.7)	Article 1
		Article 19
		Article 24
COM.7	403 (B.10)	Article N 38
COM.7	401 (B.9)	Article N 39
		Article N 40
		Article N 41
COM.7	336 (B.7)	Article 42A
COM.7	403 (B.10)	Article 43
COM.7	403 (B.10)	Article 44
COM.7	336 (B.7)	Article 48
		Article 49
		Article 51
		Article 52
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		Article 53
		Article 54
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COM.7	403 (B.10)	Article 64
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		Article 68

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COM.7	336 (B.7)	Appendix 12 Appendix 13 Appendix 14
COM.7	403 (B.10)	Appendix 26
COM.7	334 (B.6)	Resolution No. 38 (Rev.Mob-87)
COM.7	401 (B.9)	Resolution No. 322 (Rev.Mob-87)
COM.7	403 (B.10)	Resolution TEC-PLEN/4
COM.7	334 (B.6)	Resolution COM5/2 Resolution COM5/3 Resolution COM5/5
COM.7	403 (B.10)	Recommendation No. 316 (Rev.Mob-87)
COM.7	334 (B.6)	Recommendation No. 317 (Rev.Mob-87)

Y.C. MONGELARD
Chairman of Committee 7

Annex: 62 pages

ARTICLE 1

Terms and Definitions

NOC **Section IV. Radio Stations and Systems**

ADD 67A 4.10A Land earth station: An earth station in the fixed-satellite service or, in some cases, in the mobile-satellite service, located at a specified fixed point or within a specified area on land to provide a feeder link for the mobile-satellite service.

ADD 68A 4.11A Base earth station: An earth station in the fixed-satellite service or, in some cases, in the land mobile-satellite service, located at a specified fixed point or within a specified area on land to provide a feeder link for the land mobile-satellite service.

ADD 69A 4.12A Land mobile earth station: A mobile earth station in the land mobile-satellite service capable of surface movement within the geographical limits of a country or continent.

NOC ARTICLE 19

ARTICLE 24

NOC

Licences

MOD 2024 § 3. To facilitate the verification of licences issued to mobile stations and mobile earth stations, a translation of the text in one of the working languages of the Union shall be added, when necessary, to the text written in the national language.

MOD 2025 § 4. (1) The government which issues a licence to a mobile station or a mobile earth station shall indicate 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 2027 § 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 is to be registered, the administration of the country from which the mobile station or mobile earth 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. 2025 and shall be valid only for the duration of 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 less.

ADD

ARTICLE N 38

Frequencies for Distress and Safety Communications for the Global Maritime Distress and Safety System (GMDSS)

Section I. Availability of Frequencies

N 2967 A. 490 kHz

N 2968 In the maritime mobile service, after full implementation of the GMDSS the frequency 490 kHz will be used exclusively for the transmission by coast stations of meteorological and navigational warnings and urgent information to ships, by means of narrow-band direct-printing telegraphy (see Resolution [COM5/3]).

N 2971A B. 518 kHz

N 2971B In the maritime mobile service, the frequency 518 kHz is used exclusively for the transmission by coast stations of meteorological and navigational warnings and urgent information to ships, by means of narrow-band direct-printing telegraphy (international NAVTEX system) (see Article 14A).

N 2971C C. 2 174.5 kHz

N 2971D The frequency 2 174.5 kHz is used exclusively for distress and safety traffic using narrow-band direct-printing telegraphy.

N 2972 D. 2 182 kHz

N 2973 The carrier frequency 2 182 kHz is used for distress and safety traffic by radiotelephony, using class of emission J3E (see also Nos. 2973 and 4343).

N 2978A E. 2 187.5 kHz

N 2978B The frequency 2 187.5 kHz is used exclusively for distress and safety calls using digital selective calling in accordance with No. N 3171A (see Nos. N 3172, N 3195S and N 3233).

N 2979 F. 3 023 kHz

N 2980 The aeronautical carrier (reference) frequency 3 023 kHz may be used for intercommunication between mobile stations when they are engaged in coordinated search and rescue operations, and for communication between these stations and participating land stations, in accordance with the provisions of Appendix 27 Aer2 (see Nos. 501 and 505).

N 2981 G. 4 125 kHz

N 2982 The carrier frequency 4 125 kHz is used for distress and safety traffic by radiotelephony (see also Nos. 2982 and 4375).

N 2982A The carrier frequency 4 125 kHz may be used by aircraft stations to communicate with stations of the maritime mobile service for distress and safety purposes, including search and rescue (see No. N 2943).

N 2982B H. 4 177.5 kHz

N 2982C The frequency 4 177.5 kHz is used exclusively for distress and safety traffic using narrow-band direct-printing telegraphy.

N 2982D I. 4 207.5 kHz

N 2982E The frequency 4 207.5 kHz is used exclusively for distress and safety calls using digital selective calling in accordance with No. N 3171A (see Nos. N 3172, N 3195S and N 3233).

N 2982EA IA. 4 209.5 kHz

N 2982EB In the maritime mobile service, the frequency 4 209.5 kHz is used exclusively for NAVTEX-type transmissions by coast stations of meteorological and navigational warnings and urgent information to ships, by means of narrow-band direct-printing telegraphy (see Resolution [COM5/4]).

N 2982EC IB. 4 210 kHz

N 2982ED The frequency 4 210 kHz is used exclusively for the transmission by coast stations of maritime safety information, by narrow-band direct-printing telegraphy (see Resolution [COM5/5]).

N 2983 J. 5 680 kHz

N 2984 The aeronautical carrier (reference) frequency 5 680 kHz may be used for intercommunication between mobile stations when they are engaged in coordinated search and rescue operations, and for communication between these stations and participating land stations, in accordance with the provisions of Appendix 27 Aer2 (see also Nos. 501 and 505).

N 2985 K. 6 215 kHz

N 2986 The carrier frequency 6 215 kHz is used for distress and safety traffic by radiotelephony (see also Nos. 2986 and 4375).

N 2986A L. 6 268 kHz

N 2986B The frequency 6 268 kHz is used exclusively for distress and safety traffic using narrow-band direct-printing telegraphy.

N 2986C M. 6 312 kHz

N 2986D The frequency 6 312 kHz is used exclusively for distress and safety calls using digital selective calling in accordance with No. N 3171A (see Nos. N 3172, N 3195S and N 3233).

N 2986DA MA. 6 314 kHz

N 2986DB The frequency 6 314 kHz is used exclusively for the transmission by coast stations of maritime safety information, by narrow-band direct-printing telegraphy (see Resolution [COM5/5]).

N 2986E N. 8 291 kHz

N 2986F The carrier frequency 8 291 kHz is used exclusively for distress and safety traffic by radiotelephony.

N 2986G O. 8 376.5 kHz

N 2986H The frequency 8 376.5 kHz is used exclusively for distress and safety traffic using narrow-band direct-printing telegraphy.

N 2988A P. 8 414.5 kHz

N 2988B The frequency 8 414.5 kHz is used exclusively for distress and safety calls using digital selective calling in accordance with No. N 3171A (see Nos. N 3172, N 3195S and N 3233).

N 2988BA PA. 8 416.5 kHz

N 2988BB The frequency 8 416.5 kHz is used exclusively for the transmission by coast stations of maritime safety information, by narrow-band direct-printing telegraphy (see Resolution [COM5/5]).

N 2988C Q. 12 290 kHz

N 2988D The carrier frequency 12 290 kHz is used for distress and safety traffic by radiotelephony.

N 2988E R. 12 520 kHz

N 2988F The frequency 12 520 kHz is used exclusively for distress and safety traffic using narrow-band direct-printing telegraphy.

N 2988G S. 12 577 kHz

N 2988H The frequency 12 577 kHz is used exclusively for distress and safety calls using digital selective calling in accordance with No. N 3171A (see Nos. N 3172, N 3195S and N 3233).

N 2988HA SA. 12 579 kHz

N 2988HB The frequency 12 579 kHz is used exclusively for the transmission by coast stations of maritime safety information, by narrow-band direct-printing telegraphy (see Resolution [COM5/5]).

N 2988I T. 16 420 kHz

N 2988J The carrier frequency 16 420 kHz is used for distress and safety traffic by radiotelephony.

N 2988K U. 16 695 kHz

N 2988L The frequency 16 695 kHz is used exclusively for distress and safety traffic using narrow-band direct-printing telegraphy.

N 2988M V. 16 804.5 kHz

N 2988N The frequency 16 804.5 kHz is used exclusively for distress and safety calls using digital selective calling in accordance with No. N 3171A (see Nos. N 3172, N 3195S and N 3233).

(N 29880 not used)

N 2988P VA. 16 806.5 kHz

N 2988Q The frequency 16 806.5 kHz is used exclusively for the transmission by coast stations of maritime safety information, by narrow-band direct-printing telegraphy (see Resolution [COM5/5]).

N 2988R VB. 19 680.5 kHz

N 2988S The frequency 19 680.5 kHz is used exclusively for the transmission by coast stations of maritime safety information, by narrow-band direct-printing telegraphy (see Resolution [COM5/5]).

N 2988T VC. 22 376 kHz

N 2988U The frequency 22 376 kHz is used exclusively for the transmission by coast stations of maritime safety information, by narrow-band direct-printing telegraphy (see Resolution [COM5/5]).

N 2988Y VD. 26 100.5 kHz

N 2988W The frequency 26 100.5 kHz is used exclusively for the transmission by coast stations of maritime safety information, by narrow-band direct-printing telegraphy (see Resolution [COM5/5]).

N 2989 W. 121.5 MHz and 123.1 MHz

N 2990A The aeronautical emergency frequency 121.5 MHz[1] is used for the purposes of distress and urgency for radiotelephony by stations of the aeronautical mobile service using frequencies in the band between 117.975 MHz and 136 MHz (137 MHz after 1 January 1990). This frequency may also be used for these purposes by survival craft stations. Emergency position-indicating radiobeacons use the frequency 121.5 MHz with class of emission A3X.

N 2990B The aeronautical auxiliary frequency 123.1 MHz, which is auxiliary to the aeronautical emergency frequency 121.5 MHz, is for use by stations of the aeronautical mobile service and by other mobile and land stations engaged in coordinated search and rescue operations (see also No. 593).

N 2990A.1 Normally, aircraft stations transmit distress and urgency messages on the working frequency in use at the time of the distress or urgency incident.

N 2991 Mobile stations of the maritime mobile service may communicate with stations of the aeronautical mobile service on the aeronautical emergency frequency 121.5 MHz for the purposes of distress and urgency only, and on the aeronautical auxiliary frequency 123.1 MHz for coordinated search and rescue operations, using class A3E emissions for both frequencies (see also Nos. 501 and 593). They shall then comply with any special arrangements between the governments concerned by which the aeronautical mobile service is regulated.

N 2992 X. 156.3 MHz

N 2993 The frequency 156.3 MHz may be used for communication between ship stations and aircraft stations engaged in coordinated search and rescue operations. It may also be used by aircraft stations to communicate with ship stations for other safety purposes (see also note g) in Appendix 18).

N 2993A Y. 156.525 MHz

N 2993B The frequency 156.525 MHz is used in the maritime mobile service for distress and safety calls using digital selective calling (see also Nos. 347, 613A, N 2932, N 2933 and N 2934).

N 2993C Z. 156.650 MHz

N 2993D The frequency 156.650 MHz is used for ship-to-ship communications relating to the safety of navigation in accordance with note q) in Appendix 18.

N 2993E AA. 156.8 MHz

N 2994 The frequency 156.8 MHz is used for distress and safety traffic by radiotelephony (see also No. 2994).

N 2995A The frequency 156.8 MHz may be used by aircraft stations for safety purposes only.

N 2997 AB. 406 - 406.1 MHz Band

N 2997A The frequency band 406 - 406.1 MHz is used exclusively by satellite emergency position-indicating radiobeacons in the Earth-to-space direction (see No. 649).

N 2997B AC. 1 530 - 1 544 MHz Band

N 2997C In addition to its availability for routine non-safety purposes, the band 1 530 - 1 544 MHz is used for distress and safety purposes in the space-to-Earth direction in the maritime mobile-satellite service.

N 2998 AD. 1 544 - 1 545 MHz Band

N 2998A Use of the band 1 544 - 1 545 MHz (space-to-Earth) is limited to distress and safety operations (see No. 728), including:

N 2998B a) feeder links of satellites needed to relay the emissions of satellite emergency position-indicating radiobeacons to earth stations;

N 2998C b) narrow-band (space-to-Earth) links from space stations to mobile stations.

N 2998CA AE. 1 626.5 - 1 645.5 MHz Band

N 2998CB In addition to its availability for routine non-safety purposes, the band 1 626.5 - 1 645.5 MHz is used for distress and safety purposes in the Earth-to-space direction in the maritime mobile-satellite service.

N 2998D AF. 1 645.5 - 1 646.5 MHz Band

N 2998E Use of the band 1 645.5 - 1 646.5 MHz (Earth-to-space) is limited to distress and safety operations (see No. 728), including:

N 2998EA a) transmissions from satellite EPIRBs;

N 2998EB b) relay of distress alerts received by satellites in low polar earth orbits to geostationary satellites.

N 2998F AG. 9 200 - 9 500 MHz Band

N 2998G The band 9 200 - 9 500 MHz is used by radar transponders to facilitate search and rescue.

N 3001 AH. Survival Craft Stations

N 3002 Equipment for radiotelephony use in survival craft stations shall, if capable of operating on any frequency in the bands between 156 MHz and 174 MHz, be able to transmit and receive on 156.8 MHz and at least one other frequency in these bands.

N 3002A Equipment for transmitting locating signals from survival craft stations shall be capable of operating in the 9 200 - 9 500 MHz band.

N 3008A Equipment with digital selective calling facilities for use in survival craft shall, if capable of operating:

N 3008B a) in the bands between 1 605 kHz and 2 850 kHz, be able to transmit on 2 187.5 kHz;

N 3008C b) in the bands between 4 000 kHz and 27 500 kHz, be able to transmit on 8 414.5 kHz;

N 3008D c) in the bands between 156 MHz and 174 MHz, be able to transmit on 156.525 MHz.

Section II. Protection of Frequencies for Distress and Safety Communications for the GMDSS

N 3009 A. General

N 3010 Except as provided for in these Regulations, any emission capable of causing harmful interference to distress, alarm, urgency or safety communications on the frequencies 500 kHz, 2 174.5 kHz, 2 182 kHz, 2 187.5 kHz, 4 125 kHz, 4 177.5 kHz, 4 207.5 kHz, 6 215 kHz, 6 268 kHz, 6 312 kHz, 8 291 kHz, 8 376.5 kHz, 8 414.5 kHz, 12 290 kHz, 12 520 kHz, 12 577 kHz, 16 420 kHz, 16 695 kHz, 16 804.5 kHz, 121.5 MHz, 156.525 MHz, 156.8 MHz or the frequency bands 406 - 406.1 MHz, 1 544 - 1 545 MHz and 1 645.5 - 1 646.5 MHz (see also No. 3010) is prohibited. Any emission causing harmful interference to distress and safety communications on any of the other discrete frequencies identified in Section I of this Article and in Section I of Article 38 is prohibited.

N 3011 Test transmissions shall be kept to a minimum on the frequencies identified in Section I of this Article; they should be coordinated with a competent authority, as necessary, and, wherever practicable, be carried out on artificial antennas or with reduced power. However, testing on the distress and safety calling frequencies should be avoided, but where this is unavoidable, it should be indicated that these are test transmissions.

N 3016A Before transmitting for other than distress purposes on any of the frequencies identified in Section I for distress and safety, a station shall, where practicable, listen on the frequency concerned to make sure that no distress transmission is being sent.

N 3022 B. 2 173.5 - 2 190.5 kHz Band

N 3023 Except for transmissions authorized on the carrier frequency 2 182 kHz and on the frequencies 2 174.5 kHz, [2 177] kHz, 2 187.5 kHz and [2 189.5] kHz, all transmissions on the frequencies between 2 173.5 kHz and 2 190.5 kHz are forbidden.

N 3032 C. 156.7625 - 156.8375 MHz Band

N 3033 All emissions in the band 156.7625 - 156.8375 MHz capable of causing harmful interference to the authorized transmissions of stations of the maritime mobile service on 156.8 MHz are forbidden.

Section III. Watch on Frequencies for Distress and Safety Communications for the GMDSS

N 3037 A. Coast Stations

N 3038 Those coast stations assuming a watch-keeping responsibility in the GMDSS shall maintain an automatic digital selective calling watch on frequencies and for periods of time as indicated in the information published in the List of Coast Stations (see Resolution No. 322 (Rev.Mob-87)).

N 3038A B. Coast Earth Stations

N 3038B Those coast earth stations assuming a watch-keeping responsibility in the GMDSS shall maintain a continuous automatic watch for appropriate distress alerts relayed by space stations (see Resolution No. 322 (Rev.Mob-87)).

N 3040 C. Ship Stations

N 3041 Ship stations complying with the provisions of this Chapter shall, while at sea, maintain an automatic digital selective calling watch on the appropriate distress and safety calling frequencies in the frequency bands in which they are operating. Ship stations, where so equipped, should also maintain watch on the appropriate frequencies for the automatic reception of transmissions of meteorological and navigational warnings and other urgent information to ships. However, ship stations shall also continue to apply the appropriate watch-keeping provisions of Chapter IX (see Resolution [COM5/1]).

N 3042 Ship stations complying with the provisions of this Chapter should, where practicable, maintain a watch on the frequency 156.650 MHz for communications related to the safety of navigation.

N 3041A D. Ship Earth Stations

N 3041B Ship earth stations in use for the reception of shore-to-ship distress alert relays should maintain watch except when communicating on a working channel.

ADD

ARTICLE N 39

Operational Procedures for Distress and Safety Communicatios in the Global Maritime Distress and Safety System (GMDSS)

Section I. General

N 3169 Distress and safety communications rely on the use of terrestrial MF, HF and VHF radiocommunications and communications using satellite techniques.

N 3170 The distress alert (see No. N 3172) shall be sent through a satellite either with absolute priority in general communication channels or on exclusive distress and safety frequencies or, alternatively, on the distress and safety frequencies in the MF, HF and VHF bands using digital selective calling.

N 3170A The distress alert (see No. N 3172) shall be sent only on the authority of the person responsible for the ship, aircraft or other vehicle carrying the mobile station or the mobile earth station.

N 3171 All stations which receive a distress alert transmitted by digital selective calling shall immediately cease any transmission capable of interfering with distress traffic and shall continue watch until the call has been acknowledged.

N 3171A Digital selective calling shall be in accordance with the relevant CCIR Recommendations.

Section II. Distress Alerting

A. General

N 3172 The transmission of a distress alert indicates that a mobile unit[1] or person[1A] is in distress and requires immediate assistance. The distress alert is a digital selective call using a distress call format[2] in bands used for terrestrial radiocommunication or a distress message format, in which case it is relayed through space stations.

N 3172.1 Mobile unit: A ship, aircraft or other vehicle.

N 3172.1A In this Article, where the case is of a person in distress, the application of the procedures may require adaptation to meet the needs of the particular circumstances.

N 3172.2 The format of distress calls and distress messages shall be in accordance with the relevant CCIR Recommendations.

N 3173 The distress alert shall provide[1] the identification of the station in distress and its position.

N 3173.1 The distress alert may also contain information regarding the nature of the distress, the type of assistance required, the course and speed of the mobile unit, the time that this information was recorded and any other information which might facilitate rescue.

B. Transmission of a Distress Alert

B1. Transmission of a Distress Alert by a Ship Station or a Ship Earth Station

3174 Ship-to-shore distress alerts are used to alert Rescue Coordination Centres via coast stations or coast earth stations that a ship is in distress. These alerts are based on the use of transmissions via satellites (from a ship earth station or a satellite EPIRB) and terrestrial services (from ship stations and EPIRBs).

N 3175 Ship-to-ship distress alerts are used to alert other ships in the vicinity of the ship in distress and are based on the use of digital selective calling in the VHF and MF bands. Additionally, the HF band may be used.

B2. Transmission of a Shore-to-Ship Distress Alert Relay

N 3176 A station or a Rescue Coordination Centre which receives a distress alert shall initiate the transmission of a shore-to-ship distress alert relay addressed, as appropriate, to all ships, to a selected group of ships or to a specific ship by satellite and/or terrestrial means.

N 3176A The distress alert relay shall contain the identification of the mobile unit in distress, its position and all other information which might facilitate rescue.

B3. Transmission of a Distress Alert by a Station Not Itself in Distress

N 3177 A station in the mobile or mobile-satellite service which learns that a mobile unit is in distress shall initiate and transmit a distress alert in any of the following cases:

N 3178 a) when the mobile unit in distress is not itself in a position to transmit the distress alert;

N 3179 b) when the master or person responsible for the mobile unit not in distress or the person responsible for the land station considers that further help is necessary.

N 3180 A station transmitting a distress alert relay in accordance with Nos. N 3177, N 3178, N 3179 and N 3188 shall indicate that it is not itself in distress.

C. Receipt and Acknowledgement of Distress Alerts

C1. Procedure for Acknowledgement of Receipt of Distress Alerts

N 3181 Acknowledgement by digital selective calling of receipt of a distress alert in the terrestrial services shall be in accordance with relevant CCIR Recommendations.

N 3182 Acknowledgement through a satellite of receipt of a distress alert from a ship earth station shall be sent immediately (see No. N 3184).

N 3183 Acknowledgement by radiotelephony of receipt of a distress alert from a ship station or a ship earth station shall be given in the following form:

- the distress signal MAYDAY;
- the call sign or other identification of the station sending the distress message, spoken three times;
- the words THIS IS (or DE spoken as DELTA ECHO in case of language difficulties);
- the call sign or other identification of the station acknowledging receipt, spoken three times;
- the word RECEIVED (or RRR spoken as ROMEO ROMEO ROMEO in case of language difficulties);
- the distress signal MAYDAY.

N 3183A The acknowledgement by direct-printing telegraphy of receipt of a distress alert from a ship station shall be given in the following form:

- the distress signal MAYDAY;
- the call sign or other identification of the station sending the distress alert;
- the signal DE;
- the call sign or other identification of the station acknowledging receipt of the distress alert;
- the signal RRR;
- the distress signal MAYDAY.

N 3183B The acknowledgement by direct-printing telegraphy of receipt of a distress alert from a ship earth station shall be given by the coast earth station receiving the distress alert, by retransmitting the ship station identity of the ship transmitting the distress alert.

C2. Receipt and Acknowledgement of Receipt by a Coast Station, a Coast Earth Station or a Rescue Coordination Centre

N 3184 Coast stations and appropriate coast earth stations in receipt of distress alerts shall ensure that they are routed as soon as possible to a Rescue Coordination Centre. Receipt of a distress alert is to be acknowledged as soon as possible by a coast station, or by a Rescue Coordination Centre via a coast station or an appropriate coast earth station.

N 3185 A coast station using digital selective calling to acknowledge a distress call shall transmit the acknowledgement on the distress calling frequency on which the call was received and should address it to all ships. The acknowledgement shall include the identification of the ship whose distress call is being acknowledged.

C3. Receipt and Acknowledgement of Receipt by a Ship Station or Ship Earth Station

N 3186 Ship or ship earth stations in receipt of a distress alert shall, as soon as possible, inform the master or person responsible for the ship of the contents of the distress alert.

N 3186A In areas where reliable communications with one or more coast stations are practicable, ship stations in receipt of a distress alert should defer acknowledgement for a short interval so that receipt may be acknowledged by a coast station.

N 3187 Ship stations operating in areas where reliable communications with a coast station are not practicable which receive a distress alert from a ship station which is, beyond doubt, in their vicinity, shall, as soon as possible and if appropriately equipped, acknowledge receipt and inform a Rescue Coordination Centre through a coast station or coast earth station. (See No. N 3179.)

N 3188 However, a ship station receiving an HF distress alert shall not acknowledge it but shall observe the provisions N 3189D, N 3189E and N 3189F and shall, if the alert is not acknowledged by a coast station within 3 minutes, relay the distress alert.

N 3189 A ship station acknowledging receipt of a distress alert in accordance with No. N 3186A or No. N 3187 should:

N 3189A a) in the first instance, acknowledge receipt of the alert by using radiotelephony on the distress and safety traffic frequency in the band used for the alert;

N 3189B b) if acknowledgement by radiotelephony of the distress alert received on the MF or VHF distress alerting frequency is unsuccessful, acknowledge receipt of the distress alert by responding with a digital selective call on the appropriate frequency.

N 3189C A ship station in receipt of a shore-to-ship distress alert (see No. N 3176) should establish communication as directed and render such assistance as required and appropriate.

D. Preparations for Handling of Distress Traffic

N 3189E On receipt of a distress alert transmitted by use of digital selective calling techniques, ship stations and coast stations shall set watch on the radiotelephone distress and safety traffic frequency associated with the distress and safety calling frequency on which the distress alert was received.

N 3189F Coast stations and ship stations with narrow-band direct printing equipment shall set watch on the narrow-band direct-printing frequency associated with the distress alert signal if it indicates that narrow-band direct-printing is to be used for subsequent distress communications. If practicable, they should additionally set watch on the radiotelephone frequency associated with the distress alert frequency.

Section III. Distress Traffic

N 3189G A. General and Search and Rescue Coordinating Communications

N 3190 Distress traffic consists of all messages relating to the immediate assistance required by the ship in distress, including search and rescue communications and on-scene communications. The distress traffic shall as far as possible be on the frequencies contained in Article N 38.

N 3190A The distress signal consists of the word MAYDAY, pronounced in radiotelephony as the French expression "m'aider".

N 3191 For distress traffic by radiotelephony, when establishing communications, calls shall be prefixed by the distress signal MAYDAY.

N 3192 Error correction techniques in accordance with relevant CCIR Recommendations shall be used for distress traffic by direct-printing telegraphy. All messages shall be preceded by at least one carriage return, a line feed signal, a letter shift signal and the distress signal MAYDAY.

N 3192A Distress communications by direct-printing telegraphy should normally be established by the ship in distress and should be in the broadcast (forward error correction) mode. The ARQ mode may subsequently be used when it is advantageous to do so.

N 3193 The Rescue Coordination Centre responsible for controlling a search and rescue operation shall also coordinate the distress traffic relating to the incident or may appoint another station to do so.

N 3194 The Rescue Coordination Centre coordinating distress traffic, the unit coordinating search and rescue operations[1] or the coast station involved may impose silence on stations which interfere with that traffic. This instruction shall be addressed to all stations or to one station only, according to circumstances. In either case, the following shall be used:

a) in radiotelephony, the signal SEELONCE MAYDAY, pronounced as the French expression "silence, m'aider";

b) in narrow-band direct-printing telegraphy normally using forward-error correcting mode, the signal SILENCE MAYDAY. However, the ARQ mode may be used when it is advantageous to do so.

N 3194.1 In accordance with the International Convention on Maritime Search and Rescue, 1979, this is the on-scene commander (OSC) or the coordinator surface search (CSS).

N 3195 Until they receive the message indicating that normal working may be resumed (see No. N 3195B), all stations which are aware of the distress traffic, and which are not taking part in it, and which are not in distress are forbidden to transmit on the frequencies in which the distress traffic is taking place.

N 3195A A station of the mobile service which, while following distress traffic, is able to continue its normal service, may do so when the distress traffic is well established and on condition that it observes the provisions of No. N 3195 and that it does not interfere with distress traffic.

N 3195B When distress traffic has ceased on frequencies which have been used for distress traffic, the Rescue Coordination Centre controlling a search and rescue operation shall initiate a message for transmission on these frequencies indicating that distress traffic has finished.

N 3195C In radiotelephony the message referred to in No. N 3195B consists of:

- the distress signal MAYDAY;
- the call "Hello all stations" or CQ (spoken as CHARLIE QUEBEC) spoken three times;
- the words THIS IS (or DE spoken as DELTA ECHO in the case of language difficulties);
- the call sign or other identification of the station sending the message;
- the time of handing in of the message;
- the name and call sign of the mobile station which was in distress;
- the words SEELONCE FEENEE pronounced as the French words "silence fini".

N 3195CA In direct printing telegraphy the message referred to in No. N 3195B consists of:

- the distress signal MAYDAY;
- the call CQ;
- the signal DE;
- the call sign or other identification of the station sending the message;
- the time of handing in of the message;
- the name and call sign of the mobile station which was in distress; and
- the words SILENCE FINI.

B. On-scene communications

N 3195D to N 3195F Not allocated.

N 3195G On-scene communications are those between the mobile unit in distress and assisting mobile units, and between the mobile units and the unit coordinating search and rescue operations[1].

N 3195G.1 In accordance with the International Convention on Maritime Search and Rescue, 1979, this is the on-scene commander (OSC) or the coordinator surface search (CSS).

N 3195H Control of on-scene communications is the responsibility of the unit coordinating search and rescue operations[1]. Simplex communications shall be used so that all on-scene mobile stations may share relevant information concerning the distress incident. If direct-printing telegraphy is used, it shall be in the forward error-correcting mode.

N 3195H.1 In accordance with the International Convention on Maritime Search and Rescue, 1979, this is the on-scene commander (OSC) or the coordinator surface search (CSS).

N 3195I The preferred frequencies in radiotelephony for on-scene communications are 156.8 MHz and 2 182 kHz. The frequency 2 174.5 kHz may also be used for ship-to-ship on-scene communications using narrow-band direct-printing telegraphy in the forward error correcting mode.

N 3195J In addition to 156.8 MHz and 2 182 kHz the frequencies 3 023 kHz, 4 125 kHz, 5 680 kHz, 123.1 MHz and 156.3 MHz may be used for ship-to-aircraft on-scene communications.

N 3195K The selection or designation of on-scene frequencies is the responsibility of the unit coordinating search and rescue operations[1]. Normally, once an on-scene frequency is established, a continuous aural or teleprinter watch is maintained by all participating on-scene mobile units on the selected frequency.

N 3195K.1 In accordance with the International Convention on Maritime Search and Rescue, 1979, this is the on-scene commander (OSC) or the coordinator surface search (CSS).

C. Locating and Homing Signals

N 3195L Locating signals are radio transmissions intended to facilitate the finding of a mobile unit in distress or the location of survivors. These signals include those transmitted by searching units, and those transmitted by the mobile unit in distress, by survival craft, by float-free EPIRBs, by satellite EPIRBs and by search and rescue radar transponders to assist the searching units.

N 3195LA Homing signals are those locating signals which are transmitted by mobile units in distress, or by survival craft, for the purpose of providing searching units with a signal that can be used to determine the bearing to the transmitting stations.

N 3195M Locating signals may be transmitted in the following frequency bands:

a) 117.975 - 136 MHz;

b) 156 - 174 MHz;

c) 406 - 406.1 MHz; and

d) 9 200 - 9 500 MHz.

N 3195N Locating signals shall be in accordance with the relevant CCIR Recommendations.

ADD

ARTICLE N 40

Operational Procedures for Urgency and Safety Communications in the Global Maritime Distress and Safety System (GMDSS)

Section I. General

N 3195NA Urgency and safety communications include:

a) navigational and meteorological warnings and urgent information;

b) ship-to-ship safety of navigation communications;

c) ship reporting communications;

d) support communications for search and rescue operations;

e) other urgency and safety messages; and

f) communications relating to the navigation, movements and needs of ships and weather observation messages destined for an official meteorological service.

Section II. Urgency communications

N 3195P In a terrestrial system the announcement of the urgency message shall be made on one or more of the distress and safety calling frequencies specified in Section I of Article N 38 using digital selective calling and the urgency call format. A separate announcement need not be made if the urgency message is to be transmitted through the maritime mobile-satellite service.

N 3195Q The urgency signal and message shall be transmitted on one or more of the distress and safety traffic frequencies specified in Section I of Article N 38, or via the maritime mobile-satellite service or on other frequencies used for this purpose.

N 3195R The urgency signal consists of the words PAN PAN. In radiotelephony each word of the group shall be pronounced as the French word "panne".

N 3195S The urgency call format and the urgency signal indicate that the calling station has a very urgent message to transmit concerning the safety of a mobile unit or a person.

N 3195T In radiotelephony, the urgency message shall be preceded by the urgency signal (see N 3195R), repeated three times, and the identification of the transmitting station.

N 3195U In narrow-band direct-printing, the urgency message shall be preceded by the urgency signal (see N 3195R) and the identification of the transmitting station.

N 3195X The urgency call format or urgency signal shall be sent only on the authority of the master or the person responsible for the mobile unit carrying the mobile station or mobile earth station.

N 3195XA The urgency call format or the urgency signal may be transmitted by a land station or a coast earth station with the approval of the responsible authority.

N 3195XB When an urgency message which calls for action by the stations receiving the message has been transmitted, the station responsible for its transmission shall cancel it as soon as it knows that action is no longer necessary.

N 3195XC Error correction techniques in accordance with relevant CCIR Recommendations shall be used for urgency messages by direct-printing telegraphy. All messages shall be preceded by at least one carriage return, a line feed signal, a letter shift signal and the urgency signal PAN PAN.

N 3195XD Urgency communications by direct-printing telegraphy should normally be established in the broadcast (forward error correction) mode. The ARQ mode may subsequently be used when it is advantageous to do so.

Section III. Medical Transports

N 3209 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 or of neutral States and of other States not parties to an armed conflict, when these ships, craft and aircraft assist the wounded, the sick and the shipwrecked.

N 3210 For the purpose of announcing and identifying medical transports which are protected under the above-mentioned Conventions, the procedure of Section II of this Article is used. The urgency signal shall be followed by the addition of the single word MEDICAL in narrow-band direct-printing and by the addition of the single word MAY-DEE-CAL pronounced as in French "médical", in radiotelephony.

N 3212 The use of the signals described in No. N 3210 indicates that the message which follows concerns a protected medical transport. The message shall convey the following data:

N 3213 a) call sign or other recognized means of identification of the medical transport;

N 3214 b) position of the medical transport;

N 3215 c) number and type of vehicles in the medical transport;

N 3216 d) intended route;

N 3217 e) estimated time en route and of departure and arrival, as appropriate;

N 3218 f) any other information, such as flight altitude, radio frequencies guarded, languages used and secondary surveillance radar modes and codes.

N 3219A The identification and location of medical transports at sea may be conveyed by means of appropriate standard maritime radar transponders (see Recommendation [5/A]).

N 3219B The identification and location of aircraft medical transports may be conveyed by the use of the secondary surveillance radar (SSR) system specified in Annex 10 to the Convention on International Civil Aviation.

N 3220 The use of radiocommunications for announcing and identifying medical transports is optional; however, if they are used, the provisions of these Regulations and particularly of this Section and of Articles N 37 and N 38 shall apply.

Section IV. Safety Communications

N 3195Z In a terrestrial system the announcement of the safety message shall be made on one or more of the distress and safety calling frequencies specified in Section I of Article N 38 using digital selective calling techniques. A separate announcement need not be made if the message is to be transmitted through the maritime mobile-satellite service.

N 3195AC The safety signal and message shall normally be transmitted on one or more of the distress and safety traffic frequencies specified in Section I of Article N 38, or via the maritime mobile-satellite service or on other frequencies used for this purpose.

N 3195AA The safety signal consists of the word SECURITE in radiotelephony; it shall be pronounced as in French.

N 3195AB The safety call format or the safety signal indicates that the calling station has an important navigational or meteorological warning to transmit.

N 3195AD In radiotelephony, the safety message shall be preceded by the safety signal (see No. N 3195AA), repeated three times, and the identification of the transmitting station.

N 3195AE In narrow-band direct-printing, the safety message shall be preceded by the safety signal (see No. N 3195AA), and the identification of the transmitting station.

N 3195AEA Error correction techniques in accordance with relevant CCIR Recommendations shall be used for safety messages by direct-printing telegraphy. All messages shall be preceded by at least one carriage return, a line feed signal, a letter shift signal and the safety signal SECURITE.

N 3195AEB Safety communications by direct-printing telegraphy should normally be established in the broadcast (forward error correction) mode. The ARQ mode may subsequently be used when it is advantageous to do so.

Section V. Transmission of Maritime Safety Information

A. General

N 3195AFC The operational details of the stations transmitting maritime safety information in accordance with Nos. N 3195AF, N 3195AFB, N 3195AFA, N 3195AFE and N 3195AFG shall be indicated in the List of Radiodetermination and Special Service Stations (see Nos. 3323, 3326 and 3334).

N 3195AFD The mode and format of the transmissions mentioned in Nos. N 3195AF, N 3195AFB, N 3195AFA and N 3195AFE shall be in accordance with the relevant CCIR Recommendations.

B. International NAVTEX System

N 3195AF Maritime safety information shall be transmitted by means of narrow-band direct-printing telegraphy with forward error correction using the frequency 518 kHz in accordance with the international NAVTEX system (see Nos. 1632, N 2971A and N 2971B).

C. 490 kHz and 4 209.5 kHz

N 3195AFB The frequency 490 kHz may be used, after full implementation of the GMDSS, for the transmission of maritime safety information by means of narrow-band direct-printing telegraphy with forward error correction. (See No. N 2968 and Resolution [COM5/3].)

N 3195AFA The frequency 4 209.5 kHz is used exclusively for NAVTEX-type transmission by means of narrow-band direct-printing telegraphy with forward error correction (see Resolution [COM5/4]).

D. High Seas Maritime Safety Information

N 3195AFE Maritime safety information is transmitted by means of narrow-band direct-printing telegraphy with forward error correction using the frequencies 4 210, 6 314, 8 416.5, 12 579, 16 806.5, 19 680.5, 22 376 and 26 100.5 kHz (see Resolution [COM5/5]).

E. Maritime Safety Information via Satellite

N 3195AFG Maritime safety information may be transmitted via satellite in the maritime mobile-satellite service using the band 1 530 - 1 545 MHz (see Nos. 726, N 2998B and N 2998C).

Section VI. Intership Navigation Safety Communications

N 3195AI Intership navigation safety communications are those VHF radiotelephone communications conducted between ships for the purpose of contributing to the safe movement of ships.

N 3195AJ The frequency 156.650 MHz is used for intership navigation safety communications (see also No. N 2993D and note q) in Appendix 18).

Section VII. Use of Other Frequencies for Distress and Safety

N 3195AL Radiocommunications for distress and safety purposes may be conducted on any appropriate communications frequency, including those used for public correspondence. In the maritime mobile-satellite service, frequencies in the bands 1 530 to 1 544 MHz and 1 626.5 to 1 645.5 MHz are used for this function as well as for distress alerting purposes (see No. N 3170).

ARTICLE N 41

Alerting Signals

Section I. Emergency Position-Indicating Radiobeacon (EPIRB) and Satellite EPIRB Signals

N 3195AM The emergency position-indicating radiobeacon signal transmitted on 156.525 MHz and satellite EPIRB signals in the band 406 - 406.1 MHz or 1 645.5 - 1 646.5 MHz shall be in accordance with relevant CCIR Recommendations.

Section II. Digital Selective Calling

N 3195AO The characteristics of the "distress call" (see No. N 3172) in the digital selective calling system shall be in accordance with relevant CCIR Recommendations.

CHAPTER X

NOC

Aeronautical Mobile Service and Aeronautical Mobile-Satellite Service

ARTICLE 42A

NOC

Introduction

MOD 3362 § 1. With the exception of Articles **43, 44, 46, 49, 50** and No. **3652**, the other provisions of this Chapter may be governed by special arrangements concluded pursuant to Article 31 of the International Telecommunication Convention, Nairobi, 1982, or by intergovernmental agreements[1] provided their implementation does not cause harmful interference to the radio services of other countries.

SUP 3363

NOC 3362.1 Mob-83 [1]For example, the International Civil Aviation Organization (ICAO) has agreed upon standards and recommended practices adapted to the needs of aircraft operation which have been proven in practice and are well established in current use.

SUP * Note by the General Secretariat.

ARTICLE 43

NOC **Authority of the Person Responsible for the Mobile Stations in the Aeronautical Mobile Service and in the Aeronautical Mobile-Satellite Service**

NOC 3364 § 1. The service of a mobile station is placed under the supreme authority of the person responsible for the aircraft or other vehicle carrying the mobile station.

NOC 3365 § 2. The person holding this authority shall require that each operator comply with these Regulations and that the mobile station for which the operator is responsible is used, at all times, in accordance with these Regulations.

MOD 3366 § 3. Except as otherwise provided for in these Regulations, the person responsible, as well as all the persons who may have knowledge of any information whatever obtained by means of the radiocommunication service, are placed under the obligation of observing and ensuring the secrecy of correspondence.

ADD 3367 § 4. The provisions of Nos. 3364, 3365 and 3366 shall also apply to personnel of aircraft earth stations.

(MOD) 3368 to 3391 Not allocated.

ARTICLE 44

NOC **Operators' Certificates for Aircraft Stations and for Aircraft Earth Stations**

NOC **Section I. General Provisions**

SUP 3392

MOD 3393 (2) The service of every aircraft station and every aircraft earth station shall be controlled by an operator holding a certificate issued or recognized by the government to which the station is subject. Provided the station is so controlled, other persons besides the holder of the certificate may use the radiotelephone equipment.

MOD 3393A (2A) In order to meet special needs, special agreements between administrations may fix the conditions to be fulfilled in order to obtain a radiotelephone operator's certificate intended to be used in aircraft radiotelephone stations and aircraft earth stations complying with certain technical conditions and certain operating conditions. These agreements, if made, shall be on the condition that harmful interference to international services shall not result therefrom. These conditions and agreements shall be mentioned in the certificates issued to such operators.

MOD 3394 The service of automatic communication devices[1] installed in an aircraft station or aircraft earth station shall be controlled by an operator holding a certificate issued or recognized by the government to which the station is subject. Provided the devices are so controlled, they may be used by other persons. If such devices require for their basic function the use of Morse code signals specified in the Instructions for the Operation of the International Public Telegram Service, the service shall be performed by an operator holding a radiotelegraph operator's certificate. However, this latter requirement does not apply to automatic devices which may use Morse code signals solely for identification purposes.

NOC 3394.1

MOD 3395 Nevertheless, in the service of aircraft stations and aircraft earth stations operating radiotelephony solely on frequencies above 30 MHz, each government shall decide for itself whether a certificate is necessary and, if so, shall define the conditions for obtaining it.

MOD 3396 The provisions of No. 3395 shall not, however, apply to any aircraft station or aircraft earth station working on frequencies assigned for international use.

NOC 3397-3402

NOC **Section II. Classes and Categories of Certificates**

MOD 3403 (1) There are two classes of certificates for radiotelegraph operators, as well as a special certificate.

SUP 3403.1

MOD 3404 (2) There are two categories of radiotelephone operators' certificates, general and restricted.

SUP 3404.1

MOD 3405 The holder of a first- or second-class radiotelegraph operator's certificate may carry out the radiotelegraph or radiotelephone service of any aircraft station or aircraft earth station.

MOD 3406 (2) The holder of a radiotelephone operator's general certificate may carry out the radiotelephone service of any aircraft station or of any aircraft earth station.

SUP 3407-3409

MOD 3410 (3) The holder of a radiotelephone operator's restricted certificate may carry out the radiotelephone service of any aircraft station or aircraft earth station operating on frequencies allocated exclusively to the aeronautical mobile service or the aeronautical mobile-satellite service, provided that the operation of the transmitter requires only the use of simple external switching devices.

MOD 3411 (4) The radiotelephone service of aircraft stations or aircraft earth stations for which only a restricted radiotelephone operator's certificate is required may be carried out by an operator holding a radiotelegraph operator's special certificate.

NOC 3412

NOC **Section III. Conditions for the Issue of Operators' Certificates**

NOC 3413-3419

MOD 3420

a) knowledge both of the general principles and theory of radio;

MOD 3421

b) theoretical and practical knowledge of the operation, maintenance and adjustment of radiotelegraph and radiotelephone apparatus;

SUP 3422

MOD 3423

c) ability to send correctly by hand and receive correctly by ear, in the Morse code, code groups (mixed letters, figures and punctuation marks)[1] at a speed of twenty groups a minute, and a plain language text at a speed of twenty-five words[2] a minute. The duration of each test of sending and of receiving shall be, as a rule, five minutes;

MOD 3424

d) ability to send correctly and to receive correctly by radiotelephone in one of the working languages of the Union;

MOD 3425

e) detailed knowledge of the Regulations applying to radiocommunications, knowledge of the provisions of the Convention for the Safety of Life at Sea which relate to radio, and, in the case of air navigation, knowledge of the special provisions governing the aeronautical fixed, mobile and radionavigation services. In the latter case, the certificate states that the holder has successfully passed the tests relating to these special provisions;

ADD 3423.1

[1]Each code group shall comprise five characters, each figure or punctuation counting as two characters.

ADD 3423.2

[2]The average word of the text in plain language shall contain five characters.

SUP 3426-3427

NOC 3428-3429

MOD 3430

a) elementary theoretical and practical knowledge of basic radiocommunications;

MOD 3431

b) elementary theoretical and practical knowledge of the operation, maintenance and adjustment of radiotelegraph and radiotelephone apparatus;

SUP 3432

MOD 3433

c) ability to send correctly by hand and to receive correctly by ear, in the Morse code, code groups (mixed letters, figures and punctuation marks) at a speed of sixteen groups a minute, and a plain language text at a speed of twenty words a minute. The duration of each test of sending and of receiving shall, as a rule, be five minutes (the provisions of Nos. ADD 3423.1 and ADD 3423.2 also apply);

MOD 3434

d) ability to send correctly and to receive correctly by radiotelephone, in one of the working languages of the Union[1];

MOD 3435

e) knowledge of the Regulations applying to radiocommunications, knowledge of the provisions of the Convention for the Safety of Life at Sea which relate to radio, and, in the case of air navigation, knowledge of the special provisions governing the aeronautical fixed, mobile, and radionavigation services. In the latter case, the certificate states that the holder has successfully passed the tests relating to these special provisions.

ADD 3434.1 [1]This provision need not apply in the case provided for in No. 3412.

SUP 3436-3437

NOC 3438-3439

MOD 3440 a) knowledge of the practical operation and adjustment of radiotelegraph and radiotelephone apparatus[1];

MOD 3441 b) ability to send correctly by hand and receive correctly by ear, in the Morse code, code groups (mixed letters, figures and punctuation marks) at a speed of sixteen groups a minute, and a plain language text at a speed of twenty words a minute (the provisions of Nos. ADD 3423.1 and ADD 3423.2 also apply);

ADD 3441A c) ability to send correctly and to receive correctly by radiotelephone in one of the working languages of the Union[1];

MOD 3442 d) knowledge of the Regulations applying to radiotelegraph communications and specifically of that part of those Regulations relating to safety of life at sea.

MOD 3443 (2) Each administration concerned may fix the other conditions for obtaining this certificate.

NOC 3444-3447

MOD 3448 c) ability to send correctly and to receive correctly by radiotelephone in one of the working languages of the Union;

NOC 3449-3451

MOD 3452 b) ability to send correctly and to receive correctly by radiotelephone in one of the working languages of the Union;

NOC 3453

ADD 3440.1
ADD 3441A.1 [1]This provision need not apply in the case provided for in No. 3412.

MOD 3454 For aircraft radiotelephone stations and aircraft earth stations operating on frequencies allocated exclusively to the aeronautical mobile service or the aeronautical mobile-satellite service, each administration may itself fix the conditions for obtaining a radiotelephone operator's restricted certificate, provided that the operation of the transmitter requires only the use of simple external switching devices. The administration shall ensure that the operator has an adequate knowledge of radiotelephone operation and procedure particularly as far as distress, urgency and safety are concerned. This in no way contravenes the provisions of No. 3393A.

NOC 3455-3456

ARTICLE 48

MOD **Stations on Board Aircraft Communicating with Stations in the Maritime Mobile Service and in the Maritime Mobile-Satellite Service**

MOD 3571 Stations on board aircraft may communicate, for purposes of distress, and for public correspondence[1], with stations of the maritime mobile or maritime mobile-satellite services. For these purposes they shall conform to the relevant provisions of Chapter IX or N IX and Chapter XI, Articles 59 (Section III), 61, 62, 63, 65 and 66 (see also Nos. 962, 963, and 3633).

MOD 3571.1 [1]Stations on board aircraft may communicate for public correspondence purposes as long as watch is maintained on the frequencies provided for safety and regularity of flight.

ARTICLE 49

MOD **Conditions to be Observed by Mobile Stations in the Aeronautical Mobile Service and by Mobile Earth Stations in the Aeronautical Mobile-Satellite Service**

ADD **Section I. Aeronautical Mobile Service**

NOC 3597-3600

SUP 3601-3602

NOC 3603-3604

ADD **Section II. Aeronautical Mobile-Satellite Service**

ADD 3605 The provisions of Nos. 3597 to 3604 are also applicable to mobile earth stations in the aeronautical mobile-satellite service.

NOC

ARTICLE 51

NOC

Order of Priority of Communications in the Aeronautical Mobile Service and in the Aeronautical Mobile-Satellite Service

MOD 3651 § 1. The order of priority for communications[1] in the aeronautical mobile service and the aeronautical mobile-satellite service shall be as follows, except where impracticable in a fully automated system in which, nevertheless, Category 1 shall receive priority;

NOC 1. Distress calls, distress messages and distress traffic.

NOC 2. Communications preceded by the urgency signal.

MOD 3. Communications relating to radio direction-finding.

MOD 4. Flight safety messages.

MOD 5. Meteorological messages.

MOD 6. Flight regularity messages.

MOD 7. Messages relating to the application of the United Nations Charter.

MOD 8. Government messages for which priority has been expressly requested.

NOC 9. Service communications relating to the working of the telecommunication service or to communications previously exchanged.

MOD 10. Other aeronautical communications.

NOC 3652

NOC 3651.1

SUP 3651.2

SUP

ARTICLE 52

ADD

ARTICLE N 52

General Communication Procedure in the Aeronautical Mobile Service

Section I. General Provisions

3653 As a general rule, it rests with the aircraft station to establish communication with the aeronautical station. For this purpose, the aircraft station may call the aeronautical station only when it comes within the designated operational coverage[1] area of the latter.

3654 An aeronautical station having traffic for an aircraft station may call this station if it has reason to believe that the aircraft station is keeping watch and is within the designated operational coverage area (see No. 3653.1) of the aeronautical station.

3655 When an aeronautical station receives calls in close succession from several aircraft stations, it decides on the order in which these stations may transmit their traffic. Its decision shall be based on the priority in Article 51.

3656 If an aeronautical station finds it necessary to intervene in communications between aircraft stations, these stations shall comply with the instructions given by the aeronautical station.

3657 Before transmitting, a station shall take precautions to ensure that it will not interfere with a communication already in progress and that the station called is not in communication with another station.

3658 When a radiotelephone call has been made to an aeronautical station, but no answer has been received, a period of at least ten seconds should elapse before a subsequent call is made to that station.

3653.1 [1]Designated operational coverage is that volume of airspace needed operationally in order to provide a particular service and within which the facility is afforded frequency protection.

ADD 3659 When a station called fails to reply to a Morse radiotelegraph call sent three times at two-minutes intervals, the call may not be repeated until after an interval of three minutes.

3660 Aircraft stations shall not radiate carrier waves between calls.

Section II. Morse Radiotelegraph Procedure

3661 A. General

3662 The use of Morse code signals for radiotelegraphy shall be obligatory in the aeronautical mobile service. However, for radiocommunication of a special character, the use of other signals is not precluded.

3663 In order to facilitate radiocommunications, stations shall use the service abbreviations given in Appendix 13.

3663A When it is necessary for a station in the aeronautical mobile service to send test signals, either for the adjustment of a transmitter before making a call or for the adjustment of a receiver, such signals shall not be continued for more than ten seconds and shall consist of a series of VVV followed by the call sign of the station emitting the test signals.

3664 B. Method of Calling

3665 The call consists of:

- the call sign of the station called, not more than three times;
- the word DE;
- the call sign of the calling station, not more than three times;
- the letter K.

3666 The call "to all stations" CQ is used before the transmission of information of any kind intended to be read or used by anyone who may intercept it.

ADD 3667 C. Form of Reply to Calls

3668 The reply to calls consists of:

- the call sign of the calling station, not more than three times;
- the word DE;
- the call sign of the station called, once only;
- the letter K.

3669 D. Difficulties in Reception

3670 If the station called is unable to accept traffic immediately it shall reply to the call as indicated in Nos. 3667 and 3668 but it shall replace the letter K by the signal ····· (wait) followed by a number indicating in minutes the probable duration of the waiting time.

3671 E. Signal for the End of Transmission

3672 The transmission of a radiotelegram shall be terminated by the signal ·-·-· (end of transmission) followed by the letter K.

3673 F. Acknowledgement of Receipt

3674 The receipt of a radiotelegram shall be acknowledged by the receiving station in the following manner:

- the call sign of the transmitting station;
- the word DE;
- the call sign of the receiving station;
- the abbreviation QSL.

3675 G. End of Work

3676 The end of work between stations shall be indicated by each of them by means of the signal ·····- (end of work).

SUP ARTICLE 53

NOC ARTICLE 54

NOC ARTICLE 57

PINK PAGES

ARTICLE 64

NOC

General Procedures for Narrow-Band Direct-Printing Telegraphy in the Maritime Mobile Service[1]

NOC

Section I. General

NOC 4841-4842

ADD 4842A § 2A. Before transmitting, a station shall take precautions to ensure that its emissions will not interfere with transmissions already in progress; if such interference is likely, the station shall await an appropriate break in the communications in progress. This obligation does not apply to stations where unattended operation is possible through automatic means (see No. 3863).

SUP 4843

NOC 4844-4847

NOC

Section II. Procedures for Manual Operation

NOC 4848

A. General

NOC 4849

NOC A.64

NOC 4850

B. Ship to Coast Station

MOD 4851 § 7. (1) The operator of the ship station establishes communication with the coast station by A1A Morse telegraphy, telephony or by other means using normal calling procedures. The operator then requests direct-printing communication, exchanges information regarding the frequencies to be used and, when applicable, gives the ship station the direct-printing selective call number assigned in accordance with Appendix 38, or the ship station identity assigned in accordance with Appendix 43.

NOC 4852

MOD 4853 § 8. (1) Alternatively the operator of the ship station, using the direct-printing equipment, calls the coast station on a predetermined coast station receive frequency using the identification of the coast station assigned in accordance with Appendix 38, or the coast station identity assigned in accordance with Appendix 43.

NOC 4854

NOC 4855 C. Coast Station to Ship

NOC 4856-4857

NOC 4858 D. Intership

MOD 4859 § 10. (1) The operator of the calling ship station establishes communication with the called ship station by A1A Morse telegraphy, telephony, or by other means, using normal calling procedures. The operator then requests direct-printing communication, exchanges information regarding the frequencies to be used and, when applicable, gives the direct-printing selective call number of the calling ship station assigned in accordance with Appendix 38, or the ship station identity assigned in accordance with Appendix 43.

NOC 4860

NOC **Section III. Procedures for Automatic Operation**

NOC 4861 A. Ship to Coast Station

MOD 4862 § 11. (1) The ship station calls the coast station on a predetermined coast station receive frequency, using the direct-printing equipment and the identification signal of the coast station assigned in accordance with Appendix 38, or the coast station identity assigned in accordance with Appendix 43.

NOC 4863

NOC 4864 B. Coast Station to Ship

MOD 4865 § 12. (1) The coast station calls the ship station on a predetermined coast station transmit frequency, using the direct-printing equipment and the ship station direct-printing selective call number assigned in accordance with Appendix 38, or the ship station identity assigned in accordance with Appendix 43.

NOC 4866-4868

NOC **Section IV. Message Format**

NOC 4869-4872

MOD 4873 § 15. In the ship-to-shore direction, the message format should conform to the operational procedures specified in the relevant CCIR Recommendations.

SUP 4874-4875

NOC **Section V. Procedures for Operation in the Forward-Error-Correcting Mode**

NOC 4876-4881

NOC 4882 to 4902 NOT allocated.

PINK PAGES

CHAPTER XII

MOD

Land Mobile Service and Land Mobile-Satellite Service

ARTICLE 67

MOD

Conditions to Be Observed by Stations in the Land Mobile and Land Mobile-Satellite Services

MOD

Section I. Land Mobile Stations in the Land Mobile Service

NOC 5128-5131

SUP 5132-5133

ADD

Section II. Land Mobile Earth Stations in the Land Mobile-Satellite Service

ADD 5134 Land mobile earth stations in the land mobile-satellite service shall be established so as to conform to the provisions of Chapter III as regards frequencies and classes of emission.

ADD 5135 The frequencies of emissions of these earth stations shall be checked as often as practicable by the inspection service to which these stations are subject.

ADD 5136 The energy radiated by receiving apparatus shall be reduced to the lowest practicable value and shall not cause harmful interference to other stations.

ADD 5137 Administrations shall take all practicable steps necessary to ensure that the operation of any electrical apparatus installed in these earth stations does not cause harmful interference to the essential radio services of stations which are operating in accordance with the provisions of these Regulations.

ADD 5138 In exceptional cases land mobile earth stations in the land mobile-satellite service may communicate with stations in the maritime mobile-satellite and aeronautical mobile-satellite services. Such operations shall comply with the relevant provisions of the Radio Regulations relating to those services and shall be subject to agreement among the administrations concerned, taking due account of No. **953**.

NOC

ARTICLE 68

NOC APPENDIX 12

NOC APPENDIX 13
Mob-83

(MOD) APPENDIX 14
Mob-87

NOC **Miscellaneous Abbreviations and Signals to be Used for Radiocommunications in the Maritime Mobile Service**

NOC **Section I. Q Code**

NOC **Section II. Miscellaneous Abbreviations and Signals**

ADD DSC Digital selective calling

ADD MSI Maritime safety information

ADD NBDP Narrow-band direct-printing telegraphy

ADD RCC Rescue coordination centre

ADD SAR Search and Rescue

APPENDIX 26

PART IV

(MOD)

Plan for the Allotment of Frequencies for the Aeronautical Mobile (OR) Service in the Bands between 2 505 and 23 350 kHz

1. (a) Alphabetical list of country designations

ADD ALG Algeria (People's Democratic Republic of)

MOD F France (replacing France and Algeria)

MOD D Germany (Federal Republic of)

ADD DDR German Democratic Republic

(b) Other abbreviations

SUP (81) means "East Germany"

2. (OR) Frequency Plan

MOD ALG Replacing F (Algeria) and F (Oran)

MOD F Replacing F (except Algeria)

ADD ALG On channels allotted to F, except for:

5 710.5 kHz
11 218.5 kHz
13 235.5 kHz
15 076.0 kHz

MOD For the following frequencies, replace "D(81)" with "DDR":

3 102 kHz
3 109 kHz
3 116 kHz
4 745.5 kHz
6 685 kHz
3 932 kHz
3 939 kHz

MOD CHN replacing CHN (7)
MOD MRC replacing MRC (6)

(MOD) RESOLUTION No. 38 (Rev.Mob-87)

NOC **Relating to the Reassignment of Frequencies of Stations in the Fixed and Mobile Services in the Bands Allocated to the Radiolocation and Amateur Services in Region 1**

(1 625 - 1 635 kHz, 1 800 - 1 810 kHz,
1 810 - 1 850 kHz and 2 160 - 2 170 kHz)

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

(MOD) that the World Administrative Radio Conference, Geneva, 1979, adopted modifications to the allocation of the frequency bands between 1 606.5 kHz and 2 850 kHz;

noting

(MOD) a) that the implementation of the revised Table of Frequency Allocations presents difficulties, in particular for stations in the maritime mobile service in Region 1 in the bands 1 625 - 1 635 kHz, 1 800 - 1 810 kHz and 2 160 - 2 170 kHz made available for radiolocation services and in the band 1 810 - 1 850 kHz made available to the amateur service;

MOD b) that replacement frequencies for stations of the maritime mobile service have been provided in the frequency assignment plan contained in the Final Acts of the Regional Administrative Radio Conference for the Planning of the MF Maritime Mobile and Aeronautical Radionavigation Services (Region 1), Geneva, 1985, together with the arrangements for their implementation;

resolves

MOD 1. that in Region 1, except for the countries and frequency bands mentioned[1] in Nos. 485, 490, 491, 493 and 499 of the Radio Regulations, on the date of implementation (1 April 1992) of the frequency assignment plan for the maritime mobile service contained in the Final Acts of the Regional Administrative Radio Conference for the Planning of the MF Maritime Mobile and Aeronautical Radionavigation Services (Region 1), Geneva, 1985, all operations of stations of the fixed and mobile services shall be terminated in the bands 1 625 - 1 635 kHz, 1 800 - 1 810 kHz, 1 810 - 1 850 kHz and 2 160 - 2 170 kHz;

(MOD) 2. that administrations having assignments to stations of the fixed, land mobile or aeronautical mobile (OR) services in the bands concerned shall choose and notify to the IFRB appropriate replacement assignments; and where the finding of the Board is favourable with respect to Nos. 1240 and 1241 of the Radio Regulations, each such replacement assignment shall have the same date and status as that which it has replaced, so far as the assignments of the countries in Region 1 are concerned;

(MOD) 3. that the protection afforded to stations of the fixed and mobile services by Nos. 486 and 492 of the Radio Regulations shall continue to apply until such time as satisfactory replacement assignments have been found and implemented in accordance with this Resolution;

MOD 4. that, after the date of implementation (1 April 1992) of the frequency assignment plan for the maritime mobile service contained in the Final Acts of the Regional Administrative Radio Conference for the Planning of the MF Maritime Mobile and Aeronautical Radionavigation Services (Region 1), Geneva, 1985, the continued use of frequency assignments that have not been transferred in accordance with resolves 3 shall be only on the basis of No. 342 of the Radio Regulations.

(MOD) [1]No. 485, bands 1 625 - 1 635 kHz, 1 800 - 1 810 kHz and 2 160 - 2 170 kHz;
No. 490, band 1 810 - 1 830 kHz;
No. 491, band 1 810 - 1 830 kHz;
No. 493, band 1 810 - 1 850 kHz;
No. 499, band 2 160 - 2 170 kHz.

PINK PAGES

MOD

RESOLUTION No. 322 (Rev.Mob-87)

Relating to Coast Stations and Coast Earth Stations Assuming Watch-Keeping Responsibilities on Certain Frequencies in Connection with the Implementation of Distress and Safety Communications for the Global Maritime Distress and Safety System (GMDSS)

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

a) that the International Maritime Organization (IMO) is implementing a Global Maritime Distress and Safety System (GMDSS);

b) that this Conference has introduced in the Radio Regulations provisions for distress and safety communications for the GMDSS to facilitate the progressive implementation of the new system while maintaining the provisions for the continuation of the existing system during the transitional period (see Resolution [COM5/1]);

c) that the new system necessitates the use or exclusive use of a number of additional frequencies for maritime distress and safety purposes;

d) that the extra watch-keeping responsibilities associated with these additional frequencies may prove to be too onerous to be assumed, for MF, HF and VHF frequencies, by all coast stations open to public correspondence and, for space systems, by all coast earth stations;

recognizing

a) that the successful implementation of the new system requires an adequate geographical distribution of coast earth stations and coast stations keeping watch on the appropriate frequencies and the continuation of watch-keeping on the present frequencies;

b) that the IMO is the organization best qualified to coordinate, in cooperation with administrations, a plan of coast earth stations and coast stations which administrations intend to use for watch-keeping on GMDSS frequencies;

resolves to invite

1. administrations to inform the Secretary-General and the IMO of the arrangements they intend to make for watch-keeping on GMDSS distress and safety calling frequencies;

2. IMO to ensure that the services provided by administrations are sufficient for world-wide HF DSC coverage;

instructs the Secretary-General

1. to indicate in the List of Coast Stations all coast and coast earth stations designated by administrations for providing distress and safety watch-keeping services for the GMDSS;

2. to communicate this Resolution to the IMO.

RESOLUTION GT-TEC PLEN/4

Relating to the Compatibility of Equipment Used in the Mobile-Satellite Service

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

a) that only a limited number of frequency bands is allocated to the mobile-satellite service;

b) that the CCIR is studying the preferred technical and operating characteristics for a mobile-satellite system which would have earth stations on ships, land and/or aircraft, all operating within the same system;

c) that there is a need to use efficiently the bands allocated to the mobile-satellite service;

d) that the maritime mobile-satellite service and the aeronautical mobile-satellite service have special requirements with regard to safety;

resolves

that the CCIR should continue to study, as a matter of urgency, terminal characteristics which are common to the extent practicable, in order to ensure compatibility between the land, maritime, and aeronautical mobile-satellite services;

urges administrations

to encourage the development and manufacture of compatible mobile-satellite user equipment.

RESOLUTION COM5/2

Relating to the Study and Implementation of a Global Land and Maritime Distress and Safety System

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

a) that the basic characteristics of the Global Maritime Distress and Safety System (GMDSS) have been developed by the International Maritime Organization (IMO) to meet the specific needs of the maritime mobile and maritime mobile-satellite services;

b) that stations of the land mobile and land mobile-satellite services may use the frequencies and procedures of the GMDSS in sparsely populated, uninhabited or remote areas for distress and safety purposes;

c) that further development of the communication facilities in the GMDSS would enable the system also to meet the specific needs of the land mobile and land mobile-satellite services for distress and safety,

noting

that the CCIR made a considerable contribution to the development of the GMDSS by carrying out appropriate technical and operational studies,

noting further

that the World Administrative Radio Conference for the Mobile Services, Geneva, 1983, decided that the stations of the land mobile service in sparsely populated and remote areas may be authorized to use the frequencies of the then Future Global Maritime Distress and Safety System on condition that no harmful interference was caused to other distress and safety communications,

recognizing

a) that this Conference has adopted provisions to facilitate implementation of the GMDSS;

b) that administrative, technical and operational studies concerning the land mobile and land mobile-satellite services need to be conducted before detailed provisions relating to the distress and safety requirements of these services can be incorporated into the Radio Regulations,

resolves

that a future competent conference be invited to include, as necessary, provisions in Chapter N IX to ensure adequate distress and safety communications in sparsely populated, uninhabited or remote areas,

invites the CCIR

to study the requirements for distress and safety communications in sparsely populated, uninhabited or remote areas by the land mobile and land mobile-satellite services, including the technical and operational characteristics of equipment which is simple to operate and inexpensive for use in the global land and maritime distress and safety system,

invites administrations

1. actively to contribute to and participate in the work of the CCIR;

2. to take all legislative or other appropriate measures for the implementation of such a system;

3. to permit the appropriate equipment to be used within the areas under their national jurisdiction,

invites the Administrative Council

to take the necessary steps to place this matter on the agenda of the next competent conference,

instructs the Secretary-General

to communicate this Resolution to IMO and the International Civil Aviation Organization (ICAO).

RESOLUTION COM5/3

Relating to the Date of Entry into Force of the 10 kHz Guardband for the Frequency 500 kHz in the Mobile Service (Distress and Calling)[1]

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

a) that the frequency spectrum should be used in the most efficient way possible;

b) that the World Administrative Radio Conference, Geneva, 1979, adopted a 495 kHz to 505 kHz guard band for the frequency 500 kHz, which is the international distress and calling frequency for Morse radiotelegraphy in the mobile service;

c) that the use of frequencies in the band 490 - 510 kHz must be such as to provide full protection for distress and safety communications on 500 kHz;

d) that an adequate amortization period has been allowed for the radio equipment currently in service;

taking into account

that the World Administrative Radio Conference for the Mobile Services, Geneva, 1983 asked this Conference to decide on the date of entry into force of the definitive 495 kHz to 505 kHz guard band;

resolves

that the date of entry into force of the 10 kHz guardband for the frequency 500 kHz shall be the date for the full implementation of the Global Maritime Distress and Safety System (GMDSS).

---

1 Replaces Resolution No. 206 (Mob-83).

RESOLUTION COM5/5

Relating to Coordination of the Use of HF Maritime Mobile Frequencies for Transmission of High Seas Maritime Safety Information

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

a) that the International Maritime Organization (IMO) has reaffirmed the need for long-range navigational and meteorological warnings to all ships on all voyages;

b) that operational limitations prevent NAVTEX or satellite services from totally fulfilling this requirement;

c) that international narrow-band direct-printing channels for this purpose have been identified by this Conference;

d) that, due to HF propagation characteristics, global coordination of transmissions to prevent interference is required;

noting

a) that the IMO and the International Hydrographic Organization (IHO), in the development of the World-Wide Navigational Warning Service, have identified sixteen Navigational Areas (NAVAREAs), each under the jurisdiction of an area coordinator, for the transmission of maritime safety information;

b) that as maritime safety information includes meteorological as well as navigational messages, the World Meteorological Organization (WMO) also has an interest in this matter;

recognizing

that the IMO, WMO and IHO are the competent organizations to coordinate the operational aspects of the transmission of maritime safety information;

resolves that the IMO, WMO and IHO be invited

1. to develop jointly, in consultation with the IFRB, a global coordinated plan for the transmission of high seas maritime safety information using narrow-band direct-printing techniques;

2. to assume joint responsibility for maintaining the plan in consultation with the IFRB;

urges administrations

to effect the appropriate operational coordination with the IMO, IHO and WMO in accordance with this plan;

invites the CCIR

to develop the technical characteristics to allow these transmissions to be received using automated techniques;

invites the Administrative Council

to place this Resolution on the agenda of the next competent world administrative radio conference, with a view to reviewing and, if necessary, amending the coordination arrangements;

instructs the Secretary-General

to communicate this Resolution to the IMO, IHO and WMO for consideration and comments.

(MOD) RECOMMENDATION No. 316 (Rev.Mob-87)

NOC **Relating to the Use of Ship Earth Stations Within Harbours and Other Waters Under National Jurisdiction**

(MOD) The World Administration Radio Conference for the Mobile Service, Geneva, 1987,

NOC recognizing

that permitting the use of ship earth stations within harbours and other waters under national jurisdiction belongs to the sovereign right of countries concerned;

NOC recalling

SUP

(MOD) that the World Administrative Radio Conference, Geneva, 1979, allocated the bands 1 530 - 1 535 MHz (with effect from 1 January 1990), 1 535 - 1 544 MHz and 1 626.5 - 1 645.5 MHz to the maritime mobile-satellite service and the bands 1 544 - 1 545 MHz and 1 645.5 - 1 646.5 MHz to the mobile-satellite service;

ADD noting

that the International Agreement on the use of INMARSAT ship earth stations within the Territorial Sea and Ports has been adopted and this Agreement is open to accession, ratification, approval or acceptance, as appropriate;

NOC considering

NOC a) that the maritime mobile-satellite service, which is at present in operation worldwide, has improved maritime communications greatly and has contributed much to the safety and efficiency of ship navigation, and that fostering and developing the use of that service in future will contribute further to their improvement;

MOD b) that the maritime mobile-satellite service will play an important role in the Global Maritime Distress and Safety System (GMDSS);

NOC c) that the use of the maritime mobile-satellite service will be beneficial not only to the countries having ship earth stations at present but also to those considering the introduction of that service;

NOC is of the opinion

NOC that all administrations should be invited to consider permitting, to the extent possible, ship earth stations to operate within harbours and other waters under national jurisdiction in the bands 1 530 - 1 535 MHz (with effect from 1 January 1990), 1 535 - 1 545 MHz and 1 626.5 - 1 646.5 MHz;

MOD recommends

ADD 1. that all administrations should consider permitting ship earth stations to operate within harbours and other waters under national jurisdiction, in the above-mentioned frequency bands;

ADD 2. that administrations should consider the adoption, where required, of international agreements on this matter.

PINK PAGES

MOD RECOMMENDATION No. 317 (Rev.Mob-87)

Relating to the Use of a Priority Indicator Signal for Alerting Ships to Send Overdue Position Reports and for Other Ships to Report Sightings

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

a) that the International Convention on Maritime Search and Rescue, 1979, provides for the establishment of ship reporting systems by States for the search and rescue regions for which they are responsible;

b) that some administrations have already established such ship reporting systems;

c) that verification of the safety of vessels which have failed to report is required;

d) that standard procedures need to be adopted,

recommends

1. that a priority indicator signal with the following meaning be adopted:

> "A position report to the ship reporting system of (name of administration) was expected from the vessel indicated by the call sign (...) but has not been received. This vessel or any vessel or shore station that has been in communication with or sighted this vessel should immediately communicate with the station which has sent this signal.";

2. that a suitable signal for this purpose would be the alphabetic characters "JJJ" in the Morse code for radiotelegraphy and the spoken words "REPORT IMMEDIATE" for radiotelephony;

3. that the name and call sign of the vessel would be broadcast with ships' traffic lists or in marine safety information broadcasts, followed by the above signal when an expected position report is overdue for a period specified by administrations;

invites administrations

to consider this matter and submit proposals to the next competent conference for the implementation of this signal taking into account the views of the International Maritime Organization (IMO);

instructs the Secretary-General

to communicate this Recommendation to IMO for consideration.

PINK PAGES

Resolutions

Resolution No. 9: NOC
Resolution No. 12: SUP
Resolution No. 13: NOC
Resolution No. 30: SUP
Resolution No. 202: SUP
Resolution No. 203 (Mob-83): SUP
Resolution No. 204 (Mob-83): SUP
Resolution No. 206 (Mob-83): SUP
(replaced by Resolution COM5/3)
Resolution No. 303: SUP
Resolution No. 304: SUP
Resolution No. 306: SUP
Resolution No. 307: SUP
Resolution No. 308: SUP
Resolution No. 317 (Mob-83): SUP
Resolution No. 318 (Mob-83): SUP
Resolution No. 321 (Mob-83): SUP
Resolution No. 400: SUP
Resolution No. 401: SUP
Resolution No. 402: SUP
Resolution No. 404: SUP
Resolution No. 405: NOC
Resolution No. 406: NOC
Resolution No. 600: SUP

Recommendations

Recommendation No. 8: NOC
Recommendation No. 201 (Rev.Mob-83): SUP
Recommendation No. 203: SUP
Recommendation No. 204 (Rev.Mob-83): SUP
Recommendation No. 300: SUP
Recommendation No. 301: SUP
Recommendation No. 305: NOC
Recommendation No. 306: NOC
Recommendation No. 307: SUP
Recommendation No. 308: SUP
Recommendation No. 310: NOC
Recommendation No. 311: SUP
Recommendation No. 313 (Rev.Mob-83): SUP
Recommendation No. 400: SUP
Recommendation No. 404: SUP
Recommendation No. 405: NOC
Recommendation No. 406: NOC
Recommendation No. 600: SUP
Recommendation No. 601: NOC
Recommendation No. 707: NOC
Recommendation No. 713 (Mob-83): SUP

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 437-E
12 October 1987
Original: English

COMMITTEE 7

SIXTH SERIES OF TEXTS FROM COMMITTEE 4 TO THE EDITORIAL COMMITTEE

1. The following texts, which were approved by Committee 4 at its eleventh, twelfth, thirteenth and fourteenth meetings, with slight modifications, are submitted to the Editorial Committee:

- text of MOD 753 and ADD 753F (Document 377), with slight amendment
- texts contained in Annex 1 to Document 389 (with some modifications)
- texts contained in Document 412 (Annexes 1, 4-10)
- MOD 1392 and MOD 1396, as contained in Document 404
- texts contained in Annexes 1-5 to Document 413
- modification to Article 8 as contained in Annex 1 to this report
- texts contained in annex to Document 422, with slight modification
- the text contained in Document 418.

2. Committee 4 also took the following decisions:

- Recommendation No. 302: NOC
- Recommendation No. 304: NOC
- Recommendation No. 314: SUP.

O. VILLANYI
Chairman of Committee 4

Annex: 1

ANNEX

kHz

18 168 - 18 780	FIXED Mobile except aeronautical mobile

MOB-87 UNION INTERNATIONALE DES TÉLÉCOMMUNICATIONS
CAMR POUR LES SERVICES MOBILES
GENÈVE, septembre-octobre 1987

Corrigendum 1 au
Document 438/F/E/S
13 octobre 1987

Prière de remplacer le titre de ce document par le titre suivant :

NOTE DU PRESIDENT DE LA COMMISSION 6 A LA SEANCE PLENIERE

et remplacer "COMMISSION 7" par "SEANCE PLENIERE"

Replace the title of this document by the following :

NOTE FROM THE CHAIRMAN OF COMMITTEE 6 TO THE PLENARY MEETING

and replace "COMMITTEE 7" by "PLENARY MEETING"

Sustitúyase el título de este documento por el siguiente:

NOTA DEL PRESIDENTE DE LA COMISION 6 A LA SESION PLENARIA

y sustitúyase "COMISION 7" por "SESION PLENARIA"

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 438-E
12 October 1987
Original: English

COMMITTEE 7

EIGHTH SERIES OF TEXTS FROM COMMITTEE 6 TO THE EDITORIAL COMMITTEE

The annex to this document contains tentative texts for Article 56. It was impossible to obtain agreement in principle upon the provisions of Section III and it will be necessary for the Plenary to consider whether to attempt resolution of the issues individually or to adopt another course of action.

The notes in the document give an indication of the numbers of administrations who considered the individual clauses inadequate or excessive in terms of the Radio Regulations.

I.R. HUTCHINGS
Chairman of Committee 6

Annex: 1

ANNEX

NOC DRAFT ARTICLE 56

MOD **Personnel of Stations in the Maritime Mobile and the Maritime Mobile-Satellite Service**

MOD **Section I. Personnel of Coast Stations and Coast Earth Stations**

MOD 3979 Administrations shall ensure that the staff on duty in coast stations and in coast earth stations shall be adequately qualified to operate the stations efficiently.

MOD **Section II. Class and Minimum Number of Operators for Stations on board Ships using the Frequencies and Techniques as prescribed in Chapter IX**

NOC 3980-3986

ADD **Section III. Class and Minimum Number of Operators for Ship Stations and Ship Earth Stations on board Ships using the Frequencies and Techniques prescribed in Chapter N IX**

Note - All regulations in Section III should be considered tentative and in [ ] until consideration of the whole Article.

ADD 3986AA Administrations shall ensure that the personnel of ship stations and ship earth stations are adequately qualified to enable efficient operation [and maintenance] of the station, and shall take steps to ensure the operational availability of equipment for distress and safety communications.

ADD 3986AB An adequately qualified person shall be available to be a dedicated communications operator in cases of distress.

ADD 3986AC The personnel of ship stations for which a radio installation is made compulsory by international agreements and which are using the frequencies and techniques prescribed in Chapter N IX shall, with respect to the provisions of Article 55, include at least:

ADD 3986AD

a) on stations on board ships which sail beyond the range of MF coast stations:

*	**	
0	17	a general operator certificate, a first class technical certificate and facilities for on-board maintenance; or
0	15	a first class radio electronic certificate and facilities for on-board maintenance; or
1	15	a general operator's certificate, a second class technical certificate and equipment duplication; or
0	12	a second class radio electronic certificate and equipment duplication; or
18	3	a general operator's certificate and equipment duplication; or
13	15	a general operator's certificate, a second class technical certificate and shore based maintenance; or
18	12	a second class radio electronic certificate and shore based maintenance; or
20	3	a general operator certificate and shore based maintenance; or
27	1	duplicated equipment with no operator certificate.
*	**	

Note

* This number of administrations considered this provision inadequate, and

** This number of administrations considered this provision excessive in terms of the Radio Regulations.

Additionally, no administrations considered all the above were satisfactory and six administrations considered none of the above were satisfactory.

ADD 3986AE

b) on stations on board ships which sail within the range of MF coast stations:

*	**	
0	18	a general operator certificate, a first class technical certificate and facilities for on board maintenance; or
0	19	a first class radio electronic certificate and facilities for on board maintenance; or
0	16	a general operator's certificate, a second class technical certificate and equipment duplication; or
0	16	a second class radio electronic certificate and equipment duplication; or
0	9	a general operator's certificate and equipment duplication; or
0	15	a general operator's certificate, a second class technical certificate and shore based maintenance; or
0	14	a second class radio electronic certificate and shore based maintenance; or
17	4	a general operator certificate and shore based maintenance; or
31	1	duplicated equipment with no operator certificate
*	**	

Note

* This number of administrations considered this provision inadequate, and

** This number of administration considered this provision excessive in terms of the Radio Regulations.

Additionally, no administration considered all the above were satisfactory and nine administrations considered that none of the above were satisfactory.

ADD 3896AF

c) ship stations on board ships which sail within the range of VHF coast stations: one operator holding a first- or a second-class radio electronic certificate or a general operator's certificate or a restricted operator's certificate.

Note - All administrations considered that the provisions of 3896AF were adequate, whilst some administrations considered that all except the restricted operator's certificate should be deleted.

ADD 3986AG

The personnel of ship stations for which a radio installation is not made compulsory by international agreements and which are using the frequencies and techniques prescribed in Chapter N IX, shall, with regard to the provisions of Article 55, include at least:

ADD 3986AH

a) ship stations on board ships which sail beyond the range of MF coast stations: one operator holding a first- or a second-class radio electronic certificate or a general operator's certificate;

ADD 3986AI

b) ship stations on board ships which sail within the range of MF coast stations: one operator holding a first- or a second-class radio electronic certificate or a general operator's certificate or a restricted operator's certificate.

Note - Administrations were approximately equally divided on whether the provisions 3986AG to 3986AI should be included.

3987 to 4011 NOT Allocated

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

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PLENARY MEETING
COMMITTEE 7

Note by the Secretary-General

PREAMBLE TO THE FINAL ACTS OF WARC(MOB-87)

The draft text of the Preamble to the Final Acts of WARC(MOB-87) I submit hereby for the attention of the Plenary Meeting.

R.E. BUTLER
Secretary-General

Annex : 1

FINAL ACTS

of the World Administrative Radio Conference for the Mobile Services(Mob-87)

Geneva, 1987

PREAMBLE

In the light of Resolution No. 202 adopted by the World Administrative Radio Conference, Geneva, 1979 (WARC-1979) the Plenipotentiary Conference of the International Telecommunication Union (Nairobi, 1982), in its Resolution 1, decided that a World Administrative Radio Conference for the Mobile Services be convened in Geneva in mid-August of 1987 for a period of 6 weeks.

On the basis of this decision the Administrative Council of the Union at its 40th Session in 1985, considered Resolution No. 202 of the WARC-79 and made necessary arrangements for such a World Administrative Radio Conference for the Mobile Services. By establishing the Agenda for the Conference, the Administrative Council took full account of Resolutions Nos. 321 and 204 of the WARC Mob-83 as well as other relevant Resolutions and Recommendations adopted by the Regional Administrative Radio Conferences EMA and MM-R1 (Geneva 1985); In its relevant Resolution 933, the Administrative Council decided that the duration of the Conference be of 6 weeks. At its 41st Session in 1986, considering the results of foregoing consultations, the Administrative Council amended its Resolution No. 933 and resolved that the Conference be convened in Geneva for five weeks commencing on Monday, 14 September 1987.

The World Administrative Radio Conference for the Mobile Services, accordingly convened on the fixed date, considered and adopted a partial revision of the Radio Regulations in conformity with its agenda. Particulars of this partial revision and of the related actions taken by the Conference are annexed hereto.

In accordance with its Agenda, the Conference also reviewed existing Resolutions and Recommendations and adopted various new Resolutions and Recommendations relative to the Mobile Services.

The partial revision of the Radio Regulations, as adopted by the Conference, shall form an integral part of the latter and shall enter into force on [ ] **at 0001 hour UTC,** unless a different date of entry into force is stipulated in that partial revision with regard to any element thereof.

The delegates signing this partial revision of the Radio Regulations hereby declare that, should a Member Country make reservations concerning the application of one or more of the provisions of the Radio Regulations, thereby reviewed, no other Member Country shall be obliged to observe that provision or those provisions in its relations with that particular Member Country.

Members of the Union shall inform the Secretary-General of their approval of the partial revision of the Radio Regulations by the World Administrative Radio Conference for Mobile Services (Geneva, 1987). The Secretary-General shall inform Members promptly of the receipt of such notifications of approval.

IN WITNESS WHEREOF, the delegates of the Members of the International Telecommunication Union mentioned below have, on behalf of their respective competent authorities, signed one copy of the present Final Acts in the Arabic, Chinese, English, French, Russian and Spanish languages. This copy shall remain deposited in the archives of the Union. The Secretary-General shall forward one certified true copy to each Member of the International Telecommunication Union.

Done at Geneva, October 1987.

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

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19 October 1987
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COMMITTEE 4

SUMMARY RECORD

OF THE

FOURTEENTH MEETING OF COMMITTEE 4

(FREQUENCY)

Monday, 12 October 1987, at 1400 hrs

Chairman: Dr. O. VILLANYI (Hungary)

Subjects discussed:		Documents
1.	Tenth and eleventh reports of Working Group 4-A	413, 414,
2.	Report of Working Group 4 ad hoc 5	422
3.	First report of Working Group 4 ad hoc 6	418
4.	Texts related to RDSS (continued)	373

1. Tenth and eleventh reports of Working Group 4-A (Documents 413, 414)

1.1 The Chairman of Working Group 4-A introduced Document 413 and indicated an editorial amendment to MOD 728 in Annex 1, which would read " ... 1 645.5 - 1 646.5 MHz by the mobile-satellite service (Earth-to-space) ... ". The text of ADD 520A, included in square brackets in Annex 1, was a matter which had been dealt with in Working Group 4-C and it was therefore not necessary to consider in the current context.

ADD 726B, MOD 728

1.2 The delegate of the United States proposed that the word "traffic" should be replaced by "communications". The delegate of the Federal Republic of Germany pointed out that the word "traffic" was used in Article 51 but said that he would have no objection to the change. The delegate of Finland agreed with the United States delegate that the bands in question must also be available for distress calls.

1.3 The representative of the IFRB said that in accordance with the existing wording there were two bands (space-to-Earth and Earth-to-space), the interpretation of the IFRB being that the inter-satellite link was also limited to distress and safety. In the proposed text, however, there was a specific indication for the inter-satellite link for one of the bands (Earth-to-space) but not for the other. It would not be appropriate to draft the two notes differently; they should both either include or omit the reference to the inter-satellite link.

1.4 The Chairman of Working Group 4-A said that the reason for the wording was because it had been concluded that it was not at present technically desirable to subdivide the space-to-Earth band but that it was technically desirable to make provision in the Earth-to-space direction and for inter-satellite links for the relaying of distress messages. He agreed, however, that the wording as proposed was a little unclear.

1.5 In reply to a question by the delegate of the Federal Republic of Germany, the Chairman of the Technical Working Group said that the Technical Working Group had been of the opinion that it was useful to make specific mention of "inter-satellite links" in order to include them in their space-to-space context.

The proposed amendment to ADD 726B and MOD 728 was approved.

Resolution No. 200 (Rev.Mob-87)

Approved.

Resolution No. 205 (Mob-87)

considering further i)

1.6 The delegate of the Federal Republic of Germany suggested that "the carriage of" should be deleted and that "should be mandatory in" be replaced by "will form part of". The delegates of the United States and Argentina supported the proposals.

It was so agreed.

Resolution GT-TEC PLEN/3

Approved.

Resolution [COM4/17]

Approved.

Recommendation [COM4/18]

Approved.

1.7 The Chairman of Working Group 4-A introduced Document 414 which contained as an annex the statement by the Observer for ICAO, requested during discussion in the Working Group. He expressed his thanks to all Drafting Group Chairmen as well as participants in the Working Group and Drafting Groups for the determined efforts and cooperation in concluding most of the items allocated to Working Group 4. He expressed particular thanks to the Secretary of the Committee for his sustained hard work.

1.8 The delegate of the USSR, referring to paragraph 3.1 of Document 414 and proposal USA/24/48, objected to the introduction in the band in question of the aeronautical and maritime mobile services as he was concerned that harmful interference might be caused to the fixed service. However, as a compromise solution, his Administration would be prepared to accept mobile except aeronautical mobile services on a secondary basis in the band.

1.9 The delegate of Argentina proposed that the band be allocated to land mobile services only.

1.10 The delegate of the United States, supported by the delegate of Canada, said that he could accept the compromise solution proposed by the delegate of the USSR.

It was so agreed.

1.11 The Chairman observed that consideration of the proposals in paragraphs 3.2 and 3.3 must await the Committee's decision concerning RDSS. A decision had already been taken concerning paragraph 3.4 (Article 60 matters to be considered by the Plenary) and the proposals in relation to paragraph 3.5 would be considered in Working Groups 4 ad hoc 3 and 4 ad hoc 6.

It was so agreed.

1.12 The delegate of Japan introduced the Japanese proposal J/60/622, mentioned in paragraph 3.6.

In the absence of any support, the proposal was rejected.

2. Report of Working Group 4 ad hoc 5 (Document 422)

2.1 The Chairman of Working Group 4 ad hoc 5 introduced Document 422, pointing out that Thailand should be added to the list of countries in paragraph 1 and that the Spanish text should be aligned with the other language versions.

ADD 34A, ADD 34B, ADD 35A and ADD 35B

2.2 The delegate of the USSR said all four proposals were acceptable to his Delegation. In order to make the definition in ADD 34A and ADD 35A technically accurate the words "between aircraft stations and aeronautical stations" should be deleted. The delegates of Japan and Finland supported that amendment.

2.3 In reply to an expression of concern by the representative of the IFRB, the Chairman of Working Group 4 ad hoc 5, supported by the delegate of Spain, suggested that the new definitions might be modified to take into consideration the question of public correspondence. The delegate of Cuba opposed any formal modification to the proposed text. The delegates of the Netherlands and the United States urged that the discussion should not be reopened at that stage.

2.4 The delegate of Austria proposed the inclusion of a footnote containing an explanation of the abbreviations "R" and "OR".

It was so agreed.

3. First report of Working Group 4 ad hoc 6 (Document 418)

The report contained in Document 418 was approved, subject to removal of the square brackets from recognizing a) and editorial amendment of the enclosed text.

4. Texts related to RDSS (continued) (Document 373)

4.1 The Chairman reminded the Committee of the proposals reflected in Annexes 1 and 2 of Document 373, and read out a proposal for a possible compromise: in the Table, for Region 1 the aeronautical radionavigation service would be allocated on a primary basis, no other allocation being made for that region; in Region 2, two services, aeronautical radionavigation and RDSS would be on a primary basis; in Region 3, only the aeronautical radionavigation service would be on a primary basis, RDSS having secondary status. Footnote ADD 734A would be as shown in Annex 1, to which an ADD 734AA would be inserted also, reading: "In Region 1 the bands 1 610 - 1 626.5 MHz and 2 483.5 - 2 500 MHz are also allocated to the RDSS on a secondary basis". Footnotes ADD 734B, ADD 734C, ADD 734D and ADD 734E would remain as shown in Annex 1.

4.2 The delegate of Argentina reiterated his Delegation's objection to ADD 734C and to primary status for RDSS in Region 2. He requested the IFRB to state clearly what regulatory procedures would apply in implementing that service, since a study of the Note by the IFRB, annexed to Document 375, did not state whether any particular Radio Regulations applied in that regard.

4.3 The delegate of Cuba endorsed the Argentine Delegation's observations and could not agree to the Chairman's proposal as it related to ADD 734D.

4.4 The delegates of Bulgaria, Mexico, Thailand and the German Democratic Republic supported the compromise proposal, as did the delegate of Israel, provided that No. 734 was retained; his Administration wished to be included in 734B.

4.5 The delegate of the Federal Republic of Germany also supported the compromise proposal in general, subject to some clarification about 734B. The delegates of Jordan and Sweden supported the compromise proposal and the retention of 734B.

4.6 The delegate of Pakistan said that his Administration could not agree to secondary status for RDSS. He recorded his Administration's reservations.

4.7 The Chairman, replying to the delegates of Mauritania and Ethiopia, said that their Administrations' preference for primary status for RDSS would be reflected in a footnote.

4.8 The representative of the IFRB (Mr. Berrada), replying to a question by the delegate of the Islamic Republic of Iran, said that, pursuant to No. 346 of Article 7, the basic principle governing the effect of different allocations in adjacent regions was equality of rights; therefore, a primary status for a service in a given region would imply primary status with regard to the service in the other regions. As to whether, in the case of a country not listed in 734B, allocation would be on a primary basis, the situation was that, if agreement was reached subject to the Article 14 procedure the primary status would be protected and that, in the absence of agreement, the service would be deemed secondary. He suggested that, in order to save time, he would explain matters informally to any delegations which required further details.

4.9 The delegate of the United States said that his Delegation could accept the compromise proposal. He understood that in Region 1 secondary status would be allocated to the RDSS by means of a footnote, so that countries opting to do so would be able to indicate that they accorded a primary status to RDSS; he took it that the same applied to Region 3.

4.10 The Chairman invited the delegations wishing to be included in No. 734B to so signify. In response to a request by the delegate of Italy, he said that the Editorial Committee would make provision to indicate the differences in category of service, with regard to 734B, between Regions 1 and 3.

4.11 The delegate of Senegal wondered whether the RDSS allocation on a secondary basis could simply be indicated in the Table, so that the notes could be deleted.

4.12 The delegate of the Syrian Arab Republic said that his Administration wished to be included in 734B, but in respect of Article 11, not Article 14.

4.13 The delegates of Argentina and Cuba reserved the right to revert to the matter in the Plenary Meeting.

4.14 The Chairman, referring to observations by the delegates of Swaziland, Mauritania, Senegal and Oman, said that the proposals contained in Annex 1 to Document 373 as it stood had been opposed by at least 20 administrations, whereas the new proposal had been unopposed except for one or two reservations. He felt, therefore, that the latter proposal should be accepted as a basis, and that further discussion should be confined to discussing the upper frequency bands.

ADD 734E

4.15 The delegate of the United Kingdom proposed deletion of the words "in countries other than those listed in No. 734B". The figure 1 613.6 should be altered to 1 613.8 MHz.

It was so agreed.

4.16 The delegate of the Federal Republic of Germany suggested the formation of an ad hoc Group to deal with the questions relating to the limitation of power flux-density, raised in the report to Committee 4 by the Technical Working Group of the Plenary, and to consider matters related to Appendix 28.

The meeting rose at 1710 hours.

The Secretary: The Chairman:

T. GAVRILOV O. VILLANYI

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 441-E
9 November 1987
Original: English

COMMITTEE 4

SUMMARY RECORD

OF THE

FIFTEENTH AND LAST MEETING OF COMMITTEE 4

(FREQUENCY)

Tuesday, 13 October 1987, at 0905 hrs
and at 1835 hrs

Chairman: Dr. O. VILLANYI (Hungary)

Subjects discussed:		Documents
1.	Pending items from the ninth report of Working Group 4-A	389
2.	Pending items from the eleventh report of Working Group 4-A	414
3.	Pending items from the sixth report of Working Group 4-B	363
4.	Report of Working Group 4 ad hoc 7	426
5.	Pending items concerning NAVTEX Service	394
6.	Third report of Working Group 4 ad hoc 2-1	425(Rev.1)
7.	Pending items concerning RDSS	373
8.	Report of Working Group 4 ad hoc 3	421
9.	Report of Working Group 4 ad hoc 6	-
10.	Completion of the Committee's work	-

1. Pending items from the ninth report of Working Group 4-A
(Document 389)

ADD 572A

1.1 The delegates of Morocco, Austria, Italy, Malta and Mauritania said that they wished their countries' names to be added to the first paragraph of each of the footnotes that now replaced ADD 572A and the delegate of Spain said that he wished his country's name to be added to the first and third of those footnotes.

ADD 649A

1.2 The Chairman of Working Group 4-A said that the footnote had become redundant in the light of recent decisions by the Plenary and could now be deleted: the delegate of Thailand said he was against that deletion.

1.3 The delegate of France observed that, although the reason for the deletion was that the wording was weaker than that of the text approved in the Plenary, it was essential to protect the Earth-to-space service in the interests of safety. Perhaps the IFRB could suggest a text that would strengthen that provision.

1.4 The representative of the IFRB (Mr. Berrada) said that the difficulty with ADD 649A lay in the fact that the prohibition went beyond the contents of RR 342. He suggested that the footnote should be amended to read:

> "Any emission capable of causing harmful interference to the authorized uses of the band 406 - 406.1 is prohibited.".
>
> It was so agreed.

1.5 The delegate of the United States of America suggested that the wording might also be applicable to the bands 149.9 - 150.05 MHz and 399.9 - 400.05 MHz and that footnotes ADD 609A and ADD 609B should be similarly amended. The Chairman of Working Group 4-A pointed out that those two bands did not appear either in Article N 38 or in N 3010, whereas the band 406 - 406.1 MHz was included therein. Accordingly, there seemed to be no reason to amend ADD 609A and ADD 609B, which had already been approved. The delegate of the United States said he would not press the point in view of the short time remaining to the Committee, but still considered that a cautionary note was applicable to the footnotes he had mentioned.

1.6 The representative of the IFRB (Mr. Brooks) said he presumed it was understood that the intent of the text approved for ADD 649A was that administrations would not authorize the use of the band 406 - 406.1 even under the provisions of RR 342.

ADD 726A

1.7 The Chairman of Working Group 4-A said that the Indian Delegation had submitted the following text as an addition to ADD 726A, which had been agreed upon in principle:

> "In exceptional circumstances, however, an earth station at a specified fixed point in any of the mobile-satellite services may be authorized by an administration to communicate via space stations using these bands.".
>
> That text was approved.

Recommendation [COM4/C]

1.8 The delegate of Burkina Faso proposed that considering e) should end with the word "accuracy", since it appeared that the necessary bandwidth had not been sufficiently studied.

1.9 The Chairman of Working Group 4-A said that there had been an error in the French translation of the paragraph. The fact that ICAO had already carried out studies, but that CCIR studies were still in progress, might be made clearer by placing considering g) before considering e) and drawing the attention of Committee 7 to the translation error.

Recommendation COM4/C was approved as amended.

Recommendation [COM4/D]

1.10 The representative of the CCIR said that the last line of recommends administrations b) should read "... CCIR Recommendation and Reports.".

Annex 4 (Operational aspects in footnotes)

The Committee took note of the annex to enable the IFRB to continue its work.

2. Pending items from the eleventh report of Working Group 4-A (Document 414)

Paragraph 3.2

2.1 The Chairman of Working Group 4-A said that the proposals concerning the 5 GHz band could be roughly divided into two groups. In CEPT-3/10/7-8, it was proposed to allocate the band 5 150 - 5 250 MHz to the mobile service on a primary basis, thus taking account of the existing requirements for the ICAO standard international MLS, with considerable room for additional growth of the system, and having due regard to other needs. Objections to that proposal had been based on the difficulty of determining what the final requirements of the aeronautical radionavigation service would be, in view of the fact that the MLS was in the early phases of implementation. In I/97/21, USA/24/85 and AUS/40/34, it was proposed to make an additional allocation in the band 5 117 - 5 183 MHz and to add a footnote allocating the band on a primary basis to the fixed-satellite service for space-to-Earth transmissions (feeder links for the radiodetermination-satellite service). The objections had similarly been based on the uncertain future of the requirements of the aeronautical radionavigation system and also on the difficulty of taking any decision before full consideration of the two other bands allocated to the radiodetermination-satellite service.

2.2 The delegate of Switzerland said that his Administration had not co-sponsored Document 10 but after reconsidering the situation was prepared to accept a shared primary allocation in the band 5 150 - 5 250 MHz between the aeronautical radionavigation and the mobile services.

2.3 The delegate of the United Kingdom recalled that in the course of discussions on terrestrial public correspondence in Working Group 4 ad hoc 6, it had been recognized that as a long term solution small elements in the band 5 000 - 5 250 MHz might be appropriate. That opinion, together with ICAO's indication that the internationally agreed standard MLS would operate in the band 5 030 - 5 150 MHz, should be borne in mind.

2.4 The delegate of Senegal asked whether studies had been carried out into the use of the frequency band under consideration or whether ICAO's position was based on concern that the band might be allocated for other uses.

2.5 The Observer for ICAO replied that his Organization's position was not based on specific studies but on concern that difficulties might be encountered during implementation of the MLS, which would require additional spectrum over and above what was at present envisaged.

2.6 The delegate of the United States of America recalled that according to a proposal by ten Western administrations in Document 259, concerning the need for feeder-links for the radiodetermination satellite service, the characteristics specified for that service permitted sharing with the MLS without causing problems to the system.

2.7 The delegate of the USSR said that his Delegation shared the concerns of ICAO. Studies carried out in the USSR confirmed that under existing sharing conditions at a number of airport hubs, there had to be an upper band limit of at least 5 200 MHz with MLS localizers operating in a given sector. In future, those localizers would operate in a 360 degree sector, which would further affect sharing conditions and electromagnetic compatibility. In the Moscow airports area, it was already clear that the band set by the present Regulations would be almost fully used, and in other major airport hubs in the European region, interaction between the microwave landing systems could create extraordinary difficulties in the use of the spectrum. The recommendation to keep the bands for the aeronautical radionavigation service had officially been approved by ICAO's FANS Committee; it also proposed that administrations participating in the present Conference should support the retention of the band for the aeronautical mobile service. That recommendation was fully justified for technical reasons. His Delegation therefore proposed that the band should not be touched at the present time. The proposed limitation was technically not acceptable.

2.8 The delegate of Sweden said that in the European region where air traffic density was at its highest, requirements for MLS would have to be satisfied within the band 5 030 - 5 090 MHz up to the year 2000 - 2010. If the limit were set at 5 150 kHz, it would be satisfactory on that understanding, hence the proposal contained in Document 10.

2.9 The delegates of Afghanistan, Bulgaria, Cuba, German Democratic Republic, Islamic Republic of Iran, Poland, Tanzania, Togo, Tunisia, Saudi Arabia and Swaziland supported ICAO's recommendation. In addition, the delegates of Bulgaria, German Democratic Republic, Tanzania and Togo endorsed the statement by the delegate of the USSR.

2.10 The delegate of the United Kingdom said that his Delegation supported ICAO's efforts and was fully aware of the need for the band for the MLS. However, the discussion appeared to have become somewhat confused. The plans seen so far for the MLS system provided for 200 channels in the band between 5 030 and 5 090 MHz, with 300 kHz spacing, as Sweden had indicated. Furthermore, in areas with a high airport density there could be a need for more frequencies: his Delegation, in informal discussions with other delegations and the Observer from ICAO, had estimated that there could be a need for the MLS to work up to 5 150 MHz. However, it had not seen any definite or even possible need for the MLS above 5 150 MHz. The Observer for ICAO had earlier referred to other uses or systems for the band 5 150 - 5 250 MHz, but so far there had been no definite indication as to what those applications might be, and some information in that

connection would be useful. In view of the statement by the delegate of the USSR that they had foreseen a need to use the band up to 5 200 MHz, he wondered whether there was some way of achieving a compromise, in view of the obvious difficulties in the European region, in a smaller band than that proposed.

2.11 The delegate of Brazil said that his Delegation was fully aware of ICAO's problems but found it difficult to agree with them at the present time, since ICAO had not provided a clear and precise indication that the band 5 150 - 5 250 MHz would be needed even in the long term for the MLS. His Administration had tried to analyze the situation on the understanding that a limitation of the power-flux density from the satellite in those bands of -159 dBW/m^2 per 4 kHz would suffice and would permit those frequency bands to be used for feeder-links for the radiodetermination satellite service. The joint Document 259 clearly indicated the need to impose such a limitation on the feeder-links.

2.12 The Observer for ICAO, noting the comments by the delegate of the United Kingdom concerning the present channelling of the MLS and the strong likelihood of expansion, which would certainly require up to 5 150 MHz, and the comments made by the delegate of the USSR on the very strong probability of requiring up to 5 200 MHz which were also very pertinent, said that ICAO's position regarding no change to the band, indicated in the annex to the document, was that taken by ICAO's Contracting States at the 1985 Communications Operations Divisional Meeting. The approximately 160 Members, with only a couple of exceptions, were the same as those at the present ITU meeting. The concern was that as the MLS was implemented, additional problems might make themselves known and if the spectrum was no longer available, the problems for the MLS would then be very serious. The problem was not, therefore, one which had been studied and documented but, as the USSR had stated, there was a clear possibility that up to 5 200 kHz or even beyond would be required. Those aspects were as yet unknown.

2.13 The delegate of Mexico agreed with the statements made by the delegates of the United Kingdom and Brazil. His Delegation understood ICAO's concerns but did not share them. Limitations on the pfd of the feeder-links, which Mexico felt should not exceed -159 dBW/m^2 per 4 kHz, as recommended by the Technical Working Group of the Plenary in Document 277, should ensure that there were no sharing difficulties. The delegate of Uruguay endorsed that statement.

2.14 The delegate of the United States of America said that his Administration had extensively analyzed the sharing possibilities in that region of the spectrum and its proposal to the Conference had been based on the characteristics indicated in its document and in the joint Document 259. Regardless of the frequency requirements of the MLS, sharing was possible with the radiodetermination satellite under the conditions which had been proposed. His Delegation understood and appreciated the need to protect the MLS and intended to do so. North America had extensive airline traffic and everything necessary would be done to protect the safety element. Both Mexico and Brazil had indicated that certain conditions had been proposed which would protect the MLS. The United States endorsed those conditions and believed that they would provide a satisfactory Region 2 solution to the problem. There appeared to be two issues under discussion: a mobile services proposal by European countries and a radiodetermination satellite feeder-link as a separate question. If those issues were separated, the proposal being addressed might better be understood.

2.15 The Chairman, summing up, said that the majority of delegations appeared to be in favour of no change, and of retaining the entire 250 MHz band for the aeronautical radionavigation service, although it was not yet quite clear whether it was needed for the MLS in its entirety. It also appeared to be

necessary to exclude the mobile service from that band and there had been an ICAO decision in that connection. There was an additional problem concerning the feeder-link for the RDSS particularly in Region 2 which might best be solved by a footnote.

2.16 The delegate of Canada proposed the drafting of a Resolution calling for further study of the use of the band 5 150 - 5 250 MHz, concerning the introduction of the mobile service, calling for appropriate studies by CCIR and ICAO with a view to their consideration by a future competent conference.

2.17 The delegates of the Netherlands and the United States of America were in favour of drafting a text accordingly.

2.18 The delegate of the United Kingdom was in favour of establishing a Drafting Group for that purpose; he had already given the Secretariat the text of a national footnote relating to the allocation of that service on a primary basis, subject to the procedure set forth in Article 14.

2.19 The delegate of the USSR said that his Delegation would prefer a text on the lines of the Recommendation of COM4/C; it opposed reference to a specific band sector.

2.20 The delegate of Italy proposed the addition of a footnote relating to a feeder link in the 5 GHz band for Regions 1 and 3 also.

2.21 The delegates of France and Switzerland said they could endorse the United Kingdom Delegation's proposal to add a footnote, subject to studying the text.

It was agreed that the Canadian Delegation would convene a Drafting Group accordingly. It was also agreed to add a footnote relating to an additional allocation to the mobile service on a primary basis in the band 5 150 - 5 250 MHz, subject to agreement obtained under the procedure set forth in Article 14; the delegations of Austria, Denmark, Finland, the Federal Republilc of Germany, France, Israel, Italy, Norway, Switzerland and the United Kingdom indicated their wish to be included.

2.22 The Chairman invited the United States Delegation to draft a similar footnote in respect of Region 2, using the text of USA/24/86, the band 2 483.5 - 2 500 MHz at the end of the first sentence being placed within square brackets.

2.23 The delegate of the USSR expressed concern about the interrelationship between Regions 1 and 2, particularly with regard to the aeronautical radionavigation service. The note from the Chairman of the Technical Working Group of the Plenary (Document 277) contained no categorical assurances in that regard.

2.24 The delegate of the United States of America said that there was no discernible problem of incompatibility.

2.25 The delegate of the United Kingdom said that the current Conference was not competent to consider the fixed-satellite service, referred to in USA/24/86. Therefore, any footnote allocation must refer to the radiodetermination-satellite service. The matter of feeder links could be dealt with by adding the last sentence of RR 41 to RR 39, thus adding to the definition of RDSS: "This service may also include feeder links necessary for its operation.".

2.26 The delegate of the United States of America agreed that RR 39 and 41 should be referred to. As could be seen from Document 277, potential for band-sharing did exist. He proposed, in view of the earlier discussion on MLS, that the RDSS feeder link limit should be raised to 5 150 - 5 216 MHz. The delegate of Brazil having endorsed that proposal for Region 2, it was agreed that the United States Delegation would draft a footnote accordingly.

2.27 The Chairman noted that there was strong opposition to applying such a footnote to Region 1.

2.28 The delegate of the United Kingdom said that his Administration could accept such a footnote in Region 1 for the bands 5 150 - 5 216 MHz to RDSS on a secondary basis.

It was agreed to leave the matter to the Drafting Group.

Paragraph 3.3

2.29 The delegate of the United States of America introduced the proposed addition to Recommendation No. B2, set out in USA/24/818.

2.30 The delegate of the United Kingdom said that the recommends part should include the text of ADD 734E as shown in the annex to Document 344 and that both considering f) paragraphs should be deleted.

2.31 The delegate of the USSR said that, as could be seen from the communication by the International Astronomical Union in Document 202 the procedure for protecting radioastronomy services seemed very difficult to implement on technical grounds.

2.32 The delegates of the Federal Republic of Germany and the Netherlands said that their radioastronomy communities were not satisfied with the protection ratios reflected in considering f).

2.33 The delegate of the United States of America suggested that, as a compromise, the specific values in the text could be replaced by a phrase such as "within a specified radius".

2.34 The delegate of Argentina pointed out that the Conference had not yet modified the Table of Frequency Allocations, as mentioned in considering b); that paragaph should be placed within square brackets or deleted. His Delegation supported the recommendation made by the International Astronomical Union in Document 202.

2.35 In the light of further concerns expressed by the delegates of the Federal Republic of Germany, the Netherlands, the United Kingdom, Argentina, the USSR and Switzerland, the delegate of the United States of America said that he would withdraw his proposal.

2.36 The Chairman said that the Committee had concluded its consideration of pending items from the eleventh report of Working Group 4-A. In reply to a query by the delegate of Denmark on the use of frequencies for digital selective calling, he said the only way to deal with the matter was for him to invite the Chairman of the Plenary to create an ad hoc Group.

It was so agreed.

3. Pending items from the sixth report of Working Group 4-B (Document 363)

Resolution [COM4/8]

3.1 The Technical Secretary, referring to resolves 5, in reply to a question raised at the previous meeting, said that no discussion of the matter had in fact taken place in 1979 as the text of the paragraph had been taken from Resolution MAR 2-15 of the 1974 Mobile Services Conference.

3.2 In response to a proposal by the Chairman that, given the Secretary's reply, discussion should not be opened on the question, the delegate of Mexico stated the reservation of his Delegation which might wish to address the issue in a Plenary Meeting.

Resolution [COM4/9]

3.3 The delegates of New Zealand, India, the United States, Japan and Brazil opposed inclusion of the Resolution in the Radio Regulations since it did not concern all regions.

3.4 The delegate of the Federal Republic of Germany, supported by the delegate of the United Kingdom, objected to suppression of the draft Resolution which was the result of a compromise worked out in Working Group 4-B. The text clearly stated that it was relevant to Region 1 and vessels sailing in that region and it was intended as a means of conveying information to those whom it might concern, particularly outside Region 1. If a majority found it unacceptable that the information be conveyed in the form of a Resolution, he suggested that with some minor editorial adjustment, the text might be presented as a Recommendation.

3.5 The delegate of India suggested that a more acceptable way of proceeding might be to request the Secretary-General to add the information to the Maritime Manual to be published after the Conference or as an annex to the List of Coast Stations. The delegates of the United States and Brazil supported his proposal.

The latter course of action was approved.

4. Report of Working Group 4 ad hoc 7 (Document 426)

4.1 The delegate of the Netherlands recalled in an earlier decision of the Committee to suppress Resolution No. 704.

4.2 The delegates of Greece and Italy proposed that the Resolution should be updated. The delegates of the United States, Canada and Brazil were of the opinion that the purpose of Resolution No. 704 had already been achieved and the Resolution was no longer necessary. The delegates of France and the United Kingdom said that parts of the Resolution, such as Annex 3, remained valid.

4.3 The delegate of Finland suggested that Resolution No 704 should be retained unchanged but that it should be accompanied by a footnote stating that, although some of the action petaining to it had been completed, the Resolution was retained until the action required by Resolution [COM4/5] was completed. The delegate of the Netherlands supported that proposal.

It was so agreed.

Resolution [COM4/5]

4.4 The Chairman pointed out that considering b) was no longer necessary and could be deleted.

It was so agreed.

The Resolution was approved as amended.

The meeting was suspended at 1210 hours and resumed at 1835 hours.

5. Pending items concerning NAVTEX Service (Document 394)

MOD 472A

5.1 The Chairman recalled that the discussion on the footnote had been suspended pending clarification of decisions by Committee 5 (found in Documents 401 and 403) concerning the frequency 490 kHz. It had been established that there was no contradiction between the two texts and MOD 472A as it appeared in Document 394 could therefore remain as it stood, bearing in mind that Committee 5 had intended that the frequency should not be fully used until the date of full implementation of the GMDSS.

5.2 The representative of the IFRB (Mr. Berrada) drew attention to MOD 4184B according to which the frequency 490 kHz would not be used at all between the date of entry into force of the Final Acts of the present Conference and the date of full implementation of the GMDSS. That meant that there would be no problem unless Committee 4 wanted the frequency 490 kHz to be used.

The Committee noted that information.

Draft Resolution (COM4/12)

Resolves 2

third indent

5.3 The Chairman of Drafting Group 4-B-1 said that as a result of coordination, the frequency bands should be changed and the indent should read as follows:

"No. 1635 shall also be applied to the frequency bands 489.75 - 490.25 kHz and 4 209.25 - 4 209.75 kHz.".

The draft Resolution was approved, as amended.

6. Third report of Working Group 4 ad hoc 2-1 to Committee 4 (continued) (Document 425(Rev.1))

Resolution [COM4/11]

6.1 The Chairman of Working Group 4 ad hoc 2-1 said that resolves 4 contained square brackets around Date D4, which was one of the interlocking dates still to be determined; the words "with the date" in resolves 5 were superfluous and should be deleted; the last sentence in resolves 6 had been placed in square brackets because of the differing views as to its necessity or desirability. Speaking as the delegate of the United States he said that he had no strong feelings about it either way.

6.2 Following a request by the delegate of Spain the Chairman said that the attention of Committee 7 would be drawn to the need for the title to be properly aligned in all three languages.

resolves 2

6.3 The delegate of India wondered why the IFRB's operation described in resolves 2 was necessary if all frequency assignments in the non-overlapping band were transferred in blocks.

6.4 The Chairman of Working Group 4 ad hoc 2-1 said that resolves 2 was required to cover the possibility of an assigned frequency band not falling within the new bands. Special consideration was necessary because it could no longer be a simple addition of frequency. The IFRB was invited, in conformity with Nos. 1445-1450 of the Radio Regulations, to find a suitable replacement frequency for that coast telegraph station whose assigned frequency band fell across the sub-band edge. The problem therefore only arose at the band edges.

resolves 3

At the suggestion of the representative of the IFRB (Mr. Berrada), the word "uniform" was deleted.

resolves 6

6.5 The delegate of Thailand proposed that the square brackets be deleted.

6.6 The delegate of the USSR said that his Delegation had difficulties with that sentence because it could not fully describe the whole operating procedures and functioning of the Board. As Article 12 adequately explained the rules governing the relationship between the IFRB and administrations, the first sentence of resolves 6 was adequate by itself. The last sentence could lead to inaccuracies in the use of existing procedures under Article 12 and should therefore be deleted.

6.7 The representative of the IFRB (Mr. Berrada) said that resolves 6 referred to assignments already recorded in the Master Register. If the provisions of Article 12 were to be applied without that sentence, it would mean that when the Board reached an unfavourable finding, it should send back the assignment to the notifying administration, which would have to apply the enquiry procedure. While, therefore, there was no problem in deleting the sentence, it was essential that the Conference instruct the IFRB that those assignments, despite an unfavourable finding, should remain in the Master Register.

6.8 The delegate of the USSR said that if some stations remained where they were, there would be mutual interference which had not been foreseen in the revised Appendix 31 just approved. The sentence meant that an administration was not free to transfer to any frequency and the Board would simply take note that the transfer had not been made, which was not a satisfactory solution.

6.9 The representative of the IFRB (Mr. Berrada) explained that in the case of a favourable finding there was no problem. With an unfavourable finding, the situation was reflected in the Master Register and the assignment was no longer protected. If the Committee wished to make the conditions even more stringent, a sentence would have to be added to the effect that the frequencies were kept in the Master Register for information only. That should satisfy the concern of the USSR.

6.10 The delegate of the Federal Republic of Germany said that the findings would always be unfavourable because they related to that part of the band no longer used for wide-band and A1A and A1B Morse telegraphy, being in a non-overlapping part of the band and used for a different mode of operation.

6.11 The representative of the IFRB (Mr. Berrada) said that that statement was correct if an assignment was not transferred because the finding was based on conformity with the Radio Regulations and Appendix 31. An assignment no longer in conformity with the Radio Regulations was not protected. However, it could not be deleted from the Master Register unless the administration concerned so agreed. One solution would be to say that the recording had been retained for information only.

6.12 The Chairman suggested, to meet the concerns of the delegate of the USSR and the needs of the IFRB, that the second sentence should read: "Following this examination the Board shall advise the administration to delete its assignment, shall modify the findings if necessary and shall enter a symbol to indicate that the assignment is not in conformity with this Resolution."

It was so agreed and the square brackets were removed.

6.13 The representative of the IFRB (Mr. Berrada), replying to a question by the delegate of Mauritania, said that resolves 6 contained the essential details and the amendment just approved would present no problems for the Board. Any assignment not in conformity was not protected.

7. Pending items concerning the RDSS (Document 373)

7.1 The Chairman of Working Group 4-A reported that the problem for Region 3, of whether to have the RDSS below or just above 2.5 GHz, had not been solved and was therefore resubmitted to Committee 4.

7.2 The delegate of India said that the two proposals should be taken together and not be seen as alternatives. The proposal by Region 3 countries was to opt for greater flexibility by allocating both bands on a secondary basis, and he therefore proposed that the Committee take the tables and texts appearing on pages 3, 4 and 5 of the English text as a package. Some administrations had wanted the down link to be in the band above 2.5 GHz because it was already open for three types of satellite service in Region 3. The constraints on the fixed service in that band would therefore be far less than in the band 2 483.5 - 2 500 MHz which was not at present allocated to any space service. A new space service would thus be introduced with certain limitations on the existing fixed, mobile and radiolocation services.

7.3 That statement was endorsed by the delegate of Thailand.

7.4 The delegate of Japan expressed regret that the subject of the RDSS had hardly been discussed in Committee 4. His Delegation had doubts about the allocation to the RDSS above 2.5 GHz. First of all, a world-wide allocation was desirable for that service. If the allocation in Region 3 were below 2.5 GHz, it would be in line with the allocations in Regions 1 and 2 and would enable the RDSS to advance as an international system in the future. If it were allocated in the band above 2.5 GHz for Region 3 alone, it would not be conductive to the development of the RDSS internationally. Secondly, the use of the frequency spectrum, which was a limited resource, should be efficient and effective. The RDSS could adequately be allocated in the band 16.5 MHz below 2.5 GHz and his Delegation strongly opposed an extra frequency allocation above 2.5 GHz in Region 3, since an allocation would be both redundant and unnecessary. Thirdly, the addition of the RDSS in the band above 2.5 GHz would result in the deterioration of existing services. In the band 2 500 - 2 690 MHz there was

already an allocation to the broadcasting-satellite service. Although those services were not operated in the band 2 500 - 2 516.5 MHz, they would cause serious problems once initiated. Japan believed that sharing was extremely difficult between those services and therefore proposed that the RDSS be deleted from the box in the frequency band 2 500 - 2 516.5 MHz. If any country wished to allocate that frequency band to the RDSS, a national footnote should be included for its allocation on a secondary basis subject to agreement obtained under the procedure set forth in Article 14.

7.5 The delegate of the Republic of Korea supported Japan's position.

7.6 The delegate of Indonesia said that her Administration wanted to use the lower band for the RDSS on a secondary basis, because the upper band was already planned for the development of the fixed service. However, it fully understood India's concerns and in a spirit of compromise would accept the allocation in both bands.

7.7 The delegate of New Zealand said that his country was not planning to implement the RDSS. However, it appreciated India's reasons for proposing the use of the 16.5 MHz band above 2.5 GHz.

7.8 The delegate of Australia emphasised that a delicate compromise had been arranged in the Working Group. Countries wishing to use the band above 2.5 GHz in Region 3 should not be prevented from doing so. Australia would prefer an allocation below 2.5 GHz but would not oppose an allocation in the upper band. Any sharing problems in the upper band could be accommodated by national arrangements.

7.9 The delegate of Papua New Guinea confirmed the statement made by India and supported the views of Australia, that countries within the region wishing to take either side of the 2.5 GHz should be able to do so.

7.10 The delegate of Pakistan said that his Administration did not feel strongly about the need for an RDSS service at the present time but if it was unavoidable and was introduced into Region 3, it would strongly support Japan's position that any allocation above 2.5 GHz should not be allowed because it would jeopardize many fixed services throughout Region 3. The delegate of Sri Lanka endorsed that view.

7.11 The delegate of the Islamic Republic of Iran said that his country would have serious problems with an allocation for the RDSS above 2.5 GHz. It therefore supported Japan's proposal.

7.12 The Chairman suggested, in the light of the discussion, that the following solution might be acceptable: in Region 3, in the band 2 483.5 - 2 500, the RDSS be added to the table with a footnote stating that in some countries the allocation of the band 2 500 - 2 516.5 was allocated to the RDSS space-to-Earth on a secondary basis.

7.13 The delegate of India said that it was with deep regret that his Delegation would have to accept that proposal after a consensus had been achieved in the Working Group. However, if a footnote had to be formulated, it should be on the lines of No. 754A to the effect that "In certain countries, the band 2 500 - 2 516.5 MHz is also allocated to the RDSS space-to-Earth on a primary basis subject to agreement obtained under the procedure of Article 14".

7.14 The delegate of Australia supported India's proposal. Replying to a question by the Chairman as to whether Australia wished to be included in the footnote, he said that Australia would prefer an allocation below 2.5 GHz.

7.15 The delegate of Japan said that for the reasons earlier expressed, a secondary allocation was more appropriate. It seemed that CCIR studies were necessary to solve the sharing problems in Region 3.

7.16 The delegate of the Islamic Republic of Iran said that a national allocation for primary status for the RDSS in the band above 2.5 GHz would cause difficulties, particularly since it was not yet clear what kind of procedure would be taken under Article 14. More time was needed for further study of the matter and he therefore reserved the right to revert to the matter later on. The delegate of Pakistan endorsed that statement.

7.17 The Chairman acknowledged that problems existed with regard to the sharing criteria but considered that a national footnote concerning agreement under Article 14 should really meet all concerns. He asked whether India would reconsider its position.

7.18 The delegate of India replied that if the Article 14 procedure were applied, he could not see why there should be sharing problems provided that the agreement of all concerned was obtained. His Administration was prepared to agree to the power flux-density limits prescribed for space transmissions and could not see why the RDSS could not therefore share the same band by agreement with other administrations. It could not agree to secondary status for a space-satellite service. A fair solution would be to ask countries wanting primary status to go into a footnote applying Article 14, which should take care of the concerns of the other countries.

7.19 The Chairman agreed that it would be normal practice to apply the Article 14 procedure with a national footnote, and asked the delegates of Japan, Pakistan and the Islamic Republic of Iran to accept a national footnote with a primary allocation.

7.20 The delegate of Japan said that although a power-flux density was useful for the RDSS there would still be a sharing problem because the antennas of the other stations would be small and omnidirectional. He therefore proposed that the national footnote should be on a secondary basis.

7.21 The delegate of Pakistan said that since the RDSS terminals were set to have omnidirectional antennas wherever used, an RDSS as a primary service was not acceptable. He would agree to a footnote on a secondary basis.

7.22 The delegate of India wondered how a receiving terminal of an RDSS station, with an omnidirectional antenna, could affect other services.

7.23 The delegate of Japan said that in adjacent countries where one country used a certain frequency band for the broadcasting-satellite service and the other used the same frequency band for the RDSS, there would be interference even with a pfd limitation, because the signal and noise might be on the same level on the earth station, and because it was very difficult to get only the wanted signal because the other terminal used a very small omnidirectional antenna.

7.24 The delegate of Australia pointed out that earth stations in the RDSS in that band were receiver terminals.

7.25 The delegate of Pakistan said that, like the delegate of the Islamic Republic of Iran, he, too, had apprehensions about the RDSS, which was little known to developing countries and not yet fully developed in the developed countries. As far as his Administration was aware, omnidirectional antennas were transmitting antennas as well as a receiving antenna. A terminal would serve no purpose if it did not have both capabilities.

7.26 The delegate of the USSR said that in his Administration's view, the problems surrounding the RDSS had not been considered in detail. Furthermore, there was no satisfactory procedure regarding interference between regions. His Delegation therefore reserved its position with regard to any distribution of the RDSS in Region 3.

7.27 The delegate of the Islamic Republic of Iran said that from a procedural point of view, the fairest course of action would be to follow the position preferred by the majority and note the reservations of the minority. In addition, he asked the Chairman to indicate whether the proposal made by one country had received any support.

7.28 The Chairman said that as the proposal in Document 373 came from Working Group 4-A, there was no need for additional support. The original idea had been to have a table allocation but in view of the discussion, a national footnote appeared to be the only solution. That was normal practice and the Committee would have to decide whether a national footnote could be approved.

7.29 The delegate of the Islamic Republic of Iran said that he was not satisfied with that procedure and reserved the right to come back to the subject later on.

7.30 The Chairman recalled the Committee's decision, at the fourteenth meeting, relating to the footnote concerning the status of allocation to RDSS and reminded the Committee that the 2.5 GHz band had yet to be discussed.

7.31 The delegate of Swaziland recorded his Delegation's reservation concerning the 1.6 GHz band.

7.32 The delegate of the USSR suggested that footnote 734B should reflect inclusion of the Article 14 procedure for RDSS in Region 1 on both bands.

7.33 The delegate of the United States of America, speaking on a point of order, said he understood that a decision had been reached by consensus on the matter at the fourteenth meeting.

7.34 The delegate of Senegal felt that all proposals on the introduction of new systems should be considered together; therefore, the Committee's findings relating to Working Group 4-A's eighth report (Document 373) should be transmitted to the Plenary as a whole.

7.35 The Chairman said he took it, therefore, that he could report to the Plenary in respect of the 2.5 GHz band in the same manner as for the 1.6 GHz band; the lists of countries to be included in the respective footnotes would be indicated.

7.36 The delegate of the USSR recorded his Delegation's reservations in respect of both bands.

7.37 The delegate of Cuba said it was not clear to him how the matter would be reported to the Plenary Meeting. He had not wished to have a footnote reference in respect of his own Administration; he would prefer to see, in respect of Region 2, a list of those countries which desired primary status for RDSS.

7.38 The delegate of Costa Rica said that a majority of the Region 2 countries were in favour of primary status for RDSS.

7.39 The delegate of the United States of America said that, if the compromise seemingly achieved at the previous meeting was to be undone, perhaps a decision could be taken in favour of Annex 1 to Document 373, which had enjoyed majority support.

7.40 The delegates of Italy and Sweden supported the Chairman's proposed course of action.

7.41 The delegate of Pakistan said that he too wished to know how the matter would be reported to the Plenary Meeting; he reserved the right to revert to the subject of the 2.5 GHz band at that time.

7.42 The delegate of Argentina, referring to the Cuban Delegation's observation, said the Region 2 countries which preferred primary status for RDSS were not in a majority; it would be more logical to reflect those countries' position by means of a footnote: the delegate of Venezuela agreed with the delegate of Argentina.

7.43 The Secretary of the Committee read out the list of countries which, under footnote 734B, wished to have primary status for RDSS subject to agreement obtained under the procedure set forth in Article 14.

7.44 The delegate of Mexico, speaking on a point of order pursuant to No. 526 of the Convention, noted that the delegate of Argentina had said, with reference to the Costa Rican delegate's statement, that there was no majority of Region 2 countries in favour of primary status for RDSS; in fact, however, there was a clear majority in favour among the Region 2 countries present at the current Conference.

7.45 The Chairman said he would report to the Plenary Meeting that Committee 4's decision with regard to the 1.6 GHz band applied to the 2.5 GHz band also; he would also draw attention to the reservations expressed.

8. Report of Working Group 4 ad hoc 3 (Document 421)

8.1 The Chairman of Working Group 4 ad hoc 3 expressed his appreciation of the genuine desire shown by all participants to arrive at a consensus solution in a spirit of compromise on an extremely complex issue. He also thanked the Secretariat staff for their invaluable assistance. Since the text was a carefully considered and delicately balanced basis for a compromise solution, the three annexes had to be considered jointly as an inseparable whole; it might be convenient to begin consideration at draft Resolution COM4/14, before examining the tables and footnotes in Annexes 1 and 2.

8.2 The delegations of the USSR, Saudi Arabia, Tanzania and India said that they could support draft Resolution[COM4/14].

8.3 The delegate of Brazil said that he could not fully endorse the text prior to consideration of Annexes 1 and 2, which might raise some substantive issues.

8.4 The delegate of Denmark said that 17 European countries had compromised their own stance considerably for the sake of a consensus solution; he hoped, therefore, that others would consider Document 421 in that spirit. The most important element related to the proposed steps to convene a world administrative radio conference with a view to extending frequency bands for the mobile-satellite and mobile services, in such a way as to leave sufficient spectrum for the maritime mobile service and the possible development of other services, since by 1992 there would be enough accumulated experience to form a basis for allocations to cover the subsequent 20 years.

8.5 The delegate of Cameroon expressed his Delegation's reservation on considering d), which, as currently worded, implied that a portion of the spectrum had already been allocated to the LMSS.

8.6 The representative of the IFRB (Mr. Brooks) said that the wording was intended to reflect the situation at the time of the Final Acts, by which time the reallocation would presumably have been made.

8.7 The delegate of Senegal expressed a reservation regarding the entire text of [COM4/14].

8.8 The delegate of Canada thanked the Chairman of Working Group 4 ad hoc 3 for his efforts to arrive at a consensus. In order to allay any anxiety felt by delegations which had not participated in the Working Group's efforts, perhaps the meeting could consider and comment on all three annexes together.

It was so agreed.

8.9 The delegates of Swaziland and Mexico said that they could accept the basic principle of draft Resolution COM4/14.

8.10 The Chairman of Working Group 4 ad hoc 3, replying to a question by the delegate of France, said that a revision to Document 421 had been issued, concerning the French text only. Resolves 1 of draft Resolution [COM4/14], was an attempt to deal with certain aspects of mobile-satellite systems, involving highly technical considerations, to deal with such situations as a satellite service which a particular administration did not wish to have. In invites 3, the term "improved procedures" was taken from texts adopted at WARC MOB-83, was an accepted term with a definite meaning. An editorial correction was required to the English text: the word "resolves", where it appeared a second time at the top of page 6, should be deleted and the following paragraph numbered 3.

8.11 The representative of the IFRB (Mr. Brooks) said that the term "improved procedures" applied only to certain frequency bands; the word "improved" should be deleted from invites 3.

Replying to a question by the delegate of Pakistan, he said that the phrase in resolves 2, which contained the word "maximum", was patterned on the wording of RR 2674.

8.12 The reprsentative of the CCIR, supported by the Chairman of Working Group 4 ad hoc 3, suggested that, in invites 2, the words "and national" should be replaced by "and other participants in the work of CCIR".

8.13 The delegate of the United States of America recalled that the administrations in favour of developing the LMSS had made considerable sacrifices for the sake of consensus; the outcome in Document 421 was a workable compromise, which would enable that service to have primary status on a world-wide basis.

8.14 The Chairman said that, since no objection had been voiced to the principle of the draft Resolution contained in Annex 3, he now invited the Committee to consider Document 421 as a whole.

8.15 The delegate of the USSR appreciated the desire of many administrations to use for the land mobile-satellite service on a primary basis part of the band currently used exclusively for the aeronautical mobile-satellite service. However, such access should not stand in the way of the development of future aeronautical mobile-satellite systems. He suggested that the bandwidth might,

therefore, be of the order of 3 MHz. As to the possibility of having the maritime mobile-satellite services on the same band as the land mobile-satellite services, his Administration objected to the allocation of part of the band to the land mobile-satellite service on a primary basis, on the grounds that the band was already widely used nationally and internationally. He expressed doubts about using the band on a primary basis for experimental research when important services were already operating on it.

8.16 The delegate of Switzerland said that his Delegation could agree to the annexes in Document 421 without square brackets, as a global package deal.

8.17 The delegate of Senegal joined the Soviet delegate in expressing doubts as to whether precise sharing criteria could be established for primary allocations on the 1 530 - 1 533 GHz in Annexes 2 and 3. It would be a serious precedent to change the provisions of Article 8 of the Radio Regulations on the basis of a simple wish. He was opposed to primary allocation for the land mobile-satellite service in the band. Referring to Annex 1, he could not share the opinion of ICAO that reduction of the 1 545 - 1 559 MHz band would pose no problems. He was opposed to primary allocation for any service other than the maritime mobile-satellite service.

8.18 The delegate of the United Kingdom endorsed the comment by the delegate of Denmark. Document 421 was the result of a delicate, balanced compromise. His Delegation regretted that it had been found necessary to use the radioastronomy band from 1 660.0 - 1 660.5 on a primary basis for the land mobile-satellite services; it could, however, accept the package solution offered in the document, with the deletion of the square bracket.

8.19 The delegate of Brazil shared the view of the Soviet delegate concerning Annex 2. Any allocation made on a primary basis for the land mobile-satellite service would imply that INMARSAT would not use the band because of sharing difficulties. He considered that the land mobile-satellite service should be on a secondary basis and would object to any primary allocation on that part of the spectrum. Referring to Annex 1, although there were serious problems relating to allocation to the land mobile-satellite service, he could accept as a compromise the figure of 3 MHz indicated by the Soviet delegate.

8.20 The delegate of Canada recalled that the document was the outcome of a very delicate compromise. He was troubled by suggestions to reduce the amount of frequency spectrum indicated in the document and advised administrations to give careful consideration to the matter.

8.21 The delegate of Kenya, referring to ADD 730A in Annex 1, suggested that the square brackets around "aircraft earth stations and" should be deleted. His Delegation was aware that the document represented the best compromise solution offered but might wish to make a reservation concerning the frequencies allocated to the land mobile-satellite service from the aeronautical mobile-satellite service.

8.22 The delegate of Bulgaria also supported the allocation of the land mobile-satellite service on a secondary basis in the maritime mobile-satellite band.

8.23 The delegate of Greece said that he could agree with the thrust of Document 421. At the same time, he pointed out that Annex 1, which was linked with Resolution [COM4/14], provided the possibility of creating a multinational service which meant indirectly that for those bands allocated on a primary basis for the land mobile-satellite service, the related footnote and Resolution provided the possibility of establishing multinational aeronautical and maritime systems. He agreed with the delegate of France that under resolves 1 there was a

possibility of establishing a multinational service in the 1 530 - 1 544 MHz band and reference could therefore be made in that paragraph specifically to the land mobile-satellite system, to be accompanied in 730A a mention of the restriction on a national scale of the application of bands for aircraft and ship stations.

8.24 The delegate of Morocco said that the multidimensional approach adopted in the document took account of the varying needs of different administrations. He fully supported Document 421.

8.25 The delegate of Denmark, referring to concern about equal primary allocation for the land mobile-satellite service in the maritime mobile-satellite bands, said that the intention was rather to open up possibility for INMARSAT. The existing Radio Regulations specified coordination procedures to be followed when establishing satellite systems; newcomers to the existing service would have to coordinate with INMARSAT. Concerning the aeronautical R bands, he said that the proposed 1992 Conference would reorganize and extend the bands for the different mobile-satellite services and the question was now to find a solution until resolution of the 1992 Conference could be implemented. Document 421 represented a delicate compromise which his Delegation was willing to accept because it made it possible to have sufficient spectrum for the aeronautical mobile R service until 1992 and similarly for the maritime mobile-satellite service. Referring to Footnote 730A, he considered it a reasonable possibility by which to create an integrated service in a very small part of the band in order to have some real experience by 1992.

8.26 The delegate of Saudi Arabia said that his Delegation had approved Document 421 in the ad hoc Group discussions, bearing in mind the concerns of ICAO and the wish to keep the band free, the point of view of the countries not represented in the group and the wish of some to work out more effective systems. He hoped that the document could be supported by all.

8.27 The delegate of Venezuela said that his Delegation could support any proposal offering a solution leading to the opening of allocations for land mobile-satellite services in the bands for the aeronautical mobile-satellite service and would give flexibility to allow future growth in the land mobile-satellite service.

8.28 The delegate of the United States shared the concern of the delegate of Canada about attempts to reduce the amounts of spectrum or status of the proposed reallocation. He therefore urged in the interests of the viability of the land mobile-satellite service that there should be no further attempt at adjustment in that context. Referring to Footnote 730A, he agreed with the delegate of Denmark that it was a most useful multi-service approach. He supported Document 421 as it stood.

8.29 The delegate of Japan said that while his Delegation, like others, was not entirely satisfied with Document 421, it fully appreciated the package being offered as a means of ushering in a new era and allowing the ITU to keep up with the world advancement. He therefore supported the annexes to Document 421, without the square brackets.

8.30 The delegate of Mexico said that, while his Delegation was not entirely satisfied with the package solution and while many questions still remained to be answered, he could accept it as a compromise solution, with the removal of the square brackets.

8.31 The delegate of Cuba pointed to the need to study allocations carefully at the proposed future Conference. He maintained the position of his Administration against change in the maritime mobile-satellite service.

8.32 The delegate of Costa Rica, while sharing the concern expressed by the delegate of Mexico concerning use of the spectrum, supported the document as a compromise solution. The delegate of Malta also supported the proposed compromise solution. The delegate of Spain supported the document, with the removal of the square brackets.

8.33 The delegate of Argentina said that he could approve allocation for the land mobile-satellite services only on a secondary basis.

8.34 The Chairman of Working Group 4 ad hoc 3, in reply to a question from the delegate of Kenya, said that the Working Group reiterated its position concerning the inclusion of the square brackets in the annexes. Document 421 had been prepared as a means to provide a basis for compromise. In response to a question by the delegate of Venezuela concerning agreements on frequency, he confirmed that the delegate of Brazil had said in the Working Group that he would raise the matter at Committee level.

8.35 The delegate of Brazil said that Document 421 was intended as a basis for compromise and not as a compromise in itself. Thus no administration had committed itself to supporting the document prior to the meeting of the Committee. Proposals to change figures did not mean that administrations were going against any decision in the Working Group because no such decisions had in fact been taken.

8.36 The delegate of the United States said that in view of the uncertainty over the question of allocation, his Delegation wished to reserve the right to return to the question of spectrum allocation amounts and in particular to the relevant footnotes in Plenary.

8.37 The Chairman said that he took it that Document 421 was approved with the removal of the square brackets in Annexes 1 and 3. It would therefore be presented to Plenary in that form. In reply to a question from the delegate of Mexico, he said that although Document 421 had been considered as a whole, and while the square brackets could be removed in Annexes 1 and 3, they must be retained in Annex 2 for discussion at the Plenary level since strong dissatisfaction had been voiced on that point.

It was so agreed.

9. Report of Working Group 4 ad hoc 6

9.1 The Chairman said that as the report of Working Group 4 ad hoc 6 could not be considered in Committee 4 for lack of time, it would be submitted to Plenary for consideration.

9.2 The delegate of Denmark suggested that it should be requested that the report be considered together with the report of the Chairman of Committee 4 on related items.

It was so agreed.

10. Completion of the Committee's work

10.1 The Chairman expressed his particular thanks to the Chairman of the Committee's Working Groups: Mr. Karjalainen of Finland, Mr. Piponnier and Mr. Bisner (France), Mr. Visser, Mr. Broere, Mr. Witzen and Mr. van Diepenbeek (Netherlands), Mr. Rolston (Canada), Mr. Goddard and Mr. Court (United Kingdom), Mr. Steiner (Austria), Mr. Boe (Norway), Mr. Williams, Mr. Sheldon, Mr. Moran

and Mr. Borman (United States), Mr. Bjornsjo and Mr. Bergman (Sweden) and Mr. Duxfield (New Zealand). He expressed also special thanks to the staff of the Technical Secretariat and in particular to Mr. Harbi, Mr. Kovais and Mr. Gavrilov.

10.2 After the customary exchange of courtesies between the Chairman and the delegate of India, the Chairman declared the last meeting of Committee 4 closed.

The meeting rose at 2315 hours.

The Secretary: The Chairman:

T. GAVRILOV O. VILLANYI

BLUE PAGES

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 442-E
13 October 1987

B.16 PLENARY MEETING

SIXTEENTH 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	Documents	Title
COM.4	412 (437)	Appendix 31 Appendix 16 Appendix 32 Appendix 33 Appendix 34 Appendix 35

Y.C. MONGELARD
Chairman of Committee 7

Annex: 49 pages

MOD

APPENDIX 31
Mob-87

MOD

Table of Frequencies to Be Used in the Bands
Between 4 000 kHz and 27 500 kHz
Allocated Exclusively to the
Maritime Mobile Service

Band MHz	Limits kHz	Frequencies assignable to ship stations for oceanographic data transmission	Limits kHz	Frequencies assignable to ship stations for telephony, duplex operation	Limits kHz	Frequencies assignable to ship and coast stations for telephony, simplex operation	Limits kHz	Frequencies assignable to ship stations for wide-band telegraphy, facsimile and special transmission systems	Limits kHz
		c)		a) i)		a)			
4	4063	4063.3 4064.8 6 f. 0.3 kHz	4065	4066.4 4144.4 27 f. 3 kHz	4146	4147.4 4150.4 2 f. 3 kHz	4152	4154 4170 5 f. 4 kHz	4172
6	6200		6200	6201.4 6222.4 8 f. 3 kHz	6224	6225.4 6231.4 3 f. 3 kHz	6233	6235 6259 7 f. 4 kHz	6261
8	8195		8195	8196.4 8292.4 32 f. 3 kHz	8294	8295.4 8298.4 2 f. 3 kHz	8300	8302 8338 10 f. 4 kHz	8340
12	12230		12230	12231.4 12351.4 41 f. 3 kHz	12353	12354.4 12366.4 5 f. 3 kHz	12368	12370 12418 13 f. 4 kHz	12420
16	16360		16360	16361.4 16526.4 56 f. 3 kHz	16528	16529.4 16547.4 7 f. 3 kHz	16549	16551 16615 17 f. 4 kHz	16617
18/19	18780		18780	18781.4 18823.4 15 f. 3 kHz	18825	18826.4 18844.4 7 f. 3 kHz	18846	18848 18868 6 f. 4 kHz	18870
22	22000		22000	22001.4 22157.4 53 f. 3 kHz	22159	22160.4 22178.4 7 f. 3 kHz	22180	22182 22238 15 f. 4 kHz	22240
25/26	25070		25070	25071.4 25098.4 10 f. 3 kHz	25100	25101.4 25119.4 7 f. 3 kHz	25121	25123 25159 10 f. 4 kHz	25161.25

f. = fréquences/frequencies/frecuencias

Band MHz	Limits kHz	Frequencies assignable to ship stations for oceanographic data transmission	Limits kHz	Frequencies (paired) assignable to ship stations for NBDP telegraphy and data transmission systems at speeds not exceeding 100 bauds for FSK and 200 bauds for PSK	Limits kHz	Calling frequencies assignable to ship stations for A1A or A1B Morse telegraphy	Limits kHz	Frequencies (paired) assignable to ship stations for NBDP telegraphy and data transmission systems at speeds not exceeding 100 bauds for FSK and 200 bauds for PSK	Limits kHz
		c)		d) j) m)		g)		d) m)	
4	4172		4172	4172.5 4181.5 19 f. 0.5 kHz	4181.75		4186.75		4186.75
6	6261	6261.3 6262.5 5 f. 0.3 kHz	6262.75	6263 6275.5 26 f. 0.5 kHz	6275.75		6280.75	6281 6284.5 8 f. 0.5 kHz	6284.75
8	8340	8340.3 8341.5 5 f. 0.3 kHz	8341.75		8341.75		8341.75		8341.75
12	12420	12420.3 12421.5 5 f. 0.3 kHz	12421.75		12421.75		12421.75		12421.75
16	16617	16617.3 16618.5 5 f. 0.3 kHz	16618.75		16618.75		16618.75		16618.75
18/19	18870		18870		18870		18870		18870
22	22240	22240.3 22241.5 5 f. 0.3 kHz	22241.75		22241.75		22241.75		22241.75
25/26	25161.25		25161.25		25161.25		25161.25		25161.25

f. = fréquences/frequencies/frecuencias

Bands MHz	Limits kHz	Working frequencies assignable to ship stations for A1A or A1B Morse telegraphy	Limits kHz	Calling frequencies assignable to ship stations for A1A or A1B Morse telegraphy	Limits kHz	Working frequencies assignable to ship stations for A1A or A1B Morse telegraphy	Limits kHz	Frequencies (paired) assignable to ship stations for NBDP telegraphy and data transmission systems at speeds not exceeding 100 bauds for FSK and 200 bauds for PSK	Limits kHz
		e) f)		g)		e) f)		d) j) m)	
4	4186.75	4187 4202 31 f. 0.5 kHz	4202.25		4202.25		4202.25		4202.25
6	6284.75	6285 6300 31 f. 0.5 kHz	6300.25		6300.25		6300.25		6300.25
8	8341.75	8342 8365.5 48 f. 0.5 kHz	8365.75		8370.75	8371 8376 40 f. 0.5 kHz	8376.25	8376.5 8396 40 f. 0.5 kHz	8396.25
12	12421.75	12422 12476.5 110 f. 0.5 kHz	12476.75		12476.75		12476.75	12477 12549.5 146 f. 0.5 kHz	12549.75
16	16618.75	16619 16683 129 f. 0.5 kHz	16683.25		16683.25		16683.25	16683.5 16733.5 101 f. 0.5 kHz	16733.75
18/19	18870		18870		18870		18870	18870.5 18892.5 45 f. 0.5 kHz	18892.75
22	22241.75	22242 22279 75 f. 0.5 kHz	22279.25		22284.25		22284.25	22284.5 22351.5 135 f. 0.5 kHz	22351.75
25/26	25161.25	25161.5 25171 20 f. 0.5 kHz	25171.25		25172.75		25172.75	25173 25192.5 40 f. 0.5 kHz	25192.75

f. = fréquences/frequencies/frecuencias

Band MHz	Limits kHz	Calling frequencies assignable to ship stations for A1A or A1B Morse telegraphy	Limits kHz	Frequencies (paired) assignable to ship stations for NBDP telegraphy and data transmission systems at speeds not exceeding 100 bauds for FSK and 200 bauds for PSK	Limits kHz	Frequencies (non-paired) assignable to ship stations for NBDP and A1A, A1B Morse telegraphy (working)	Limits kHz	Frequencies assignable to ship stations for Digital Selective Calling	Limits kHz
		g)		d) m)		b)		k) [l)]	
4	4202.25		4202.25		4202.25	4202.5 4207 10 f. 0.5 kHz	4207.25	4207.5 4209 4 f. 0.5 kHz	4209.25
6	6300.25		6300.25		6300.25	6300.5 6311.5 23 f. 0.5 kHz	6311.75	6312 6313.5 4 f. 0.5 kHz	6313.75
8	8396.25		8396.25		8396.25	8396.5 8414 36 f. 0.5 kHz	8414.25	8414.5 8416 4 f. 0.5 kHz	8416.25
12	12549.75		12554.75	12555 12559.5 10 f. 0.5 kHz	12559.75	12560 12576.5 34 f. 0.5 kHz	12576.75	12577 12578.5 4 f. 0.5 kHz	12578.75
16	16733.75		16738.75	16739 16784.5 92 f. 0.5 kHz	16784.75	16785 16804 39 f. 0.5 kHz	16804.25	16804.5 16806 4 f. 0.5 kHz	16806.25
18/19	18892.75		18892.75		18892.75	18893 18898 11 f. 0.5 kHz	18898.25	18898.5 18899.5 3 f. 0.5 kHz	18899.75
22	22351.75		22351.75		22351.75	22352 22374.5 46 f. 0.5 kHz	22374.75	22375 22376 3 f. 0.5 kHz	22376.25
25/26	25192.75		25192.75		25192.75	25193 25208 31 f. 0.5 kHz	25208.25	25208.5 25209.5 3 f. 0.5 kHz	25210

f. = fréquences/frequencies/frecuencias

Band MHz	Limits kHz	Frequencies (paired) assignable to coast stations for NBDP and data transmission systems, at speeds not exceeding 100 bauds for FSK and 200 bauds for PSK	Limits kHz	Frequencies assignable to coast stations for digital selective calling	Limits kHz	Frequencies assignable to coast stations for wide-band and A1A or A1B Morse telegraphy, facsimile, special and data transmission systems and direct-printing telegraphy systems	Limits kHz	Frequencies assignable to coast stations for telephony, duplex operation	Limits kHz
		d) o)						a)	
4	4209.25	4209.5 4219 20 f. 0.5 kHz	4219.25	4219.5 4220.5 3 f. 0.5 kHz	4221		4351	4352.4 4436.4 29 f. 3 kHz	4438
6	6313.75	6314 6330.5 34 f. 0.5 kHz	6330.75	6331 6332 3 f. 0.5 kHz	6332.5		6501	6502.4 6523.4 8 f. 3 kHz	6525
8	8416.25	8416.5 8436 40 f. 0.5 kHz	8436.25	8436.5 8437.5 3 f. 0.5 kHz	8438		8707	8708.4 8813.4 37 f. 3 kHz	8815
12	12578.75	12579 12656.5 156 f. 0.5 kHz	12656.75	12657 12658 3 f. 0.5 kHz	12658.5		13077	13078.4 13198.4 41 f. 3 kHz	13200
16	16806.25	16806.5 16902.5 193 f. 0.5 kHz	16902.75	16903 16904 3 f. 0.5 kHz	16904.5		17242	17243.4 17408.4 56 f. 3 kHz	17410
18/19	19680.25	19680.5 19703 46 f. 0.5 kHz	19703.25	19703.5 19704.5 3 f. 0.5 kHz	19705		19755	19756.4 19798.4 15 f. 3 kHz	19800
22	22375.75	22376 22443.5 136 f. 0.5 kHz	22443.75	22444 22445 3 f. 0.5 kHz	22445.5		22696	22697.4 22853.4 53 f. 3 kHz	22855
25/26	26100.25	26100.5 26120.5 41 f. 0.5 kHz	26120.75	26121 26122 3 f. 0.5 kHz	26122.5		26145	26146.4 26173.4 10 f. 3 kHz	26175

f. = fréquences/frequencies/frecuencias

ADD NOTES REFERRING TO THE TABLE

MOD a) See Appendix 16(Rev.).

MOD b) See Appendix 33(Rev.)

MOD c) These frequency bands may also be used by buoy stations for oceanographic data transmission and by stations interrogating these buoys.

MOD d) See Appendix 32(Rev.).

MOD e) In the frequency bands to be used by ship stations for A1A Morse telegraphy working at speeds not exceeding 40 bauds, administrations may assign additional frequencies interleaved between the assignable frequencies. Any frequencies so assigned shall be multiples of 100 Hz. Administrations shall ensure a uniform distribution of such assignments within the bands.

MOD f) See Appendix 35(Rev.).

MOD g) See Appendix 34(Rev.).

NOC h)

MOD i) For the use of the carrier frequencies 4 125 kHz, 6 215 kHz, 8 291 kHz, 12 290 kHz and 16 420 kHz in these sub-bands by ship and coast stations for distress and safety purposes, by single-sideband radiotelephony, see Articles 38 and N 38.

ADD j) For the use of the frequencies 4 177.5 kHz, 6 268 kHz, 8 376.5 kHz, 12 520 kHz and 16 695 kHz in these sub-bands by ship and coast stations for distress and safety purposes, by narrow-band direct-printing telegraphy, see Article N 38.

ADD k) For the use of the frequencies 4 207.5 kHz, 6 312 kHz, 8 414.5 kHz, 12 577 kHz and 16 804.5 kHz in these sub-bands by ship and coast stations for distress and safety purposes, by digital selective calling, see Article N 38.

ADD l) The following paired frequencies (for ship/coast stations) 4 208/4 219.5 kHz, 6 312.5/6 331 kHz, 8 415/8 436.5 kHz, 12 577.5/12 657 kHz, 16 805/16 903 kHz, 18 898.5/19 703.5 kHz, 22 375/22 444 kHz and 25 208.5/26 121 kHz are the first choice international frequencies for digital selective calling (see Article 62).

ADD m) Frequencies from these frequency bands may also be used for A1A and A1B Morse (working); see Appendix 32(Rev.).

ADD n) The frequencies 4 210 kHz, 6 314 kHz, 8 416.5 kHz, 12 579 kHz, 16 806.5 kHz, 19 680.5 kHz, 22 376 kHz and 26 100.5 kHz are the international frequencies for the transmission of Maritime Safety Information (MSI) (see Resolution COM5/5).

ADD o) The frequency 4 209.5 kHz is an international frequency for the transmission of NAVTEX type information (see Resolution COM5/4).

MOD

APPENDIX 16
(Mob-87)

MOD

Channelling of the Maritime Mobile Radiotelephone Bands Between 4 000 kHz and 27 500 kHz

(See Article 60, Section IV)

MOD 1. Radiotelephone channelling arrangements for the frequencies to be used by coast and ship stations in the bands allocated to the maritime mobile service are indicated in the following sections:

Section A - Table of single-sideband transmitting frequencies (in kHz) for duplex (two-frequency) operation;

Section B - Table of single-sideband transmitting frequencies (in kHz) for simplex (single-frequency) operation and for intership cross-band (two-frequency) operation;

MOD Section C-1 - Table of recommended single-sideband transmitting frequencies (in kHz) for ship stations in the band 4 000 - 4 063 kHz shared with the fixed service;

MOD Section C-2 - Table of recommended single-sideband transmitting frequencies (in kHz) for ship and coast stations i the band 8 100 - 8 195 kHz shared with the fixed service.

NOC 2.

NOC 3.

NOC. 4.

MOD 5. The following frequencies in Section A are allocated for calling purposes:

- Channel No. 421 in the 4 MHz band;
- Channel No. 606 in the 6 MHz band;
- Channel No. 821 in the 8 MHz band;
- Channel No. 1221 in the 12 MHz band;
- Channel No. 1621 in the 16 MHz band;
- Channel No. 1806 in the 18 MHz band;
- Channel No. 2221 in the 22 MHz band;
- Channel No. 2510 in the 25 MHz band.

The remaining frequencies in Sections A, B, C-1 and C-2 are working frequencies.

MOD 5A For the use of the carrier frequencies:

4 125 kHz (Channel No. 421)

6 215 kHz (Channel No. 606)

8 291 kHz (Channel No. 833)

12 290 kHz (Channel No. 1221)

16 420 kHz (Channel No. 1621)

in Section A, by coast and ship stations for distress and safety purposes, see Articles 38 and N 38.

MOD 6. a) Maritime radiotelephone stations using single-sideband emissions in the bands between 4 000 and 27 500 kHz exclusively allocated to the maritime mobile service shall operate only on the carrier frequencies shown in Sections A and B in conformity with the technical characteristics specified in Appendix 17.

ADD b) Ship stations, when using frequencies for single-sideband radiotelephony from the bands 4 000 - 4 063 kHz and ship and coast stations, when using frequencies for single-sideband radiotelephony in the band 8 100 - 8 195 kHz should operate on the carrier frequencies indicated in Sections C-1 and C-2 respectively. Technical characteristics of the equipment shall be those specified in Appendix 17.

MOD c) Stations employing the single-sideband mode shall use only class J3E emissions.

NOC 7.

ADD 8. For the use and notification of channels Nos. 427, 428, 429, 607, 608, 832, 834, 835, 836, 837, 1233 up to and including 1241, 1642 up to and including 1656, 1801 up to and including 1815, 2241 up to and including 2253 and 2501 up to and including 2510, see Resolution COM4/6.

NOC

Section A

Table of Single-Sideband Transmitting Frequencies For Duplex (Two-Frequency) Operation (in kHz)

Channel No.	4 MHz Band			
	Coast stations		Ship stations	
	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency
401	4357	4358.4	4065	4066.4
402	4360	4361.4	4068	4069.4
403	4363	4364.4	4071	4072.4
404	4366	4367.4	4074	4075.4
405	4369	4370.4	4077	4078.4
406	4372	4373.4	4080	4081.4
407	4375	4376.4	4083	4084.4
408	4378	4379.4	4086	4087.4
409	4381	4382.4	4089	4090.4
410	4384	4385.4	4092	4093.4
411	4387	4388.4	4095	4096.4
412	4390	4391.4	4098	4099.4
413	4393	4394.4	4101	4102.4
414	4396	4397.4	4104	4105.4
415	4399	4400.4	4107	4108.4
416	4402	4403.4	4110	4111.4
417	4405	4406.4	4113	4114.4
418	4408	4409.4	4116	4117.4
419	4411	4412.4	4119	4120.4
420	4414	4415.4	4122	4123.4
421	4417*	4418.4*	4125* [4]	4126.4*
422	4420	4421.4	4128	4129.4
423	4423	4424.4	4131	4132.4
424	4426	4427.4	4134	4135.4
425	4429	4430.4	4137	4138.4
426	4432	4433.4	4140	4141.4
427[2]	4435	4436.4	4143	4144.4
428[1 2 3]	4351	4352.4	-	-
429[1 2 3]	4354	4355.4	-	-

Channel No.	6 MHz Band			
	Coast stations		Ship stations	
	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency
601	6501	6502.4	6200	6201.4
602	6504	6505.4	6203	6204.4
603	6507	6508.4	6206	6207.4
604	6510	6511.4	6209	6210.4
605	6513	6514.4	6212	6213.4
606	6516*	6517.4*	6215* [5]	6216.4*
607[2]	6519	6520.4	6218	6219.4
608[2]	6522	6523.4	6221	6222.4

Channel No.	8 MHz Band			
	Coast stations		Ship stations	
	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency
801	8719	8720.4	8195	8196.4
802	8722	8723.4	8198	8199.4
803	8725	8726.4	8201	8202.4
804	8728	8729.4	8204	8205.4
805	8731	8732.4	8207	8208.4
806	8734	8735.4	8210	8211.4
807	8737	8738.4	8213	8214.4
808	8740	8741.4	8216	8217.4
809	8743	8744.4	8219	8220.4
810	8746	8747.4	8222	8223.4
811	8749	8750.4	8225	8226.4
812	8752	8753.4	8228	8229.4
813	8755	8756.4	8231	8232.4
814	8758	8759.4	8234	8235.4
815	8761	8762.4	8237	8238.4
816	8764	8765.4	8240	8241.4
817	8767	8768.4	8243	8244.4
818	8770	8771.4	8246	8247.4
819	8773	8774.4	8249	8250.4
820	8776	8777.4	8252	8253.4
821	8779*	8780.4*	8255*	8256.4*
822	8782	8783.4	8258	8259.4
823	8785	8786.4	8261	8262.4
824	8788	8789.4	8264	8265.4
825	8791	8792.4	8267	8268.4
826	8794	8795.4	8270	8271.4
827	8797	8798.4	8273	8274.4
828	8800	8801.4	8276	8277.4
829	8803	8804.4	8279	8280.4
830	8806	8807.4	8282	8283.4
831	8809	8810.4	8285	8286.4
832 [2]	8812	8813.4	8288	8289.4
833	8291[9]	8292.4	8291[9]	8292.4
834[6] [2] [3]	8707	8708.4	–	–
835[6] [2] [3]	8710	8711.4	–	–
836[6] [2] [3]	8713	8714.4	–	–
837[6] [2] [3]	8716	8717.4	–	–

Channel No.	12 MHz Band			
	Coast stations		Ship stations	
	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency
1201	13077	13078.4	12230	12231.4
1202	13080	13081.4	12233	12234.4
1203	13083	13084.4	12236	12237.4
1204	13086	13087.4	12239	12240.4
1205	13089	13090.4	12242	12243.4
1206	13092	13093.4	12245	12246.4
1207	13095	13096.4	12248	12249.4
1208	13098	13099.4	12251	12252.4
1209	13101	13102.4	12254	12255.4
1210	13104	13105.4	12257	12258.4
1211	13107	13108.4	12260	12261.4
1212	13110	13111.4	12263	12264.4
1213	13113	13114.4	12266	12267.4
1214	13116	13117.4	12269	12270.4
1215	13119	13120.4	12272	12273.4
1216	13122	13123.4	12275	12276.4
1217	13125	13126.4	12278	12279.4
1218	13128	13129.4	12281	12282.4
1219	13131	13132.4	12284	12285.4
1220	13134	13135.4	12287	12288.4
1221	13137 *	13138.4*	12290* 7	12291.4*
1222	13140	13141.4	12293	12294.4
1223	13143	13144.4	12296	12297.4
1224	13146	13147.4	12299	12300.4
1225	13149	13150.4	12302	12303.4
1226	13152	13153.4	12305	12306.4
1227	13155	13156.4	12308	12309.4
1228	13158	13159.4	12311	12312.4
1229	13161	13162.4	12314	12315.4
1230	13164	13165.4	12317	12318.4
1231	13167	13168.4	12320	12321.4
1232	13170	13171.4	12323	12324.4
1233	13173	13174.4	12326	12327.4
1234	13176	13177.4	12329	12330.4
1235	13179	13180.4	12332	12333.4
1236	13182	13183.4	12335	12336.4
1237	13185	13186.4	12338	12339.4
1238	13188	13189.4	12341	12342.4
1239	13191	13192.4	12344	12345.4
1240	13194	13195.4	12347	12348.4
1241	13197	13198.4	12350	12351.4

2

Channel No.	16 MHz Band			
	Coast stations		Ship stations	
	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency
1601	17242	17243.4	16360	16361.4
1602	17245	17246.4	16363	16364.4
1603	17248	17249.4	16366	16367.4
1604	17251	17252.4	16369	16370.4
1605	17254	17255.4	16372	16373.4
1606	17257	17258.4	16375	16376.4
1607	17260	17261.4	16378	16379.4
1608	17263	17264.4	16381	16382.4
1609	17266	17267.4	16384	16385.4
1610	17269	17270.4	16387	16388.4
1611	17272	17273.4	16390	16391.4
1612	17275	17276.4	16393	16394.4
1613	17278	17279.4	16396	16397.4
1614	17281	17282.4	16399	16400.4
1615	17284	17285.4	16402	16403.4
1616	17287	17288.4	16405	16406.4
1617	17290	17291.4	16408	16409.4
1618	17293	17294.4	16411	16412.4
1619	17296	17297.4	16414	16415.4
1620	17299	17300.4	16417	16418.4
1621	17302*	17303.4*	16420* 8	16421.4*
1622	17305	17306.4	16423	16424.4
1623	17308	17309.4	16426	16427.4
1624	17311	17312.4	16429	16430.4
1625	17314	17315.4	16432	16433.4
1626	17317	17318.4	16435	16436.4
1627	17320	17321.4	16438	16439.4
1628	17323	17324.4	16441	16442.4
1629	17326	17327.4	16444	16445.4
1630	17329	17330.4	16447	16448.4
1631	17332	17333.4	16450	16451.4
1632	17335	17336.4	16453	16454.4
1633	17338	17339.4	16456	16457.4
1634	17341	17342.4	16459	16460.4
1635	17344	17345.4	16462	16463.4
1636	17347	17348.4	16465	16466.4
1637	17350	17351.4	16468	16469.4
1638	17353	17354.4	16471	16472.4
1639	17356	17357.4	16474	16475.4
1640	17359	17360.4	16477	16478.4

Channel No.	16 MHz Band (cont.)			
	Coast stations		Ship stations	
	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency
1641	17362	17363.4	16480	16481.4
1642	17365	17366.4	16483	16484.4
1643	17368	17369.4	16486	16487.4
1644	17371	17372.4	16489	16490.4
1645	17374	17375.4	16492	16493.4
1646	17377	17378.4	16495	16496.4
1647	17380	17381.4	16498	16499.4
1648	17383	17384.4	16501	16502.4
1649 } 2	17386	17387.4	16504	16505.4
1650	17389	17390.4	16507	16508.4
1651	17392	17393.4	16510	16511.4
1652	17395	17396.4	16513	16514.4
1653	17398	17399.4	16516	16517.4
1654	17401	17402.4	16519	16520.4
1655	17404	17405.4	16522	16523.4
1656	17407	17408.4	16525	16526.4

Channel No.	18/19 MHz Band			
	Coast stations		Ship stations	
	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency
1801	19755	19756.4	18780	18781.4
1802	19758	19759.4	18783	18784.4
1803	19761	19762.4	18786	18787.4
1804	19764	19765.4	18789	18790.4
1805	19767	19768.4	18792	18793.4
1806	19770*	19771.4*	18795*	18796.4*
1807	19773	19774.4	18798	18799.4
1808 } 2	19776	19777.4	18801	18802.4
1809	19779	19780.4	18804	18805.4
1810	19782	19783.4	18807	18808.4
1811	19785	19786.4	18810	18811.4
1812	19788	19789.4	18813	18814.4
1813	19791	19792.4	18816	18817.4
1814	19794	19795.4	18819	18820.4
1815	19797	19798.4	18822	18823.4

Channel No.	22 MHz Band			
	Coast stations		Ship stations	
	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency
2201	22696	22697.4	22000	22001.4
2202	22699	22700.4	22003	22004.4
2203	22702	22703.4	22006	22007.4
2204	22705	22706.4	22009	22010.4
2205	22708	22709.4	22012	22013.4
2206	22711	22712.4	22015	22016.4
2207	22714	22715.4	22018	22019.4
2208	22717	22718.4	22021	22022.4
2209	22720	22721.4	22024	22025.4
2210	22723	22724.4	22027	22028.4
2211	22726	22727.4	22030	22031.4
2212	22729	22730.4	22033	22034.4
2213	22732	22733.4	22036	22037.4
2214	22735	22736.4	22039	22040.4
2215	22738	22739.4	22042	22043.4
2216	22741	22742.4	22045	22046.4
2217	22744	22745.4	22048	22049.4
2218	22747	22748.4	22051	22052.4
2219	22750	22751.4	22054	22055.4
2220	22753	22754.4	22057	22058.4
2221	22756*	22757.4*	22060*	22061.4*
2222	22759	22760.4	22063	22064.4
2223	22762	22763.4	22066	22067.4
2224	22765	22766.4	22069	22070.4
2225	22768	22769.4	22072	22073.4
2226	22771	22772.4	22075	22076.4
2227	22774	22775.4	22078	22079.4
2228	22777	22778.4	22081	22082.4
2229	22780	22781.4	22084	22085.4
2230	22783	22784.4	22087	22088.4
2231	22786	22787.4	22090	22091.4
2232	22789	22790.4	22093	22094.4
2233	22792	22793.4	22096	22097.4
2234	22795	22796.4	22099	22100.4
2235	22798	22799.4	22102	22103.4

Channel No.	22 MHz Band (cont.)			
	Coast stations		Ship stations	
	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency
2236	22801	22802.4	22105	22106.4
2237	22804	22805.4	22108	22109.4
2238	22807	22808.4	22111	22112.4
2239	22810	22811.4	22114	22115.4
2240	22813	22814.4	22117	22118.4
2241	22816	22817.4	22120	22121.4
2242	22819	22820.4	22123	22124.4
2243	22822	22823.4	22126	22127.4
2244	22825	22826.4	22129	22130.4
2245	22828	22829.4	22132	22133.4
2246	22831	22832.4	22135	22136.4
2247 } 2	22834	22835.4	22138	22139.4
2248	22837	22838.4	22141	22142.4
2249	22840	22841.4	22144	22145.4
2250	22843	22844.4	22147	22148.4
2251	22846	22847.4	22150	22151.4
2252	22849	22850.4	22153	22154.4
2253	22852	22853.4	22156	22157.4

Channel No.	25/26 MHz Band			
	Coast stations		Ship stations	
	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency
2501	26145	26146.4	25070	25071.4
2502	26148	26149.4	25073	25074.4
2503	26151	26152.4	25076	25077.4
2504	26154	26155.4	25079	25080.4
2505 } 2	26157	26158.4	25082	25083.4
2506	26160	26161.4	25085	25086.4
2507	26163	26164.4	25088	25089.4
2508	26166	26167.4	25091	25092.4
2509	26169	26170.4	25094	25095.4
2510	26172*	26173.4*	25097*	25098.4*

NOTES TO THE TABLE

NOC * The frequencies followed by an asterisk are Calling frequencies (see Nos. 4375 and 4376).

ADD 1 These coast station frequencies may be paired with a ship station frequency from the table of simplex frequencies for ship and coast stations (see Section B) or with a frequency from the band 4 000 - 4 063 kHz (see Section C-1) to be selected by the administration concerned.

ADD 2 For the use and notification of these frequencies; see Resolution COM4/6.

ADD 3 These channels may also be used for simplex (single frequency) operation.

MOD 4 For the conditions of use of the carrier frequency 4 125 kHz, see Nos. 2982, N 2982, N 2982A, 4379 and 4380.

MOD 5 For the conditions of use of the carrier frequency 6 215 kHz, see Nos. 2986 and N 2986.

ADD 6 These coast station frequencies may be paired with a ship station frequency from the table of simplex frequencies for ship and coast stations (see Section B) or with a frequency from the band 8 100 - 8 195 kHz (see Section C-2) to be selected by the administration concerned.

ADD 7 For the conditions of use of the carrier frequency 12 290 kHz, see No. N 2988D.

ADD 8 For the conditions of use of the carrier frequency 16 420 kHz, see No. N 2988J,

ADD 9 For the conditions of use of the carrier frequency 8 291 kHz, see No. N 2986F.

SECTION B

NOC

Table of Single-Sideband Transmitting Frequencies for Simplex (Single-Frequency) Operation and for Intership Cross-Band (Two-Frequency) Operation (in kHz)

(See paragraph 4 of this Appendix)

MOD

4 MHz Band[1]		6 MHz Band		8 MHz Band[2]		12 MHz Band		16 MHz Band		18/19 MHz Band		22 MHz Band		25/26 MHz Band	
Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency	Carrier frequency	Assigned frequency
4 146	4 147.4	6 224	6 225.4	8 294	8 295.4	12 353	12 354.4	16 528	16 529.4	18 825	18 826.4	22 159	22 160.4	25 100	25 101.4
4 149	4 150.4	6 227	6 228.4	8 297	8 298.4	12 356	12 357.4	16 531	16 532.4	18 828	18 829.4	22 162	22 163.4	25 103	25 104.4
		6 230	6 231.4			12 359	12 360.4	16 534	16 535.4	18 831	18 832.4	22 165	22 166.4	25 106	25 107.4
						12 362	12 363.4	16 537	16 538.4	18 834	18 835.4	22 168	22 169.4	25 109	25 110.4
						12 365	12 366.4	16 540	16 541.4	18 837	18 838.4	22 171	22 172.4	25 112	25 113.4
								16 543	16 544.4	18 840	18 841.4	22 174	22 175.4	25 115	25 116.4
								16 546	16 547.4	18 843	18 844.4	22 177	22 178.4	25 118	25 119.4

ADD 1) These frequencies may be used for duplex operation with coast stations operating on Channels 428 and 429 (see Section A).

ADD 2) These frequencies may be used for duplex operation with coast stations operating on Channels 834 up to and including 837 (see Section A).

SECTION C-1

MOD

Table of Recommended Single-Sideband Transmitting Frequencies (in kHz) for Ship Stations in the Band 4 000 - 4 063 kHz Shared with the Fixed Service

MOD

The frequencies in this Section may be used:

- for supplementing ship-to-shore channels for duplex operation in Section A;
- for intership simplex (single-frequency) and cross-band operation;
- for cross-band working with coast stations on channels in Section C-2;
- for duplex operation with coast stations working in the band 4 438 - 4 650 kHz.
- for duplex operation with Channels Nos. 428 and 429.

Channel No.	Carrier Frequency	Assigned Frequency	Channel No.	Carrier Frequency	Assigned Frequency
1	4 000 *	4 001.4 *	12	4 033	4 034.4
2	4 003 *	4 004.4 *	13	4 036	4 037.4
3	4 006	4 007.4	14	4 039	4 040.4
4	4 009	4 010.4	15	4 042	4 043.4
5	4 012	4 013.4	16	4 045	4 046.4
6	4 015	4 016.4	17	4 048	4 049.4
7	4 018	4 019.4	18	4 051	4 052.4
8	4 021	4 022.4	19	4 054	4 055.4
9	4 024	4 025.4	20	4 057	4 058.4
10	4 027	4 028.4	21	4 060	4 061.4
11	4 030	4 031.4			

NOC *

SECTION C-2

MOD

Table of Recommended Single-Sideband Transmitting Frequencies (in kHz) for Ship and Coast Stations in the Band 8 100 - 8 195 kHz Shared with the Fixed Service

MOD

The frequencies in this Section may be used:

- for supplementing ship-to-shore and shore-to-ship channels for duplex operation in Section A;
- for intership simplex (single frequency) and cross-band operation;
- for cross-band working with ship stations on channels in Section C-1;
- for ship-to-shore or shore-to-ship simplex operation;
- for duplex operation with Channel Nos. 834, 835, 836 and 837.

Channel No.	Carrier Frequency	Assigned Frequency	Channel No.	Carrier Frequency	Assigned Frequency
1	8 101	8 102.4	17	8 149	8 150.4
2	8 104	8 105.4	18	8 152	8 153.4
3	8 107	8 108.4	19	8 155	8 156.4
4	8 110	8 111.4	20	8 158	8 159.4
5	8 113	8 114.4	21	8 161	8 162.4
6	8 116	8 117.4	22	8 164	8 165.4
7	8 119	8 120.4	23	8 167	8 168.4
8	8 122	8 123.4	24	8 170	8 171.4
9	8 125	8 126.4	25	8 173	8 174.4
10	8 128	8 129.4	26	8 176	8 177.4
11	8 131	8 132.4	27	8 179	8 180.4
12	8 134	8 135.4	28	8 182	8 183.4
13	8 137	8 138.4	29	8 185	8 186.4
14	8 140	8 141.4	30	8 188	8 189.4
15	8 143	8 144.4	31	8 191	8 192.4
16	8 146	8 147.4			

MOD

APPENDIX 32
Mob-87

MOD

Channelling of the Maritime Mobile Bands Between 4 000 kHz and 27 500 kHz Used for Narrow-Band Direct-Printing Telegraphy and Data Systems (Paired Frequencies)

MOD (See Article 60 and Resolution No. 300(Rev.)

MOD 1. Each coast station which uses paired frequencies is assigned one or more frequency pairs from the following series; each pair consists of a transmitting and a receiving frequency.

MOD 2. The speed of the narrow-band direct-printing telegraphy and data systems shall not exceed 100 bauds for FSK and 200 bauds for PSK.

Table of Frequencies for Two-Frequency Operation by Coast Stations (kHz)

CHANNEL No.	4 MHz BAND[1]	
	TRANSMIT	RECEIVE
1	4210.5	4172.5
2	4211	4173
3	4211.5	4173.5
4	4212	4174
5	4212.5	4174.5
6	4213	4175
7	4213.5	4175.5
8	4214	4176
9	4214.5	4176.5
10	4215	4177
11	4177.5[2]	4177.5[2]
12	4215.5	4178
13	4216	4178.5
14	4216.5	4179
15	4217	4179.5
16	4217.5	4180
17	4218	4180.5
18	4218.5	4181
19	4219	4181.5

ADD [1] Ship stations may use the coast station receiving frequencies for transmitting A1A and A1B Morse telegraphy (working), with the exception of channel No. 11 (see N 2982C).

ADD [2] For the condition of use of this frequency, see Article N 38.

CHANNEL No.	6 MHz BAND[3]	
	TRANSMIT	RECEIVE
1	6314.5	6263
2	6315	6263.5
3	6315.5	6264
4	6316	6264.5
5	6316.5	6265
6	6317	6265.5
7	6317.5	6266
8	6318	6266.5
9	6318.5	6267
10	6319	6267.5
11	6268 [2]	6268 [2]
12	6319.5	6268.5
13	6320	6269
14	6320.5	6269.5
15	6321	6270
16	6321.5	6270.5
17	6322	6271
18	6322.5	6271.5
19	6323	6272
20	6323.5	6272.5
21	6324	6273
22	6324.5	6273.5
23	6325	6274
24	6325.5	6274.5
25	6326	6275
26	6326.5	6275.5
27	6327	6281
28	6327.5	6281.5
29	6328	6282
30	6328.5	6282.5
31	6329	6283
32	6329.5	6283.5
33	6330	6284
34	6330.5	6284.5

ADD 2 For the condition of use of this frequency, see Article N 38.

ADD 3 Ship stations may use the coast station receiving frequencies of channels Nos. 25 up to and including 34 for transmitting A1A and A1B Morse telegraphy (working).

CHANNEL No.	8 MHz BAND[4]	
	TRANSMIT	RECEIVE
1	8376.5[2]	8376.5[2]
2	8417	8377
3	8417.5	8377.5
4	8418	8378
5	8418.5	8378.5
6	8419	8379
7	8419.5	8379.5
8	8420	8380
9	8420.5	8380.5
10	8421	8381
11	8421.5	8381.5
12	8422	8382
13	8422.5	8382.5
14	8423	8383
15	8423.5	8383.5
16	8424	8384
17	8424.5	8384.5
18	8425	8385
19	8425.5	8385.5
20	8426	8386
21	8426.5	8386.5
22	8427	8387
23	8427.5	8387.5
24	8428	8388
25	8428.5	8388.5
26	8429	8389
27	8429.5	8389.5
28	8430	8390
29	8430.5	8390.5
30	8431	8391
31	8431.5	8391.5
32	8432	8392
33	8432.5	8392.5
34	8433	8393
35	8433.5	8393.5
36	8434	8394
37	8434.5	8394.5
38	8435	8395
39	8435.5	8395.5
40	8436	8396

ADD 2 For the condition of use of this frequency, see Article N 38.

ADD 4 Ship stations may use the coast station receiving frequencies of channels Nos. 29 up to and including 40 for transmitting A1A and A1B Morse telegraphy (working).

CHANNEL No.	12 MHz BAND[5]	
	TRANSMIT	RECEIVE
1	12579.5	12477
2	12580	12477.5
3	12580.5	12478
4	12581	12478.5
5	12581.5	12479
6	12582	12479.5
7	12582.5	12480
8	12583	12480.5
9	12583.5	12481
10	12584	12481.5
11	12584.5	12482
12	12585	12482.5
13	12585.5	12483
14	12586	12483.5
15	12586.5	12484
16	12587	12484.5
17	12587.5	12485
18	12588	12485.5
19	12588.5	12486
20	12589	12486.5
21	12589.5	12487
22	12590	12487.5
23	12590.5	12488
24	12591	12488.5
25	12591.5	12489
26	12592	12489.5
27	12592.5	12490
28	12593	12490.5
29	12593.5	12491
30	12594	12491.5
31	12594.5	12492
32	12595	12492.5
33	12595.5	12493
34	12596	12493.5
35	12596.5	12494
36	12597	12494.5
37	12597.5	12495
38	12598	12495.5
39	12598.5	12496
40	12599	12496.5

ADD

5 Ship stations may use the coast station receiving frequencies of channels Nos. 58 up to and including 156 for transmitting A1A and A1B Morse telegraphy (working), with exception of channel No. 87, see N 2988F.

CHANNEL No.	12 MHz BAND[5] (cont.)	
	TRANSMIT	RECEIVE
41	12599.5	12497
42	12600	12497.5
43	12600.5	12498
44	12601	12498.5
45	12601.5	12499
46	12602	12499.5
47	12602.5	12500
48	12603	12500.5
49	12603.5	12501
50	12604	12501.5
51	12604.5	12502
52	12605	12502.5
53	12605.5	12503
54	12606	12503.5
55	12606.5	12504
56	12607	12504.5
57	12607.5	12505
58	12608	12505.5
59	12608.5	12506
60	12609	12506.5
61	12609.5	12507
62	12610	12507.5
63	12610.5	12508
64	12611	12508.5
65	12611.5	12509
66	12612	12509.5
67	12612.5	12510
68	12613	12510.5
69	12613.5	12511
70	12614	12511.5
71	12614.5	12512
72	12615	12512.5
73	12615.5	12513
74	12616	12513.5
75	12616.5	12514
76	12617	12514.5
77	12617.5	12515
78	12618	12515.5
79	12618.5	12516
80	12619	12516.5

ADD

5 Ship stations may use the coast station receiving frequencies of channels Nos. 58 up to and including 156 for transmitting A1A and A1B Morse telegraphy (working), with exception of channel No. 87, see N 2988F.

CHANNEL No.	12 MHz BAND[5] (cont.)	
	TRANSMIT	RECEIVE
81	12619.5	12517
82	12620	12517.5
83	12620.5	12518
84	12621	12518.5
85	12621.5	12519
86	12622	12519.5
87	12520 [2]	12520 [2]
88	12622.5	12520.5
89	12623	12521
90	12623.5	12521.5
91	12624	12522
92	12624.5	12522.5
93	12625	12523
94	12625.5	12523.5
95	12626	12524
96	12626.5	12524.5
97	12627	12525
98	12627.5	12525.5
99	12628	12526
100	12628.5	12526.5
101	12629	12527
102	12629.5	12527.5
103	12630	12528
104	12630.5	12528.5
105	12631	12529
106	12631.5	12529.5
107	12632	12530
108	12632.5	12530.5
109	12633	12531
110	12633.5	12531.5
111	12634	12532
112	12634.5	12532.5
113	12635	12533
114	12635.5	12533.5
115	12636	12534
116	12636.5	12534.5

ADD 2 For the condition of use of this frequency, see Article N 38.

ADD 5 Ship stations may use the coast station receiving frequencies of channels Nos. 58 up to and including 156 for transmitting A1A and A1B Morse telegraphy (working), with exception of channel No. 87, see N 2988F.

CHANNEL No.	12 MHz BAND[5] (cont.)	
	TRANSMIT	RECEIVE
117	12637	12535
118	12637.5	12535.5
119	12638	12536
120	12638.5	12536.5
121	12639	12537
122	12639.5	12537.5
123	12640	12538
124	12640.5	12538.5
125	12641	12539
126	12641.5	12539.5
127	12642	12540
128	12642.5	12540.5
129	12643	12541
130	12643.5	12541.5
131	12644	12542
132	12644.5	12542.5
133	12645	12543
134	12645.5	12543.5
135	12646	12544
136	12646.5	12544.5
137	12647	12545
138	12647.5	12545.5
139	12648	12546
140	12648.5	12546.5
141	12649	12547
142	12649.5	12547.5
143	12650	12548
144	12650.5	12548.5
145	12651	12549
146	12651.5	12549.5
147	12652	12555
148	12652.5	12555.5
149	12653	12556
150	12653.5	12556.5
151	12654	12557
152	12654.5	12557.5
153	12655	12558
154	12655.5	12558.5
155	12656	12559
156	12656.5	12559.5

ADD

[5] Ship stations may use the coast station receiving frequencies of channels Nos. 58 up to and including 156 for transmitting A1A and A1B Morse telegraphy (working), with exception of channel No. 87, see N 2988F.

CHANNEL No.	16 MHz BAND[6]	
	TRANSMIT	RECEIVE
1	16807	16683.5
2	16807.5	16684
3	16808	16684.5
4	16808.5	16685
5	16809	16685.5
6	16809.5	16686
7	16810	16686.5
8	16810.5	16687
9	16811	16687.5
10	16811.5	16688
11	16812	16688.5
12	16812.5	16689
13	16813	16689.5
14	16813.5	16690
15	16814	16690.5
16	16814.5	16691
17	16815	16691.5
18	16815.5	16692
19	16816	16692.5
20	16816.5	16693
21	16817	16693.5
22	16817.5	16694
23	16818	16694.5
24	16695 [2]	16695 [2]
25	16818.5	16695.5
26	16819	16696
27	16819.5	16696.5
28	16820	16697
29	16820.5	16697.5
30	16821	16698
31	16821.5	16698.5
32	16822	16699
33	16822.5	16699.5
34	16823	16700
35	16823.5	16700.5
36	16824	16701
37	16824.5	16701.5
38	16825	16702
39	16825.5	16702.5
40	16826	16703

ADD 2 For the condition of use of this frequency, see Article N 38.

ADD 6 Ship stations may use the coast station receiving frequencies of channels Nos. 71 up to and including 193 for transmitting A1A and A1B Morse telegraphy (working).

CHANNEL No.	16 MHz BAND[6] (cont.)	
	TRANSMIT	RECEIVE
41	16826.5	16703.5
42	16827	16704
43	16827.5	16704.5
44	16828	16705
45	16828.5	16705.5
46	16829	16706
47	16829.5	16706.5
48	16830	16707
49	16830.5	16707.5
50	16831	16708
51	16831.5	16708.5
52	16832	16709
53	16832.5	16709.5
54	16833	16710
55	16833.5	16710.5
56	16834	16711
57	16834.5	16711.5
58	16835	16712
59	16835.5	16712.5
60	16836	16713
61	16836.5	16713.5
62	16837	16714
63	16837.5	16714.5
64	16838	16715
65	16838.5	16715.5
66	16839	16716
67	16839.5	16716.5
68	16840	16717
69	16840.5	16717.5
70	16841	16718
71	16841.5	16718.5
72	16842	16719
73	16842.5	16719.5
74	16843	16720
75	16843.5	16720.5
76	16844	16721
77	16844.5	16721.5
78	16845	16722
79	16845.5	16722.5
80	16846	16723
81	16846.5	16723.5
82	16847	16724
83	16847.5	16724.5
84	16848	16725
85	16848.5	16725.5

ADD

6 Ship stations may use the coast station receiving frequencies of channels Nos. 71 up to and including 193 for transmitting A1A and A1B Morse telegraphy (working).

CHANNEL No.	16 MHz BAND[6] (cont.)	
	TRANSMIT	RECEIVE
86	16849	16726
87	16849.5	16726.5
88	16850	16727
89	16850.5	16727.5
90	16851	16728
91	16851.5	16728.5
92	16852	16729
93	16852.5	16729.5
94	16853	16730
95	16853.5	16730.5
96	16854	16731
97	16854.5	16731.5
98	16855	16732
99	16855.5	16732.5
100	16856	16733
101	16856.5	16733.5
102	16857	16739
103	16857.5	16739.5
104	16858	16740
105	16858.5	16740.5
106	16859	16741
107	16859.5	16741.5
108	16860	16742
109	16860.5	16742.5
110	16861	16743
111	16861.5	16743.5
112	16862	16744
113	16862.5	16744.5
114	16863	16745
115	16863.5	16745.5
116	16864	16746
117	16864.5	16746.5
118	16865	16747
119	16865.5	16747.5
120	16866	16748
121	16866.5	16748.5
122	16867	16749
123	16867.5	16749.5
124	16868	16750
125	16868.5	16750.5
126	16869	16751

ADD

6 Ship stations may use the coast station receiving frequencies of channels Nos. 71 up to and including 193 for transmitting A1A and A1B Morse telegraphy (working).

CHANNEL No.	16 MHz BAND[6] (cont.)	
	TRANSMIT	RECEIVE
127	16869.5	16751.5
128	16870	16752
129	16870.5	16752.5
130	16871	16753
131	16871.5	16753.5
132	16872	16754
133	16872.5	16754.5
134	16873	16755
135	16873.5	16755.5
136	16874	16756
137	16874.5	16756.5
138	16875	16757
139	16875.5	16757.5
140	16876	16758
141	16876.5	16758.5
142	16877	16759
143	16877.5	16759.5
144	16878	16760
145	16878.5	16760.5
146	16879	16761
147	16879.5	16761.5
148	16880	16762
149	16880.5	16762.5
150	16881	16763
151	16881.5	16763.5
152	16882	16764
153	16882.5	16764.5
154	16883	16765
155	16883.5	16765.5
156	16884	16766
157	16884.5	16766.5
158	16885	16767
159	16885.5	16767.5
160	16886	16768
161	16886.5	16768.5

ADD

6 Ship stations may use the coast station receiving frequencies of channels Nos. 71 up to and including 193 for transmitting A1A and A1B Morse telegraphy (working).

CHANNEL No.	16 MHz BAND[6] (cont.)	
	TRANSMIT	RECEIVE
162	16887	16769
163	16887.5	16769.5
164	16888	16770
165	16888.5	16770.5
166	16889	16771
167	16889.5	16771.5
168	16890	16772
169	16890.5	16772.5
170	16891	16773
171	16891.5	16773.5
172	16892	16774
173	16892.5	16774.5
174	16893	16775
175	16893.5	16775.5
176	16894	16776
177	16894.5	16776.5
178	16895	16777
179	16895.5	16777.5
180	16896	16778
181	16896.5	16778.5
182	16897	16779
183	16897.5	16779.5
184	16898	16780
185	16898.5	16780.5
186	16899	16781
187	16899.5	16781.5
188	16900	16782
189	16900.5	16782.5
190	16901	16783
191	16901.5	16783.5
192	16902	16784
193	16902.5	16784.5

ADD

6 Ship stations may use the coast station receiving frequencies of channels Nos. 71 up to and including 193 for transmitting A1A and A1B Morse telegraphy (working).

CHANNEL No.	18/19 MHz BAND	
	TRANSMIT	RECEIVE
1	19681	18870.5
2	19681.5	18871
3	19682	18871.5
4	19682.5	18872
5	19683	18872.5
6	19683.5	18873
7	19684	18873.5
8	19684.5	18874
9	19685	18874.5
10	19685.5	18875
11	19686	18875.5
12	19686.5	18876
13	19687	18876.5
14	19687.5	18877
15	19688	18877.5
16	19688.5	18878
17	19689	18878.5
18	19689.5	18879
19	19690	18879.5
20	19690.5	18880
21	19691	18880.5
22	19691.5	18881
23	19692	18881.5
24	19692.5	18882
25	19693	18882.5
26	19693.5	18883
27	19694	18883.5
28	19694.5	18884
29	19695	18884.5
30	19695.5	18885
31	19696	18885.5
32	19696.5	18886
33	19697	18886.5
34	19697.5	18887
35	19698	18887.5
36	19698.5	18888
37	19699	18888.5
38	19699.5	18889
39	19700	18889.5
40	19700.5	18890
41	19701	18890.5
42	19701.5	18891
43	19702	18891.5
44	19702.5	18892
45	19703	18892.5

CHANNEL No.	22 MHz BAND[7]	
	TRANSMIT	RECEIVE
1	22376.5	22284.5
2	22377	22285
3	22377.5	22285.5
4	22378	22286
5	22378.5	22286.5
6	22379	22287
7	22379.5	22287.5
8	22380	22288
9	22380.5	22288.5
10	22381	22289
11	22381.5	22289.5
12	22382	22290
13	22382.5	22290.5
14	22383	22291
15	22383.5	22291.5
16	22384	22292
17	22384.5	22292.5
18	22385	22293
19	22385.5	22293.5
20	22386	22294
21	22386.5	22294.5
22	22387	22295
23	22387.5	22295.5
24	22388	22296
25	22388.5	22296.5
26	22389	22297
27	22389.5	22297.5
28	22390	22298
29	22390.5	22298.5
30	22391	22299
31	22391.5	22299.5
32	22392	22300
33	22392.5	22300.5
34	22393	22301
35	22393.5	22301.5

ADD

[7] Ship stations may use the coast station receiving frequencies of channels Nos. 68 up to and including 135 for transmitting A1A and A1B Morse telegraphy (working).

CHANNEL No.	22 MHz BAND[7] (cont.)	
	TRANSMIT	RECEIVE
36	22394	22302
37	22394.5	22302.5
38	22395	22303
39	22395.5	22303.5
40	22396	22304
41	22396.5	22304.5
42	22397	22305
43	22397.5	22305.5
44	22398	22306
45	22398.5	22306.5
46	22399	22307
47	22399.5	22307.5
48	22400	22308
49	22400.5	22308.5
50	22401	22309
51	22401.5	22309.5
52	22402	22310
53	22402.5	22310.5
54	22403	22311
55	22403.5	22311.5
56	22404	22312
57	22404.5	22312.5
58	22405	22313
59	22405.5	22313.5
60	22406	22314
61	22406.5	22314.5
62	22407	22315
63	22407.5	22315.5
64	22408	22316
65	22408.5	22316.5
66	22409	22317
67	22409.5	22317.5
68	22410	22318
69	22410.5	22318.5
70	22411	22319
71	22411.5	22319.5
72	22412	22320
73	22412.5	22320.5
74	22413	22321
75	22413.5	22321.5
76	22414	22322
77	22414.5	22322.5
78	22415	22323
79	22415.5	22323.5
80	22416	22324

ADD

[7] Ship stations may use the coast station receiving frequencies of channels Nos. 68 up to and including 135 for transmitting A1A and A1B Morse telegraphy (working).

CHANNEL No.	22 MHz BAND [7] (cont.)	
	TRANSMIT	RECEIVE
81	22416.5	22324.5
82	22417	22325
83	22417.5	22325.5
84	22418	22326
85	22418.5	22326.5
86	22419	22327
87	22419.5	22327.5
88	22420	22328
89	22420.5	22328.5
90	22421	22329
91	22421.5	22329.5
92	22422	22330
93	22422.5	22330.5
94	22423	22331
95	22423.5	22331.5
96	22424	22332
97	22424.5	22332.5
98	22425	22333
99	22425.5	22333.5
100	22426	22334
101	22426.5	22334.5
102	22427	22335
103	22427.5	22335.5
104	22428	22336
105	22428.5	22336.5
106	22429	22337
107	22429.5	22337.5
108	22430	22338
109	22430.5	22338.5
110	22431	22339
111	22431.5	22339.5
112	22432	22340
113	22432.5	22340.5
114	22433	22341
115	22433.5	22341.5

ADD

[7] Ship stations may use the coast station receiving frequencies of channels Nos. 68 up to and including 135 for transmitting A1A and A1B Morse telegraphy (working).

CHANNEL No.	22 MHz BAND [7] (cont.)	
	TRANSMIT	RECEIVE
116	22434	22342
117	22434.5	22342.5
118	22435	22343
119	22435.5	22343.5
120	22436	22344
121	22436.5	22344.5
122	22437	22345
123	22437.5	22345.5
124	22438	22346
125	22438.5	22346.5
126	22439	22347
127	22439.5	22347.5
128	22440	22348
129	22440.5	22348.5
130	22441	22349
131	22441.5	22349.5
132	22442	22350
133	22442.5	22350.5
134	22443	22351
135	22443.5	22351.5

ADD [7] Ship stations may use the coast station receiving frequencies of channels Nos. 68 up to and including 135 for transmitting A1A and A1B Morse telegraphy (working).

CHANNEL No.	25/26 MHz BAND	
	TRANSMIT	RECEIVE
1	26101	25173
2	26101.5	25173.5
3	26102	25174
4	26102.5	25174.5
5	26103	25175
6	26103.5	25175.5
7	26104	25176
8	26104.5	25176.5
9	26105	25177
10	26105.5	25177.5
11	26106	25178
12	26106.5	25178.5
13	26107	25179
14	26107.5	25179.5
15	26108	25180
16	26108.5	25180.5
17	26109	25181
18	26109.5	25181.5
19	26110	25182
20	26110.5	25182.5
21	26111	25183
22	26111.5	25183.5
23	26112	25184
24	26112.5	25184.5
25	26113	25185
26	26113.5	25185.5
27	26114	25186
28	26114.5	25186.5
29	26115	25187
30	26115.5	25187.5
31	26116	25188
32	26116.5	25188.5
33	26117	25189
34	26117.5	25189.5
35	26118	25190
36	26118.5	25190.5
37	26119	25191
38	26119.5	25191.5
39	26120	25192
40	26120.5	25192.5

MOD

APPENDIX 33
Mob-87

MOD

Channelling of the Maritime Mobile Bands Between 4 000 kHz and 27 500 kHz used for Narrow-Band Direct-Printing Telegraphy and Data Transmission (Non-Paired Frequencies)

MOD

(See Article 60)

MOD 1. One or more frequencies are assigned to each ship station as transmitting frequencies.

ADD 2. All frequencies in this Appendix may also be used by ship stations for transmitting A1A and A1B Morse telegraphy (working).

ADD 3. All frequencies appearing in this Appendix may be used for NBDP duplex operation.

The corresponding coast station frequencies should be selected by the administration concerned from the sub-bands for coast station wideband telegraphy, A1A and A1B Morse telegraphy, facsimile, special and data transmission systems and direct-printing telegraphy systems.

ADD 4. The speed of the narrow-band direct-printing telegraphy and data systems shall not exceed 100 bauds for FSK and 200 bauds for PSK.

Table of Ship Station Transmitting Frequencies (kHz)

Channel No.	Frequency Bands							
	4 MHz	6 MHz	8 MHz	12 MHz	16 MHz	18/19 MHz	22 MHz	25/26 MHz
1	4202.5	6300.5	8396.5	12560	16785	18893	22352	25193
2	4203	6301	8397	12560.5	16785.5	18893.5	22352.5	25193.5
3	4203.5	6301.5	8397.5	12561	16786	18894	22353	25194
4	4204	6302	8398	12561.5	16786.5	18894.5	22353.5	25194.5
5	4204.5	6302.5	8398.5	12562	16787	18895	22354	25195
6	4205	6303	8399	12562.5	16787.5	18895.5	22354.5	25195.5
7	4205.5	6303.5	8399.5	12563	16788	18896	22355	25196
8	4206	6304	8400	12563.5	16788.5	18896.5	22355.5	25196.5
9	4206.5	6304.5	8400.5	12564	16789	18897	22356	25197
10	4207	6305	8401	12564.5	16789.5	18897.5	22356.5	25197.5
11		6305.5	8401.5	12565	16790	18898	22357	25198
12		6306	8402	12565.5	16790.5		22357.5	25198.5
13		6306.5	8402.5	12566	16791		22358	25199
14		6307	8403	12566.5	16791.5		22358.5	25199.5
15		6307.5	8403.5	12567	16792		22359	25200
16		6308	8404	12567.5	16792.5		22359.5	25200.5
17		6308.5	8404.5	12568	16793		22360	25201
18		6309	8405	12568.5	16793.5		22360.5	25201.5
19		6309.5	8405.5	12569	16794		22361	25202
20		6310	8406	12569.5	16794.5		22361.5	25202.5
21		6310.5	8406.5	12570	16795		22362	25203
22		6311	8407	12570.5	16795.5		22362.5	25203.5
23		6311.5	8407.5	12571	16796		22363	25204
24			8408	12571.5	16796.5		22363.5	25204.5
25			8408.5	12572	16797		22364	25205
26			8409	12572.5	16797.5		22364.5	25205.5
27			8409.5	12573	16798		22365	25206
28			8410	12573.5	16798.5		22365.5	25206.5
29			8410.5	12574	16799		22366	25207
30			8411	12574.5	16799.5		22366.5	25207.5
31			8411.5	12575	16800		22367	25208
32			8412	12575.5	16800.5		22367.5	
33			8412.5	12576	16801		22368	
34			8413	12576.5	16801.5		22368.5	
35			8413.5		16802		22369	
36			8414		16802.5		22369.5	
37					16803		22370	
38					16803.5		22370.5	
39					16804		22371	
40							22371.5	
41							22372	
42							22372.5	
43							22373	
44							22373.5	
45							22374	

MOD

APPENDIX 34
Mob-87

MOD

Table of Calling Frequencies Assignable to Ship Stations for A1A Morse Telegraphy at Speeds Not Exceeding 40 Bauds*

(See Article 60 and Resolution No. 312)

(kHz)

GROUP	CHANNEL SERIES	4 MHz BAND	6 MHz BAND	8 MHz BAND	12 MHz BAND	16 MHz BAND	22 MHz BAND	25/26 MHz BAND
I	1 2	4 182 4 182.5	6 277 6 277.5	8 366 8 366.5	12 550 12 550.5	16 734 16 734.5	22 279.5 22 280	Channel A 25 171.5 Groups I and II
Common Channel Common Channel	3 4	4 184 4 184.5	6 276 6 276.5	8 368 8 369	12 552 12 553.5	16 736 16 738	22 280.5 22 281	Common Channel C 25 172
II	5 6	4 183 4 183.5	6 278 6 278.5	8 367 8 367.5	12 551 12 551.5	16 735 16 735.5	22 281.5 22 282	Channel A 25 171.5 Groups I and II
III	7 8	4 185 4 185.5	6 279 6 279.5	8 368.5 8 369.5	12 552.5 12 553	16 736.5 16 737	22 282.5 22 283	Channel B 25 172.5
IV	9 10	4 186 4 186.5	6 280 6 280.5	8 370 8 370.5	12 554 12 554.5	16 737.5 16 738.5	22.283.5 22 284	Groups III and IV

ADD * Channel width in every band: 0.5 kHz

Notes

ADD 1 Only the common channels in the 4, 6, 8, 12 and 16 MHz for A1A Morse telegraphy are harmonically related.

ADD 2 Administrations should assign the frequencies as they appear in this Appendix only to ship stations equipped with crystal controlled oscillators.

ADD 3 However, administrations may subdivide each appropriate group channel and common channel into specific calling frequencies on every full 100 Hz in the channel and assign these discrete frequencies to ships with synthesized transmitters.

MOD Examples of subdivision of channels (centre frequencies are underlined)

4 181.8	6 276.8	8 365.8	12 549.8	16 733.8	22 279.3	25 171.3
4 181.9	6 276.9	8 365.9	12 549.9	16 733.9	22 279.4	25 171.4
4 182	6 277	8 366	12 550	16 734	22 279.5	25 171.5
4 182.1	6 277.1	8 366.1	12 550.1	16 734.1	22 279.6	25 171.6
4 182.2	6 277.2	8 366.2	12 550.2	16 734.2	22 279.7	25.171.7

ADD 4 Administrations should avoid as far as possible, assigning the two frequencies at ±100 Hz from the harmonically related common channel.

ADD 5 In the 22 MHz and 25/26 MHz bands the channels are not harmonically related to those in the 4 to 16 MHz bands. However, the principle of subdivision of channels into specific calling frequencies on 100 Hz applies.

MOD

APPENDIX 35
Mob-87

MOD

**Table of Working Frequencies, in kHz,
Assignable to Ship Stations
for A1A and A1B Morse Telegraphy
at Speeds Not Exceeding 40 Bauds**

(See also Note e) to Appendix 31(Rev.)

SUP Note:

Frequency Bands							
Channel No.	4 MHz	6 MHz	8 MHz	12 MHz	16 MHz	22 MHz	25/26 MHz
1	4187	6285	8342	12422	16619	22242	25161.5
2	4187.5	6285.5	8342.5	12422.5	16619.5	22242.5	25162
3	4188	6286	8343	12423	16620	22243	25162.5
4	4188.5	6286.5	8343.5	12423.5	16620.5	22243.5	25163
5	4189	6287	8344	12424	16621	22244	25163.5
6	4189.5	6287.5	8344.5	12424.5	16621.5	22244.5	25164
7	4190	6288	8345	12425	16622	22245	25164.5
8	4190.5	6288.5	8345.5	12425.5	16622.5	22245.5	25165
9	4191	6289	8346	12426	16623	22246	25165.5
10	4191.5	6289.5	8346.5	12426.5	16623.5	22246.5	25166
11	4192	6290	8347	12427	16624	22247	25166.5
12	4192.5	6290.5	8347.5	12427.5	16624.5	22247.5	25167
13	4193	6291	8348	12428	16625	22248	25167.5
14	4193.5	6291.5	8348.5	12428.5	16625.5	22248.5	25168
15	4194	6292	8349	12429	16626	22249	25168.5
16	4194.5	6292.5	8349.5	12429.5	16626.5	22249.5	25169
17	4195	6293	8350	12430	16627	22250	25169.5
18	4195.5	6293.5	8350.5	12430.5	16627.5	22250.5	25170
19	4196	6294	8351	12431	16628	22251	25170.5
20	4196.5	6294.5	8351.5	12431.5	16628.5	22251.5	25171
21	4197	6295	8352	12432	16629	22252	
22	4197.5	6295.5	8352.5	12432.5	16629.5	22252.5	
23	4198	6296	8353	12433	16630	22253	
24	4198.5	6296.5	8353.5	12433.5	16630.5	22253.5	
25	4199	6297	8354	12434	16631	22254	
26	4199.5	6297.5	8354.5	12434.5	16631.5	22254.5	
27	4200	6298	8355	12435	16632	22255	
28	4200.5	6298.5	8355.5	12435.5	16632.5	22255.5	
29	4201	6299	8356	12436	16633	22256	
30	4201.5	6299.5	8356.5	12436.5	16633.5	22256.5	
31	4202	6300	8357	12437	16634	22257	
32			8357.5	12437.5	16634.5	22257.5	
33			8358	12438	16635	22258	
34			8358.5	12438.5	16635.5	22258.5	
35			8359	12439	16636	22259	
36			8359.5	12439.5	16636.5	22259.5	
37			8360	12440	16637	22260	
38			8360.5	12440.5	16637.5	22260.5	
39			8361	12441	16638	22261	
40			8361.5	12441.5	16638.5	22261.5	
41			8362	12442	16639	22262	
42			8362.5	12442.5	16639.5	22262.5	
43			8363	12443	16640	22263	
44			8363.5	12443.5	16640.5	22263.5	
45			8364	12444	16641	22264	

Frequency Bands							
Channel No.	4 MHz	6 MHz	8 MHz	12 MHz	16 MHz	22 MHz	25/26 MHz
46			8364.5	12444.5	16641.5	22264.5	
47			8365	12445	16642	22265	
48			8365.5	12445.5	16642.5	22265.5	
49			8371	12446	16643	22266	
50			8371.5	12446.5	16643.5	22266.5	
51			8372	12447	16644	22267	
52			8372.5	12447.5	16644.5	22267.5	
53			8373	12448	16645	22268	
54			8373.5	12448.5	16645.5	22268.5	
55			8374	12449	16646	22269	
56			8374.5	12449.5	16646.5	22269.5	
57			8375	12450	16647	22270	
58			8375.5	12450.5	16647.5	22270.5	
59			8376	12451	16648	22271	
60				12451.5	16648.5	22271.5	
61				12452	16649	22272	
62				12452.5	16649.5	22272.5	
63				12453	16650	22273	
64				12453.5	16650.5	22273.5	
65				12454	16651	22274	
66				12454.5	16651.5	22274.5	
67				12455	16652	22275	
68				12455.5	16652.5	22275.5	
69				12456	16653	22276	
70				12456.5	16653.5	22276.5	
71				12457	16654	22277	
72				12457.5	16654.5	22277.5	
73				12458	16655	22278	
74				12458.5	16655.5	22278.5	
75				12459	16656	22279	
76				12459.5	16656.5		
77				12460	16657		
78				12460.5	16657.5		
79				12461	16658		
80				12461.5	16658.5		
81				12462	16659		
82				12462.5	16659.5		
83				12463	16660		
84				12463.5	16660.5		
85				12464	16661		
86				12464.5	16661.5		
87				12465	16662		
88				12465.5	16662.5		
89				12466	16663		
90				12466.5	16663.5		

Frequency Bands							
Channel No.	4 MHz	6 MHz	8 MHz	12 MHz	16 MHz	22 MHz	25/26 MHz
91				12467	16664		
92				12467.5	16664.5		
93				12468	16665		
94				12468.5	16665.5		
95				12469	16666		
96				12469.5	16666.5		
97				12470	16667		
98				12470.5	16667.5		
99				12471	16668		
100				12471.5	16668.5		
101				12472	16669		
102				12472.5	16669.5		
103				12473	16670		
104				12473.5	16670.5		
105				12474	16671		
106				12474.5	16671.5		
107				12475	16672		
108				12475.5	16672.5		
109				12476	16673		
110				12476.5	16673.5		
111					16674		
112					16674.5		
113					16675		
114					16675.5		
115					16676		
116					16676.5		
117					16677		
118					16677.5		
119					16678		
120					16678.5		
121					16679		
122					16679.5		
123					16680		
124					16680.5		
125					16681		
126					16681.5		
127					16682		
128					16682.5		
129					16683		

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MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 443-E
13 October 1987

B.17

PLENARY MEETING

SEVENTEENTH 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	Documents	Title
COM.4	147 (166) 206 (254) 235 (254) 281 (297) 358 (390)	Article 8

Y.C. MONGELARD
Chairman of Committee 7

Annex: 22 pages

ARTICLE 8

MOD 405 § 5. The "European Maritime Area" is bounded to the north by a line extending along parallel 72° North from its intersection with meridian 55° East of Greenwich to its intersection with meridian 5° West, then along meridian 5° West to its intersection with parallel 67° North, thence along parallel 67° North to its intersection with meridian 32° West; to the west by a line extending along meridian 32° West to its intersection with parallel 30° North; to the south by a line extending along parallel 30° North to its intersection with meridian 43° East; to the east by a line extending along meridian 43° East to its intersection with parallel 60° North, thence along parallel 60° North to its intersection with meridian 55° East and thence along meridian 55° East to its intersection with parallel 72° North.

MOD 448 The use of the bands 14 - 19.95 kHz, 20.05 - 70 kHz and 70 - 90 kHz (72 - 84 kHz and 86 - 90 kHz in Region 1) by the maritime mobile service is limited to coast radiotelegraph stations (A1A and F1B only). Exceptionally, the use of class J2B or J7B emissions is authorized subject to the necessary bandwidth not exceeding that normally used for class A1A or F1B emissions in the band concerned.

MOD 451 In the bands 70 - 90 kHz (70 - 86 kHz in Region 1) and 110 - 130 kHz (112 - 130 kHz in Region 1), pulsed radionavigation systems may be used on condition that they do not cause harmful interference to other services to which these bands are allocated.

kHz
90 - 110

Allocation to Services		
Region 1	Region 2	Region 3
90 - 110		
	RADIONAVIGATION 453	
	Fixed	
MOD		
MOD	454 453A	

ADD 453A In the band 90 - 110 kHz, the United Kingdom may continue to use its coast radiotelegraph stations in operation on 14 September 1987, on a secondary basis.

kHz
130 - 285

	Allocation to Services		
	Region 1	Region 2	Region 3
	130 - 148.5 MARITIME MOBILE /FIXED/	130 - 160 (NOC) FIXED MARITIME MOBILE	130 - 160 (NOC) FIXED MARITIME MOBILE
MOD	454 457		RADIONAVIGATION
		454	454
	148.5 - 255 BROADCASTING	160 - 190 (NOC) FIXED	160 - 190 (NOC) FIXED
		459	Aeronautical Radionavigation
		190 - 200 (NOC) AERONAUTICAL RADIONAVIGATION	
MOD	460 461 462		
		200 - 275	200 - 285 (NOC)
MOD	255 - 283.5 (NOC) BROADCASTING /AERONAUTICAL RADIONAVIGATION/	AERONAUTICAL RADIONAVIGATION Aeronautical Mobile	AERONAUTICAL RADIONAVIGATION Aeronautical Mobile
MOD	463	275 - 285	
		AERONAUTICAL RADIONAVIGATION Aeronautical Mobile	
MOD	458 462 464	Maritime radionavigation (radiobeacons)	

MOD 458 In Region 1, the change of the band limit from 285 kHz to 283.5 kHz shall take place on 1 February 1990 (see Resolution No. 500).

kHz
283.5 - 315

Allocation to Services		
Region 1	Region 2	Region 3
283.5 - 315		
MARITIME RADIONAVIGATION (radiobeacons) 466 /AERONAUTICAL RADIONAVIGATION/ 458 465 466A	285 - 315 (NOC) MARITIME RADIONAVIGATION (radiobeacons) 466 /AERONAUTICAL RADIONAVIGATION/	

MOD

ADD 466A Additional Allocation: In Region 1, the frequency band 285.3 - 285.7 kHz is also allocated to the maritime radionavigation service (other than radiobeacons) on a permitted basis.

kHz
415 - 1 606.5

	Allocation to Services		
	Region 1	Region 2	Region 3
MOD	415 - 435 (NOC) AERONAUTICAL RADIONAVIGATION / MARITIME MOBILE / 470 465	415 - 495 MARITIME MOBILE 470 Aeronautical Radionavigation 470A	
MOD	435 - 495 (NOC) MARITIME MOBILE 470 Aeronautical Radionavigation 465 [471] [472A]	469 469A [471] [472A]	
MOD	505 - 526.5 MARITIME MOBILE 470 /AERONAUTICAL RADIONAVIGATION/ 465 [471] [474] 475 476	505 - 510 (NOC) MARITIME MOBILE 470 471	505 - 526.5 (NOC) MARITIME MOBILE 470 474 /AERONAUTICAL RADIONAVIGATION/ Aeronautical Mobile Land Mobile 471
		510 - 525 (NOC) MOBILE 474 AERONAUTICAL RADIONAVIGATION	
		525 - 535 (NOC) BROADCASTING 477 AERONAUTICAL RADIONAVIGATION	526.5 - 535 (NOC) BROADCASTING Mobile 479
	526.5 - 1 606.5 (NOC) BROADCASTING 478	535 - 1 605 (NOC) BROADCASTING	535 - 1 606.5 (NOC) BROADCASTING

MOD 469 Different category of service: In Afghanistan, Australia, China, the Overseas French Territories of Region 3, India, Indonesia, the Islamic Republic of Iran, Japan, Pakistan, Papua New Guinea and Sri Lanka, the allocation of the band 415 - 495 kHz to the aeronautical radionavigation service is on a permitted basis. Administrations in these countries shall take all practical steps necessary to ensure that aeronautical radionavigation stations in the band 435 - 495 kHz do not cause interference to reception by coast stations of ship stations transmitting on frequencies designated for ship stations on a world-wide basis (see No. 4237).

ADD 469A Different category of service: In Cuba and the United States of America the allocation of the band 415 - 435 kHz to the aeronautical radionavigation service is on a primary basis.

ADD 470A In Region 2, the use of the band 435 - 495 kHz by the aeronautical radionavigation service is limited to non-directional beacons not employing voice transmission.

SUP 473

kHz
1 605 - 1 800

	Allocation to Services		
	Region 1	Region 2	Region 3
		1 605 - 1 625	
	1 606.5 - 1 625	BROADCASTING 480	1 606.5 - 1 800 (NOC)
MOD	MARITIME MOBILE 480A		FIXED
	/ FIXED /		MOBILE
	/ LAND MOBILE /		RADIOLOCATION
			RADIONAVIGATION
MOD	483 484	481 480A	
	1 625 - 1 635 (NOC)	1 625 - 1 705	
	RADIOLOCATION 487	BROADCASTING 480	
		/ FIXED /	
	485 486	/ MOBILE /	
	1 635 - 1 800	Radiolocation	
MOD	MARITIME MOBILE 480A	481 480A	
MOD	/ FIXED /		
	/ LAND MOBILE /	1 705 - 1 800 (NOC)	
		FIXED	
		MOBILE	
		RADIOLOCATION	
		AERONAUTICAL RADIONAVIGATION	
	483 484 488		482

ADD 480A In cases where a broadcasting station of Region 2 is concerned, the service area of the maritime mobile stations in Region 1 shall be limited to that provided by ground-wave propagation.

kHz
1 800 - 2 000

Allocation to Services		
Region 1	Region 2	Region 3
1 800 - 1 810 (NOC) RADIOLOCATION 487 485 486	1 800 - 1 850 AMATEUR	1 800 - 2 000 (NOC) AMATEUR FIXED MOBILE except aeronautical mobile RADIONAVIGATION Radiolocation
1 810 - 1 850 (NOC) AMATEUR MOD 490 491 492 493		
1 850 - 2 000 (NOC) FIXED MOBILE except aeronautical mobile MOD 484 488 495	1 850 - 2 000 AMATEUR FIXED MOBILE except aeronautical mobile RADIOLOCATION RADIONAVIGATION 494	489

MOD 489 In Region 3, the Loran system operates either on 1 850 kHz or 1 950 kHz, the bands occupied being 1 825 - 1 875 kHz and 1 925 - 1 975 kHz respectively. Other services to which the band 1 800 - 2 000 kHz is allocated may use any frequency therein on condition that no harmful interference is caused to the Loran system operating on 1 850 kHz or 1 950 kHz.

MOD 517 The use of the band 4 000 - 4 063 kHz by the maritime mobile service is limited to ship stations using radiotelephony (see No. 4374 and [Appendix 16]).

MOD 554 Additional allocation: in Albania, the Federal Republic of Germany, Austria, Belgium, Bulgaria, Côte d'Ivoire, Denmark, Spain, Finland, France, Gabon, Greece, Ireland, Israel, Italy, the Lebanon, Liechtenstein, Luxembourg, Mali, Malta, Morocco, Nigeria, Norway, the Netherlands, Poland, the German Democratic Republic, the United Kingdom, Senegal, Sweden, Switzerland, Tunisia, Turkey and Yugoslavia, the band 47 - 68 MHz and in Romania, the band 47 - 58 MHz, are also allocated to the land mobile service on a permitted basis. However, stations of the land mobile service in the countries mentioned in connection with each band referred to in this footnote shall not cause harmful interference to, or claim protection from, existing or planned broadcasting stations of countries other than those mentioned in connection with the band.

MHz
87 - 108

Allocation to Services		
Region 1	Region 2	Region 3
		87 - 100 (NOC) FIXED
87.5 - 100 (NOC) BROADCASTING 581 582	88 - 100 (NOC) BROADCASTING	MOBILE BROADCASTING 580
100 - 108	BROADCASTING	
MOD	582 584 585	
MOD	586 587 588 589	

SUP 583

MOD 587 Additional allocation: in Austria, Bulgaria, Hungary, Israel, Kenya, Mongolia, Poland, Syria, the German Democratic Republic, the United Kingdom, Somalia, Czechoslovakia, Turkey and the USSR, the band 104 - 108 MHz is also allocated to the mobile, except aeronautical mobile (R), service on a permitted basis until 31 December 1995 and, thereafter, on a secondary basis.

MOD 589 Additional allocation: in France, Romania, Sweden and Yugoslavia, the band 104 - 108 MHz is also allocated to the mobile, except aeronautical mobile (R), service on a permitted basis until 31 December 1995.

SUP 590

MHz
108 - 138

	Allocation to Services		
	Region 1	Region 2	Region 3
NOC	108 - 117.975		
NOC	117.975 - 136		
MOD	136 - 137	AERONAUTICAL MOBILE (R) Fixed Mobile except aeronautical mobile (R)	
MOD		591 594A 595	
NOC	137 - 138		

ADD 594A Different category of service: as from 1 January 1990, in Poland and in the USSR, the allocation of the band 136 - 137 MHz to the aeronautical mobile (OR) service is on a permitted basis.

MOD 595 Until 1 January 1990, the band 136 - 137 MHz is also allocated to the space operation service (space-to-Earth), meteorological-satellite service (space-to-Earth) and the space research service (space-to-Earth) on a primary basis. The introduction of stations of the aeronautical mobile (R) service shall only occur after that date. After 1 January 1990, the band 136 - 137 MHz will also be allocated to the above-mentioned space radiocommunication services on a secondary basis (see Resolution COM4/1).

MHz
150.05 - 174

Allocation to Services		
Region 1	Region 2	Region 3
150.05 - 153 (NOC) FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY 610 612	150.05 - 156.7625 (NOC) FIXED MOBILE	
153 - 154 (NOC) FIXED MOBILE except aeronautical mobile (R) Meteorological Aids		
154 - 156.7625 (NOC) FIXED MOBILE except aeronautical mobile (R) [613] [613A]	611 [613] [613A]	
NOC 156.7625 - 156.8375	MARITIME MOBILE (distress and calling) 501 [613] [613A]	
156.8375 - 174 FIXED MOBILE except aeronautical mobile MOD [613] 614 615 613B	156.8375 - 174 (NOC) FIXED MOBILE [613] 616 617 618	

MOD 613 The frequency 156.8 MHz is the international distress, safety and calling frequency for the maritime mobile VHF radiotelephone service. The conditions for the use of this frequency are contained in Articles 38 and N 38.

In the bands 156 - 156.7625 MHz, 156.8375 - 157.45 MHz, 160.6 - 160.975 MHz and 161.475 - 162.05 MHz, each administration shall give priority to the maritime mobile service on only such frequencies as are assigned to stations of the maritime mobile service by the administration (see Articles 38, N 38 and 60).

Any use of frequencies in these bands by stations of other services to which they are allocated should be avoided in areas where such use might cause harmful interference to the maritime mobile VHF radiocommunication service.

However, the frequency 156.8 MHz and the frequency bands in which priority is given to the maritime mobile service may be used for radiocommunications on inland waterways subject to agreement between interested and affected administrations and taking into account current frequency usage and existing agreements.

MOD 613A In the maritime mobile VHF service the frequency 156.525 MHz is to be used exclusively for digital selective calling for distress, safety and calling [(see Resolution [COM4/2])]. The conditions for the use of this frequency are prescribed in Articles 38, N 38 [and 60] and in Appendix 18.

ADD 613B Additional allocation: In Ireland and in the United Kingdom, the band 161.3875 - 161.4125 MHz is also allocated to the maritime radionavigation service on a primary basis, subject to agreement obtained under the procedure set forth in Article 14.

MHz
174 - 235

MOD

Allocation to Services		
Region 1	Region 2	Region 3
174 - 223 (NOC) BROADCASTING 621 623 628 629	174 - 216 (NOC) BROADCASTING Fixed Mobile 620	174 - 223 (NOC) FIXED MOBILE BROADCASTING 619 624 625 626 630
	216 - 220 FIXED MARITIME MOBILE Radiolocation 627 627A	
	220 - 225 (NOC) AMATEUR FIXED MOBILE Radiolocation 627	
223 - 230 (NOC) BROADCASTING Fixed Mobile 622 628 629 631 632 633 634 635		223 - 230 (NOC) FIXED MOBILE BROADCASTING AERONAUTICAL RADIONAVIGATION Radiolocation 636 637
	225 - 235 (NOC) FIXED MOBILE	
230 - 235 (NOC) FIXED MOBILE 629 632 633 634 635 638 639		230 - 235 (NOC) FIXED MOBILE AERONAUTICAL RADIONAVIGATION 637

MOD 621 Additional allocation: in the Federal Republic of Germany, Austria, Belgium, Denmark, Spain, Finland, France, Italy, Liechtenstein, Monaco, Norway, the Netherlands, the United Kingdom, Sweden, Switzerland and Yemen (P.D.R. of), the band 174 - 223 MHz is also allocated to the land mobile service on a permitted basis. However, the stations of the land mobile service shall not cause harmful interference to, nor claim protection from, broadcasting stations, existing or planned, in countries other than those listed in this footnote.

ADD 627A Additional allocation: in Canada, the band 216 - 220 MHz is also allocated to the land mobile service on a primary basis.

MHz
420 - 470

	Allocation to Services		
	Region 1	Region 2	Region 3
NOC	420 - 430		
MOD	430 - 440 AMATEUR RADIOLOCATION 653 654 655 656 657 658 659 661 662 663 664 665	430 - 440 RADIOLOCATION Amateur 653 658 659 660 663 664 664A	
NOC	440 - 450		
NOC	450 - 460		
NOC	460 - 470		

ADD 664A Additional allocation: in Mexico, the bands 430 - 435 MHz and 438 - 440 MHz are also allocated on a primary basis to the land mobile service, subject to agreement obtained under the procedure set forth in Article 14.

MHz
470 - 890

	Allocation to Services		
	Region 1	Region 2	Region 3
	470 - 790 BROADCASTING	470 - 512 (NOC) BROADCASTING Fixed Mobile 674 675	470 - 585 (NOC) FIXED MOBILE BROADCASTING 673 677 679
		512 - 608 (NOC) BROADCASTING 678	585 - 610 (NOC) FIXED MOBILE BROADCASTING RADIONAVIGATION 688 689 690
		608 - 614 (NOC) RADIO ASTRONOMY Mobile-Satellite except aeronautical mobile-satellite (Earth-to-space)	610 - 890 (NOC) FIXED MOBILE BROADCASTING
MOD	676 677A 680 682 683 684 685 686 687 689 693 694	614 - 806 BROADCASTING Fixed Mobile 675 692 693 693A	
MOD MOD	790 - 862 FIXED BROADCASTING 694 695 695A 696 697 698 702	806 - 890 FIXED MOBILE BROADCASTING	
MOD	862 - 890 FIXED MOBILE except aeronautical mobile BROADCASTING 703 704	693A 700	677 688 689 690 691 693 701

MOD 674 Different category of service: in Mexico and Venezuela, the allocation of the band 470 - 512 MHz to the fixed and mobile services, and in Argentina and Uruguay to the mobile service, is on a primary basis (see No. 425), subject to agreement obtained under the procedure set forth in Article 14.

ADD 677A Additional allocation: in the Federal Republic of Germany, Austria, Belgium, Cyprus, Denmark, Spain, Finland, France, Ireland, Italy, Libya, Malta, Morocco, Monaco, Norway, the Netherlands, Portugal, the United Kingdom, Sweden, Switzerland and Turkey, the band 470 - 790 MHz is also allocated on a secondary basis to the land mobile service, intended for applications ancillary to broadcasting. Stations of the land mobile service in the countries mentioned in this footnote, shall not cause harmful interference to existing or planned stations operating in accordance with the Table of Frequency Allocations in countries other than those listed in this footnote.

MOD 680 Additional allocation: In the United Kingdom, the band 598 - 606 MHz is also allocated to the aeronautical radionavigation service on a primary basis until 31 December 1994. All new assignments to stations in the aeronautical radionavigation service in this band are subject to the agreement of the Administrations of the following countries: the Federal Republic of Germany, Belgium, Denmark, Spain, France, Ireland, Luxembourg, Morocco, Norway and the Netherlands.

SUP 681

ADD 693A Additional allocation: In Cuba, the band 614 - 890 MHz is also allocated to the radionavigation service on a primary basis, subject to agreement obtained under the procedure set forth in Article 14.

ADD 695A Additional allocation: In Italy and in the United Kingdom, the band 790 - 862 MHz is also allocated to the land mobile service on a secondary basis.

MOD 697 Additional allocation: in the Federal Republic of Germany, Denmark, Egypt, Finland, Israel, Liechtenstein, Norway, the Netherlands, Sweden, Switzerland and Yugoslavia, the band 790 - 830 MHz, and in these same countries and in Spain and France, the band 830 - 862 MHz, are also allocated to the mobile, except aeronautical mobile, service on a primary basis. However, stations of the mobile service in the countries mentioned in connection with each band referred to in this footnote shall not cause harmful interference to, or claim protection from, stations of services operating in accordance with the Table in countries other than those mentioned in connection with the band.

SUP 699

MOD 700 Additional allocation: in Region 2, the band 806 - 890 MHz is also allocated to the mobile-satellite service on a primary basis. The use of this service is intended for operation within national boundaries and subject to agreement obtained under the procedure set forth in Article 14.

MOD 701 Additional allocation: in Region 3, the bands 806 - 890 MHz and 942 - 960 MHz are also allocated to the mobile-satellite, except aeronautical mobile-satellite (R), service on a primary basis. The use of this service is limited to operation within national boundaries and subject to agreement obtained under the procedure set forth in Article 14. In seeking such agreement, appropriate protection shall be afforded to services operating in accordance with the Table, to ensure that no harmful interference is caused to services operating in accordance with the Table.

MHz
890 - 960

	Allocation to Services		
	Region 1	Region 2	Region 3
MOD	890 - 942 (NOC) FIXED MOBILE except aeronautical mobile BROADCASTING 703 Radiolocation	890 - 902 FIXED MOBILE except aeronautical mobile Radiolocation 705 705B	890 - 942 (NOC) FIXED MOBILE BROADCASTING Radiolocation
MOD		902 - 928 FIXED Amateur Mobile except aeronautical mobile Radiolocation 705 705A 707	
		928 - 942 (NOC) FIXED MOBILE except aeronautical mobile Radiolocation	
	704	705	706
MOD	942 - 960 FIXED MOBILE except aeronautical mobile BROADCASTING 703 704	942 - 960 (NOC) FIXED Mobile 708	942 - 960 (NOC) FIXED MOBILE BROADCASTING 701

ADD 705A Different category of service: In Chile, the band 903 - 905 MHz is allocated to the mobile, except aeronautical mobile, service on a primary basis and is subject to agreement obtained under the procedure set forth in Article 14.

ADD 705B Additional allocation: In Brazil and Canada, the band 890 - 896 MHz is also allocated to the mobile-satellite service on a primary basis. The use of this service is intended for operation within national boundaries and subject to agreement obtained under the procedure set forth in Article 14. In seeking such agreement, appropriate protection shall be afforded to services operating in accordance with the Table.

MHz
1 700 - 1 710

	Allocation to Services		
	Region 1	Region 2	Region 3
	1 700 - 1 710 FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) Mobile except aeronautical mobile	1 700 - 1 710 (NOC) FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile	
MOD	671 722 743A	671 722 743	

ADD 743A Different category of service: In the Federal Republic of Germany, Austria, Denmark, Finland, Norway, the Netherlands, the United Kingdom and Switzerland, in the band 1 700 - 2 450 MHz, and in Sweden, in the bands 1 700 - 1 710 MHz and 2 290 - 2 450 MHz, the allocation to the mobile, except aeronautical mobile, service is on a primary basis (see No. 425), subject to agreement obtained under the procedure set forth in Article 14.

MHz
1 710 - 2 290

	Allocation to Services		
	Region 1	Region 2	Region 3
	1 710 - 2 290 FIXED Mobile	1 710 - 2 290 (NOC) FIXED MOBILE	
MOD	722 743A 744 746A 747 748 750	722 744 745 746 747 748 749 750	

MHz
2 290 - 2 450

	2 290 - 2 300 FIXED SPACE RESEARCH (deep space) (space-to Earth) Mobile except aeronautical mobile	2 290 - 2 300 (NOC) FIXED MOBILE except aeronautical mobile SPACE RESEARCH (deep space) (space-to-Earth)
MOD	743A	
	2 300 - 2 450 FIXED Amateur Mobile Radiolocation	2 300 - 2 450 (NOC) FIXED MOBILE RADIOLOCATION Amateur
MOD	664 743A 752	664 751 752

MHz
2 700 - 3 100

	Allocation to Services		
	Region 1	Region 2	Region 3
(NOC)	2 700 - 2 900	AERONAUTICAL RADIONAVIGATION 717 Radiolocation 770 771	
MOD	2 900 - 3 100	RADIONAVIGATION 773 775A Radiolocation 772	

MOD 772 In the band 2 900 - 3 100 MHz, the use of the shipborne interrogator-transponder system (SIT) shall be confined to the sub-band 2 930 - 2 950 MHz.

SUP 774-775

ADD 775A In the bands 2 900 - 3 100 MHz and 9 300 - 9 500 MHz, the response from radar transponders shall not be capable of being confused with the response from radar beacons (racons) and shall not cause interference to ship or aeronautical radars in the radionavigation service, having regard, however, to No. 347 of these Regulations.

MHz
3 100 - 3 300

MOD	3 100 - 3 300	RADIOLOCATION 713 777 778

SUP 776

MHz
5 470 - 5 650

	Allocation to Services		
	Region 1	Region 2	Region 3
MOD	5 470 - 5 650	MARITIME RADIONAVIGATION Radiolocation 800 801 802	

MHz
8 850 - 9 300

	9 200 - 9 300	RADIOLOCATION	
MOD		MARITIME RADIONAVIGATION 823 823A 824	

ADD 823A In the band 9 200 - 9 500 MHz, search and rescue transponders (SART) may be used, having due regard to the appropriate CCIR Recommendation [(see also Article N 38).]

MHz
9 300 - 10 000

MOD	9 300 - 9 500	RADIONAVIGATION 775A 823A 825A Radiolocation 825	
NOC	9 500 - 9 800	RADIOLOCATION RADIONAVIGATION 713	

ADD 825A In the band 9 300 - 9 320 MHz in the radionavigation service, the use of shipborne radars, other than those existing on 1 January 1976, is not permitted until 1 January 2001.

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 444-E
13 October 1987
Original: English

COMMITTEE 7

SEVENTH SERIES OF TEXTS FROM COMMITTEE 4 TO THE EDITORIAL COMMITTEE

1. The following texts, which were approved by Committee 4 at its fifteenth meeting, with slight modifications, are submitted to the Editorial Committee:

- ADD 726A, as contained in Annex 1 to this report;
- new wording of ADD 649A, which cancels and replaces that already communicated in Document 437 (see Annex 1 to this report);
- new amendments to ADD 572A, 572B and 572C, (as contained in Annex 1 to this report);
- texts contained in Annexes 2 and 3 of Document 389, with slight amendments;
- new footnote ADD 796A, as contained in Annex 1 to this report;
- text in Annex 1 to Document 363, as contained therein;
- text in annex to Document 426 with slight amendments.

2. Committee 4 also took the following decisions:

- Resolution No. 309: SUP
- Resolution No. 407: SUP
- Recommendation No. 703: SUP
- Resolution No. 704: NOC, with a Note as contained in Annex 1 to this report.

3. Please note that Annex 6 to Document 413 was also approved by Committee 4 at its fourteenth meeting, but was not quoted in the sixth series (Document 437), due to a typing error.

O. VILLANYI
Chairman of Committee 4

Annex: 1

ANNEX 1

ADD 726 The bands 1 530 - 1 544 MHz, 1 545 - 1 559 MHz, 1 626.5 - 1 645.5 MHz and 1 646.5 - 1 660.5 MHz shall not be used for feeder links of any service. In exceptional circumstances, however, an earth station at a specified fixed point in any of the mobile-satellite services may be authorized by an administration to communicate via space stations using these bands.

572A: Add also AUT, E, I, MRC, MTN

572B: Add also AUT, E, I, MRC, MTN

572C: Add also AUT, E, I, MRC, MTN

ADD 649A Any emission capable of causing harmful interference to the authorized uses of the band 406 - 406.1 MHz is prohibited.

ADD 796A Additional allocation: In the Federal Republic of Germany, Austria, Denmark, Spain, France, Finland, Israel, Norway, the United Kingdom, Sweden and Switzerland, the band 5 150 - 5 250 MHz is also allocated to the mobile service, on a primary basis, subject to the agreement obtained under the procedure set forth in Article 14.

(MOD) RESOLUTION No. 704 (Mob-83)[1]

[1]This Resolution has been reviewed by the WARC MOB-87, and although some of the actions have been completed, it is retained, until such a time that actions are taken in response to Resolution [COM4/5].

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MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 445-E
13 October 1987

B.18 PLENARY MEETING

EIGHTEENTH 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	Documents	Title
COM.4	422 (437)	Article 1
	412 (437))	Article 12
	404 (437))	
	413 (437)	Resolution No. 200 (Rev.Mob-87)
		Resolution No. 205 (Rev.Mob-87)
		Resolution GT-TEC PLEN/3
	418 (437)	Resolution COM4/16
	413 (437)	Resolution COM4/17
	412 (437)	Recommendation COM4/E
	413 (437)	Recommendation COM4/G

Y.C. MONGELARD
Chairman of Committee 7

Annex: 14 pages

ARTICLE 1

Terms and Definitions

Section III. Radio Services

ADD 34A Aeronautical mobile (R)* service

An aeronautical mobile service reserved for communications relating to safety and regularity of flight, primarily along national or international civil air routes.

ADD 34B Aeronautical mobile (OR)** service

An aeronautical mobile service intended for communications, including those relating to flight coordination, primarily outside national or international civil air routes.

ADD 35A Aeronautical mobile-satellite (R)* service

An aeronautical mobile-satellite service reserved for communications relating to safety and regularity of flights, primarily along national or international civil air routes.

ADD 35B Aeronautical mobile-satellite (OR)** service

An aeronautical mobile-satellite service intended for communications, including those relating to flight coordination, primarily outside national and international civil air routes.

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* (R): route

** (OR): off-route

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ARTICLE 12

MOD

Sub-Section IIB. Procedure to Be Followed for Coast Radiotelephone Stations Operating in the Bands Allocated Exclusively to the Maritime Mobile Service Between 4 000 kHz and 27 500 kHz

MOD 1315 § 24. (1) Examination of Notices Concerning Frequency Assignments to Coast Radiotelephone Stations in the Bands Allocated Exclusively to the Maritime Mobile Service Between 4 000 kHz and 27 500 kHz for Coast Radiotelephone Stations (see No. 1239).

MOD 1326 § 25. (1) Examination of Notices Concerning Frequencies used for Reception by Coast Radiotelephone Stations in the Bands Allocated Exclusively to the Maritime Mobile Service Between 4 000 kHz and 27 500 kHz for Ship Radiotelephone Stations (see Nos. 1219 and 1239).

NOC

Section III. Recording of Dates and Findings in the Master Register

MOD 1388 § 40. (1) Frequency Bands:

9	-	2 850	kHz
3 155	-	3 400	kHz
3 500	-	3 900	kHz in Region 1
3 500	-	4 000	kHz in Region 2
3 500	-	3 950	kHz in Region 3
4 221	-	4 351	kHz
6 332.5	-	6 501	kHz
8 438	-	8 707	kHz
12 658.5	-	13 077	kHz
16 904.5	-	17 242	kHz
19 705	-	19 755	kHz
22 445.5	-	22 696	kHz
26 122.5	-	26 145	kHz

MOD 1391 § 41. (1) Frequency Bands Allocated Exclusively to the Maritime Mobile Service Between 4 000 kHz and 27 500 kHz for Coast Radiotelephone Stations.

MOD 1392 (2) If the finding is favourable with respect to Nos. 1317 and 1318, the date of 1 July 1989 shall be entered in Column 2a.

MOD 1395 § 42. (1) Frequency Bands Allocated Exclusively to the Maritime Mobile Service Between 4 000 kHz and 27 500 kHz for Ship Radiotelephone Stations.

MOD 1396 (2) If the finding is favourable with respect to Nos. 1328 and 1329, the date of 1 July 1989 shall be entered in Column 2a.

MOD 1399 § 43. (1) Frequency Bands Allocated Exclusively to the Maritime Mobile Service Between 4 000 kHz and 27 500 kHz for Radiotelegraph Ship Stations (see No. 1220).

RESOLUTION No. 200 (Rev.Mob-87)

Relating to the Class of Emission to be Used for Distress and Safety Purposes on the Carrier Frequency 2 182 kHz

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

noting

a) the requirements of No. 2973 of the Radio Regulations concerning the class of emission to be used on the carrier frequency 2 182 kHz;

b) that the main objective of this provision is to permit the orderly introduction of the new and improved global maritime distress and safety system using advanced techniques whilst at the same time maintaining reliable distress and safety communications using existing and proven techniques;

recognizing

a) that the use of class J3E emission on the carrier frequency 2 182 kHz would provide the operational advantages, inherent in single-sideband techniques, which are being obtained on other frequencies;

b) that, however, provision for transmission and reception of the radiotelephone alarm signal on the carrier frequency 2 182 kHz will be required until, and for some time after, the introduction of the global maritime distress and safety system (GMDSS);

c) that there are many uncertain factors relating to the date of introduction of the GMDSS;

d) that the Radio Regulations provide frequencies in the band 2 173.5 to 2 190.5 kHz for the orderly introduction of the GMDSS without calling for the interruption or cessation of present distress and safety communication systems using existing and proven techniques;

e) that the requirement for direction finding and homing must be satisfied under all conditions;

resolves

that the question of the date for transferring entirely to J3E emissions on the carrier frequency 2 182 kHz for distress and safety communications be referred to the next competent world administrative radio conference.

RESOLUTION No. 205 (Rev.Mob-87)

Relating to the Protection of the Band 406 - 406.1 MHz Allocated to the Mobile-Satellite Service

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

NOC a) that the World Administrative Radio Conference, Geneva, 1979, allocated the band 406 - 406.1 MHz to the mobile-satellite service in the Earth-to-space direction;

NOC b) that No. 649 of the Radio Regulations limits the use of the band 406 - 406.1 MHz to low-power satellite emergency position-indicating radiobeacons (EPIRBs);

MOD c) that the World Administrative Radio Conference for the Mobile Services, Geneva, 1983 (WARC MOB-83), made provision in the Radio Regulations for the introduction and development of a global distress and safety system;

(MOD) d) that the use of satellite EPIRBs is an essential element of this system;

NOC e) that, like any frequency band reserved for a distress and safety system, the band 406 - 406.1 MHz is entitled to full protection against all harmful interference;

MOD f) that WARC MOB-83 adopted Recommendation No. 604 (Rev.Mob-83) which recommends that the CCIR continue its studies on the technical and operational questions for EPIRBs, including those using the frequencies in the band 406 - 406.1 MHz;

ADD g) that the CCIR has initiated a study of the compatibility between satellite EPIRBs in the band 406 - 406.1 MHz and services using adjacent bands;

considering further

MOD h) that some administrations have developed and implemented an operational low-altitude, near-polar orbiting satellite system (COSPAS-SARSAT) operating in the band 406 - 406.1 MHz to provide alerting and to aid in the locating of distress incidents;

ADD i) that the International Maritime Organization (IMO) has decided that EPIRBs operating in the COSPAS-SARSAT system will form part of the Global Maritime Distress and Safety System (GDMSS);

MOD j) that observations of the use of frequencies in the band 406 - 506.1 MHz show that they are being used by stations other than those authorized by No. 609 of the Radio Regulations, and that these stations have caused harmful interference to the mobile-satellite service, and particularly to the reception of satellite EPIRB signals by the COSPAS-SARSAT system;

(MOD) k) that in the future, new satellite systems which may be either geostationary or non-geostationary may be introduced in this band;

NOC recognizing

that it is essential for the protection of human life and property that bands allocated exclusively to a service for distress and safety purposes be kept free from harmful interference;

resolves

NOC to instruct the IFRB

to organize monitoring programmes in the band 406 - 406.1 MHz in order to identify the source of any unauthorized emission in that band;

NOC to urge administrations

1. to take part in monitoring programmes requested by the IFRB in accordance with No. 1874 of the Radio Regulations, in the band 406 - 406.1 MHz, with a view to identifying and locating stations of services other than those authorized in the band;

2. to ensure that stations other than those operated under No. 649 abstain from using frequencies in the band 406 - 406.1 MHz;

3. to take the appropriate measures to eliminate harmful interference caused to the distress and safety system;

MOD invites the CCIR

to continue on an urgent basis its study of compatibility between satellite EPIRBs in the band 406 - 406.1 MHz and services using adjacent bands.

RESOLUTION GT-TEC PLEN/3

Relating to the Operation of the Fixed and Maritime Mobile Services in the Band 90 - 110 kHz

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

a) the need to protect phased pulse hyperbolic radionavigation systems (Loran-C) operating in the band 90 - 110 kHz used as a safety service for both maritime and aeronautical services;

b) the studies made by the CCIR in this band;

c) that harmful interference affecting safety of flight and ship navigation may be caused to this service by the operation of the fixed and maritime mobile services having a secondary allocation in this band;

d) that, notwithstanding No. 453A of the Radio Regulations, this Conference has removed the allocation for the maritime mobile service from this band;

noting

that this Conference is not competent to affect significantly the allocation of the fixed service;

resolves

to invite the next competent conference to review the fixed service allocation in this band, and No. 453A of the Radio Regulations, with a view to their possible deletion;

invites

the Administrative Council to place this matter on the agenda of the next competent world administrative radio conference.

RESOLUTION COM4/16

Relating to the Use of Frequency Bands Allocated Exclusively to the Aeronautical Mobile Service for Various Forms of Public Correspondence

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

a) that some administrations have notified assignments to the IFRB, in the frequency bands allocated exclusively to the aeronautical mobile service, which relate to public correspondence, limited public correspondence and correspondence of a private agency;

b) that such assignments are in contravention of No. 3633 which prohibits public correspondence in frequency bands allocated exclusively to the aeronautical mobile service;

c) that such assignments are capable of causing harmful interference to the aeronautical mobile service;

d) that radio is the sole means of communication available to the aeronautical mobile service and that this service is concerned with the safety and regularity of flight;

recognizing

[a) that this Conference has made appropriate amendments to Article 12 to allow the IFRB the flexibility required in dealing with notices not in conformity with No. 3633;]

b) that it is of paramount importance that frequencies directly concerned with the safe and regular conduct of aircraft operations be kept free from harmful interference, since they are essential for the safety of life and property;

resolves

1. to urge administrations

a) to refrain from making assignments to stations for various forms of public correspondence in frequency bands allocated exclusively to the aeronautical mobile service;

b) to cease such operations and delete related assignments from the Master Register;

2. to request the IFRB

a) to advise administrations concerned of those assignments contained in the Master Register which are in contravention of No. 3633 of the Radio Regulations;

b) to seek the cooperation of administrations in the cessation of operations in contravention of No. 3633 of the Radio Regulations and consequent deletion of the assignments concerned from the Master Register.

RESOLUTION COM4/17

Relating to Frequencies for Routine (Non-Distress) Calling in the Bands Between 1 605 kHz and 4 000 kHz

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

noting

a) that after the full implementation of the GMDSS the carrier frequency 2 182 kHz may be required exclusively for distress and safety purposes (see Resolution [COM5/1]);

b) that as a consequence there may be a need to provide a frequency for routine (non-distress) calling by radiotelephony; however, this Conference is not in a position to identify a specific frequency for this purpose in the bands between 1 605 kHz and 4 000 kHz;

c) that this Conference has provided the frequency pair 2 177 kHz (coast stations) and 2 189.5 kHz (ship stations) for routine (non-distress) calling using digital selective-calling techniques;

considering

that, as this Conference has provided frequencies for routine (non-distress) calling using digital selective calling techniques, there may no longer be a need to provide a frequency for routine (non-distress) calling by radiotelephony in the bands between 1 605 kHz and 4 000 kHz after the full implementation of the GMDSS;

resolves

to recommend that a future competent world administrative radio conference should consider whether there is a need to provide a frequency for routine (non-distress) calling by radiotelephony in the bands between 1 605 kHz and 4 000 kHz;

invites the Administrative Council

to place this matter on the agenda of the next competent world administrative radio conference;

instructs the Secretary-General

to communicate this Resolution to the International Maritime Organization (IMO).

RECOMMENDATION COM4/E

Relating to the Need for Technical Improvements to Minimize the Risk of Adjacent Channel Harmful Interference Between Assignments Used for Narrow-Band Direct-Printing Telegraphy and Data Systems in Accordance with Appendix 32(Mob-87) and Resolution No. 300(Rev.Mob-87)

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

a) that Appendix 32(Mob-87) of the Radio Regulations contains the channelling arrangement for narrow-band direct-printing telegraphy and data systems (paired frequencies);

b) that the use of these frequency pairs is subject to the provisions of Article 60 of the Radio Regulations and Resolution No. 300(Rev.Mob-87);

c) that the spacing between the frequencies listed in Appendix 32(Mob-87) is 500 Hz;

d) that the present Conference has decided to adopt No. 4321B which specifies the maximum mean powers to be used by coast stations for F1B and J2B emissions in bands exclusively allocated to the maritime mobile service between 4 000 kHz and 27 500 kHz;

recommends

that administrations cooperate to the fullest extent possible in resolving harmful interference from adjacent channels used for narrow-band direct-printing telegraphy and data systems (paired frequencies);

requests the CCIR

1. to study the question of technical compatibility between adjacent channels and make appropriate Recommendations;

2. to take into account, in the study, the maximum mean powers for coast radiotelegraph stations employing class F1B or J2B emissions in the bands exclusively allocated to the maritime mobile service between 4 000 and 27 500 kHz (see No. 4321B);

3. to present the results of its study to the next competent conference.

RECOMMENDATION COM4/G

Relating to Future Public Land Mobile Telecommunication Systems

The World Administrative Radio Conference for Mobile Services, Geneva 1987,

considering

a) that present techniques used by land mobile cellular systems allow for a significant degree of spectrum efficiency;

b) that new applications involving digital techniques are being introduced in public switched networks and that these applications will also be introduced in the land mobile service;

c) that there is a need for world-wide interoperability especially for hand-portable (personal) terminals;

d) that the demand for mobile services will continue to increase, making it necessary to develop techniques to improve spectrum utilization;

e) that the spectrum needs will be relatively small for systems serving short-range, low-power hand-portable (personal) terminals due to the high spectrum efficiency inherent to the small cells in such systems;

f) that a high degree of equipment standardization is desirable;

g) that land mobile system techniques may also be used to provide telecommunications services for fixed service applications in remote areas;

h) that future systems which provide service to hand-portable (personal) terminals may evolve from existing or currently planned systems;

noting

a) Recommendation No. 310 of the World Administrative Radio Conference, Geneva, 1979, relating to an automated UHF maritime mobile radiocommunication system;

b) CCIR Question 39/8 and Study Programme 39A/8 on public land mobile telephone systems;

c) CCIR Decision 69 initiating a study of future public land mobile telecommunication systems within the current study period;

d) relevant CCITT studies and Recommendations;

recommends

that the next competent world administrative radio conference should consider designating a suitable band or bands for international use by future public land mobile telecommunication systems taking into account the relevant CCIR Recommendations and reports;

invites the CCIR

to continue to study, as a matter of urgency, the technical characteristics and suitable frequency bands for the equipment and systems providing public land mobile services;

invites the CCITT

to pursue studies to permit the interworking of future public land mobile telecommunication systems with the public switched telecommunication networks;

invites the Administrative Council

to take the necessary action to place this matter on the agenda of the next competent world administrative radio conference.

Resolutions

Resolution No. 309: REP by Resolution COM4/8
Resolution No. 407: REP by Resolution COM4/8

Recommendations

Recommendation No. 302: NOC
Recommendation No. 304: NOC
Recommendation No. 314 (Mob-83): SUP

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

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13 October 1987
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COMMITTEE 4

SECOND REPORT OF CHAIRMAN OF WORKING GROUP 4 AD HOC 6

Attached are (in Annexes 1, 2 and 3) provisions to go into Articles 8 and 50 and draft Recommandation [COM4/H] related to the aeronautical mobile services, in particular, related to public correspondence by aircraft (APC).

K. BJÖRNSJÖ
Chairman of Working Group 4 Ad Hoc 6

Annexes: 3

ANNEX 1

FOOTNOTE PROVISIONS PROPOSED FOR TERRESTRIAL APC IN ARTICLE 8

726B Additional Allocation: The bands [1 593 - 1 594] MHz and [1 625.5 - 1626.5] MHz are also allocated to the aeronautical mobile service in Region 1 on a primary basis and in Region[s] 2 [and 3] on a secondary basis. The use of these bands in the aeronautical mobile service is limited to public correspondence with aircraft (see Recommendation COM4/H). The use of the band [1 593 - 1594] MHz is limited to transmissions from aeronautical stations and the use of [1 625.5 - 1626.5] MHz is limited to transmissions from aircraft stations.

726C Different category of service: the bands listed in No. 726B are allocated, subject to agreement obtained in accordance with the procedures set forth in Article 14 to the aeronautical mobile service on a primary basis in Greenland, the French Overseas Territories in Regions 2 and 3, Bermuda, British Virgin Islands, Cayman Islands, Montserrat and Pitcairn Island (see Recommendation COM4/H).

730A In Region 1 stations of the aeronautical mobile service using the bands [1 593 - 1 594] MHz and [1 625.5 - 1 626.5] MHz shall not cause harmful interference to stations of the fixed service operating in those countries listed in No. 730.

731A In Region 1 stations of the aeronautical mobile service using the band [1 593 - 1 594 MHz and 1 625.5 - 1 626.5 MHz] shall not claim protection from or cause harmful interference to stations of the aeronautical radionavigation and radionavigation-satellite services, as applicable.

ANNEX 2

ARTICLE 50

Special Rules Relating to the Use of Frequencies in the Aeronautical Mobile Service and in the Aeronautical Mobile-Satellite Service

MOD 3630 Frequencies in any band allocated to the aeronautical mobile (R) service and the aeronautical mobile-satellite (R) service are reserved for communications related to safety and regularity of flight between any aircraft and those aeronautical stations and aeronautical earth stations primarily concerned with flight along national or international civil air routes.

MOD 3631 Frequencies in any band allocated to the aeronautical mobile (OR) service and the aeronautical mobile-satellite (OR) service are reserved for communications between any aircraft and aeronautical stations and aeronautical earth stations other than those primarily concerned with flight along national or international civil air routes.

MOD 3632 Frequencies in the bands allocated to the aeronautical mobile service between 2 850 kHz and 22 000 kHz (see Article 8) shall be assigned in conformity with the provisions of Appendices 26, ~~27*~~ and ~~27 Aer2*~~ 27 Aer2 and the other relevant provisions of these Regulations.

Note: Delete the "note" by the ITU General Secretariat at the bottom of the page RR50-1 of the Radio Regulations.

MOD 3633 Administrations shall not permit public correspondence in the frequency bands allocated exclusively to the aeronautical mobile service or to the aeronautical mobile-satellite service.

NOC 3634

MOD 3635 Governments may, by agreement, decide the frequencies to be used for call and reply in the aeronautical mobile service and the aeronautical mobile-satellite service.

ANNEX 3

RECOMMENDATION No [COM4/H]

Relating to the Development of a Worldwide System for Public Correspondence with Aircraft

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

a) that market research studies and operational experience in some areas indicates a demand for a worldwide system of public correspondence with aircraft (APC);

b) that although some terrestrial APC systems operate in the band 862 - 960 MHz it is not allocated to the aeronautical mobile service on a worldwide basis;

c) that it could be beneficial to extend and supplement a satellite APC system by additionally developing a terrestrial APC system to provide a spectrally efficient cost effective system over the more densely populated areas of the World;

d) that two bands of [1] MHz would appear to provide sufficient capacity for pre-operational and experimental APC systems;

e) that studies are required to determine the optimum technical and operational characteristics to be adopted for a terrestrial APC system together with studies concerning the conditions for sharing with other services utilising the same frequency bands, particularly safety services;

f) that consideration must be given to elecro-magnetic compatibility problems in the operation of APC radiocommunications equipment and radionavigation equipment in aircraft,

noting

1. that the band [1 593 - 1 594] MHz and [1 625.5 - 1 626.5] MHz have been allocated under certain conditions to the aeronautical mobile service to provide the initial allocations for pre-operational and experimental APC systems;

2. that in some countries the use of those bands for APC systems would cause considerable difficulties,

recommends

that administrations continue their studies relating to technical and experimental matters concerning a terrestrial APC system and to report their results to the CCIR, CCITT, ICAO and other interested bodies,

invites the CCIR

1. to study urgently the necessary sharing criteria between terrestrial APC systems operating in the bands mentioned in noting 1 above and other services in the same and adjacent frequency bands;

2. to study the operational and technical characteristics of a terrestrial APC system and related matters;

3. to identify technically preferred alternative frequency bands for a future worlwide terrestrial aeronautical public correspondence system,

invites the CCITT

to study the question of whether the introduction of an APC service will necessitate additional provisions relating to tariff principles, accounting and numbering schemes, and if appropriate prepare a report for consideration by a competent WATTC.

invites Administrations

to take note of this Recommendation and as a matter of urgency, if appropriate, to arrange in their regional telecommunications organisations, in conjunction with appropriate aviation interests, discussions concerning the necessary provisions for their terrestrial APC service, including the locations of aeronautical stations, the foreseen traffic demands and the number of channels required,

invites the Administrative Council

to take note of this Recommendation and, if appropriate following the conclusion of the CCIR studies, include this subject in the agenda of a fuure WARC,

instructs the Secretary-General

to bring this Recommendation to the attention of ICAO, INMARSAT and IATA and other appropriate organisations having an interest in the subject of APC.

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

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3 February 1988
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PLENARY MEETING

MINUTES

OF THE

SEVENTH PLENARY MEETING

Tuesday, 13 October 1987, at 1400 hours

Chairman : Mr. J.W. EGAN (Canada)

Subjects discussed:		Documents
1.	Report of the Credentials Committee	430
2.	Eleventh Series of texts submitted by the Editorial Committee for first reading	411
3.	Twelfth Series of texts submitted by the Editorial Committee for first reading (B.12)	420
4.	Thirteenth Series of texts submitted by the Editorial Committee for first reading (B.13)	428
5.	Fourteenth Series of texts submitted by the Editorial Committee for first reading (B.14)	431
6.	Draft Preamble to the Final Acts	439
7.	Eighth Series of texts submitted by the Editorial Committee for first reading (B.8)	393

1. Report of the Credentials Committee (Document 430)

1.1 The Chairman of Committee 2, introducing the Report dated 12 October, said that the Republic of the Philippines had now deposited credentials which had been found in order so that the country's name should be transferred from Section 3 to Section 1.

1.2 The delegate of Pakistan informed the Committee that although the Pakistan Mission in Geneva had despatched the letter of credentials it had evidently gone astray so he had requested a copy to be sent.

1.3 The Chairman said that that matter would be dealt with as recommended in paragraph 4 of the Report which authorized the Chairman and Vice-Chairman of Committee 2 to verify credentials received after the Committee's last report.

The Plenary took note of the Report and endorsed the recommendation in paragraph 4.

2. Eleventh Series of texts submitted by the Editorial Committee for first reading (Document 411)

Article 12

SUP Footnote on page RR12-19

2.1 The representative of the IFRB (Mr. Berrada) said that the texts in question were not part of the Radio Regulations and a decision of the Plenary would suffice for the Secretary-General to delete them from the Red Book.

The Article was approved, on that understanding.

Appendix 18 (Mob-87)

Notes referring to the Table, MOD g)

2.2 The Chairman of the Editorial Committee said that the square brackets around N 2993 should now be deleted.

ADD q)

2.3 The delegate of Mexico said he had difficulty in interpreting the provision since there seemed to be a conflict between use of Channel 13 on a world-wide basis and the possibility of assigning it also to the ship movement and port operations service.

2.4 The Chairman said that the text was close to that in the existing Radio Regulations and the delegate of the United States of America added that footnote n) in existing Appendix 18 was worded similarly.

2.5 The delegate of Denmark pointed out that the wording was the end result of lengthy discussions on the use of Channel 13 in Committees 4 and 5 and in Working Group 4-A. The Vice-Chairman of Committee 4 confirmed that the wording was that agreed upon in Committees 4 and 5.

2.6 After further discussion, the Chairman observed that the French text was correct but that the English and Spanish versions should be aligned by inserting the word "communications" after "intership navigation safety". At the suggestion of the delegate of Mexico, the second sentence would begin "It may also be used by" rather than "It may also be assigned to".

The Article was approved with those amendments.

2.7 The delegate of the United Kingdom said, with regard to Appendix 18 in general, that the United Kingdom regretted that the Conference had failed to find any short-term solution to the problem of congestion in the VHF channels in the maritime mobile service, which was a great problem in certain parts of the world.

2.8 The delegates of France and Monaco associated themselves with that statement.

NOC AP 37 and 39

SUP Resolution Nos. 302 and 314

2.9 The representative of the IFRB (Mr. Berrada) said that the Plenary should decide between suppression and retention without change of Resolution No. 314 since Committees 6 and 4 had taken different decisions in that respect.

2.10 The delegate of the Federal Republic of Germany said that since no action had been taken on the Resolution, which dated from the 1964 Maritime Conference, it had been felt appropriate to delete it. The delegate of the USSR supported that decision; the delegate of Finland added that that position had not been contested in Committee 4. The delegate of Norway said that the matter had been discussed in Working Group ad hoc 4 but if Committee 6 had primary responsibility, then its views should be considered.

2.11 The Chairman of Committee 6 said that his Committee had felt there was some value in retaining the Resolution since there were still some assignments on the frequencies in question.

2.12 The Chairman of the IFRB recalled that the IFRB had drawn attention to the problem in Document 4. If Resolutions Nos. 314 and 302 (which contained a reference to 314) were deleted, then there would be no mention in the Radio Regulations of coordination with IOC and WMO before notifications were sent to the IFRB. His preference, therefore, would be to retain both those Resolutions.

2.13 The Chairman said that there seemed to be some justification for keeping them, i.e., to replace SUP by NOC.

2.14 The delegate of Sweden pointed out that the symbol should rather be MOD, since some parts of Resolution No. 314 at least referred to the 1967 Conference.

At the suggestion of the Chairman, it was agreed to leave both Resolutions in square brackets pending a new proposal from a small Drafting Group chaired by the delegate of Norway.

Resolution COM4/1

considering c)

2.15 The delegate of Paraguay said that the Spanish text should be amended by replacing "para" by "que pondria en peligro"; the Chairman said that the English text would therefore read "...subject to harmful interference which would endanger the safety...".

It was so agreed.

Resolution COM4/1 was approved, as amended.

Resolution COM4/2

Approved.

Resolution COM4/A

considering f)

2.16 The delegate of the United Kingdom noted that "inhomogeneity" should be replaced by "homogeneity" in the English version.

Recommendation COM4/A was approved, as corrected.

Recommendation COM4/B

noting a)

2.17 Following comments from the delegates of Cuba, France, Spain and Finland, the delegate of the Federal Republic of Germany suggested that the text read: "... such as narrow-band FM, single sideband, compandored single sideband...".

It was so agreed.

Recommendation COM4/B was approved, as amended.

The Eleventh Series of texts submitted by the Editorial Committee was approved, as amended, on first reading.

3. Twelfth Series of texts submitted by the Editorial Committee for first reading (B.12) (Document 420)

Article 9

Approved.

Resolution No. 300 (Rev.Mob-87)

MOD e)

It was agreed to insert "1974" after "WARC".

MOD 1.2

It was agreed to delete the square brackets.

MOD 1.5

3.1 The representative of the IFRB (Mr. Berrada) proposed that the last sentence should be redrafted to read: "In cases where the Board identifies incompatibilities, it shall make suggestions with a view to resolving them".

It was so agreed.

Resolution No. 300 (Rev.Mob-87) was approved, as amended.

Resolution COM4/6

3.2 The Chairman proposed the setting up of a small Drafting Group composed of the Chairmen of Committees 4, 5, 6 and the Technical Working Group and the representative of the IFRB, to consider the dates given in square brackets in paragraphs 6, 7 and 9 of the Annex.

It was so agreed.

Resolution COM4/7

Title

3.3 The delegate of Paraguay proposed that the word "Radiotelephone" be inserted before the word "Stations".

It was so agreed.

3.4 In reply to the delegate of Japan, the Chairman said that the Drafting Group would consider the dates in square brackets in resolves 1 and 2.

Resolution COM4/7 was approved, as amended, and on that understanding.

Resolution COM4/10

Approved.

The Twelfth Series of texts submitted by the Editorial Committee was approved, as amended, on first reading.

4. Thirteenth Series of texts submitted by the Editorial Committee for first reading (B.13) (Document 428)

Article 38

MOD 2974, MOD 2975, MOD 2986

4.1 The Chairman said that the square brackets around 6 215 kHz should be deleted.

MOD 2993D

4.2 The Chairman said that "note n" should read "note q".

MOD 3010

4.3 The Chairman noted that the square brackets should be deleted from around "6 215 kHz" and that "518 kHz should be deleted. He further noted that, in the last sentence, the word "discrete" should be inserted before "frequencies". He pointed out that "12 997.5 kHz" should read "12 577 kHz".

It was agreed that the Editorial Committee would ensure that the frequencies listed were all correct.

4.4 Following comments by the representative of the IFRB and the Chairman of Committee 5, the delegate of Finland proposed that the text be aligned to that of N 3010 in Document 403.

It was so agreed.

MOD 3018

4.5 The Chairman of Committee 5 said that the square brackets round "and Resolution COM5/3" should be deleted.

4.6 The delegate of Cuba pointed out that the first mention of "490 kHz" should be deleted, in the light of earlier decisions.

MOD 3023

4.7 The Chairman of Committee 6 said that both sets of square brackets should be removed.

4.8 In reply to the request by the delegate of Cuba that the number of frequencies be reduced, the Chairman said that in view of the fact that that request was not supported and that the text had been agreed upon by Committee 6, the frequencies should be left as they stood.

It was so agreed.

4.9 In reply to the delegate of the Islamic Republic of Iran, the Chairman of Committee 6 said that Committee 6 had considered the text in terms of Article 60 to which it had been proposed to add N 4323S, N 4323U and N 4323V. Committee 6 had decided that there should be one frequency calling ship stations and another for calling coast stations and that when ship stations were calling ship stations they should use the coast stations calling frequency, thereby minimizing the number of frequencies. The Chairman of Committee 5 recalled that CCIR Study Group 8 had reported that additional frequencies could be added, similar to those agreed, without causing interference to communications on 2 182 kHz.

NOC 3026

4.10 The delegate of Togo said that 3026 should be included in N 2973 of Article 38 (Document 403): the delegate of Tunisia said that the text of N 2973 should be amended so as to incorporate a cross-reference to 3026.

MOD 3038 and ADD 3038A

4.11 The delegate of Greece withdrew his earlier reservations.

MOD 3052A, (MOD) 3053 and MOD 3054

4.12 The Chairman noted that the square brackets should be removed.

It was so agreed.

The Thirteenth Series of texts submitted by the Editorial Committee was approved, as amended, on first reading.

5. Fourteenth Series of texts submitted by the Editorial Committee for first reading (B.14) (Document 431)

Article 25

5.1 The Secretary-General drew attention to Document 26 in which it was pointed out (paragraph 1.5 of the Annex) that there was a certain discrepancy between the terms of noting b) of Resolution No. 13 and Footnote 2101.1 of Article 25. He therefore proposed that that footnote be modified by inserting

"U" between "R" and "W", for the sake of consistency with Resolution No. 13, and that the modified text be included for consideration on second reading.

It was so agreed and Article 25 was approved, as amended.

Article 26

5.2 The Chairman of Committee 6 said that (MOD) 2220, (MOD) 2221, NOC 2222 to 2227, MOD 2228 and NOC 2229 to 2500 from Document 379 should be inserted after (MOD) 2219.

It was so agreed and Article 26 was approved, as amended.

Article 59

Approved.

The Fourteenth Series of texts submitted by the Editorial Committee was approved, as amended, on first reading.

6. Draft Preamble to the Final Acts (Document 439)

6.1 The Secretary-General introduced the draft in Document 439 which followed the normal historical approach to entry into force of Final Acts. In the present case, decisions had been taken of a general nature as well as others which implied varying degrees of work. It might be useful to focus first on the entry into force of the general provisions and then make some regulatory provision to cover those parts for which a separate, later date was necessary. Bearing in mind that a period of some eighteen months was required on the part of the General Secretariat and the IFRB, that administrations would need time to make their own preparations, and that the Admininstrative Council might be called upon to take some decisions on staffing, he would suggest - as a starting-point for the discussions - the first quarter of 1989 (March/April) for entry into force of the general provisions, and the beginning of 1991 for the Appendices which called for specific work.

6.2 The delegate of Sweden, agreeing to a date in the first part of 1989 for the first stage, thought it would be practical to effect the change in frequencies overnight between Saturday and Sunday and therefore suggested a Sunday in April 1989. Similarly, perhaps April 1991 would be a good choice for the implementation of Appendix 25 etc.

6.3 The delegate of Mexico said that the 18-month requirement indicated by the Secretary-General would already lead to June 1989: in his view, considering the time needed by administrations to carry out the preparation, October 1989 would be a preferable period for entry into force of the Final Acts and January 1991 for the entry into force of Appendix 25.

6.4 The delegate of the United Kingdom said that from the range of dates possible, he would propose 2 April 1989, subject to confirmation that that date fell at the weekend, and with the adoption of later dates for specific parts of the Final Acts if necessary.

6.5 The delegate of Greece said he could support the United Kingdom proposal provided that the date proposed was not correlated to the entry into force of new Chapter IX which had not yet been adopted.

6.6 The October 1989 proposal put forward by the delegate of Mexico was supported by the delegates of Saudi Arabia, Oman, Mauritania, Israel, the Islamic Republic of Iran, Qatar, Morocco, Colombia, Paraguay, Ethiopia, Iraq, China, India, Nigeria, Libya, Tunisia, Algeria, Argentina, Tanzania, Uruguay, Swaziland, Indonesia, Brazil, Egypt, Spain, Antigua and Barbuda in view of the time necessary for the procedures.

6.7 Implementation at an early date and the United Kingdom proposal was supported by the delegates of the Federal Republic of Germany, New Zealand, Switzerland, Canada, Malta, Norway, Netherlands, Australia, Finland, Ireland and the United States of America.

6.8 The delegate of Japan, supported by the delegate of Sri Lanka, proposed an even later date of entry into force, namely 1 January 1990.

6.9 Several delegates having stated that some flexibility was acceptable, the delegate of Denmark proposed a compromise date of 1 July 1989.

6.10 The Chairman said that he saw majority support in favour of October 1989 and suggested that the decision on the day of the week on which the Final Acts would become effective be finalized by the Secretariat after consultation among delegations.

It was so agreed.

7. Eighth Series of texts submitted by the Editorial Committee for first reading (Series B.8) (Document 393)

Resolution COM5/1

7.1 The Resolution was introduced by the Chairman of Committee 5 who pointed out that the Spanish wording of requests the IMO 2 was not in line with the other versions. He also drew attention to the square brackets round noting further d) and to the footnotes of information to the Plenary relating to resolves 1, and suggested that the square brackets could be removed from resolves 2 in the light of the Plenary's decision with respect to No. 2945.

noting further a)

7.2 The delegate of France said that it was clear from the noting section that IMO had established a programme for bringing the new system into service which depended on the category of ships and other criteria, in other words, the date which was not the same for all ships. That being so, it was absurd to state that all ships had to wait until the GMDSS was fully implemented before abandoning the former system: rather, ships subject to the 1974 SOLAS Convention should conform to the distress and safety provisions as they appeared in the transitional plan adopted by the IMO.

There being no support for the alternative text put forward by the delegate of France, noting further a) was approved as it stood.

noting further c)

7.3 The delegate of Tunisia said he was prepared to withdraw his reservation if the phrase "costly for administrations to maintain..." was replaced by "preferable for administrations not to maintain...".

7.4 The delegate of Togo said that his own reservation about the word "costly", expressed in Working Group 5 ad hoc 1, could be withdrawn in favour of the Tunisian proposal. The delegates of Saudi Arabia and Syria also supported the proposal.

7.5 The delegate of Thailand said he preferred the text as it stood.

7.6 The delegate of Spain said that the important thing was for the paragraph to state that administrations should maintain parallel arrangements for some time.

7.7 The delegate of New Zealand said that if the Tunisian amendment were adopted, a value judgement would be substituted for a statement of fact. He believed that administrations were able to make such a choice themselves and the language being proposed was inappropriate in the noting part of a Resolution. That view was shared by the delegates of Norway, Denmark, Brazil, Sweden and Argentina.

The paragraph was retained as it stood.

noting further d)

7.8 The delegate of Australia said that his Delegation was one of the two which had expressed a reservation; he now withdrew that in favour of the proposal to delete the paragraph in question.

7.9 The delegate of the Federal Republic of Germany said that d) should be deleted because the point was adequately reflected in resolves 2. The delegate of Japan shared that view, as did the delegate of Finland because the text referring to ships not subject to the 1975 SOLAS Convention also included those which had no radio stations whatsoever and therefore did not depend on the existing radio system.

7.10 The delegate of Spain said that resolves 2 would be isolated without the justification contained in considering 1). He therefore supported the arguments put forward by the delegate of Mexico who considered that the square brackets should be removed and the text within them retained, because it represented a compromise which was important for a country such as his own which had more ships not subject to the SOLAS Convention than subject to it.

The meeting rose at 1805 hours.

The Secretary-General: The Chairman:

R.E. BUTLER J.W. EGAN

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MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 448-E
13 October 1987

R.4

PLENARY MEETING

FOURTH SERIES OF TEXTS SUBMITTED BY THE EDITORIAL COMMITTEE TO THE PLENARY MEETING

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

Source	Documents	Title
COM.7	420 (B.12)	Article 9
	411 (B.11)	Article 12
	431 (B.14)	Article 25
		Article 26
	428 (B.13)	Article 38
	431 (B.14)	Article 59
	411 (B.11)	Appendix 18 Mob-87
		Appendix 37
		Appendix 39
	420 (B.12)	Resolution No. 300 (Rev.Mob-87)
	411 (B.11)	Resolution COM4/1
		Resolution COM4/2
	420 (B.12)	Resolution COM4/6
		Resolution COM4/7
	411 (B.11)	Resolution COM4/10
		Resolution COM4/A
		Resolution COM4/B

Y.C. MONGELARD
Chairman of Committee 7

Annex: 43 pages

ARTICLE 9

MOD 962 § 6. In certain cases provided for in Articles 38, N 38 and 59, aircraft stations are authorized to use frequencies in the bands allocated to the maritime mobile service for the purpose of communicating with stations of that service (see No. 4148).

ARTICLE 12

(MOD) 1314 The provisions of Nos. 1311 to 1313 do not apply to frequency assignments which are in conformity with the Allotment Plans appearing in Appendices 25, 26 and 27 Aer2 to these Regulations; such frequency assignments shall be entered in the Master Register on receipt of the notice by the Board.

MOD 1332 (4A) Any notice which has received a favourable finding with respect to No. 1328 but an unfavourable finding with respect to No. 1329 shall be returned to the notifying administration unless the administration has initiated the procedure of Article 16 in accordance with No. 1719.

ADD 1332A (5) Any notice which makes reference to No. 1719 shall be recorded provisionally in the Master Register, if the finding with respect to No. 1328 is favourable. In this case the Board shall review the recording after the notifying administration has applied the procedure of Article 16.

(MOD) 1336 b) the frequency corresponds to one of the frequencies specified in Column 1 of the Allotment Plan for the aeronautical mobile (R) service contained in Appendix 27 Aer2 (Part II, Section II, Article 2), or the assignment is the result of a permitted change of class of emission and the necessary bandwidth of the new emission is within the channelling arrangement provided for in Appendix 27 Aer2;

(MOD) 1338 d) the notice is in conformity with the technical principles of the Plan set forth in Appendix 27 Aer2;

(MOD) 1341 In the case of a notice in conformity with the provisions of Nos. 1335, 1336 and 1338, but not with those of Nos. 1337 or 1339, the Board shall examine whether the protection specified in Appendix 27 Aer2 (Part I, Section IIA, paragraph 5) is afforded to the allotments in the Plan and to assignments already recorded in the Master Register with a favourable finding with respect to this present provision. In doing so, the Board shall assume that the frequency will be used in accordance with the "Sharing conditions between areas" specified in Appendix 27 Aer2 (Part I, Section IIB, paragraph 4).

ADD 1344A aa) the notice is in conformity with the provisions of No. 1240;

ADD 1348A (4) A notice which is not in conformity with the provisions of No. 1344A shall be examined with respect to Nos. 1267 and 1268. The date to be entered in Column 2b shall be determined in accordance with the relevant provisions of Section III of this Article.

MOD 1349 (5) Except for cases where No. 1268 applies, all frequency assignments referred to in No. 1343 shall be recorded in the Master Register according to the findings reached by the Board. The date to be entered in Column 2a or 2b shall be that determined in accordance with the relevant provisions of Section III of this Article.

MOD 1393 (3) For all other cases referred to in No. 1315, the date of receipt of the notice by the Board shall be entered in Column 2b.

(MOD) 1451 The provisions of Sections V, VI (except No. 1430) and VII of this Article shall not be applied to frequency assignments which are in conformity with the Allotment Plans contained in Appendices 25, 26 and 27 Aer2 to these Regulations.

ARTICLE 25

NOC **Identification of Stations**

NOC **Section I. General Provisions**

NOC 2055-2064

ADD 2064A (4A) All transmissions by satellite emergency position-indicating radiobeacons (EPIRBs) operating in the band 406 - 406.1 MHz or the band 1 645.5 - 1 646.5 MHz, or by EPIRBs using digital selective calling techniques, shall carry identification signals.

NOC 2065-2067

MOD 2068 b) emergency position-indicating radiobeacons (except for those in No. 2064A).

(MOD) 2069 § 3. In transmissions carrying identification signals a station shall be identified by a call sign, by a maritime mobile service identity in accordance with Appendix 43 or by other recognized means of identification which may be one or more of the following: name of station, location of station, operating agency, official registration mark, flight identification number, selective call number or signal, selective call identification number or signal, characteristic signal, characteristic of emission or other clearly distinguishing features readily recognized internationally.

SUP 2069.1

MOD 2101.1 [1]For call sign series beginning with B, F, G, I, K, M, N, R, U and W, only the first character is required for nationality identification. In the cases of half series, the first three characters are required for nationality identification.

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ARTICLE 26

Service Documents

NOC 2180 to 2200

NOC 2201 § 5. List IV. List of Coast Stations

ADD 2201A (1) This list shall contain particulars of coast stations and coast earth stations providing a public correspondence service, and

MOD 2202 a) an annex containing a table of inland telegraph rates, rates for telegrams destined for adjacent countries, etc. taking into account the relevant CCITT Recommendations;

ADD 2202A b) an annex giving important information concerning the operation of maritime mobile-satellite systems which may be forwarded to the Secretary-General by participating administrations;

ADD 2202B c) an annex[1] giving in tabulated form the following particulars of coast stations and coast earth stations participating in the Global Maritime Distress and Safety System (GMDSS):

ADD 2202C i) coast stations participating in VHF, MF and HF watchkeeping using digital selective calling techniques;

ADD 2202D ii) coast earth stations operating in the geostationary satellite system and capable of providing distress and safety communications with ship earth stations including distress alerting using radiotelephony and/or direct-printing, or transmitting maritime safety information using direct-printing techniques;

ADD 2202E iii) coast stations transmitting navigational and meteorological warnings and urgent information to ships using narrow-band direct-printing techniques.

NOC 2203 to 2214

ADD 2202B.1 [1]The annex shall be first published following entry into force of Chapter N IX (see Resolution [COM5/1]), and updated as necessary.

MOD 2215 § 8. List VIIA. List of Call Signs and Numerical Identities of Stations Used by the Maritime Mobile and Maritime Mobile-Satellite Services.

MOD 2216 (1) This list shall contain an alphabetical list of call signs and a numerical table of identities of stations used by the maritime mobile service and maritime mobile-satellite service (coast, coast earth, ship, ship earth, radiodetermination and special service stations), maritime mobile service identities and selective call numbers or signals of ship and ship earth stations, and maritime mobile service identities and identification numbers or signals of coast and coast earth stations.

(MOD) 2217 (2) This list shall be preceded by the Table of Allocation of International Call Sign Series and the Table of Maritime Identification Digits Series given in Appendices 42 and 43 respectively and a table of signals characterizing the emissions of radiobeacons used in the maritime mobile service.

(MOD) 2218 (3) List VIIA shall be republished every two years and kept up to date by recapitulative supplements every three months.

(MOD) 2219 § 8.A List VIIB. Alphabetical List of Call Signs of Stations Other than Amateur Stations, Experimental Stations and Stations of the Maritime Mobile Service.

(MOD) 2220 (1) This list shall be preceded by the Table of Allocation of International Call Sign Series given in Appendix 42 and by a table indicating the form of call signs assigned by each administration to its amateur and experimental stations.

(MOD) 2221 (2) List VIIB shall be republished at intervals determined by the Secretary-General, and kept up to date by recapitulative supplements issued every three months.

NOC 2222 to 2227

MOD 2228 § 11. Map of Coast Stations Open to Public Correspondence.

The Map shall be republished in a form and at intervals to be determined by the Secretary-General.

NOC 2229 to 2500

NOC ARTICLE 38

NOC **Frequencies for Distress and Safety**

NOC **Section I. Availability of Frequencies**

SUP 2967

SUP 2968 § 0.

(MOD) 2969 A. 500 kHz

MOD 2970 The frequency 500 kHz is the international distress frequency for Morse telegraphy (see also No. 472); it shall be used for this purpose by ship, aircraft and survival craft stations which employ Morse telegraphy on frequencies in the bands between 415 kHz and 535 kHz when requesting assistance from the maritime services. It shall be used for the distress call and distress traffic, for the urgency signal and urgency messages, for the safety signal and, outside regions of heavy traffic, for short safety messages. When practicable, safety messages shall be transmitted on the working frequency after a preliminary announcement on 500 kHz (see also No. 4236). For distress and safety purposes, the classes of emission to be used on 500 kHz shall be A2A, A2B, H2A or H2B (see also No. 3042 [and Resolution COM5/1]).

NOC 2971 (2)

(MOD) 2971A B. 518 kHz

MOD 2971B § 1A. In the maritime mobile service, the frequency 518 kHz is used exclusively for the transmission by coast stations of meteorological and navigational warnings and urgent information to ships, by means of narrow-band direct-printing telegraphy using the international NAVTEX system.

SUP 2971C

SUP 2971D

(MOD) 2972 C. 2 182 kHz

MOD 2973 § 2. (1) The carrier frequency 2 182 kHz[1] is an international distress frequency for radiotelephony (see also Nos. 500 and 501); it shall be used for this purpose by ship, aircraft and survival craft stations and by emergency position-indicating radiobeacons using frequencies in the authorized bands between 1 605 kHz and 4 000 kHz when requesting assistance from the maritime services. It is used for distress calls and distress traffic, for signals of emergency position-indicating radiobeacons, for the urgency signal and urgency messages and for the safety signal. Safety messages shall be transmitted, where practicable, on a working frequency after a preliminary announcement on 2 182 kHz. The class of emission to be used for radiotelephony on the frequency 2 182 kHz shall be H3E. Class of emission A3E may continue to be used by apparatus intended solely for distress, urgency and safety purposes (see No. 4127). The class of emission to be used by emergency position-indicating radiobeacons shall be as specified in Appendix 37 (see also No. 3265). The class of emission J3E may be used for the exchange of distress traffic on 2 182 kHz following the acknowledged reception of a distress call using digital selective calling techniques on 2 187.5 kHz taking into account that other shipping in the vicinity may not be able to receive this traffic. (See also No. N 2973 [and Resolution COM5/1].)

MOD 2974 (2) If a distress message on the carrier frequency 2 182 kHz has not been acknowledged, the radiotelephone alarm signal, whenever possible followed by the distress call and message, may be transmitted again on a carrier frequency of 4 125 kHz or 6 215 kHz, as appropriate (see Nos. 2982, 2986 and 3054).

MOD 2975 (3) However, ship and aircraft stations which can transmit neither on the carrier frequency 2 182 kHz nor, in accordance with No. 2974, on the carrier frequencies 4 125 kHz or 6 215 kHz, should use any other available frequency on which attention might be attracted.

SUP 2976

NOC 2977 (5)

NOC 2978 (6)

SUP 2978A

SUP 2978B § 2A.

NOC 2973.1

(MOD) 2979 D. 3 023 kHz

NOC 2980 § 3.

(MOD) 2981 E. 4 125 kHz

MOD 2982 § 4. (1) The carrier frequency 4 125 kHz is used to supplement the carrier frequency 2 182 kHz for distress and safety purposes and for call and reply (see also No. 520). This frequency is also used for distress and safety traffic by radiotelephony (see also No. N 2982 [and Resolution COM5/1]).

MOD 2982A (2) The carrier frequency 4 125 kHz may be used by aircraft stations to communicate with stations of the maritime mobile service for distress and safety purposes, including search and rescue (see No. 2943).

SUP 2982B

SUP 2982C § 4A.

SUP 2982D

SUP 2982E § 4B.

(MOD) 2983 F. 5 680 kHz

NOC 2984 § 5.

MOD 2985 G. 6 215 kHz

MOD 2986 § 6. The carrier frequency 6 215 kHz is used to supplement the carrier frequency 2 182 kHz for distress and safety purposes and for call and reply (see also No. 520). This frequency is also used for distress and safety traffic by radiotelephony (see also No. N 2986 [and Resolution COM 5/1]).

SUP 2986A

SUP 2986B § 6A.

SUP 2986C

SUP 2986D § 6B.

SUP 2986E

SUP 2986F § 6C.

SUP 2986G

SUP 2986H § 6D.

(MOD) 2987 H. 8 364 kHz

MOD 2988 § 7. The frequency 8 364 kHz is designated for use by survival craft stations if they are equipped to transmit on frequencies in the bands between 4 000 kHz and 27 500 kHz and if they wish to establish communications relating to search and rescue operations with stations of the maritime and aeronautical mobile services (see also No. 501 [and Resolution COM5/1]).

SUP 2988A

SUP 2988B § 7A.

SUP 2988C

SUP 2988D § 7B.

SUP 2988E

SUP 2988F § 7C.

SUP 2988G

SUP 2988H § 7D.

SUP 2988I

SUP 2988J § 7E.

SUP 2988K

SUP 2988L § 7F.

SUP 2988M

SUP 2988N § 7G.

(MOD) 2989 I. 121.5 MHz and 123.1 MHz

SUP 2990

NOC 2990A § 8.

NOC 2990B (1B)

NOC 2991 (2)

NOC 2990A.1

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(MOD) 2992 J. 156.3 MHz

NOC 2993 § 9.

SUP 2993A

SUP 2993B § 9A.

(MOD) 2993C K. 156.650 MHz

MOD 2993D § 9B. The frequency 156.650 MHz is used for ship-to-ship communications relating to the safety of navigation in accordance with note q) of Appendix 18.

(MOD) 2993E L. 156.8 MHz

MOD 2994 § 10. (1) The frequency 156.8 MHz is the international distress, safety and calling frequency for radiotelephony for stations of the maritime mobile service when they use frequencies in the authorized bands between 156 MHz and 174 MHz (see also Nos. 501 and 613). It is used for the distress signal, the distress call and distress traffic, as well as for the urgency signal, urgency traffic and the safety signal (see also No. 2995A). Safety messages shall be transmitted where practicable on a working frequency after a preliminary announcement on 156.8 MHz (see No. N 2994, Appendix 19 [and also Resolution COM5/1]).

NOC 2995 (2)

NOC 2995A (3)

SUP 2995B

SUP 2995C § 10A.

(MOD) 2996 M. 243 MHz

(See Nos. 501 and 642)

(MOD) 2997 N. 406 - 406.1 MHz Band

NOC 2997A § 10B.

(MOD) 2998 O. 1 544 - 1 545 MHz Band

2998A § 10C. Use of the band 1 544 - 1 545 MHz (space-to-Earth) is limited to distress and safety operations (see No. 728), including:

2998B a) feeder links of satellites needed to relay the emissions of satellite emergency position-indicating radiobeacons to earth stations;

2998C b) narrow-band (space-to-Earth) links from space stations to mobile stations.

(MOD) 2998D P. 1 645.5 - 1 646.5 MHz Band

2998E § 10D. Use of the band 1 645.5 - 1 646.5 MHz (Earth-to-space) is limited to distress and safety operations (see No. 728), including:

ADD 2998EA a) transmissions from satellite EPIRBs;

ADD 2998EB b) relay of distress alerts received by satellites in low polar earth orbits to geostationary satellites.

(MOD) 2999 Q. Aircraft in Distress

NOC 3000

(MOD) 3001 R. Survival Craft Stations

NOC 3002 to 3008

SUP 3008A

SUP 3008B

SUP 3008C

SUP 3008D

NOC **Section II. Protection of Distress and Safety Frequencies**

NOC 3009 A. General

MOD 3010 Except as provided for in these Regulations, any emission capable of causing harmful interference to distress, alarm, urgency or safety communications on the frequencies 500 kHz, 2 174.5 kHz, 2 182 kHz, 2 187.5 kHz, 4 125 kHz, 4 177.5 kHz, 4 207.5 kHz, 6 215 kHz, 6 268 kHz, 6 312 kHz, 8 291 kHz, 8 376.5 kHz, 8 414.5 kHz, 12 290 kHz, 12 520 kHz, 12 577 kHz, 16 420 kHz, 16 695 kHz, 16 804.5 kHz, 121.5 MHz, 156.525 MHz, 156.8 MHz or in the frequency bands 406 - 406.1 MHz, 1 544 - 1 545 MHz and 1 645.5 - 1 646.5 MHz (see also No. N 3010) is prohibited. Any emission causing harmful interference to distress and safety communications on any of the other discrete frequencies identified in Section I of this Article and in Section I of Article N 38 is prohibited.

NOC 3011

NOC 3012 to 3015

MOD 3016 (2) It is not permitted to transmit complete alarm signals for testing purposes on any frequency except for essential tests coordinated with the competent authorities. As an exception, such tests are permitted for radiotelephone equipment which can operate only on either of the international distress frequencies 2 182 kHz and 156.8 MHz, in which case a suitable artificial antenna shall be employed.

NOC 3016A

NOC 3016B

NOC 3017 B. 500 kHz

MOD 3018 § 15. (1) Apart from the transmissions authorized on 500 kHz, and taking account of No. 4226, all transmissions on the frequencies included between 490 kHz and 510 kHz are forbidden (see No. 471 and Resolution COM5/3).

NOC 3019

NOC 3020 and 3021

NOC 3022 C. 2 182 kHz

MOD 3023 § 16. (1) Except for transmissions authorized on the carrier frequency 2 182 kHz and on the frequencies 2 174.5 kHz, 2 177 kHz, 2 187.5 kHz and 2 189.5 kHz, all transmissions on the frequencies between 2 173.5 kHz and 2 190.5 kHz are forbidden (see also No. N 3023).

NOC 3024 to 3031

(MOD) 3031A D. 121.5 MHz, 123.1 MHz and 243 MHz

NOC 3031B

ADD 3031C In order to avoid unjustified alerts in automatic emergency systems, transmissions of non-operational test signals on the emergency frequencies 121.5 MHz and 243 MHz should be coordinated with the competent authorities and carried out only during the first five minutes of each hour, with each test transmission lasting no longer than ten seconds (see also No. 3011).

MOD 3032 E. 156.7625 - 156.8375 MHz Band

MOD 3033 § 18. (1) All emissions in the band 156.7625 - 156.8375 MHz capable of causing harmful interference to the authorized transmissions of stations of the maritime mobile service on 156.8 MHz are forbidden.

NOC 3034 to 3036

NOC **Section III. Watch on Distress Frequencies**

NOC 3037

MOD 3038 § 19. (1) In order to increase the safety of life at sea and over the sea, all stations of the maritime mobile service normally keeping watch on frequencies in the authorized bands between 415 kHz and 526.5 kHz which employ Morse telegraphy shall, during their hours of service, take the necessary measures to ensure watch on the international distress frequency 500 kHz for three minutes twice an hour beginning at x h 15 and x h 45, Coordinated Universal Time (UTC), by an operator using headphones or loudspeaker [(see also Resolution COM5/1).]

ADD 3038A (2) No. 3038 does not apply to a coast station open to public correspondence when its operational area for distress purposes is covered by one or more coast stations keeping watch on 500 kHz in accordance with an agreement between the administrations concerned. These administrations shall inform the Secretary-General of the details of such agreements for publication in the List of Coast Stations (see Article 26 and Appendix 9).

NOC 3039

MOD 3040 a) transmissions shall cease in the band between 490 kHz and 510 kHz (see also Resolution COM5/3);

MOD 3041 b) outside these bands, transmissions of stations of the mobile service may continue; stations of the maritime mobile service may listen to these transmissions on the express condition that they first ensure watch on the distress frequency as required by No. 3038 [(see also Resolution COM5/1).]

MOD 3042 § 20. (1) Stations of the maritime mobile service open to Morse telegraphy public correspondence and using frequencies in the authorized bands between 415 kHz and 526.5 kHz shall, during their hours of service, remain on watch on 500 kHz except in the situation referred to in No. 3038A. This watch is obligatory only for class A2A and H2A emissions [(see also Resolution COM5/1).]

MOD 3043 (2) These stations, while observing the provisions of No. 3038, are authorized to relinquish this watch only when they are engaged in communications on other frequencies.

NOC 3044 to 3046

MOD 3046A (4) Ship stations, while observing the provisions of No. 3038, are also authorized to relinquish this watch[1] when it is impractical to listen by split headphones or by loudspeaker, and by order of the master in order to repair or carry out maintenance required to prevent imminent malfunction of:

NOC 3046B

NOC 3046C

NOC 3046D

NOC 3046E

MOD 3046A.1 [1]For additional information see the relevant provisions of the International Convention for the Safety of Life at Sea. [(See also Resolution COM5/1.)]

NOC 3047 B. 2 182 kHz

MOD 3048 § 21. (1) Coast stations which are open to public correspondence and which form an essential part of the coverage of the area for distress purposes on 2 182 kHz shall, during their hours of service, maintain a watch on 2 182 kHz [(see also Resolution COM5/1).]

NOC 3049 to 3051

MOD 3052 § 23. In order to increase the safety of life at sea and over the sea, all stations of the maritime mobile service normally keeping watch on frequencies in the authorized bands between 1 605 kHz and 2 850 kHz shall, during their hours of service, and as far as possible, take steps to keep watch on the international distress carrier frequency 2 182 kHz for three minutes twice each hour beginning at x h 00 and x h 30 Coordinated Universal Time (UTC).[(see also Resolution COM5/1).]

MOD 3052A § 23A. During the periods referred to in No. 3052 all transmissions in the band 2 173.5 - 2 190.5 kHz shall cease, except those on 2 177 kHz and 2 189.5 kHz and those provided for in this Chapter and in Chapter N IX.

(MOD) 3053 C. 4 125 kHz and 6 215 kHz

MOD 3054 § 24. (1) All coast stations which are open to public correspondence and which form an essential part of the coverage of the area for distress purposes may, during their hours of service, maintain a watch on the carrier frequencies 4 125 kHz or 6 215 kHz or both (see Nos. 2982 and 2986). Such watch should be indicated in the List of Coast Stations.

NOC 3055 to 3056

MOD 3057 § 25. (1) A coast station providing an international maritime mobile radiotelephone service in the band 156 - 174 MHz and which forms an essential part of the coverage of the area for distress purposes should, during its working hours in that band, maintain an efficient aural watch on 156.8 MHz. (See also [Resolution COM5/1] and Recommendation No. 306.)

MOD 3058 (2) Ship stations should, where practicable, maintain watch on 156.8 MHz when within the service area of a coast station providing international maritime mobile radiotelephone service in the band 156 - 174 MHz. Ship stations fitted only with VHF radiotelephone equipment operating in the authorized bands between 156 MHz and 174 MHz, should maintain watch on 156.8 MHz when at sea [(see also Resolution COM5/1).]

MOD 3059 (3) Ship stations, when in communication with a port station, may, on an exceptional basis and subject to the agreement of the administration concerned, continue to maintain watch, on the appropriate port operations frequency only, provided that watch on 156.8 MHz is being maintained by the port station [(see also Resolution COM5/1).]

MOD 3060 (4) Ship stations, when in communication with a coast station in the ship movement service and subject to the agreement of the administrations concerned, may continue to maintain watch on the appropriate ship movement service frequency only, provided the watch on 156.8 MHz is being maintained by the coast station [(see also Resolution COM5/1).]

3061 to 3085 NOT allocated.

ARTICLE 59

NOC **Conditions to be Observed in the Maritime Mobile Service and in the Maritime Mobile-Satellite Service**

NOC **Section I. Maritime Mobile Service**

NOC 4096-4103

MOD 4104 § 7. Ship stations and ship earth stations other than survival craft stations shall be provided with the documents enumerated in the appropriate section of Appendix 11.

NOC 4105

MOD 4106 B. Ship Stations Using Morse Radiotelegraphy

NOC 4107-4109

MOD 4110 § 11. All ship stations equipped with Morse radiotelegraph apparatus to work in the authorized bands between 415 kHz and 535 kHz shall be able to:

NOC 4111

NOC 4112-4115

MOD 4116 § 13. In Region 2, any Morse radiotelegraph station installed on board a ship which uses frequencies in the band 2 089.5 - 2 092.5 kHz for call and reply shall be provided with at least one other frequency in the authorized bands between 1 605 kHz and 2 850 kHz.

NOC 4117

MOD 4118 § 14. In ship stations, all apparatus using class A1A emissions for Morse telegraphy on frequencies in the authorized bands between 4 000 kHz and 27 500 kHz shall satisfy the following conditions:

NOC 4119-4121

MOD 4122 C. Ship Stations Using Digital Selective Calling

SUP 4123

(MOD) 4123A § 15. The characteristics of the digital selective calling equipment shall be in accordance with the Recommendations of the CCIR.

ADD 4123B C1. Bands Between 415 kHz and 535 kHz

ADD 4123C § 15A. All ship stations equipped with apparatus for digital selective calling to work in the authorized bands between 415 kHz and 535 kHz shall be able to send and receive class F1B or J2B emissions on at least two digital selective calling channels necessary for their service.

ADD 4123D C2. Bands Between 1 605 kHz and 4 000 kHz

ADD 4123E § 15B. All ship stations equipped with digital selective calling apparatus to work in the authorized bands between 1 605 kHz and 4 000 kHz shall be able to:

ADD 4123F a) send and receive class F1B or J2B emissions on the frequency 2 187.5 kHz;

ADD 4123G b) in addition, send and receive class F1B or J2B emissions on other digital selective calling frequencies in this band necessary to carry out their service.

ADD 4123H C3. Bands Between 4 000 kHz and 27 500 kHz

ADD 4123I § 15C. All ship stations equipped with digital selective calling apparatus to work in the authorized bands between 4 000 kHz and 27 500 kHz shall be able to:

ADD 4123J a) send and receive class F1B or J2B emissions on the frequencies designated for digital selective distress calling in each of the maritime HF bands in which they are operating (see also N 3172);

ADD 4123K b) send and receive class F1B or J2B on an international calling channel (see Nos. 4683 and 4684) in each of the HF maritime mobile bands necessary for their service;

ADD 4123L c) send and receive class F1B or J2B on other digital selective calling channels in each of the HF maritime mobile bands necessary for their service.

ADD 4123M C4. Bands Between 156 MHz and 174 MHz

ADD 4123N § 15D. All ship stations equipped with apparatus for digital selective calling to work in the authorized bands between 156 MHz and 174 MHz shall be able to send and receive class G2B emissions on the frequency 156.525 MHz.

ADD 4123O D. Ship Stations Using Narrow-Band Direct-Printing Telegraphy

ADD 4123P § 15E.(1) All ship stations using narrow-band direct-printing telegraphy equipment shall be able to send and receive on the frequency designated for distress traffic by narrow-band direct-printing telegraphy in the frequency bands in which they are operating.

(MOD) 4123 (2) The characteristics of the narrow-band direct-printing equipment shall be in accordance with Appendix 38.

ADD 4123Q D1. Bands Between 415 kHz and 535 kHz

ADD 4123R § 15F. All ship stations equipped with narrow-band direct-printing telegraphy apparatus to work in the authorized bands between 415 kHz and 535 kHz shall be able to:

ADD 4123S a) send and receive class F1B or J2B emissions on the working frequencies necessary to carry out their service;

ADD 4123T b) receive class F1B emissions on 518 kHz, if complying with the provisions of Chapter N IX.

ADD 4123U D2. Bands Between 1 605 kHz and 4 000 kHz

ADD 4123V § 15G. All ship stations equipped with narrow-band direct-printing telegraphy apparatus to work in the authorized bands between 1 605 kHz and 4 000 kHz shall be able to send and receive class F1B or J2B emissions on working frequencies necessary to carry out their service.

ADD 4123W D3. Bands Between 4 000 kHz and 27 500 kHz

ADD 4123X § 15H. All ship stations equipped with narrow-band direct-printing telegraphy apparatus to work in the authorized bands between 4 000 and 27 500 kHz shall be able to send and receive class F1B or J2B emissions on working frequencies in each of the HF maritime mobile bands necessary to carry out their service.

NOC 4124 E. Ship Stations Using Radiotelephony

(MOD) 4125 E1. Bands Between 1 605 kHz and 4 000 kHz

NOC 4126

MOD 4127 a) send class J3E or H3E emissions on a carrier frequency of 2 182 kHz and receive class J3E or H3E emissions on a carrier frequency of 2 182 kHz, except for such apparatus as is referred to in No. 4130 (see also MOD 2945 and MOD 2973).

NOC 4128-4130

MOD 4131 E2. Bands Between 4 000 kHz and 27 500 kHz

MOD 4132 § 18. All ship stations equipped with radiotelephony to work in the authorized bands between 4 000 kHz and 27 500 kHz and which do not comply with the provisions of Chapter N IX should be able to send and receive on the carrier frequencies 4 125 kHz and 6 215 kHz (see Nos. 2982 and 2986). However, all ship stations which comply with the provisions of Chapter N IX shall be able to send and receive on the carrier frequencies designated in Article N 38 for distress and safety traffic by radiotelephony for the frequency bands in which they are operating.

(MOD) 4133 E3. Bands Between 156 MHz and 174 MHz

MOD 4134 § 19. All ship stations equipped with radiotelephony to work in the authorized bands between 156 MHz and 174 MHz (see No. 613 and Appendix 18) shall be able to send and receive class G3E emissions on:

NOC 4135-4136

ADD 4136A c) the intership navigation safety frequency 156.65 MHz;

(MOD) 4137 d) all the frequencies necessary for their service.

MOD **Section II. Maritime Mobile-Satellite Service**

NOC 4138

SUP 4139

NOC 4140-4141

MOD **Section III. Stations on Board Aircraft Communicating with Stations of the Maritime Mobile Service and the Maritime Mobile-Satellite Service**

NOC 4142-4145

MOD 4146 § 25. In the case of communication between stations on board aircraft and stations of the maritime mobile service, radiotelephone calling may be renewed as specified in Nos. 4933 and 4934 and radiotelegraph calling may be renewed after an interval of five minutes, notwithstanding No. 4735.

NOC 4147-4153

MOD 4154 (2) The frequency 156.3 MHz may be used by stations on board aircraft for safety purposes. It may also be used for communication between ship stations and stations on board aircraft engaged in coordinated search and rescue operations (see Nos. 2993 and N 2993).

ADD 4155 (2A) The frequency 156.8 MHz may be used by stations on board aircraft for safety purposes only (see Nos. 2995A and N 2995A).

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(MOD)

APPENDIX 18
Mob-87

Table of Transmitting Frequencies in the Band 156 - 174 MHz for Stations in the Maritime Mobile Service

(See Nos. 613, 613A and 613B and Articles 59 and 60)

MOD

Note 1: For assistance in understanding the Table, see notes a) to q) below.

MOD

Note 2: Channels 01 to 28, except 15 and 17, correspond to the channels of Appendix 18 to the Radio Regulations, Geneva, 1959, and channels 15, 17 and 60 to 88 correspond to those additional channels made available for assignment in accordance with the provisions of Appendix 18 Mar to the Radio Regulations, Geneva, 1967.

NOC

Note 3: Channel designators 60 to 88 were chosen for the additional channels in order to separate them clearly from the original channels.

Channel designators	Notes	Transmitting frequencies (MHz)		Inter-ship	Port operations		Ship movement		Public correspondence
		Ship stations	Coast stations		Single frequency	Two frequency	Single frequency	Two frequency	
60	*h)*	156.025	160.625			17		9	25
01		156.050	160.650			10		15	8
61		156.075	160.675			23		3	19
02		156.100	160.700			8		17	10
62		156.125	160.725			20		6	22
03		156.150	160.750			9		16	9
63		156.175	160.775			18		8	24
04		156.200	160.800			11		14	7
64		156.225	160.825			22		4	20
05		156.250	160.850			6		19	12
65		156.275	160.875			21		5	21
06	*g)*	156.300		1					
66		156.325	160.925			19		7	23
07		156.350	160.950			7		18	11
67	*l)*	156.375	156.375	9	10		9		
08		156.400		2					
68	*n)*	156.425	156.425		6		2		
09	*m)*	156.450	156.450	5	5		12		
69	*n)*	156.475	156.475	8	11		4		
10	*l)*	156.500	156.500	3	9		10		
70	*p)*	156.525	156.525	Digital selective calling for distress, safety and calling					
11	*n)*	156.550	156.550		3		1		
71	*n)*	156.575	156.575		7		6		
12	*n)*	156.600	156.600		1		3		
72	*m)*	156.625		6					
13	q)	156.650	156.650	4	4		5		
73	*l)*	156.675	156.675	7	12		11		
14	*n)*	156.700	156.700		2		7		
74	*n)*	156.725	156.725		8		8		

Channel designators	Notes	Transmitting frequencies (MHz)		Inter-ship	Port operations		Ship movement		Public correspondence
		Ship stations	Coast stations		Single frequency	Two frequency	Single frequency	Two frequency	
15	*j)*	156.750	156.750	11	14		14		
75			Guardband 156.7625 – 156.7875 MHz						
16		156.800	156.800	DISTRESS, SAFETY AND CALLING					
76		Guardband 156.8125 - 156.8375 MHz							
17	*j)*	156.850	156.850	12	13		13		
77		156.875		10					
18	*f)*	156.900	161.500			3		22	
78		156.925	161.525			12		13	27
19	*f)*	156.950	161.550			4		21	
79	*f) n)*	156.975	161.575			14		1	
20	*f)*	157.000	161.600			1		23	
80	*f) n)*	157.025	161.625			16		2	
21	*f)*	157.050	161.650			5		20	
81		157.075	161.675			15		10	28
22	f)	157.100	161.700			2		24	
82		157.125	161.725			13		11	26
23		157.150	161.750						5
83		157.175	161.775						16
24		157.200	161.800						4
84		157.225	161.825			24		12	13
25		157.250	161.850						3
85		157.275	161.875						17
26		157.300	161.900						1
86	*o)*	157.325	161.925						15
27		157.350	161.950						2
87		157.375	161.975						14
28		157.400	162.000						6
88	*h)*	157.425	162.025						18

NOTES REFERRING TO THE TABLE

NOC a)

NOC b)

NOC c)

MOD d) The channels of the present Appendix, with the exception of channels 06, 13, 15, 16, 17, 70, 75 and 76, may also be used for highspeed data and facsimile transmissions, subject to special arrangement between interested and affected administrations.

MOD e) The channels of the present Appendix, preferrably two adjacent channels from the series 87, 28, 88, with the exception of channels 06, 13, 15, 16, 17, 70, 75 and 76, may be used for direct-printing telegraphy and data transmission, subject to special arrangement between interested and affected administrations.

NOC f)

MOD g) The frequency 156.300 MHz (channel 06) (see Nos. 2993, N 2993 and 4154) may also be used for communication between ship stations and aircraft stations engaged in coordinated search and rescue operations. Ship stations shall avoid harmful interference to such communications on channel 06 as well as to communications between aircraft stations, ice-breakers and assisted ships during ice seasons.

NOC h)

NOC i)

NOC j)

SUP k) (Not reallocated)

NOC l)

NOC m)

MOD n) These channels (68, 69, 11, 71, 12, 14, 74, 79 and 80) are the preferred channels for the ship movement service. They may, however, be used for the port operations service until required for the ship movement service if this should prove to be necessary in any specific area.

NOC o)

MOD p) This channel (70) is to be used exclusively for digital selective calling for distress, safety and calling (see Resolution COM4/2).

ADD q) Channel 13 is designated for use on a world-wide basis as a navigation safety communication channel, primarily for intership navigation safety communications. It may also be used for the ship movement and port operations services subject to the national regulations of the administrations concerned.

PINK PAGES

NOC APPENDIX 37

NOC APPENDIX 39

Resolutions

[SUP RESOLUTION No. 302

SUP RESOLUTION No. 314]

PINK PAGES

(MOD) RESOLUTION No. 300 (Rev.Mob-87)

MOD **Relating to the Use and Notification of the Paired Frequencies Reserved for Narrow-Band Direct-Printing Telegraph and Data Transmission Systems in the HF Bands Allocated on an Exclusive Basis to the Maritime Mobile Service (see Appendix 32)**

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

NOC a) that certain sections of the HF bands allocated to the maritime mobile service have been reserved for narrow-band direct-printing telegraph and data transmission systems for use on a paired frequency basis only;

MOD b) that Appendix 32 of the Radio Regulations contains a channelling arrangement in the maritime HF bands for narrow-band direct-printing telegraphy and data systems (paired frequencies);

MOD c) that this Conference has made available an increased number of paired frequencies reserved for narrow-band direct-printing telegraphy and data transmission systems for use on a paired basis only, and has modified Appendix 32 accordingly;

MOD d) that the World Maritime Administrative Radio Conference (WMARC, Geneva, 1974), established interim measures for the orderly bringing into use of the paired frequencies;

MOD e) that the WMARC 1974 established a provisional procedure for the use and notification of paired frequencies for narrow-band direct-printing telegraphy and that the application of this procedure by administrations and by the IFRB was satisfactory;

resolves

(MOD) 1. that paired frequencies in the HF bands reserved for narrow-band direct-printing telegraphy between coast stations and ship stations shall be used by these stations, notified to the IFRB and recorded in the Master International Frequency Register in the following manner:

NOC 1.1 assignments of pairs of frequencies for transmission and reception shall be made solely to coast stations. Ship stations of any nationality shall use by right for their transmissions the receiving frequencies of the coast stations with which they exchange traffic;

MOD 1.2 each administration shall choose the pairs of frequencies for its requirements, if necessary with the assistance of the IFRB;

MOD 1.3 the assignments thus selected shall be notified to the IFRB in notices as shown in Appendix 1 to the Radio Regulations and administrations shall supply the basic characteristics listed in Section A or B of that Appendix, as appropriate;

MOD 1.4 whenever practicable, each notice should reach the Board before the date on which the assignment is brought into use. It must reach the Board not earlier than one year before the date on which it is to be brought into use but in any case not later than 30 days after it is actually brought into use;

MOD 1.5 assignments which are in conformity with the Radio Regulations, and in particular Appendix 32, shall be examined by the Board from the viewpoint of the probability of harmful interference to be caused by or to other existing or proposed uses. The Board shall inform the administration concerned of the results of its examination and shall record the notified assignment with reference to this Resolution and without any date in Column 2. The date of receipt of the notice by the Board and the date of putting into use of the assignment shall be entered in the Remarks Column. In cases where the Board identifies incompatibilities, it shall make suggestions with a view to resolving them;

MOD 1.6 any notice not in conformity with the Radio Regulations shall be returned to the notifying administration by the IFRB, together with any suggestion which the Board may be able to submit in this respect;

MOD 1.7 should difficulties arise between administrations using the same channel, or adjacent channels, the matter shall be settled by agreement between the administrations concerned taking into account the information published by the IFRB;

MOD 2. that a future competent conference be invited to review this Resolution and examine any difficulties which may have arisen in its application;

MOD 3. that the entries made in the Master Register under this Resolution shall in no way prejudge any decisions which may be taken by the aforementioned conference;

<u>invites the Administrative Council</u>

to place this Resolution on the agenda of the next competent conference in order to examine any difficulties which may have arisen in its applications.

RESOLUTION COM4/1

Relating to the Use of the Band 136 - 137 MHz by Services other than the Aeronautical Mobile (R) Service

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

noting

a) the provisions of No. 595 concerning the use of the band 136 - 137 MHz by the aeronautical mobile (R) service commencing on 1 January 1990;

b) that frequencies allocated to the aeronautical mobile (R) service are reserved for communications related to safety and regularity of flight and therefore require special measures to ensure freedom from harmful interference;

considering

a) that the Table of Frequency Allocations includes allocations in the band 136 - 137 MHz to the aeronautical mobile (R) service on a primary basis, to the aeronautical mobile (OR) service in some countries (No. 594A) on a permitted basis and to the fixed and mobile, except aeronautical mobile (R), services on a secondary basis;

b) that No. 595 also provides for allocation to the space operation service (space-to-Earth), the meteorological-satellite service (space-to-Earth) and the space research service (space-to-Earth) on a primary basis up to 1 January 1990, and thereafter on a secondary basis, and that the aeronautical mobile (R) service can be introduced only after 1 January 1990;

c) that from that date the aeronautical mobile (R) service may be subject to harmful interference which would endanger the safety of air navigation and that it is therefore necessary to protect this service from harmful interference that might be caused by stations in the fixed service, the mobile except aeronautical mobile (R) service, the space research service (space-to-Earth), the space operation service (space-to-Earth) and the meteorological-satellite service (space-to-Earth);

resolves

1. that administrations operating or intending to operate, stations in the fixed service, the mobile except aeronautical mobile (R) service, the space research service (space-to-Earth), the space operation service (space-to-Earth) and the meteorological-satellite service (space-to-Earth) in the band 136 - 137 MHz from 1 January 1990, take all necessary steps to protect the aeronautical mobile (R) service;

2. to request administrations to refrain from authorizing new assignments, as from 1 January 1990, to the services to which the band 136 - 137 MHz is allocated on a secondary basis.

recommends

1. that administrations cease operation of stations of the other services to which the band is allocated on a secondary basis as and when the stations of the aeronautical mobile (R) service come into operation;

2. that a future competent world administrative radio conference consider the deletion of all secondary allocations from the band 136 - 137 MHz;

invites the Administrative Council

to place this matter on the agenda of the next competent world administrative radio conference.

PINK PAGES

RESOLUTION COM4/2

Relating to the Implementation and Use of Frequency 156.525 MHz for Digital Selective Calling for Distress, Safety and Calling

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

noting

that the World Administrative Radio Conference for the Mobile Services, 1983 designated, on an exclusive basis, the frequency 156.525 MHz for distress and safety calling by digital selective calling techniques;

considering

a) that the frequency 156.525 MHz became available for distress and safety calling using digital calling techniques on 1 January 1986;

b) that this Conference has decided that the frequency 156.525 MHz may also be used for other calling purposes using digital calling techniques;

c) that the Final Acts of this Conference will enter into force on [October 1989];

d) that there is an urgent need to implement, at the earliest possible date, use of digital selective calling techniques on 156.525 MHz for calling purposes in addition to distress and safety calling;

e) that every effort must be made to prevent the use of 156.525 MHz for purposes other than digital selective calling in the maritime mobile service;

f) that the use of 156.525 MHz for other maritime mobile communication purposes must cease as soon as practical;

resolves

that as of 1 January 1988, the frequency 156.525 MHz in the maritime mobile service shall be used exclusively for digital selective calling for distress, safety and calling;

urges administrations

to take all practical measures, including the possible use of technical means, to prevent, as soon as possible and not later than 1 January 1988, any maritime mobile use of the frequency 156.525 MHz other than indicated in the resolves;

instructs the Secretary-General

to communicate this Resolution to the International Maritime Organization (IMO).

RESOLUTION COM4/6

Relating to the Use of the Additional Channels Reserved for Duplex Radiotelephony in the HF Bands Allocated to the Maritime Mobile Service

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

a) that there is an increasing demand for additional duplex channels for radiotelephony in the HF bands allocated on an exclusive basis to the maritime mobile service;

b) that this Conference has modified Appendices 16 and 31 of the Radio Regulations and has provided a number of additional duplex channels for radiotelephony (channel Nos.:

from 427 to 429
from 607 to 608
832, and from 834 to 837
from 1233 to 1241
from 1642 to 1656
from 1801 to 1805, and from 1807 to 1815
from 2241 to 2253
from 2501 to 2509);

c) that it is necessary to develop procedures for the establishment of initial duplex radiotelephony allotments for the newly available channels, as well as for the updating of the use of these channels;

noting

that the current Appendix 25 allotment plan together with Article 16 of the Radio Regulations have effectively served the maritime mobile service and the latter may be used for the updating of the use of the new channels;

resolves

1. that the newly available channels shall be initially allotted in accordance with the procedure contained in the Annex to this Resolution;

2. that Appendix 25 shall be updated by including in it the allotments resulting from the application of the provisions of the Annex to this Resolution;

3. that, following the application of resolves 2 above, the administrations shall apply the procedure of Article 16 for any modification to existing allotments or the addition of new allotments.

ANNEX TO RESOLUTION COM4/6

Procedure for Establishing an Initial Allotment Arrangement in the Newly Available Channels for Duplex Radiotelephony in the HF bands

1. Administrations intending to use one of the new channels indicated in considering b) shall send their requirements to the Board by providing the information listed in Appendix 5 of the Radio Regulations before [1 May 1988].*

2. Following the receipt of this information, the Board shall examine these requirements and, if necessary, request the Administrations to communicate any missing information. Only those requirements which are complete will be taken into account in this procedure.

3. Using its Technical Standards, the Board shall prepare an initial allotment arrangement following the order indicated in paragraph 4 below.

4. The initial allotment arrangement for the new channels shall include for a given band and a given allotment area the requirements in the following order:

4.1 requirements of administrations having no allotments in Appendix 25 of the Radio Regulations and which require such allotments;

4.2 requirements of administrations which, following the application of Article 16, could not be given an allotment in the current Appendix 25 with the required protection criteria;

4.3 requirements of administrations asking for additional allotments to supplement their existing allotments in order to satisfy an increase in radiotelephony traffic.

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* Note - Administrations that cannot use channels Nos. [428, 429, 834, 835, 836, 837] shall indicate accordingly when submitting their requirements.

5. The Board shall consult those administrations whose requirements could not be included in the allotment arrangement for the new channels and, if an administration insists, the Board shall determine from all the channels available for duplex radiotelephony the channel which is the least affected, and shall include the requirement in this channel.

6. Not later than [1 February 1989] the Board shall publish the allotment arrangement for the new channels so that administrations may comment on it.

7. If within a period of [60 days] following this publication, an administration informs the Board that its proposed allotment is not acceptable to it, the Board shall endeavour to identify an alternative channel as indicated in paragraph 5 above.

8. If following the application of paragraph 7 above, the administration concerned is not in a position to accept the Board's recommendation, the requirement will be returned to the administration concerned with the suggestion that it apply the Article 16 procedure.

9. At [Date D3] the Board shall enter the allotment arrangement for the new channels in Appendix 25 and shall prepare a revised version of Appendix 25 for publication by the Secretary-General.

RESOLUTION COM4/7

Relating to the Transfer of Frequency Assignments of Radiotelephone Stations Operating in Accordance with Appendix 25

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

a) that this Conference has modified Appendices 16 and 31 of the Radio Regulations and has placed the paired frequencies reserved for radiotelephony in the HF bands allocated to the maritime mobile service at intervals of 3.0 kHz as opposed to 3.1 kHz;

b) that it will be necessary to make a consequential modification to Appendix 25 of the Radio Regulations;

c) that coast and ship radiotelephone stations will need to change their transmitting and receiving frequencies to bring them into conformity with the corresponding channels in Appendix 16 (Mob-87) (Section A);

d) that there should be an orderly transition to the revised paired frequencies reserved for radiotelephony in the HF bands allocated to the maritime mobile service;

resolves

1. that, at 0001 hours UTC on [Date D4], coast and ship radiotelephone stations shall change their transmitting and receiving frequencies to the replacement frequencies indicated for the same channel number in Appendix 16 (Mob-87);

2. that within three months prior to [Date D4] the administrations shall notify the Board of the transfer of their assignments to the replacement frequencies;

3. that an assignment for a replacement frequency, the other basic characteristics of which are not modified, shall be recorded with the date 1 July 1989 in column 2a;

4. that frequency assignments for which the Board received no notification for the frequency indicated in Appendix 16 (Mob-87) shall bear a symbol to indicate that they will no longer be taken into account. The Board shall apply the provisions of Article 16 to the corresponding allotment appearing in Appendix 25.

RESOLUTION COM4/10

Relating to the Transfer of Paired Frequency Assignments Reserved for Narrow-Band Direct-Printing Telegraph and Data Transmission Systems

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

that it has provided for additional narrow-band direct-printing and data transmission channels;

recognizing

a) that the transfer of frequency assignments from the channels established by the World Maritime Administrative Radio Conference, Geneva, 1974 and already in use, to the channels adopted by this Conference, should be made with the least possible disruption of the service provided by each station;

b) that a satisfactory procedure for the use and notification of paired frequencies for narrow-band direct-printing telegraph and data transmission has been established in Resolution No. 300 (Rev.Mob-87);

c) that the present coast station assignment arrangements for paired narrow-band direct-printing telegraphy and data transmission have been effective;

resolves

1. that, at 0001 hours UTC on [Date D4], coast and ship stations using paired narrow-band direct-printing and data transmission shall change their transmitting and receiving frequencies to bring them into conformity with Appendix 32 (Rev.Mob-87);

2. that, within three months prior to [Date D4], administrations shall notify the Board of the transfer of their assignments to the frequency indicated for the same channel number in Appendix 32 (Rev.Mob-87);

3. that notices of frequency assignments whose basic characteristics, other than the frequency, are not modified, shall be recorded in the Master International Frequency Register;

4. that frequency assignments for which the Board has received no notification for the frequency indicated in Appendix 32 (Rev.Mob-87) shall bear a symbol to show that they will no longer be taken into account in the application of Resolution No. 300 (Rev.Mob-87).

RECOMMENDATION COM4/A

Relating to the Provision of Frequency Bands for Feeder Links in the Fixed-Satellite Service for the Mobile-Satellite Service or for the Aeronautical [,Land], or Maritime Mobile-Satellite Services in the Bands 1 530 - 1 559 MHz and 1 626.5 - 1 660.5 MHz

The World Administrative Radio Conference for Mobile Services, Geneva, 1987,

considering

a) that No. 726 of the Radio Regulations provides that the allocation to the maritime mobile-satellite service in the band 1 530 - 1 535 MHz shall be effective from 1 January 1990, and that up to that date the fixed service shall be on a primary basis in Regions 1 and 3;

b) that feeder links are required for the aeronautical mobile-satellite service, the [land mobile-satellite service], the maritime mobile-satellite service and the mobile-satellite service operating in the bands 1 530 - 1 559 MHz and 1 626.5 - 1 660.5 MHz;

c) that, although No. 27 of the Radio Regulations provides that such feeder links may be part of the mobile-satellite service, No. 22 of the Radio Regulations indicates that the fixed-satellite service may also include feeder links for the mobile-satellite services;

d) that the majority of such feeder links are in the bands 3 400 - 4 200 MHz and 5 925 - 7 075 MHz;

e) that the bands mentioned in considering d) above are becoming increasingly congested, thus causing some difficulties during the coordination process;

f) that the lack of homogeneity of the technical characteristics of the feeder links of the mobile-satellite services and the links of the fixed-satellite service results in coordination difficulties;

g) that distress and safety traffic is carried on feeder links of the mobile-satellite services;

h) that the extension of the spectrum necessary for feeder links in contiguous frequency bands would be desirable from a technical and economic point of view, but may cause significant problems of sharing or allocation, or both;

noting

that, at this Conference, certain administrations made proposals for sub-bands in the frequency bands 3 400 - 4 200 MHz and 5 925 - 7 075 MHz in which the feeder links for the aeronautical, [land], maritime and mobile-satellite services would have priority over other assignments to the fixed-satellite service, while other administrations considered that the frequency spectrum required for the feeder links for the mobile-satellite services can more readily be provided in the fixed-satellite service bands by the normal coordination process;

recommends

that the World Administrative Radio Conference on the Use of the Geostationary-Satellite Orbit and on the Planning of the Space Services Utilizing It (WARC ORB-88) take note of the concerns expressed in the considerings and noting above in its decisions with respect to feeder links for the aeronautical mobile-satellite service, [the land mobile-satellite service], the maritime mobile-satellite service and the mobile-satellite service in the bands 1 530 - 1 559 MHz and 1 626.5 - 1 660.5 MHz;

invites the CCIR

to continue its study relating to this matter;

instructs the Secretary-General

to forward this Recommendation to WARC ORB-88.

RECOMMENDATION COM4/B

Relating to Improved Efficiency in the Use of the Appendix 18 VHF Frequency Spectrum for Maritime Mobile Communications

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

a) that growth in the use of Appendix 18 VHF maritime mobile channels is expected to continue;

b) that in many parts of the world significant congestion already exists;

c) that increases in congestion could be harmful to the safe movement and operation of vessels and port operations and are a matter of concern to the International Association of Lighthouse Authorities, (IALA) the International Maritime Organization (IMO) and many administrations;

noting

a) that it may be possible to make more efficient use of the VHF maritime mobile spectrum with the development of existing or new technologies such as narrow-band FM, single sideband, compandored single sideband, use of interleaved channels separated by 12.5 kHz, reduced channel spacing, etc.;

b) that a great number of mariners using low-cost transceivers rely on this band and the safety services that are thereby provided;

c) that any modification to Appendix 18 shall take account of the distress and safety utilization;

invites the CCIR

urgently to undertake studies to determine the most appropriate means of promoting a more efficient use of the frequency spectrum in the VHF maritime mobile band and to develop Recommendations covering the technical and operational characteristics of systems using this band;

invites administrations

to participate in these studies actively;

recommends

that a future competent administrative radio conference review and revise, if appropriate, the provisions of Appendix 18, taking into account the relevant CCIR Recommendations;

instructs the Secretary-General

to communicate this Recommendation to the IALA and IMO.

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 449-E
13 October 1987
Original: English

COMMITTEE 7

SEVENTH SERIES OF TEXTS SUBMITTED BY COMMITTEE 6 TO THE EDITORIAL COMMITTEE

Committee 6 has considered the following documents and decided on them as follows:

Document 391

Item 4 on Appendix 25: the suggestion contained in this paragraph was approved.

Document 415

Appendix 38: no further action proposed with respect to the decision taken in the Technical Working Group of the Plenary.

Appendix 39: no further action proposed with respect to the decision taken in the Technical Working Group of the Plenary.

Appendix 4: approved for NOC.

Resolution No. 314: approved for NOC.

Recommendation No. 7: approved for NOC.

Resolution No. 204: approved for SUP.

Resolution No. 304: approved for SUP.

Resolution No. 311: approved for SUP.

Resolution No. 320: approved for SUP.

Recommendation No. 203: approved for SUP.

Recommendation No. 301: approved for SUP.

Recommendation No. 305: approved for SUP.

Recommendation No. 315: approved for SUP.

Resolution No. 312: approved with minor changes given to the Editorial Committee.

Recommendation No. 302: approved with minor changes given to the Editorial Committee.

Document 416

Article 63: approved with minor changes given to the Editorial Committee.

Document 402

Appendix 41: approved for NOC.

Appendix 42: approved for NOC.

I.R. HUTCHINGS
Chairman of Committee 6

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LIST OF DOCUMENTS
(401 to 450)

No.	Origin	Title	Destination
401	C7	B.9	PL
402	WG/6-B	Eighth Report by the Chairman of WG 6-B to the Chairman of Committee 6	C6
403	C7	B.10	PL
404	C4	Note from the Chairman of Committee 4	C4
405	C4	Fifth series of texts from Committee 4 to the Editorial Committee	C7
406	C6	Summary Record of the tenth meeting of Committee 6	C6
407	C4	Summary Record of the eleventh meeting of Committee 4	C4
408	C4	Summary Record of the twelfth meeting of Committee 4	C4
409	C6	Note by the Chairman of Committee 6	C6
410	WG/4-C	Note from the Chairman of WG 4-C to the Chairman of Committee 4	C4
411	C7	B.11	PL
412 + Corr.1	WG/4-C	Third and last report by WG 4-C to Committee 4	C4
413	WG/4-A	Tenth report of WG 4-A to Committee 4	C4
414	WG/4-A	Eleventh and last report of the Chairman of WG 4-A to Committee 4	C4
415	WG/6-A	Seventeenth report of the Chairman of WG 6-A to the Chairman of Committee 6	C6
416	WG/6-A	Eighteenth report by the Chairman of WG 6-A to the Chairman of Committee 6	C6
417	C6	Fifth series of texts from Committee 6 to the Editorial Committee	C7

No.	Origin	Title	Destination
418	WG/4 Ad Hoc 6	First Report of WG 4 Ad Hoc 6 to Committee 4	C4
419	C6	Sixth series of texts from Committee 6 to the Editorial Committee	C7
420	C7	B.12	PL
421 (Rev.1)	WG/4 Ad Hoc 3	Report of WG 4 Ad Hoc 3 to Committee 4	C4
422	WG/4 Ad Hoc 5	Report of WG 4 Ad Hoc 5 to Committee 4	C4
423	C4	Summary Record of the thirteenth meeting of Committee 4	C4
424	C6	Summary Record of the eleventh meeting of Committee 6	C6
425 (Rev. 1)	WG/4 AdHoc 2-1	Third Report of WG 4 Ad Hoc 2-1	C4
426	WG/4 Ad Hoc 7	Report of WG 4 Ad Hoc 7 to Committee 4 - Draft Resolution (COM4/5)	C4
427	C2	Summary Record of the second meeting of Committee 2	C2
428	C7	B.13	PL
429	PL	Minutes of the sixth Plenary Meeting	PL
430 +Corr.1, 2	C2	Report of Committee 2 to the Plenary Meeting (Credentials)	PL
431	C7	B.14	PL
432	WG/6-A	Nineteenth Report of the Chairman of WG 6-A to the Chairman of Committee 6	C6
433 + Corr.1	C6	Note from the Chairman of Committee 6 to the Plenary Meeting	PL
434	WG/6 Ad Hoc 3	First Report of the Chairman of Committee 6 Ad Hoc 3 to the Chairman of Committe 6	C6

No.	Origin	Title	Destination
435	C7	B.15	PL
436	C7	R.3	PL
437	C4	Sixth series of texts from Committee 4 to the Editorial Committee	C7
438 + Corr.1	C6	Note from the Chairman of Committee 6 to the Plenary Meeting	PL
439	SG	Preamble to the Finals Acts of WARC(MOB-87)	PL, C7
440	C4	Summary Record of the fourteenth meeting of Committee 4	C4
441	C4	Summary Record of the fifteenth meeting of Committee 4	C4
442	C7	B.16	PL
443	C7	B.17	PL
444	C4	Seventh series of texts from Committee 4 to the Editorial Committee	C7
445	C7	B.18	PL
446	WG/4 Ad Hoc 6	Second Report of Chairman of WG 4 Ad Hoc 6 to Committee 4	C4
447	PL	Minutes of the seventh Plenary Meeting	PL
448	C7	R.4	PL
449	C6	Seventh series of texts submitted by Committee 6 to the Editorial Committee	C7
450	SG	List of documents (401 to 450)	-

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Document 451-E
14 October 1987

B.19 PLENARY MEETING

NINETEENTH 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	Documents	Title
SG	439	Preamble
COM.4	426 (444)	Resolution COM4/5
	363 (444)	Resolution COM4/8
	389 (444)	Recommendation COM4/C
		Recommendation COM4/D

Y.C. MONGELARD
Chairman of Committee 7

Annex: 10 pages

FINAL ACTS

of the World Administrative Radio Conference for the Mobile Services (MOB-87)

Geneva, 1987

PREAMBLE

In the light of Resolution No. 202 adopted by the Word Administrative Radio Conference, Geneva, 1979 (WARC 1979), the Plenipotentiary Conference of the International Telecommunication Union (Nairobi, 1982), in its Resolution No. 1, decided that a World Administrative Radio Conference for the Mobile Services be convened in Geneva in mid-August 1987 for a period of six weeks.

On the basis of this decision the Administrative Council of the Union, at its 40th Session in 1985, considered Resolution No. 202 of WARC 1979 and made the necessary arrangements for such a World Administrative Radio Conference for the Mobile Services. When establishing the agenda for the Conference, the Administrative Council took full account of Resolutions Nos. 321 and 204 of WARC MOB-83 as well as other relevant Resolutions and Recommendations adopted by the Regional Administrative Conference for the Planning of the Maritime Radionavigation Service (Radiobeacons) in the European Maritime Area (EMA-R1) and the Regional Administrative Conference for the Planning of the MF Maritime Mobile and Aeronautical Radionavigation Services (Region 1) (MM-R1), Geneva, 1985. In its Resolution No. 933, the Administrative Council decided that the duration of the Conference would be six weeks. At its 41st Session in 1986, considering the results of prior consultations, the Administrative Council amended its Resolution No. 933 and resolved that the Conference be convened in Geneva for five weeks commencing on Monday, 14 September 1987.

The World Administrative Radio Conference for the Mobile Services, accordingly convened on the appointed date, considered and adopted a partial revision of the Radio Regulations in accordance with its Agenda. Details of this partial revision and of the related action taken by the Conference are given in the annex hereto.

In accordance with its Agenda, the Conference also reviewed existing Resolutions and Recommendations and adopted a number of new Resolutions and Recommendations relating to the mobile services.

The partial revision of the Radio Regulations, as adopted by the Conference, shall form an integral part of those Regulations and shall enter into force on [October 1989] at 0001 hours UTC, except for provisions of the partial revision for which a different date of entry into force is stipulated.

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

Members of the Union shall inform the Secretary-General of their approval of the partial revision of the Radio Regulations by the World Administrative Radio Conference for Mobile Services (Geneva, 1987). The Secretary-General shall inform Members promptly of the receipt of such notifications of approval.

IN WITNESS WHEREOF, the delegates of the Members of the International Telecommunication Union named below have, on behalf of their respective competent authorities, signed one copy of the present Final Acts in the Arabic, Chinese, English, French, Russian and Spanish languages. This copy shall remain in the archives of the Union. The Secretary-General shall forward one certified copy to each Member of the International Telecommunication Union.

Done at Geneva, October 1987.

RESOLUTION COM4/5

Relating to the Need to Study the Question of Including Decisions of Regional Administrative Radio Conferences in the Radio Regulations

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

a) that this Conference had Resolution No. 704 as an item on its agenda;

b) that the general question of the inclusion of decisions of regional conferences in the Radio Regulations was raised;

c) that there is a need for general guidance on the question to ensure consistency of approach;

recognizing

a) that the question of including decisions of regional conferences in the Radio Regulations, in order to render those decisions applicable to all the Members of a particular Region, raises a question of principle which affects all the Members of the Union;

b) that the best source of guidance on this question is the supreme organ of the Union;

resolves

to submit to the next Plenipotentiary Conference for consideration the question of including in the Radio Regulations the decisions of regional administrative radio conferences and the implications of such inclusion on all Members of the Union;

invites the IFRB

to prepare a report on the radio regulatory aspects of this question for the information of the Administrative Council and administrations;

instructs the Secretary-General

to prepare a report on the legal aspects of this question for the Administrative Council and administrations;

invites the Administrative Council

to bring to the attention of the Plenipotentiary Conference the need for a decision by that Conference on the possible inclusion of decisions of regional administrative radio conferences in the Radio Regulations;

recommends the Plenipotentiary Conference

to consider the question of including in the Radio Regulations decisions of regional administrative conferences in order to provide general guidance on this subject.

RESOLUTION COM4/8

Relating to the Unauthorized Use of Frequencies in the Bands Allocated to the Maritime Mobile Service[1] and to the Aeronautical Mobile (R) Service[2]

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

a) that monitoring observations of the use of frequencies in the band 2 170 - 2 194 kHz and in the bands allocated exclusively to the maritime mobile service between 4 063 kHz and 27 500 kHz and to the aeronautical mobile (R) service between 2 850 kHz and 22 000 kHz show that a number of frequencies in these bands are still being used by stations of other services, some of which are operating in contravention of No. 2665 of the Radio Regulations;

b) that these stations are causing harmful interference to the maritime mobile and aeronautical mobile (R) services;

c) that radio is the sole means of communication for the maritime mobile service and that certain frequencies in the bands mentioned in considering a) are reserved for distress and safety purposes;

d) that radio is the sole means of communication for the aeronautical mobile (R) service and that this is a safety service;

considering in particular

e) that it is of paramount importance that the distress and safety channels of the maritime mobile service be kept free from harmful interference, since they are essential for the protection of the safety of life and property;

f) that it is also of paramount importance that channels directly concerned with the safe and regular conduct of aircraft operations be kept free from harmful interference, since they are essential for the safety of life and property;

---

[1] Replaces Resolution No. 309 of the WARC, Geneva, 1979;

[2] Replaces Resolution No. 407 of the WARC, Geneva, 1979;

resolves

to urge administrations

1. to ensure that stations of services other than the maritime mobile service abstain from using frequencies in distress and safety channels and their guard bands and in the bands allocated exclusively to that service, except under the conditions expressly specified in Nos. 342, 518, 519, 522 and 956 to 958 of the Radio Regulations; and to ensure that stations of services other than the aeronautical mobile (R) service refrain from using frequencies allocated to that service except under the conditions expressly specified in Nos. 342 and 956 of the Radio Regulations;

2. to make every effort to identify and locate the source of any unauthorized emission capable of endangering human life or property and the safe and regular conduct of aircraft operations, and to communicate their findings to the IFRB;

3. to participate in the monitoring programmes that the IFRB may organize pursuant to this Resolution;

4. to make every effort to ensure that such emissions are made in appropriate bands allocated to services other than the maritime mobile service or the aeronautical mobile (R) service;

5. to request their governments to enact such legislation as is necessary to prevent stations located off their coasts or on board aircraft from operating in contravention of No. 2665 of the Radio Regulations;

to invite the IFRB

1. to continue to organize monitoring programmes, at regular intervals, in the maritime distress and safety channels and their guard bands and in the bands allocated exclusively to the maritime mobile service between 4 063 kHz and 27 500 kHz and to the aeronautical mobile (R) service between 2 850 kHz and 22 000 kHz, with a view to identifying the stations of other services operating on these channels or in these bands;

2. to seek the cooperation of administrations in identifying the sources of those emissions by all available means and in securing the cessation of those emissions;

3. when the station of another service transmitting in a band allocated to the maritime mobile service or to the aeronautical mobile (R) service has been identified, to inform the administration concerned;

requests administrations

to take all necessary steps in such cases to ensure the cessation of any transmissions contravening the provisions of the Radio Regulations on the frequencies or in the bands referred to in this Resolution.

RECOMMENDATION COM4/C

Relating to the Possibility of Reducing the Band 4 200 - 4 400 MHz Used by Radio Altimeters in the Aeronautical Radionavigation Service

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987

considering

a) that there is a demand for additional frequency allocations for the mobile service, particularly the land mobile service;

b) that all systems utilizing the radio-frequency spectrum should be efficient in their use of that scarce resource;

c) that the allocation of the band 4 200 - 4 400 MHz to the aeronautical radionavigation service appeared in the Radio Regulations (Atlantic City, 1947) and has not been changed despite technological advances;

d) that it has decided not to change the frequency allocations in that band;

e) that it might be possible to operate radio altimeters in this band with sufficient accuracy with a necessary bandwidth of less than 200 MHz;

f) that the frequency tolerance of such devices might be improved;

g) that studies carried out by ICAO on this question indicate that the operation of the existing radio altimeter equipment necessitates the whole band;

recommends

1. that the next competent world administrative conference should consider, if appropriate, a reduction of the band 4 200 - 4 400 MHz allocated to the aeronautical radionavigation service;

2. that any reduction should be based on a detailed technical evaluation of the systems in question, taking into account ICAO reports on the evaluation of future world traffic of aircraft using this band;

3. that the conference mentioned in recommends 1 above should consider reallocating to the land mobile service any portion of the band currently available for the aeronautical radionavigation service which is identified as being suitable on the basis of technical considerations;

invites the CCIR

to study the necessary bandwidth and frequency tolerance requirements for systems operating in the aeronautical radionavigation service in the frequency band 4 200 - 4 400 MHz;

invites the Administrative Council

to place this Recommendation on the agenda of the next competent world administrative radio conference;

instructs the Secretary-General

to refer this Recommendation to ICAO, inviting it to consider the possibility of reducing the band 4 200 - 4 400 MHz for the aeronautical radionavigation service and to make appropriate recommendations to assist administrations in this matter.

RECOMMENDATION COM4/D

Relating to the Compatibility Between the Aeronautical Mobile (R) Service in the Band 117.975 - 137 MHz and Sound Broadcasting Stations in the Band 87.5 - 108 MHz

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

a) that VHF air/ground communications play a vital role for aircraft operations and safety, which could be prejudiced by interference;

b) that compatibility problems have arisen in various parts of the world between the aeronautical mobile (R) service in the band 117.975 - 137 MHz and FM sound broadcasting stations in the band 87.5 - 108 MHz;

c) that the Regional Administrative Conference for the Planning of VHF Sound Broadcasting (Region 1 and Part of Region 3) (Geneva, 1984) did not consider the aspects of compatibility between these two services in preparation of the sound broadcasting plan;

d) that the CCIR and ICAO have studied the problem and the CCIR has recommended technical criteria which can be used by administrations for coordination between the two services concerned;

e) that ICAO has adopted standards, to come into effect on 1 January 1998, relating to the immunity characteristics of future aeronautical VHF receivers and incorporating the agreed immunity levels for intermodulation and desensitization;

invites the CCIR

to continue studying compatibility between these two services from the standpoint of possible interference to the aeronautical mobile service;

requests the ICAO

to continue studying these problems and communicate the results of its studies to the CCIR;

recommends administrations

a) to participate actively in these studies and provide the CCIR with expert guidance on this matter;

b) to take all possible steps to give the required protection to the aeronautical mobile (R) service, taking into account the information contained in relevant CCIR Reports;

instructs the Secretary-General

to communicate this Recommendation to ICAO.

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WARC FOR THE MOBILE SERVICES
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Document 452-E
13 October 1987
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Information Document

REPORT ON THE WORK OF COMMITTEE 5

1. The tasks assigned to Committee 5 on a primary basis were:

a) to review and revise as necessary Articles 37, 38, 39, 40, 41 and 42;

b) to review and take appropriate action on Resolutions Nos. 203, 206, 317, 318, 321 and 322;

c) to review and take appropriate action on Recommendations Nos. 201, 204, 306, 311, 317 and 713.

2. The review and revision of Chapter IX was complicated by the proposals concerning the introduction of operational provisions relating to the Global Maritime Distress and Safety System (GMDSS). All the proposals on this matter suggested the preparation of a new Chapter IX containing the provisions specific to GMDSS and the revision of the existing Chapter IX to delete the provisions relating to frequencies which related only to GMDSS. The Committee agreed on this approach and to the preparation of a Resolution relating to the Introduction of Provisions for the GMDSS and the continuation of Existing Distress and Safety Provisions.

3. Working Group 5-A was established under the chairmanship of Mr. U. Hammerschmidt (Federal Republic of Germany) to prepare the new Chapter IX containing the provisions relating to the GDMSS. The Working Group met on 13 occasions and prepared the texts contained in Documents 161(Rev.1), 217, 313 and 314.

These texts were considered by Committee 5, adopted with some amendments and submitted to Committee 7 under cover of Documents 210 and 354.

4. Working Group 5-B was established under the chairmanship of Mr. T. Hahkio (Finland) to review and revise as necessary the existing Chapter IX. The Working Group met on seven occasions and prepared the texts contained in Documents 215, 228, 229 and 231.

These texts were considered by Committee 5, adopted with some amendments and submitted to Committee 7 under cover of Document 289.

5. Working Group 5 ad hoc 1 was established under the chairmanship of Mr. R. C. McIntyre (United States) to consider in detail the Resolution providing for "the Introduction of the GMDSS and the Coordination of Existing Distress and Safety Provisions" and to consider all other Resolutions and Recommendations pertinent to the work of Committee 5.

5.1 Working Group 5 ad hoc 1 met on eight occasions and:

a) prepared the following new Resolutions:

i) [COM5/1] Relating to the Introduction of Provisions for the Global Maritime Distress and Safety System (GMDSS) and the Continuation of the Existing Distress and Safety Provisions;

ii) [COM5/2] Relating to the Study and Implementation of a Global Land and Maritime Distress and Safety System;

iii) [COM5/3] Relating to the Date of Entry into Force of the 10-kHz Guardband for the Frequency 500 kHz in the Mobile Service (Distress and Calling);

iv) [COM5/4] Relating to Coordination of the Use of the Maritime Mobile Frequency in the 4 MHz Band Dedicated to the Broadcast of NAVTEX-type Transmissions;

v) [COM5/5] Relating to Coordination of the Use of HF Maritime Mobile Frequencies for Broadcast of High Seas Maritime Safety Information;

5.2 The Working Group proposed amendments to Resolution No. 332 and suggested the following action concerning other Resolutions:

SUP Resolutions Nos. 203, 206*, 317, 318** and 321.

5.3 The Working Group proposed amendments to Recommendation No. 317 and suggested the following actions regarding the other Recommendations:

NOC Recommendation No. 306

SUP Recommendations Nos. 201, 204, 311 and 713.

5.4 The texts prepared by Working Group 5 ad hoc 1 are contained in Documents 253, 268, 286, 295, 338 and 339. The texts were considered by Committee 5, adopted with some amendments and submitted to Committee 7 under cover of Documents 317, 354, 365(Rev.1) and 397.

6. In addition to the documents prepared by its Working Groups, Committee 5 considered the Addendum 1 to Document 97 and the text adopted by the Committee resulting from these considerations is contained in Document 317.

6.1 The Committee also considered Documents 223(Rev.1) and 325. These considerations resulted in the preparation of Recommendation [COM5/A] which is contained in the Annex to Document 397.

7. Committee 5 conducted its work in 11 meetings.

P.E. KENT
Chairman of Committee 5

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* Resolution No. 206 is superseded by Resolution [COM5/3].

** Resolution No. 318 should be suppressed when the Final Acts of the Conference come into force.

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PLENARY MEETING

Attached is a proposed modification to Resolution No. 314 for the consideration of the Plenary.

T. BØE
Chairman of the ad hoc Group
of the Plenary

Annex: 1

ANNEX

RES314-1

RESOLUTION No. 314 (Rev.Mob-87)

Relating to the Establishment of a Coordinated Worldwide System for the Collection of Data Relating to Oceanography[1]

The World Administrative Radio Conference, ~~Geneva, 1979~~, for the Mobile Services, Geneva, 1987

considering

a) the expressed desire for the establishment of a coordinated worldwide system for the collection of data relating to oceanography;

b) that in ~~each of~~ the ~~six~~ high frequency bands allocated exclusively to the maritime mobile service, ~~the World Administrative Radio Conference, Geneva, 1967, designated a frequency band~~, for use in the collection of data relating to oceanography in accordance with Appendix 31 to the Radio Regulations; bands are designated

c) that use of these frequencies with maximum effectiveness is dependent upon cooperation and coordination among administrations;

d) that certain administrations expressed the desire that a coordinated worldwide system for the transmission of data relating to oceanography be established on the basis of a coordinated plan in the bands allocated by this Conference;

e) that, however, certain other administrations wish to use in the near future stations for the collection of data relating to oceanography within the framework of decisions taken on this matter by this Conference;

f) that, consequently, a coordinated programme for the collection of data relating to oceanography should be established using the frequency bands referred to in *b)* above;

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[1] Replaces Resolution No. Mar 20 of the World Administrative Radio Conference, Geneva, 1967.

RES314-2

g) that the Intergovernmental Oceanographic Commission (IOC) and the World Meteorological Organization (WMO) have been in consultation ~~since 1962~~ with respect to cooperative efforts in the collection of data relating to oceanography ~~(e.g. the WMO/IOC Panel of Experts on Coordination of Requirements, Geneva, 19-21 July, 1967)~~;

resolves

1. that the IOC and WMO be invited to develop jointly, in consultation with the IFRB, and in consultation with administrations of the Members, as appropriate, a coordinated plan designed to meet existing and future requirements of all interested Members, for use by stations in the collection of data relating to oceanography in a worldwide system, within the framework of provisions made by this Conference for such a system; this plan to include the geographical distribution of oceanographic stations, their system of operation, the deployment of frequencies in the system and the manner in which oceanographic information is to be transmitted;

2. that administrations be encouraged to assign frequencies in conformity with the plan and the recommendations of IOC and WMO for the portion of the worldwide system over which they have jurisdiction;

3. that the IOC and WMO be invited further to assume jointly the responsibility, in consultation with the IFRB, for keeping such a plan current, in the light of changing requirements for data relating to oceanography;

4. that the plan developed under paragraphs 1 and 3 above shall be considered at the next administrative radio conference competent to deal with matters relating to the maritime mobile service, to determine what changes, if any, appear necessary to improve its effectiveness.

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14 October 1987
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COMMITTEE 7

EIGHTH AND LAST SERIES OF TEXTS FROM COMMITTEE 4 TO THE EDITORIAL COMMITTEE

1. The following texts, which were approved by Committee 4 at its fourteenth and fifteenth meetings, with some modifications, are submitted to the Editorial Committee:

- text in Annex 1 to Document 373 (with some modifications);
- texts in Annexes 1 and 2 to Document 394, with some modifications;
- text in Annex to Document 425(Rev.1), with slight modification.

O. VILLANYI
Chairman of Committee 4

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Document 455-E
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PLENARY MEETING

FINAL REPORT FROM THE CHAIRMAN OF COMMITTEE 4 TO THE PLENARY

1. Committee 4 had considered the proposals concerning frequency matters and had communicated the approved texts to the Editorial Committee (Documents 166, 254, 297, 390, 405, 437, 444 and 454 refer.)

2. The following texts are forwarded to the Plenary for consideration:

2.1 Texts in Document 421(Rev.1) concerning the allocations in the bands 1 530 - 1 544 MHz, 1 545 - 1 559 MHz, 1 626.5 - 1 645.5 MHz and 1 646.5 1 660.5 MHz. For easy reference, these texts are reproduced in Annexes 1 to 3 to this document. In this connection, the following is reported:

- the text in Annex 1 has been approved with some reservations;
- the text in Annex 2 could not be approved;
- the text in Annex 3 has been approved, in principle, pending the decisions concerning the texts in Annexes 1 and 2.

2.2 The following texts have not been considered in Committee 4 due to lack of time:

2.2.1 texts concerning the aeronautical public conference (Documents 446 and 345);

2.2.2 texts concerning the band 5 000 - 5 250 MHz (Documents DT/80 and DT/81);

2.2.3 text of Recommendation No. 303;

2.2.4 proposals concerning Article 60 (due to the fact that Committee 6 had terminated the consideration of that Article very lately).

O. VILLANYI
Chairman of Committee 4

Annex: 3

ANNEX 1

MHz

Allocation to Services		
Region 1	Region 2	Region 3
1 545 - 1 555	AERONAUTICAL MOBILE-SATELLITE (R) (space-to-Earth) 722 727 729 730 729[B]	
1 555 - 1 559	LAND MOBILE-SATELLITE (space-to-Earth) 722 727 ~~729~~ 730 730[A]	

(MOD) 729 Change band limits to 1 545 - 1 555.

1 646.5 - 1 656.5	AERONAUTICAL MOBILE-SATELLITE (R) (Earth-to-space) 722 727 730 735 729[B]
1 656.5 - 1 660.0	LAND MOBILE-SATELLITE (Earth-to-space) 722 727 730 730[A] ~~735~~ 730[B]
1 660.0 - 1 660.5	RADIO ASTRONOMY LAND MOBILE-SATELLITE (Earth-to-space) 722 ~~735~~ 736 730[A]

ADD 729[B] Notwithstanding any other provisions of the Radio Regulations relating to restrictions in the use of the bands allocated to the aeronautical mobile-satellite (R) service for public correspondence, the bands 1 545 - 1 555 and 1 646.5 - 1 656.5 MHz may be authorized by administrations for public correspondence with aircraft earth stations. Such communications must cease immediately, if necessary, to permit transmission of messages with priority 1 to [6] in Article 51.

ADD 730[A] In the bands 1 555 - 1 559 and 1 656.5 - 1 660.5 MHz administrations may also authorize [aircraft earth stations and] ship earth stations to communicate with space stations in the land mobile-satellite service (see Resolution COM4/14).

MOD 735 Change band limits to 1 646.5 - 1 656.5.

ANNEX 2

Allocation to Services		
Region 1	Region 2	Region 3
1 530 — ~~1 535~~ [1 533] SPACE OPERATION (space-to-Earth) MARITIME MOBILE-SATELLITE (space-to-Earth) Earth Exploration-Satellite Fixed Mobile except aeronautical mobile LAND MOBILE-SATELLITE (space-to-Earth) 722 726	1 530 — ~~1 535~~ [1 533] SPACE OPERATION (space-to-Earth) MARITIME MOBILE-SATELLITE (space-to-Earth) Earth Exploration-Satellite Fixed Mobile 723 LAND MOBILE-SATELLITE (space-to-Earth) 722 726	

~~1 530~~ — 1 535 [1 533] SPACE OPERATION (space-to-Earth) MARITIME MOBILE-SATELLITE (space-to-Earth) Earth Exploration-Satellite Fixed Mobile except aeronautical mobile Land Mobile-Satellite (space-to-Earth) 726[A] 722 726	~~1 530~~ — 1 535 [1 533] SPACE OPERATION (space-to-Earth) MARITIME MOBILE-SATELLITE (space-to-Earth) Earth Exploration-Satellite Fixed Mobile 723 Land Mobile-Satellite (space-to-Earth) 726[A] 722 726

ADD 726[A] The use of the bands [1 533 - 1 544, 1 626.5 - 1 631.5 and 1 634.5 - 1 645.5] MHz by the land mobile-satellite service is limited to non-speech low bit-rate data transmissions.

ADD 730[B] Land earth stations and ship earth stations in the mobile-satellite services operating in the bands [1 631.5 - 1 634.5 and 1 656.5 - 1 660] MHz shall not cause harmful interference to the stations in the fixed service operating as the countries listed in No. 730.

Allocation to Services		
Region 1	Region 2	Region 3
1 535 - 1 544	MARITIME MOBILE-SATELLITE (space-to-Earth) Land Mobile-Satellite (space-to-Earth) 726[A] 722 727	

1 626.5 - ~~1 645.5~~ [1 631.5]	MARITIME MOBILE-SATELLITE (Earth-to-space) Land mobile-satellite (Earth-to-space) 726[A] 722 727 730

[1 631.5] - [1 634.5]	MARITIME MOBILE-SATELLITE (Earth-to-space) LAND MOBILE-SATELLITE (Earth-to-space) 722 727 730 730[B]

~~1 626.5~~ [1 634.5] - 1 645.5	MARITIME MOBILE-SATELLITE (Earth-to-Space) Land Mobile-Satellite (Earth-to-space) 726[A] 722 727 730

ANNEX 3

DRAFT RESOLUTION [COM4/14]

Relating to the Extension of the Frequency Bands Allocated to the Mobile-Satellite and Mobile Services and Their Conditions of Use

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987

considering

a) that the demand for frequency allocations for the various mobile-satellite services has increased during the last few years;

b) that the allocations for the mobile-satellite services at 1.5 GHz are the only allocations generally available for those services below 10 GHz;

c) that ICAO studies indicate that future AMSS(R) systems will require the use of all spectrum presently allocated to that service;

d) that since AMSS(R) systems may not fully utilize before 1992 all of the spectrum allocated to that service, a portion of that spectrum has been reallocated to the LMSS;

e) that in view of the growing demand for frequency bands for satellite communications with mobile stations, it is necessary to revise the allocations in parts of the frequency spectrum to cover the needs beyond 1992;

f) that the most suitable frequencies for the operation of mobile and mobile-satellite services are below about 3 GHz;

g) that the CCIR is studying the possibility and need for maritime, aeronautical and land mobile-satellite systems to use common frequency bands of the mobile-satellite service;

h) Resolutions Nos. 2 and 4 of the Radio Regulations;

resolves

1. that mobile satellite systems operating in the bands [1 530 - 1 544 MHz, 1 555 - 1 559 MHz, 1 626.5 - 1 645.5 MHz and 1 656.5 - 1 660.5 MHz] shall be limited to providing national service or, with the agreement of administrations concerned, to providing multinational service;

2. that in devising the characteristics of the antennas of such systems all technical means available shall be used to reduce to the maximum extent practicable, the radiation over the territories of other countries unless an agreement has been previously reached with such countries;

resolves to recommend

to the Plenipotentiary Conference, 1989, to take appropriate steps for the convening of a world administrative radio conference, not later than 1992, to consider revising certain parts of the frequency allocation table in Article 8 of the Radio Regulations in the approximate range 1 - 3 GHz and other relevant provisions of the Radio Regulations with a view to providing the necessary spectrum for the mobile-satellite services as well as for the mobile services taking into account Resolutions Nos. 2 and 4 of the Radio Regulations;

invites

1. the CCIR to study as a matter of urgency the technical and operational issues related to geostationary and non-geostationary mobile-satellite systems. These studies should include applications, spectrum requirements, available and future technology and intersystem and intrasystem sharing aspects concerning the mobile-satellite systems;

2. IMO, ICAO and other interested international organizations and other participants in the work of the CCIR to cooperate in these studies and to make the results of their own studies available to the CCIR;

3. the WARC-ORB-88 to consider the particular characteristics of the mobile-satellite services when dealing with provisions relating to procedures for coordination and notification;

requests the Secretary-General

1. to bring this Resolution to the attention of IMO and ICAO;

2. to forward this Resolution to WARC-ORB-88;

requests the Administrative Council

to bring this Resolution to the attention of the Plenipotentiary Conference, 1989.

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MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 456-E
14 October 1987
Original: English

COMMITTEE 7

EIGHTH SERIES OF TEXTS SUBMITTED BY COMMITTEE 6 TO THE EDITORIAL COMMITTEE

The following documents were considered by the Committee and decided on as indicated:

1) Document 366 - Article 65: Approved with minor modifications given to the Editorial Committee.

2) Document 434 - Resolution COM6/6: Approved with minor modifications given to the Editorial Committee.

Note - The Plenary may wish to include other Resolutions and Recommendations in this Resolution that need to remain in effect until the Provisions of the Radio Regulations as partially revised by this Conference come into effect.

3) Document 367 - Resolution No. 319: Approved with minor modifications given to the Editorial Committee.

I.R. HUTCHINGS
Chairman of Committee 6

BLUE PAGES

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 457-E
14 October 1987

B.20

PLENARY MEETING

TWENTIETH 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	Documents	Title
COM.6	419 (449)	Article 62
	416 (449)	Article 63
	391 (449)	Appendix 25(Rev.)
	415 (449)	Resolution No. 312 (Rev.Mob-87)
	444	Resolution No. 704 (Mob-83)
COM.4	394 (454)	Resolution COM4/12
COM.6	419 (449)	Resolution COM6/4
	415 (449)	Recommendation No. 302 (Rev.Mob-87)

Y.C. MONGELARD
Chairman of Committee 7

Annex: 19 pages

ARTICLE 62

NOC **Selective Calling Procedure in the Maritime Mobile Service**

NOC **Section I. General**

SUP 4665

NOC 4665A

SUP 4666

NOC 4666A

NOC **Section II. Sequential Single-Frequency Code System**

NOC 4667 A. General

NOC 4668

NOC 4668A

NOC 4669 B. Method of Calling

NOC 4670-4674

NOC 4675 C. Reply to Calls

NOC 4676

MOD 4677 a) Nos. 4767 and 4769 when using Morse radiotelegraphy.

NOC 4678

NOC 4679 D. Frequencies to Be Used

MOD 4679A § 4A. Selective calling may be carried out on:

a) the following calling frequencies:

[500	kHz
2 170.5	kHz
4 125	kHz
4 417	kHz
6 516	kHz
8 779	kHz
13 137	kHz
17 302	kHz
19 770	kHz
22 765	kHz
26 172	kHz
156.8	MHz[1]]

SUP 4679B-4679C

SUP 4680

NOC 4679A.1

SUP 4680.1 and 4680.2

NOC **Section III. Digital Selective Calling System**

ADD 4680A A. General

MOD 4681 § 6. The technical characteristics of equipment used for digital selective calling shall be in conformity with the relevant CCIR Recommendations.

MOD 4681A The frequencies used for distress and safety purposes using digital selective calling are as follows (see also Article 38):

[2 187.5 kHz
4 207.5 kHz
6 312 kHz
8 414.5 kHz
12 577 kHz
16 804.5 kHz
156.525 MHz[1]]

MOD 4682 § 7. The frequencies assignable on an international basis to ship and coast stations for digital selective calling, for purposes other than distress and safety, are as follows:

SUP 4681A.1

ADD 4681A.2 [1]The frequency 156.525 MHz may also be used for digital selective calling purposes other than distress and safety.

MOD 4683 a) Ship stations

[2 177			kHz
4 208	4 208.5	4 209	kHz
6 312.5	6 313	6 313.5	kHz
8 415	8 415.5	8 416	kHz
12 577.5	12 578	12 578.5	kHz
16 805	16 805.5	16 806	kHz
18 898.5	18 899	18 899.5	kHz
22 375	22 375.5	22 376	kHz
25 208.5	25 209	25 209.5	kHz]
		156.525	MHz[1]

MOD 4684 b) Coast stations

[2 177			kHz
4 219.5	4 220	4 220.5	kHz
6 331	6 331.5	6 332	kHz
8 436.5	8 437	8 437.5	kHz
12 657	12 657.5	12 658	kHz
16 903	16 903.5	16 904	kHz
19 703.5	19 704	19 704.5	kHz
22 444.5	22 445	22 445.5	kHz
26 121	26 121.5	26 122	kHz]
		156.525	MHz[2]

MOD 4685 In addition to the frequencies listed in Nos. 4683 and 4684, appropriate working frequencies in the following bands may be used for digital selective calling:

415	-	526.5	kHz (Regions 1 and 3)
415	-	525	kHz (Region 2)
1 606.5	-	4 000	kHz (Regions 1 and 3)
1 605*	-	4 000	kHz (Region 2)
4 000	-	27 500	kHz
156	-	174	MHz

---

* For the band 1 605 - 1 625 kHz, see Nos. 480 and 481.

ADD 4683.1) [1,2]The frequency 156.525 MHz is also used for distress and
4684.1) safety purposes (see No. 4681A.2).

ADD 4686 B. Method of Calling

ADD 4686A § 9. (1) The procedures set out in this section are applicable to the use of digital selective calling techniques, except in cases of distress, urgency or safety, to which the provisions of Chapter N IX are applicable.

ADD 4686B (2) The call shall contain information indicating the station or stations to which the call is directed, and the identification of the calling station.

ADD 4686C (3) The call should also contain information indicating the type of communication to be set up and may include supplementary information such as a proposed working frequency or channel; this information shall always be included in calls from coast stations, which shall have priority for that purpose.

ADD 4686D (4) The technical format of the call sequence shall be in conformity with the relevant CCIR Recommendations.

ADD 4686E (5) The call shall be transmitted once on a single appropriate calling channel or frequency only. Only in exceptional circumstances may a call be transmitted simultaneously on more than one frequency.

ADD 4686F (6) When calling ship stations, coast stations may transmit the call sequence twice at the same calling frequency, whatever it may be, with an interval of at least 45 seconds between the two calls, provided that they receive no acknowledgement within that interval.

ADD 4686G (7) When calling on nationally assigned frequencies, coast stations may transmit a call attempt consisting of up to five calls at the same frequency.

ADD 4686H (8) If the station called does not acknowledge the call, the call may be transmitted again on the same or another calling frequency after a period of at least five minutes (five seconds in automated VHF or UHF systems) and should then normally not be repeated until after a further interval of 15 minutes.

ADD 4686I (9) When initiating a call to a coast station, a ship station should preferably use the coast station's nationally assigned calling channels, for which purpose it shall send a single calling sequence on the selected frequency.

ADD 4687 C. Acknowledgement of Calls

ADD 4688 C.1 Content of acknowledgements and transmission procedure

ADD 4688A § 10. (1) The reply to a digital selective call requesting an acknowledgement shall be made by transmitting an appropriate acknowledgement using digital selective calling techniques.

ADD 4688B (2) Transmission of the calling signal shall cease as soon as an acknowledgement is received.

ADD 4688C (3) Acknowledgements may be manual or automatic. When an acknowledgement can be transmitted automatically, it shall be in conformity with the relevant CCIR Recommendations.

ADD 4688D (4) Acknowledgements shall normally be transmitted on the frequency paired with the frequency of the received call. If the same call is received on several calling channels, the most appropriate shall be chosen to transmit the acknowledgement.

ADD 4688E (5) The technical format of the acknowledgement sequence shall be in conformity with the relevant CCIR Recommendations.

ADD 4688F (6) If the call includes a proposal for a working channel or frequency which can be used immediately by the station called, the latter should transmit an acknowledgement indicating this possibility.

ADD 4688G (7) If, in the above case, the station called is unable immediately to use the working frequency or channel proposed in the received call, it should indicate this in its acknowledgement, which may also include supplementary information in that respect.

ADD 4688H (8) Coast stations unable to comply immediately on a proposed working frequency or channel may include a proposal of an alternative working frequency or channel in the acknowledgement specified in No. 4688G.

ADD 4688I (9) If no working frequency or channel was proposed in the call, the station called should include a proposal for a working frequency or channel in its acknowledgement of the call.

ADD 4689 C.2. Mode of transmission of acknowledgements

ADD 4689A § 11. (1) Acknowledgements may be initiated either manually or automatically. Where the transmission of acknowledgement is automatic, this should be in conformity with the relevant CCIR Recommendations.

ADD 4689B (2) If the ship station is unable to acknowledge a received call within a time limit of five minutes, the ship station's reply to the call should be made by transmitting a call in accordance with the provisions of No. 4686 to the calling station. Where automated or semi-automated systems are used, a time limit in accordance with the relevant Recommendation of the CCIR should apply.

ADD 4690 D. Preparation for Exchange of Traffic

ADD 4690A § 12. (1) The procedures prescribed in this sub-section are applicable for manual operation. Where automated or semi-automated digital selective calling VHF or UHF systems are used, these should operate in conformity with relevant CCIR Recommendations.

ADD 4690B (2) After having transmitted an acknowledgement indicating that it can use the proposed working frequency or channel, the station called transfers to the working frequency or channel and prepares to receive the traffic.

ADD 4690C (3) The calling station shall prepare to transmit traffic on the working channel or frequency it has proposed.

ADD 4690D (4) The calling station and the called station then exchange traffic on the appropriate working frequency or channel.

ADD 4690E (5) If it is unable to use the working frequency or channel proposed in an acknowledgement transmitted by the coast station, the ship station should then transmit a new call in accordance with the provisions of Nos. 4686H and 4686I, indicating that it is unable to comply.

ADD 4690F (6) The coast station shall then transmit an acknowledgement indicating an alternative working frequency or channel.

ADD 4690G (7) On reception of the acknowledgement, the operator of the ship station shall then apply the provisions of Nos. 4690C or 4690E, as appropriate.

ADD 4690H (8) For communication between a coast station and a ship station, the coast station shall finally decide the working frequency or channel to be used.

(MOD) 4686 4691 to 4709 NOT allocated.

ARTICLE 63

MOD **General Morse Radiotelegraph Procedure in the Maritime Mobile Service**

NOC **Section I. General Provisions**

NOC 4711-4712

NOC **Section II. Preliminary Operations**

MOD 4713 4. (1) Before transmitting, a station shall take precautions to ensure that its emissions will not interfere with transmissions already in progress; if such interference is likely, the station shall await an appropriate break in the communications in progress.

NOC 4714-4717

MOD **Section III. Calls by Morse Radiotelegraphy**

NOC 4718 A. General

SUP 4719

NOC 4720-4744

NOC 4745 B. Calls to Several Stations

SUP 4746

NOC 4747-4753

NOC **Section IV. Method of Calling, Reply to Calls and Signals Preparatory to Traffic**

NOC 4754-4786

NOC **Section V. Forwarding (Routing) of Traffic**

NOC 4787-4801

NOC **Section VI. End of Traffic and Work**

NOC 4802-4810

NOC **Section VII. Control of Working**

NOC 4811-4813

NOC **Section VIII. Tests**

NOC 4814-4815

NOC 4816 to 4840 NOT allocated.

(MOD)

APPENDIX 25 (Rev.)
Mob-87

Frequency Allotment Plan for Coast Radiotelephone Stations Operating in the Exclusive Maritime Mobile Bands Between 4 000 and 23 000 kHz

(See Nos. 4198 and 4212 of the Radio Regulations and Appendix 16)

NOC Note a): The frequencies in Column 1 are assigned frequencies (see No. 142) as listed in Appendix 16 to the Radio Regulations. Each frequency is followed, in parentheses, by the carrier frequency and the channel number. (See Section A of Appendix 16 to the Radio Regulations.)

NOC Note b): The coast radiotelephone stations operating in the exclusive maritime mobile bands between 4 000 kHz and 23 000 kHz must use the minimum power required to cover their service area. They may in no case use a peak envelope power above 10 kW per channel. (See No. 4373 of the Radio Regulations.)

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*Note by the General Secretariat : Changes to the Frequency Allotment Plan adopted by the World Maritime Administrative Radio Conference, Geneva, 1974, resulting from the application of the procedures prescribed in Article 16 are indicated on pages AP25-97 and following.

NOC Note c): The Plan contained in this Appendix is updated in accordance with the procedure defined in Article 16 of the Radio Regulations.

MOD

Column 1	Column 2	Column 3
Assigned frequency (carrier frequency) (channel number)	* Country or area	Observations

Column 3
Observations

NOC ADD This allotment has been entered in the Plan as a result of the application of the procedure of Article 16. The basic characteristics of the allotment are given, as published in Part B of the relevant Special Section of the IFRB Circular, in the Table of allotments added to the Plan, pages AP25-97 to AP25-103.

ADD * In this appendix, the word "country" is used with the meaning attributed to it in No. 2246 of the Radio Regulations.

The remainder of the appendix remains unchanged.

MOD

RESOLUTION No. 312 (Rev.Mob-87)

MOD

Relating to the Calling Procedures for HF A1A Morse Telegraphy[1]

MOD The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

NOC considering

NOC a) that there is a need for more effective utilization of the radio frequency spectrum and of the time of operational personnel on board ships;

MOD b) that it is desirable to continue to improve the effectiveness of calling in the HF A1A Morse telegraphy bands;

MOD c) that the World Maritime Administrative Radio Conference, Geneva, 1974 adopted a new calling procedure for the HF A1A Morse telegraphy bands (Article 60 and [Table C of Appendix 31A]);

MOD d) that the effectiveness of the new calling procedure requires agreement between administrations with respect to the groups specified in [Table C of Appendix 31A] in accordance with a planned distribution of coast stations on a regional and traffic basis;

NOC e) that the administrations at the 1974 Conference agreed to the Distribution Plan of Coast Stations (annexed to this Resolution) arranged by countries and areas into four groups to ensure a better distribution of calls;

---

[1]Replaces Resolution No. 312 of the World Administrative Radio Conference, Geneva, 1979.

NOC invites

NOC administrations which are providing an international public correspondence service to indicate for publication in the List of Coast Stations the periods of service during which watch will be maintained on the common, and if necessary the group, channel or channels;

NOC invites further

NOC administrations which wish to enter into a group in the Distribution Plan, or administrations included in the Plan wishing to make a modification in the Plan, to coordinate as far as possible their proposed changes with other interested and affected administrations which are designated in the group concerned. An administration which has decided to enter into a group or change from a designated group in the Distribution Plan shall inform the Secretary-General of its decision and it shall be published in the Annex to the List of Coast Stations;

NOC instructs the Secretary-General

SUP 1.

MOD 2. in the light of the foregoing consultation with the administrations concerned, to update, as necessary, the Distribution Plan annexed to the List of Coast Stations;

SUP 3.

NOC ANNEX TO RESOLUTION No. 312 (Rev.Mob-87)

(MOD) RESOLUTION No. 704 (Mob-83)[1]

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[1]this Resolution has been reviewed by the WARC MOB-87, and, although some of the action required has been completed, it is retained until such a time as action is taken in response to Resolution [COM4/5].

RESOLUTION COM4/12

Relating to the Procedure Applicable to Stations Transmitting NAVTEX-type Information on the Frequencies 490 and 4 209.5 kHz Using Narrow-Band Direct-Printing Telegraphy

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

a) that in the maritime mobile service the frequency 518 kHz is used exclusively for the transmission by coast stations of navigational and meteorological warnings and urgent information to ships using narrow-band direct-printing telegraphy (the International NAVTEX system);

b) that this Conference has included in Article 14A the procedure for the coordination of the planned use of the frequency 518 kHz for the International NAVTEX system;

c) that this Conference has also designated within the maritime mobile service the frequencies 490 kHz and 4 209.5 kHz to be used exclusively for the transmission of NAVTEX-type information;

d) that the frequency 490 kHz will become available for NAVTEX-type transmissions after the full implementation of the GMDSS;

e) that the proper functioning of the transmission of NAVTEX-type information is dependent on the coordinated use of these transmissions by the coast stations involved;

f) that the coordination of the operational aspect of the International NAVTEX system on 518 kHz is being undertaken by the International Maritime Organization (IMO), the International Hydrographic Organization (IHO), and the World Meteorological Organization (WMO);

g) that it is moreover desirable that the IMO, in cooperation with the IHO and the WMO, provide assistance in the coordination of the transmission of NAVTEX-type information by coast stations on the frequencies 490 kHz and 4 209.5 kHz;

resolves

1. that administrations wishing the IMO to coordinate the use of the frequencies 490 kHz and 4 209.5 kHz for the transmission of NAVTEX-type information should also communicate to the IFRB the additional characteristics mentioned in No. 1632 of the Radio Regulations;

2. that for the frequencies 490 kHz and 4 209.5 kHz administrations and the IFRB shall use the procedures set forth in Article 14A with the following qualifications:

- No. 1634 applies to the basic characteristics only;
- communication of the additional characteristics mentioned in No. 1632, or of any analogous characteristics, is nevertheless recommended;
- No. 1635 shall also be applied to the frequency bands 489.75 - 490.25 kHz and 4 209.25 - 4 209.75 kHz;
- the IFRB shall communicate a copy of the special section of its weekly circular indicating any coordination already effected and the names of administrations identified in application of No. 1635 to the IMO, IHO and WMO for information only;

requests

1. the IMO to communicate upon receipt of the information supplied by the IFRB under resolves 2, to the administrations concerned and the IFRB, any comments which may assist the administrations in reaching agreement;

2. the IMO, the IHO and the WMO to carry out any operational coordination which may be necessary;

3. the CCIR to undertake the necessary technical studies with a view to ensuring global coordination of the planned utilization of the transmission of NAVTEX-type information, for use by the IMO, the WMO, the IHO and the IFRB;

4. the Secretary-General to communicate this Resolution to the IMO, the IHO and the WMO.

RESOLUTION COM6/4

Relating to Early Implementation of the Use of Digital Selective Calling on Maritime HF Radiotelephone Channels

The World Administrative Conference for the Mobile Services, Geneva, 1987,

considering

a) that it is desirable for ship stations capable of operating radiotelephony also to be able to signal using digital selective calling;

b) that, at present, the emission of digital signals on maritime HF radiotelephone channels is not allowed;

c) that this Conference has nevertheless adopted a modification to No. 4685 to permit the use of digital selective calling on maritime HF radiotelephone working channels;

d) that equipment capable of meeting this requirement is likely to be available before the date of entry into force of the Final Acts of the Conference;

resolves

that, with effect from 1 January 1988, digital selective calling signals may be emitted on maritime HF radiotelephone working channels in accordance with No. 4685 as modified by this Conference.

MOD RECOMMENDATION NO. 302 (Rev.Mob-87)

NOC **Relating to the Improved Use of the HF Radiotelephone Channels for Coast Stations in the Bands Allocated Exclusively to the Maritime Mobile Service**[1]

MOD The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

NOC considering

NOC a) that a large number of requests for HF radiotelephony allotments was submitted to the World Maritime Administrative Radio Conference, Geneva, 1974;

MOD b) that the number of channels resulting from the revision of [Appendix 16] by that Conference has not been sufficient to satisfy those requirements in optimum conditions;

NOC c) that the resulting sharing patterns have been formed mainly by operational considerations;

MOD d) that since the World Administrative Radio Conference, Geneva, 1979, the optimum use of the HF radiotelephony channels in the bands allocated exclusively to the maritime mobile service has been of even greater importance;

NOC e) that, on each channel, administrations should afford one another an equivalent quality of service;

NOC f) that the efforts to develop technical means to facilitate the common use of frequencies by neighbouring coast stations of different administrations, or by a coast station operating on behalf of more than one administration, should be continued;

ADD g) that this Conference has provided a number of additional channels for radiotelephony in the HF bands allocated exclusively to the maritime mobile service [(see Resolution No. D)], but that these additional channels may not be sufficient to satisfy all requirements;

MOD [1]Replaces Recommendation No. 302 of the World Administrative Radio Conference, Geneva, 1979.

NOC recommends that administrations

NOC 1. make every effort to reach mutually satisfactory operational arrangements, which may include:

- different time-sharing arrangements;
- differentiated hours of opening;
- on a voluntary and regional basis, the use of HF radiotelephone channels in an order of overflow priority;

NOC 2. employ every practicable means, which may include those mentioned above, to ensure that the best possible use is made of the HF coast radiotelephone channels in the bands allocated to the maritime mobile service;

NOC invites administrations

NOC 1. when assigning frequencies in the HF bands to coast stations, to take into account the special rules contained in No. 954 and the provisions of No. 1804 of the Radio Regulations;

NOC 2. to ensure that coast stations:

- use the frequency band and the minimum power appropriate to the propagation conditions and the nature of the service;
- use directional antennae whenever possible;
- give appropriate instructions to ship stations in accordance with No. 5056 of the Radio Regulations;

NOC invites the CCIR

NOC (1) to continue its study with a view to improving all technical and operational sharing criteria relating to the use of HF coast radiotelephone channels in the bands allocated exclusively to the maritime mobile service, including the choice of available channels by electronic or other means to facilitate multiple access to the channels.

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 458-E
19 October 1987
Original: English

COMMITTEE 6

SUMMARY RECORD

OF THE

TWELFTH MEETING OF COMMMITTEE 6

(MOBILE AND RADIODETERMINATION SERVICES
- EXCEPT DISTRESS AND SAFETY)

Monday, 12 October 1987, at 1405 hours

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

Subjects discussed:	Documents
1. Consideration of Article 55 (continued)	409
2. Consideration of Article 56 (continued)	376, DT/78
3. Distribution of documents	

1. Consideration of Article 55 (continued) (Document 409)

ADD 3949F

Approved.

ADD 3949FA

Approved with deletion of the word "Officer's" in square brackets.

ADD 3949FB

1.1 The delegate of Greece, supported by the delegate of Italy, said that his Administration favoured the word "general" rather than "elementary". The second-class technical certificate would be used when the possessor of a second-class radio electronic operator's certificate was not available and it was therefore preferable to use the same term as had been used in connection with the latter certificate.

1.2 The delegate of the United States said that he would prefer the word "elementary". However, in view of the contentiousness of the matter and since the operator would be supplemented in some cases by duplicate equipment and shore-based maintenance, he suggested as a compromise the use of the word "limited".

1.3 The delegate of Greece having opposed that suggestion, the delegate of Spain suggested as a compromise word "basic".

1.4 The delegate of the Netherlands said that he could not accept the Greek delegate's argument for keeping the word "general" since there was not necessarily any direct relationship between the second-class technical certificate and the second-class radio electronic certificate. He could accept the proposed compromise.

1.5 The delegate of Libya said that in Arabic "general" was more appropriate; the delegate of India also said he preferred "general".

1.6 The delegate of Greece pointed out that the same arguments were being put forward repeatedly: little knowledge was required for a restricted operator's certificate and hence in order to ensure survival in an emergency situation it was necessary to have someone of the technical level of at least a second-class technical certificate.

1.7 The delegate of Norway, recalling his remarks at the Committee's tenth meeting, said that while he had no strong views on the subject, the word "elementary" had been used in similar texts in the Regulations and he therefore considered it better.

1.8 The delegate of Tanzania suggested as a compromise that both words should be retained; the delegate of Liberia endorsed that proposal but said that he could support the word "basic".

1.9 The Chairman said there appeared to be a fair degree of support for the Spanish compromise; he therefore proposed that the Committee should approve the word "basic", while noting that the Greek delegate had difficulty with it.

It was so agreed.

ADD 3949FC

It was agreed to submit the text to the Plenary with the square brackets retained at the end of the provision.

ADD 3949FD, ADD 3949FE

Approved, the latter with the square brackets deleted.

ADD 3949FF, ADD 3949FG

Deleted.

1.10 The delegate of Greece said that, for the reasons he had already indicated in connection with ADD 3949FB and ADD 3949FC, he would like the same wording as used for the second-class radio electronic certificate to be used in ADD 3949FF.

Article 55 as thus amended, was approved.

1.11 The delegate of the United Kingdom suggested that, in order to avoid a lengthy repetition of debate in the Plenary Meeting, when the Chairman transmitted the revised text of Article 55, he should point out that it was for administrations to interpret the meaning of the texts; the interpretation placed upon them by certain administrations was clear from the questions which had been asked.

2. Consideration of Article 56 (continued) (Documents DT/78, 376)

Sections I and II

Approved.

Section III

2.1 In reply to an invitation by the Chairman for general comments on the contents of Article 56, the delegate of Finland said that the approach in Document DT/78 was not suitable for his Administration since it would require a person with advanced technical skills to be on board ship on rather short voyages such as that between Finland and Sweden, whereas, as the Swedish delegate had pointed out, equipment maintenance for such trips could more effectively be carried out on shore. He therefore believed that the Article should include a general clause giving administrations the possibility of following the procedure best suited to their national circumstances.

2.2 The delegate of Tanzania said that Document DT/78 was generally acceptable to his Delegation except for the question of officer versus operator, and a few minor changes.

2.3 The delegate of the United Kingdom said that Article 56 should contain only what was essential. All delegations represented administrations having sovereign responsibility and all were equally concerned about safety at sea. However, there were different means of ensuring safety and there were wide differences in the resources available to administrations. It was not for the ITU to tell administrations how to use those resources.

2.4 The delegate of Sweden strongly endorsed the United Kingdom delegate's comments. With regard to intervention by the delegate of Finland, he pointed out that in that context a passenger ship was often only a motorboat with a few passengers plying between countries one nautical mile apart and they could not afford to have a radio operator on such ships.

2.5 The delegate of Denmark and Norway endorsed the United Kingdom delegate's comments.

2.6 The delegate of Spain, also seconding the previous speakers, said that it was obvious that administrations had different resources available to them and their approaches should be different. His Administration supported ADD 3986C and ADD 3986D.

2.7 The delegate of Mexico, also expressing his support, said that the differences between countries should not be increased by forcing them unnecessarily to change equipment which was already working satisfactorily for other equipment.

2.8 The delegate of Greece supported the views expressd by the Spanish and Mexican delegates. He wished to clarify the relationship between ITU and IMO by pointing out that the two were independent bodies which must address their own particular problems within the proper context. ITU must enact regulations as it saw fit within the area of its own expertise and must take a long-term view and plan for an uncertain future. It should not therefore enact any Radio Regulation which would ensure the dependence of some administrations on others which were more technologically advanced. All administrations must meet equally their shared obligation for the avoidance of harmful interference, and proper operation and maintenance were factors in that obligation. The only solution was to ensure that professional operators and maintenance should remain on board ship.

2.9 The delegate of France, supporting the United Kingdom delegate's views, said that he believed the regulations in Document DT/78 were much too detailed and to some extent duplicated SOLAS regulations. He supported the Finnish delegate's view that ADD 3986D was much too restrictive for the type of vessel concerned. The delegates of the United States and Ireland, endorsing the same views, said that ADD 3986D provided an example of the difficulties which might be caused if undue detail was entered into. The delegate of Portugal said that Document DT/78 gave him grounds for concern because the Committee was dealing with the radiocommunications of all ships and not merely of ships subject to the SOLAS Convention. The wording of Document DT/78 should therefore be more generalized.

2.10 The delegate of Brazil said he thought the provisions of Article 56 as drafted in Document DT/78 were excellent and sufficiently flexible to meet the needs both of those countries which wished to have operators on board ship and those which wished to ensure maintenance by other means. He urged the Committee to approve the draft of Article 56 and proceed with discussion of ADD [xx] and draft Resolution [COM6/5].

2.11 The delegate of Argentina supported ADD 3986D as drafted in Document DT/78.

2.12 The delegate of the Netherlands said that the current proposals for amendment of the Radio Regulations made by the countries which supported Document 232 sought to extend on-board maintenance of equipment as the chief option for governments. That, however, would have a consequential effect on the provisions of the SOLAS Convention. Articles 55 and 56 applied to all stations of the maritime mobile service, and in the form proposed in Document DT/78 they would apply to ship stations for which a radio installation was made compulsory by international agreements, e.g. SOLAS. He agreed with the Greek delegate that IMO was an independent organization and could establish its own provisions to ensure the availability of radio equipment for ships coming under the SOLAS Convention. He could not accept the inclusion of specific requirements on maintenance capabilities for different categories of ships in the Radio Regulations since such requirements would prejudice the development of the GMDSS which was still under consideration in IMO. This view was supported by the delegates of Norway, France and Sweden.

2.13 The delegate of Denmark said it had been pointed out that the philosophy in ADD 3986E seemed to have been developed on the basis that near the coast there were VHF stations, further out MF and further out again deep-sea. He pointed out that in many parts of the world there would be no VHF or MF but perhaps only HF and that factor must be taken into account.

2.14 The delegate of Greece said it appeared that some delegations had not considered Document DT/78 as a whole. It contained a minimum requirement for a second-class radio electronic operator on board passenger ships within the coverage of MF coast stations. It provided complete flexibility to use a general operator on all other ships in the same area. In areas beyond MF coverage, it required all ships to carry a second-class radio electronic operator but ADD [xx] exempted certain categories of ship from that requirement in accordance with the type of voyage and size of vessel and those ships were clearly identified in draft Resolution [COM6/5]. The proposal in Document DT/78 provided for flexibility, but when it came to area A3, i.e. the area beyond MF coverage, it took into consideration other factors such as safety. Safety did not mean the same in every sea area - the length of voyage was a critical factor - so he proposed that there should be a requirement for on-board maintenance in A3 areas.

2.15 The delegate of Australia said that there were a number of methods of making equipment availability mandatory under the new system but what was required was a general philosophy. He therefore proposed that ADD 3986E should be transferred to the beginning of Section III.

2.16 The Chairman suggested that before going into detail on the ADD 3986 regulations the Committee might consider including a general introductory statement along the lines of MOD 3979 at the beginning of Section III.

2.17 For the information of the Committee, the Observer for the IMO said that both the IMO Conventions, the SOLAS and the STCW Conventions, contained general provisions of the sort the Committee was now considering. In Chapter 5, Regulation 13, the SOLAS Convention provided for each contracting government, for its own national ships, to undertake to maintain, or if necessary to adopt, measures to ensure that, from the point of view of the safety of life at sea, all ships without exception should be sufficiently and efficiently manned. In

Article 1 (General Obligations under the Convention), the STCW Convention, which applied to all seafarers on all seagoing ships, provided that the parties to the Convention undertook to ensure that, from the point of view of the safety of life and property at sea and protection of the marine environment, seafarers on board ships were qualified and fit for their duties.

2.18 After discussion on a number of alternative proposals, the Chairman observed that the principle of a general introductory statement appeared acceptable to all even though the details of the wording still caused some problems. He suggested that the text be placed provisionally in square brackets until the details of proposed ADD 3986A-F had been examined, since that discussion could perhaps assist in the drafting of a general sentence.

It was so agreed.

ADD 3986A-F

2.19 The delegate of Finland, supported by the delegates of Norway, France, Australia, Sweden and the Netherlands, said that should the present Conference accept the detailed provisions in proposed ADD 3986A-F, which concerned all ships compulsorily fitted with radiocommunication equipment under the SOLAS Convention now under review by the IMO, it would prejudge the outcome of the IMO's discussions on the subject and perhaps lead to contradictions in the relevant international legislation. Such details had no place in the Radio Regulations. A general introductory statement, followed by proposed ADD [x] as modified by the United States and the Chairman's proposed ADD [xx], was all that should appear in Section III.4.

2.20 The delegate of Greece said that the difficulty in which the Committee found itself was that two basic philosophies were in conflict, as they had been for many years past: one that on-board maintenance should be replaced by equipment duplication and shore-based maintenance, and the other that the present practice should continue of requiring on-board maintenance and professionalism as a minimum on passenger and cargo ships and all ships sailing in areas beyond the coverage of MF coast stations. In his view, the text in Document DT/78 represented a compromise acceptable to those supporting the second philosophy; if it was to be amended further he would have no option but to return to the proposals in Document 232 as the basis for discussion. The United States' proposed amendment to proposed ADD [x] was completely unacceptable.

2.21 The delegate of Norway, supported by the delegates of France, Australia, Sweden and the Netherlands, said that with regard to operation of the GMDSS it would, as a matter of principle, be unacceptable to make the distinction between types of ship and areas of navigation as was done in proposed ADD 3986B-F.

ADD 3986F

2.22 Support for or acceptance of proposed ADD 3986F was expressed by the delegates of China, Turkey and the Federal Republic of Germany.

2.23 Objections were expressed by the delegates of France, Australia, Sweden and the Netherlands.

ADD 3986D

2.24 The Chairman suggested, in order to meet the concerns of delegations who considered that the present text would cause difficulties for coastal shipping, that the wording might be amended to indicate that the requirements applied solely to ship stations on sea-going passenger ships. In reply to a question from the delegate of Denmark, he said that interpretation of the term "sea-going" would, as was the case in general with all the Radio Regulations, be a matter for each administration to decide for its its area of jurisdiction on a case by case basis.

2.25 The delegate of Japan recalled his Administration's proposal J/60/477 concerning the personnel of GMDSS ship stations and GMDSS ship earth stations and urged the Committee to reconsider it.

The discussion was adjourned to the next meeting of the Committee.

3. Distribution of documents

3.1 The delegate of the United States said that, as mentioned by the Swedish Delegation at the end of the previous meeting, a document had been surreptitiously distributed by the ITF in the pigeonholes of selected administrations thus bypassing the normal channels. That document was unacceptable and should be clearly and forcefully rejected by the Committee.

3.2 The Chairman said that since the document in question was not a Conference document, it was not before the Committee, which was thus not in a position to to make any comment thereon or to give any consideration whatsoever thereto. He therefore noted that delegates would need to disregard the document entirely in terms of the work of the Committee. Any document to be placed before the Committee would have to follow the accepted rules of procedure for the submission of documents.

The meeting rose at 1630 hours.

The Secretary: The Chairman:

S. CHALLO I.R. HUTCHINGS

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 459-E
19 October 1987
Original: English

COMMITTEE 6

SUMMARY RECORD

OF THE

THIRTEENTH MEETING OF COMMMITTEE 6

(MOBILE AND RADIODETERMINATION SERVICES
- EXCEPT DISTRESS AND SAFETY)

Monday, 12 October 1987, at 2120 hours

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

Subjects discussed:	Documents
1. Continuation of consideration of Article 56	DT/78

1. Continuation of consideration of Article 56 (Document DT/78)

1.1 The Chairman while first noting that this was the last meeting at which he would entertain debate on Articles 55 and 56, said that in the light of the discussion at the previous meeting he suggested the following wording for the general introductory sentence to Section III:

> "Administrations shall ensure that operators of ship stations and ship earth stations are adequately qualified to ensure efficient operation of the station, and shall take steps to ensure the operational availability of equipment for distress and safety communication".

1.2 That text was supported by the delegates of the United Kingdom, the United States, the Netherlands, Australia, Chile, Denmark, France, Norway, Sweden and Paraguay.

1.3 The delegate of Spain said the text was acceptable but would have no force unless it was backed up by detailed regulations.

1.4 The delegate of Greece proposed that the word "operators" be replaced by "personnel".

It was so agreed.

Supported by the delegates of Turkey and Libya, he further proposed that the text should refer not only to efficient operation of stations but also to their efficient maintenance and avoidance of harmful interference.

1.5 That proposal was opposed by the delegates of Denmark, the Netherlands, the United States, Australia, the United Kingdom, Sweden and Finland.

1.6 The Chairman suggested, in view of the conflict of opinion, that the text of the introductory sentence be held pending until the rest of Section III.4 had been considered.

It was so agreed.

1.7 The Chairman suggested, in order to meet the concern Spain had expressed at the previous meeting, that a further introductory sentence should be added, to read:

> "An adequately qualified person shall be available to be a dedicated communications operator in cases of distress".

1.8 The delegate of Spain added that it was important that the person concerned should be a professional.

Further discussion on that proposal was suspended until the whole of Section III.4 had been discussed.

1.9 The Chairman invited the Committee to consider whether the distinction made in proposed ADD 3986B and C between passenger ships and ships other than passenger ships was acceptable or whether the two provisions should be merged into one.

1.10 The delegates of the Netherlands, the United Kingdom, Finland, Chile, Australia, the United States and Japan considered that no distinction should be made since safety was equally important for all categories of ships. A single provision should suffice.

1.11 The delegates of Spain, Greece and Argentina said that two separate provisions were preferable since in present day practice requirements regarding number and qualifications of operators were more stringent on passenger ships in view of the fact that in emergencies a far greater number of human lives was at stake than was the case for other ships.

1.12 The Chairman suggested, in view of the majority support for the proposal, that ADD 3896B and C be merged into a single provision.

It was so agreed.

1.13 The Chairman invited the Committee to consider the qualifications which would be required for the operator in that case, under a revised ADD 3896B dealing with what IMO would refer to as A3 areas.

1.14 The delegate of Spain reiterated that dedicated operation by a professional was essential.

1.15 The delegate of the Federal Republic of Germany considered that either a first- or second-class REO, or a general operator and a person with a first- or second-class technical certificate, would be acceptable. The delegate of the United States said that a first-class REO, or a general operator and a person with a second-class techncial certificate, would be acceptable. The delegate of the United Kingdom said a person with a general operator's certificate would be acceptable.

1.16 The delegate of Greece said that for passenger ships, and for all ships operating in A3 areas (beyond the range of MF coast stations), it was essential that both operational and maintenance capability be provided by dedicated personnel with qualifications equivalent to REO first-class.

1.17 The delegates of Denmark, Norway, Finland and Papua New Guinea said that for some countries, particularly those in the tropics, the A3 area started at the coast line since propagation conditions forced coast stations to operate on HF. The Greek proposal would not be acceptable in the case of coastal shipping operating in such conditions.

1.18 Endorsing those remarks, the delegate of the United States, supported by the delegates of the United Kingdom and Norway, said it was not feasible, as Greece proposed, to legislate for compulsory on-board maintenance to the exclusion of other effective options.

The IMO had given no indication in its guidelines that all available options should be adopted simultaneously. The work done by IMO must be recognized by ITU, and in that light he proposed the following text for application in the A3 area:

"ADD xx

Where a general operator's certificate is used under these provisions, administrations shall, for ship stations under their jurisdiction, make appropriate provisions in accordance with relevant international agreements for the maintenance of equipment to ensure communication availability whilst at sea".

1.19 The delegate of Sweden continued to uphold the position expressed in Document 17, and gave his support to the delegate of the United States; he said that the solution chosen by a particular administration depended on a complex economic equation which was different in each situation. His Administration was unwilling to have a solution forced upon it, however appropriate that solution might be for another administration.

1.20 The delegate of Greece accepted the economic argument and, saying that he spoke also on behalf of the other sponsors of Document 232, said that ADD xx should contain the following words:

> "... require a general operator's certificate together with either a first-class technical certificate (see No. xyz) or a second-class technical certificate (see No. zyx) provided, however, that the application of this provision is limited to ships which:
>
> a) make short international voyages as defined in the 1974 SOLAS Convention; or
>
> b) have a gross tonnage not exceeding 1600 tonnes."

He proposed also the following ADD xxx:

> "Where a second-class radio electronic operator certificate or a general operator certificate together with a second-class technical certificate is used, additional provisions to ensure equipment availability whilst at sea should be required in accordance with appropriate international agreements."

1.21 The delegate of Denmark objected that under Article 57 of the Radio Regulations inspectors might inspect ship stations, not their navigation plans.

1.22 The Chairman said that there appeared to be a degree of agreement that some technical provision must be made, the argument being over whether that should be done through the radio electronic operator with a first- or second-class technical certificate, or through duplication of equipment coupled with shore-based maintenance.

1.23 The delegate of Greece upheld the position expressed in Document 232, that other means of assuring equipment availability at sea were acceptable where, and only where, it was not obligatory to have a radio electronic operator.

1.24 The delegate of the United Kingdom expressed his Administration's opposition to any reference in the Radio Regulations to technical certificates.

1.25 The delegate of the Netherlands, supported by the delegates of Norway and the Federal Republic of Germany, said that the application of technical skills for maintenance purposes was regulated by other international agreements, and that by doing more than simply referring to those agreements in the Radio Regulations, the ITU would be trespassing on IMO territory. Duplication of equipment was, in his opinion, a matter to be regulated by the carriage requirements, which were matters for the IMO.

1.26 The delegate of Greece said that the competence of the ITU was in a sense wider than that of IMO in that it covered stations on ships not subject to IMO Conventions; the sponsors of Document 232 had not specified that equipment be duplicated or maintenance be carried out on shore, they wished only to specify the certificates required to maintain ship stations, particularly in the A3 area.

1.27 The delegate of Brazil listed the various options available as follows:

1. a general operator certificate, a first-class technical certificate and facilities for on-board maintenance;

2. a first-class radio electronic certificate and facilities for on-board maintenance;

3. a general operator's certificate, a second-class technical certificate and equipment duplication;

4. a second-class radio electronic certificate and equipment duplication;

5. a general operator's certificate and equipment duplication;

6. a general operator's certificate, a second-class technical certificate and shore-based maintenance;

7. a second-class radio electronic certificate and shore-based maintenance;

8. a general operator's certificate and shore-based maintenance.

1.28 The delegate of China said there was a ninth option: duplicated equipment and no personnel. In reality, there were only two options for maintenance: on-board or shore-based. If maintenance could be shore based, then there was no need for maintenance personnel on board; 3986B and 3986C could thus be combined and, to ensure safety in navigation, require the presence of a first-class or second-class radio electronic officer.

1.29 The delegates of Finland, the Netherlands and the United Kingdom supported the earlier remark by the delegate of Norway that the appropriate equipment and facilities had to be available on board in order to carry out on-board maintenance.

1.30 The delegate of Greece drew attention to the proposal in Document 232 which provided a simpler solution.

1.31 The delegate of Argentina stressed that the provision of duplicate equipment on board would entail unacceptably high costs and said that he could not support any texts which contained that requirement.

1.32 The Chairman ascertained, by asking for a show of hands, that a few delegations considered options 1-4 to be inadequate, whereas several delegations felt that options 5-9 were inadequate. Some thought that options 5, 8 and 9 were excessive in the context of the Radio Regulations whereas others thought the other options to be so.

ADD 3986D and ADD 3986E

1.33 The delegate of Spain drew attention to the proposal in Document 232 which he supported.

1.34 The delegate of the United Kingdom recalled that the respective proposal in Document 17 called for a certified general operator. He stressed that it was not for the Radio Regulations to provide for maintenance.

1.35 By again asking for a show of hands, the Chairman ascertained that no delegations found the first seven options inadequate but quite a few found options 8 and 9 to be so. Conversely, a number of delegates considered options 1-7 excessive in the context of the Radio Regulations, while only a few thought options 8 and 9 to be so. None thought that all the provisions were satisfactory, and some thought that none of the provisions were satisfactory.

ADD 3986F

1.36 The delegate of the United Kingdom said that the minimum requirement should be a restricted operator's certificate with no provision for maintenance.

ADD 3986G, ADD 3986H and ADD 3986I

1.37 The Chairman observed equal support for and opposition to the deletion of those provisions.

General comments

1.38 The delegate of Greece strongly opposed the call for the provision of duplicate equipment. Such a regulation would lead to less employment on ships and to greater profits for manufacturers in sales of equipment and in the provision of maintenance. He said that the text should be drafted in accordance with the proposals contained in Document 232.

1.39 The delegate of Australia considered that countries should be free to choose maintenance procedure, and that no single system should be made obligatory.

The Chairman noted that the time available to discuss these Articles had elapsed and that he would accordingly prepare a document containing the draft regulations as they had been discussed and that when there were several options that had been discussed they would all be included with an indication of the numbers of administrations that supported each proposal. He observed that the meeting starting at 0900 hours would deal with the remaining matters allocated to Committee 6.

The meeting rose at 0010 hours on Tuesday, 13 October

The Secretary: The Chairman:

S. CHALLO I.R. HUTCHINGS

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

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COMMITTEE 6

SUMMARY RECORD

OF THE

FOURTEENTH AND LAST MEETING OF COMMMITTEE 6

(MOBILE AND RADIODETERMINATION SERVICES
- EXCEPT DISTRESS AND SAFETY)

Tuesday, 13 October 1987, at 0905 hrs

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

Subjects discussed:		Documents
1.	Nineteenth report of Working Group 6-A	432, DL/72
2.	Approval of summary record of the sixth meeting of Committee 6	319
3.	First report of Working Group 6 ad hoc 3 to Committee 6	434
4.	Further action in respect of Article 1 and Article 35	-
5.	Completion of the Committee's work	-

1. Nineteenth report of Working Group 6-A (Documents 432, DL/72)

1.1 The Chairman of Working Group 6-A introduced the nineteenth report of Working Group 6-A to the Committee (Document 432) and indicated how the frequencies given in Document DL/72, which had been derived from Document 412 after editing by Committee 4, should be incorporated in it.

Article 60, section I

MOD 4184A

1.2 The delegates of the United States and France pointed out that the word NAVTEX should not be deleted and the phrase should read "international NAVTEX system".

[MOD 4184B]

1.3 The delegate of Greece, supported by the delegate of the USSR, said that he would like the text to be the same as that approved by Committee 5 in Document 401, namely "... the frequency may be used after full implementation of the GMDSS".

1.4 The Chairman of Working Group 6-A said that where texts remained in square brackets the intention was to align them with the decisions of other Committees. That was an editorial matter and there was no need to go into it in detail at that stage.

1.5 The Chairman of Working Group 6-A gave editorial corrections to the figures in MODs 4200, 4203, 4205, 4206, 4207, 4208 and 4209.

MOD 4202, 4203 and 4207

1.6 The delegate of the Netherlands pointed out that the text should say "at speeds of 100 bauds" instead of "speeds not exceeding 100 bauds".

1.7 The delegate of the United States said that in MOD 4203 the word "(working)" should be inserted after "A1A Morse telegraphy".

Section II

1.8 In reply to a question by the delegate of Paraguay, the Chairman of Working Group 6-A said that the first asterisk below NOC 4217 referred to H2B and ADD 4215A. The same footnote also appeared in 4216; the double asterisks applied to 4215A and 4216.

[ADD 4237A]

1.9 The delegate of China, supported by the delegate of Japan, proposed that the provision be deleted and that the words "in Region 1" should be added to the footnote stating that 458 kHz would replace 425 kHz on 1 April 1992.

1.10 After a lengthy discussion on the propriety or otherwise of referring explicitly to the 1985 RARC MM R-1 Conference in the Radio Regulations, the delegate of Poland proposed that the words "or in a different frequency band applicable by action of a regional administrative radio conference in the region

in which such a Plan applies." should be added at the end of MOD 4237. With that addition, ADD 4237A could be deleted. The words "In Region 1" would be added to the footnote as proposed by the delegates of China and Japan.

It was so agreed.

MOD 4280

1.11 The Chairman of Working Group 6-A pointed out that the words which had been crossed out in the third last line should be reinstated.

Section III

ADD 4313A

1.12 The delegate of Canada said that his Administration had reviewed its proposal and decided to withdraw it.

NOC 4316

1.13 The delegate of Finland drew attention to the need to amend NOC 4316 in view of the future possibility of using the frequency 490 kHz for narrow band direct printing.

On a suggestion by the Chairman of Working Group 6-A, it was agreed to place NOC 4316 in square brackets, noting that an editorial change making possible the use of 490 kHz in connection with the NAVTEX service might be necessary.

MOD 4323

1.14 The delegate of Japan proposed to delete the words "narrow-band"

It was so agreed.

ADD 4323R

1.15 In reply to a question by the delegate of Finland, the Chairman explained that ADD 4323R was in square brackets pending a decision by Committee 4 on the implications of the Region 1 Plan or parts of it being incorporated in the Radio Regulations.

1.16 Chairman of Working Group 6-A said he understood the Region 1 plan carried some power limitations which applied in Region 1 only. If the plan was incorporated in the Radio Regulations as being applied globally, ADD 4323R might not be necessary, but if it was not considered as applied globally then the added text would be required. He pointed out that ADD 4323R had more implications than merely providing information since if it were adopted it would bring into the Radio Regulations a power limitation which would apply to all countries in Region 1 irrespective of whether they had attended a regional conference on the matter or agreed with its outcome.

After further discussion in which the delegates of Greece, New Zealand, Cuba, the United States and Denmark and the Chairman of Working Group 6-A took part, it was agreed to keep the square brackets around ADD 4323R for the meantime.

ADD 4323S, [ADD 4323U], ADD 4323V

1.17 The delegate of the USSR drew the Committee's attention to the fact that the digital selective calling frequencies mentioned in those proposed additions should be coordinated with those in Article 62 (MOD 4685 and MOD 4684), (see Document 419) where only one DSC frequency in the 2 MHz band (2 177 kHz) had been listed.

1.18 The delegate of the United States reminded the Committee that when the Plenary had considered Document 403 on first reading, Committee 4 had made known that the frequencies 2 177 and 2 189.5 kHz in square brackets in N 3023 (Article N 38) could be made available from the guard band should Committee 6 decide it needed them as DSC frequencies.

1.19 The delegate of Denmark recalled that the CCIR in Report 908 had recommended that, in order to split traffic load, a pair of frequencies should be made available in the 2 MHz band for international DSC between ship and coast stations. In the case of inter-ship DSC, a simplex channel in that band had been considered sufficient.

1.20 Support for duplex DSC in the 2 MHz band between ship and coast stations was expressed by the delegates of Denmark, Finland, Norway, Spain, the Federal Republic of Germany, the Netherlands, the United Kingdom, Kenya, Greece and Cuba.

In the 2 MHz band, the principle of duplex DSC between ship and coast stations and simplex DSC between ship stations was agreed.

It was decided that in the 2 MHz band ship stations calling coast stations by DSC (ADD 4323S) would use the frequency 2 189.5 kHz and coast stations calling ship stations by DSC (ADD 4323V) would use the frequency 2 177 kHz.

1.21 The delegate of the United States pointed out an editorial change in ADD 4323S(b), where "No. 4323J" should read "No. 4323T".

1.22 The delegate of the USSR, supported by the delegate of Cuba, reminded the Committee that in the case of inter-ship DSC (ADD 4323U), the calling frequency should be the same as that for coast stations calling ship stations, namely 2 177 kHz, for ease of watchkeeping on seagoing vessels.

It was so agreed.

It was further agreed that alignment with the decisions just taken would be coordinated with Committees 4 and 7 in the case of Article 62 (MODs 4685 and 4684) and Article N 38 (N 3023).

On that understanding, the above provisions, as amended and with the square brackets removed, were approved.

ADD 4326A

1.23 In reply to a query from the delegate of Cuba, the delegate of the United States said that the problem raised in Plenary with regard to Appendix 19 was basically an editorial one and would be solved by deleting the word "an" in the first line

MOD 4328

1.24 In reply to a question from the delegate of Paraguay, the Chairman said that the square brackets around the reference to Resolution No. 307 would remain until the Plenary had taken a decision with respect to that Resolution.

[ADD 4368A], [ADD 4368B]

1.25 The Chairman noted that the square brackets should remain in place until a decision had been taken with respect to the provisions of the Region 1 Plan.

NOC 4410

1.26 The Chairman of Working Group 6-A said that the square brackets related to pending activity of Committee 5 now completed and could be removed.

2. Approval of summary record of the sixth meeting of Committee 6 (Document 319)

The summary record of the sixth meeting was approved, subject to editorial amendments (see Corrigendum 1 to Document 319).

3. First report of Working Group 6 ad hoc 3 to Committee 6 (Document 434)

3.1 The Chairman of Working Group 6 ad hoc 3 introduced Document 434 containing Draft Resolution [COM6/6] which reflected those Resolutions and Recommendations within the purview of Working Group 6-A which were to be suppressed. If there were others within the purview of other Working Groups or Committees they might be added before the document was submitted to Plenary.

3.2 The delegate of Spain suggested that the words "as a general rule" in noting further were somewhat vague; the Chairman of the IFRB explained that Resolutions and Recommendations came into effect immediately after the signing of the Final Acts unless they contained a reservation to the effect that they only came into force after a certain date.

3.3 The Chairman of Working Group 6 ad hoc 3 said that that wording had been suggested by the Legal Adviser to cover exceptions to the norm.

Resolution [COM 6/6] was approved, subject to a minor editorial amendment to the title.

3.4 In reply to a suggestion by the Chairman of the IFRB, the Chairman said that a footnote would be added to the Resolutions and Recommendations concerned, indicating that they should remain in force in accordance with the provisions of Resolution [COM6/6].

4. Further action in respect of Article 1 and Article 35

4.1 The Chairman said that the Committee 6 had completed all its work with the exception of some input from Working Group 6-B on Article 1 and Article 35 which depended upon decisions not yet taken by Committee 4. He therefore proposed that the Committee should transmit Article 35 to the Plenary indicating that it had been unable to consider the remaining sections of the Article because Committee 4 had not yet made the relevant decisions. So far as Article 1

was concerned, it had been suggested that there might be additional definitions of the aeronautical, maritime and land elements of the radiodetermination satellite service. It appeared, however, that Committee 4 was unlikely to require those definitions in its work and he therefore proposed that Committee 6 should recommend that they not be included in the Radio Regulations.

It was so agreed.

4.2 The Chairman further proposed that Committee 6 should report that it had been unable to consider the definitions regarding a base and a mobile radiodetermination-satellite station until Committee 4 had completed its work, so those definitions might be taken up in Plenary.

It was so agreed.

5. Completion of Committee 6's work

After the customary exchange of courtesies, the Chairman declared the work of Committee 6 completed.

The meeting rose at 1210 hours.

The Secretary: The Chairman:

S. CHALLO I.R. HUTCHINGS

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 461-E
8 February 1987
Original: English

PLENARY MEETING

MINUTES

OF THE

EIGHTH PLENARY MEETING

Wednesday, 14 October 1987, at 0905 hrs
and at 1420 hrs

Chairman: Mr. J.W. EGAN (Canada)

Subjects discussed:		Documents
1.	Fifteenth Series of texts submitted by the Editorial Committee for first reading (B.15)	435
2.	Sixteenth Series of texts submitted by the Editorial Committee for first reading (B.16)	442
3.	Provisions concerning the radiodetermination-satellite service	-
4.	Seventeenth Series of texts submitted by the Editorial Committee for first reading (B.17)	443
5.	Eighth Series of texts submitted by the Editorial Committee for first reading (B.8) (continued)	393
6.	Sixth Series of texts submitted by the Editorial Committee for first reading (B.6) (continued)	334
7.	Seventh Series of texts submitted by the Editorial Committee for first reading (B.7) (continued)	336
8.	Notes by the Chairman of Committee 6	438 + Corr.1 433 + Corr.1

1. Fifteenth Series of texts submitted by the Editorial Committee for first reading (B.15) (Document 435)

Appendix 9

It was agreed to replace "marine" by "maritime" in sub-paragraph 2b) of Part B, in order to bring it into line with standard practice. It was also agreed to align paragraph 3 of Part C (English version - "broadcasts") to the French text.

MOD Columns 8 and 9

1.1 The Chairman of Committee 6 said that the square brackets could be deleted from round the figure "415".

Appendix 9 was approved, as amended.

Appendix 10

It was agreed to delete the word "proposed" from the title.

1.2 The Chairman of Committee 7 indicated the following amendments:

- delete "in the aeronautical mobile-satellite service" from ADD TB and ADD TJ;
- delete "in the maritime mobile-satellite service" from MOD TI and MOD TG;
- delete "in the mobile-satellite service" from ADD UA;
- delete "fixed earth station in the mobile-satellite services" from ADD VA;
- amend ADD NM to ADD NR.

It was agreed that the final list would appear in alphabetical order.

Appendix 10 was approved, as amended.

Appendix 11

1.3 The delegate of the USSR said that "operators'" should be deleted from paragraph 2 of Section VA, and the paragraph restructured around the word "personnel" in accordance with the decision of Committee 6 as reflected in Document 433. The Chairman of Committee 6 proposed that "operators'" should be placed in square brackets until such time as the relevant parts of Document 433 had been agreed.

It was so agreed and Appendix 11 was approved on that understanding.

Appendix 43

Approved.

Resolution COM5/4

1.4 The Chairman of Committee 5 indicated that the square brackets in the title and under recognizing a) could be replaced by "4 209.5 kHz".

1.5 The representative of the IFRB (Mr Brooks) suggested that the text of recognizing a) from "allocated" onwards be replaced by "designated by this Conference for the purposes indicated in considering c);". The delegate of Argentina further suggested that "exclusively" be inserted between "Conference" and "for".

It was so agreed and the Resolution was approved, as amended.

Resolution COM6/3

1.6 The Chairman of Committee 6 said that the square brackets round considering a) and b) should remain until such time as the revisions to which considering a) referred had been decided.

Approved on that understanding.

Recommendation COM5/A

Approved.

The Fifteenth Series of texts submitted by the Editorial Committee (series B.5) was approved, as amended, on first reading.

2. Sixteenth Series of texts submitted by the Editorial Committee for first reading (B.16) (Document 442)

2.1 The Chairman said that the numbers of the Appendices should be followed by "(Rev.)" and that "(Mob-87)" would ultimately be inserted after the titles.

Appendix 31(Rev.)

2.2 The delegate of Thailand said that in the Table on page B.16/1 the Figure "32 f." in the column "Frequencies assignable to ship stations for telephony, duplex operation" for the 8 MHz band should be changed to "33 f.".

2.3 The Chairman of Working Group 4-C indicated the following changes:

- on page B.16/3, the figure "40 f." in the column "Working frequencies assignable to ship stations for A1A or A1B Morse telegraphy" for the 8 MHz band should be replaced by "11 f.";

- on page B.16/4, for the 22 MHz band, the figures in the column "Frequencies (non-paired) assignable to ship stations for NBDP and A1A, A1B Morse telegraphy" should read "45 f." and "22 374", with "Limits kHz" of "22 374.25", and those in the column "Frequencies assignable to ship stations for Digital Selective Calling" should read "22 374.5" and "22 375.5", with "Limits kHz" of "22 375.75";

- on page B.16/5, the figure "37 f." in the column "Frequencies assigned to coast stations, for duplex operation" for the 8 MHz band should be changed to "36 f.";

- finally, in note ADD 1) on page B.16/6. The figure "22 375" should be replaced by "22 374.5", and the reference "(see Articles N 38 and N 40)" be added to notes ADD n) and ADD o) on page B.16/7.

Notes referring to the Table: ADD n) and ADD o)

2.4 The delegate of Greece proposed that the word "international" should be deleted from notes ADD n) and ADD o), to align those texts with N 2982EB on page B.10/2 of Document 403, already approved

2.5 The delegate of Australia, supported by the delegates of Brazil, Spain and India, opposed that deletion, since the frequencies in question were designated as international frequencies. The delegate of Greece said he would not press his point.

2.6 The delegate of Spain, supported by the delegate of Argentina, proposed that the word "exclusive" should be added before "international" in both notes.

Notes referring to the Table: MOD c) and ADD o)

2.7 The representative of the IFRB (Mr Berrada) said that this symbol should be "NOC c)" in view of the reinstatement of Resolution No. 314 and that the reference at the end of ADD o) should read "(see Resolutions COM5/4 and COM4/12)".

Appendix 31(Rev.) was approved as amended.

Appendix 16(Rev.)

2.8 The Chairman of Working Group 4-C said that ADD 8 should be aligned with Resolution COM4/6 by replacing the figure "1815" in the third line by "1805, 1807 up to and including 1815," and the figure "2510" in the last line by "2509", since 1806 and 2510 were calling channels.

2.9 The delegate of Brazil suggested that footnotes ADD 1) and ADD 2) to section B might be clarified by the addition of the sentence "However, it is not possible to use this operation in all the Regions of the world". The delegate of Argentina supported that suggestion.

2.10 The Chairman of Working Group 4-C, supported by the delegate of France, said that the problem was already covered by note ADD 3 on page B.16/20. The delegate of Brazil said he would not press the point.

Appendix 16(Rev.) was approved as amended.

Appendix 32(Rev.)

Approved with editorial amendments to the Spanish text.

Appendix 33(Rev.)

Approved.

Appendix 34(Rev.)

2.11 The delegate of China, referring to the Table said that in the common channel group there seemed to be no harmonic relation between the frequencies 6 276.5 MHz and 12 553.5 MHz in the 6 MHz and 12 MHz bands.

2.12 The delegate of Brazil said that, although it was true that the frequency 12 553.5 MHz was harmonically related to the frequency 4 184.5 MHz, an examination of the 6 MHz band showed that it was not possible to have a harmonically related frequency without a decimal fraction or with .5 of a frequency, and the frequency 6 276.5 MHz had therefore been chosen as that closest to one half of 12 533.5 MHz. The delegate of China noted that explanation.

Appendix 34(Rev.) was approved.

Appendix 35(Rev.)

Approved.

The Sixteenth Series of texts submitted by the Editorial Committee (B.16), as amended, was approved on first reading.

2.13 The Secretary-General, observing that the Conference was lagging considerably behind schedule, suggested that the second reading of the texts should be held towards the end of the morning on the basis of blue Document B.16 since that would save the large amount of time required to reproduce the many tables contained therein. The amendments would of course be indicated during the second reading.

It was so agreed.

3. Provisions concerning the radiodetermination-satellite service

3.1 The representative of the IFRB (Mr. Berrada) observed that although no Committee had examined questions relating to the radiodetermination-satellite service, the Conference would have to adopt some provisions on the subject, and the IFRB would need some technical criteria such as methods of calculating coordination distances and power flux-density limits to regulate the relations between space and terrestrial services.

3.2 The Chairman suggested that a small ad hoc Group, presided over by the delegate of the Federal Republic of Germany (Mr. George), should be set up to prepare an appropriate text.

3.3 The delegate of the Federal Republic of Germany said he would be prepared to preside over such a group, the work of which would be facilitated if it could be decided that the values appearing in a note from the Technical Working Group of the Plenary to Committee 4 (Document 277) should be used for the technical criteria mentioned. From the formal point of view, the problem could be covered by footnotes to Article 8 or by amendments to Article 28, whichever the IFRB considered more appropriate.

3.4 The delegate of the United States of America, although agreeing that the ad hoc Group should base its work on Document 277, recalled that that document contained a number of compromises. He therefore considered that the CCIR and a future competent conference should study the matter further. His Administration was of the opinion that the power flux-density limits could be

relaxed without adversely affecting existing services in the 2.5 GHz band. He suggested that the ad hoc Group draft a Resolution pointing out the nature of the criteria and calling for a review of the criteria by the CCIR and the next competent WARC.

3.5 The delegate of the USSR supported the suggestion of setting up an ad hoc Group on the understanding that the relaxation of limits set out in Document 277 was not within its terms of reference.

It was so agreed.

3.6 The Chairman listed the members of the ad hoc Group as: Argentina, Federal Republic of Germany (Chairman), France, India, Islamic Republic of Iran, Italy, Pakistan, United Kingdom, United States of America.

3.7 The Secretary-General drew attention to the Resolution adopted by WARC-79 providing that certain technical values adopted by the CCIR Plenary Assembly would be the subject of consultation by Members of the ITU and adapted if there were agreement.

4. Seventeenth Series of texts submitted by the Editorial Committee for first reading (B.17) (Document 443)

Article 8

4.1 The Chairman noted that "(NOC)" should be deleted wherever it appeared in the Table.

Page B.17/5, Table

It was agreed to delete the square brackets round "471" and "474".

ADD 469A

4.2 The delegate of Mexico requested that Mexico be added to the list of countries.

It was so agreed.

MOD 517

Insert "Rev." after "Appendix 16".

MOD 554

4.3 The delegates of Madagascar, Mauritania and Monaco requested that their countries be added to the list of countries with the additional allocation band 47 - 68 MHz.

ADD 594A

4.4 The delegates of Bulgaria, Czechoslovakia, German Democratic Republic, Romania and Turkey requested that their countries be added to the list of countries.

Page B.17/11, Table

It was agreed to remove the square brackets round "613" and "613A".

4.5 The delegate of Cuba pointed out that, under NOC 156.7625 - 156.8375 MARITIME MOBILE (distress and calling), "613A" should be deleted.

MOD 613A

4.6 The Chairman of Committee 4 said that the square brackets should be deleted from the reference "(see Resolution COM4/2)".

MOD 621

4.7 The delegate of Israel requested that his country be included in the list.

ADD 677A

4.8 The delegates of Israel, Tunisia, and Syria requested that their countries be added to the list.

ADD 695A

4.9 The delegate of Austria requested that his country be included in ADD 695A, and consequently he supported the deletion of existing footnote 698.

MOD 697

4.10 The delegate of Libya requested that his country be included in the first list. In view of the comment by the Secretary-General that that inclusion would involve a significant change, the delegate of Libya agreed to discuss the matter with the Chairman of Committee 4 and the Chairman of the Editorial Committee.

He subsequently requested that his country should be included in MOD 697 for both frequency bands.

4.11 The delegate of Malta asked for his country to be included in MOD 697, and the delegates of Monaco and Kenya asked to be included for the band 790 - 830 MHz.

SUP 698

MOD 700

It was noted that the Spanish text should be aligned with the English text.

MOD 701

It was noted that the French and Spanish texts should be aligned with the English text.

ADD 705B

4.12 The delegate of the United States of America asked for the United States to be included with Brazil and Canada in connection with the band 890 - 896 MHz although for the moment it had no intention to use that band for the purpose stated.

ADD 743A

4.13 The delegate of France, supported by the delegate of Italy, proposed an amendment - put forward after consultation between the Administrations mentioned in the note - which resulted from the concern that sooner or later the band in question might be used by the maritime mobile service. The text would read: "... the allocation to the land mobile service is on a primary basis ...".

4.14 The delegate of the Federal Republic of Germany said that his Delegation would have difficulty in accepting that amendment and he reserved the right to return to the matter, but subsequently withdrew that reservation.

4.15 The delegate of Israel asked for Israel to be included in the text of the footnote as originally worded but agreed to withdraw his request upon the Chairman's explanation that that would require a new footnote. Subsequently the delegate asked for Israel to be included in the footnote for all bands.

4.16 The delegate of Yugoslavia asked for his country to be included for the band 2 300 - 2 450 MHz and the delegate of Syria for Syria to be included for the band 1 700 - 1 710 MHz only.

Table 1 710 - 2 990 MHz

4.17 The delegate of the USSR pointed out that "746A" should read "746".

MOD 772, ADD 775A, ADD 823A

4.18 The delegate of Argentina pointed out that definitions should be established for the shipborne interrogator-transponder system (SIT), radar transponders and search and rescue transponders (SART) mentioned throughout the texts.

It was agreed that the matter would be taken up directly with the Editorial Committee.

It was also agreed to delete the square brackets round the reference "see also Article N 38" in ADD 823A.

The requests for inclusion of countries in the various footnotes of the Article being agreed, the Seventeenth Series of texts submitted by the Editorial Committee (B.17) was approved, as amended, on first reading.

The meeting was suspended at 1230 hours and resumed at 1420 hours.

5. Eighth Series of texts submitted by the Editorial Committee for first reading (B.8) (continued) (Document 393)

Resolution COM5/1

noting further d) (continued)

5.1 The delegates of Madagascar, Islamic Republic of Iran, Togo, Indonesia, Italy, India, Algeria, Saudi Arabia, Pakistan, Libya, Swaziland, Oman, Morocco, Mauritania, Jordan, Syria, Senegal, Cuba, Spain and Egypt supported the Mexican proposal to delete the square brackets and retain the text of d) as it stood.

5.2 The delegate of the Netherlands, supported by the delegates of France, Argentina, Federal Republic of Germany and Japan proposed the deletion of the whole sub-paragraph since it was completely open-ended.

5.3 The delegate of Portugal pointed out that there were three categories of ships: those subject to the SOLAS Convention, those not subject to the SOLAS Convention but having a maritime mobile station, and those having no maritime mobile station. In Portugal there were some 50 ships in category 1, 1,000 in category 2 and more than 1,000 in category 3 and most of the latter would never be fitted with a ship station. The adoption of d) would mean that administrations must maintain a coast station watch for an endless period of time and he therefore opposed that provision.

5.4 The delegate of Tunisia supported the retention of the text of d), which he considered essential to ensure the safety of life at sea after the provisions of Chapter N IX of the Radio Regulations came into force.

5.5 The delegate of Finland said there was an error of logic in the text of d) to which he had drawn attention earlier. It was absurd to say that non-Convention ships, which might include ships having no radio station, were dependent on coast stations.

5.6 The delegate of Australia said that he would have preferred to delete the text of d) but since the majority appeared to wish to retain it he would only point out that it might give rise to complications in future.

It was agreed to delete the square brackets and retain the text as it stood.

resolves 2

5.7 The Chairman of Committee 5 said that as he had already indicated it would be consistent with the Plenary's decision on No. 2945 to delete the square brackets in resolves 2 and retain the text.

It was so agreed.

Resolution COM5/1, as amended, was approved.

5.8 The delegate of Mauritania said that now it had been approved, he wished to make a statement in connection with Resolution COM5/1.

At the eleventh and last meeting of Committee 5, the Observer for the IMO had made a statement concerning the participation by developing countries in IMO meetings in which he had said that two-thirds of the delegates participating in IMO's work were from developing countries. That was in contradiction with certain statements made in Committee 5 during the discussion of Resolution COM5/1. In connection with discussion of the third indent under noting which stated that the IMO would decide on the dates of implementation of the GMDSS, his Administration had said that its Delegation to IMO was not authorized to discuss technical questions concerning maritime radiocommunications and had further stated that it did not find the inclusion of that indent appropriate for its country. His statement in Committee 5 had not in any way been meant to cast aspersions on the standard of the delegates who participated in the work of IMO but had referred only to the delegation of his own country which was not competent to deal with radiocommunication questions.

5.9 The delegate of Tunisia endorsed that statement. It appeared that his remarks regarding the IMO had been somewhat distorted: he had in fact said that most developing countries sent representatives of merchant navy organizations to IMO meetings and very few of those were competent in telecommunication matters. Hence, he did not consider IMO competent to fix the date of the implementation of the GMDSS. That was a matter for sovereign administrations meeting in a competent conference after the final tests had been carried out. He appealed to the conscience of all present, pointing out that any decision that might be taken would have serious repercussions on the safety of life at sea.

So far as N 2930 in Chapter N IX was concerned, that provision had been so amended in lengthy discussion that it no longer had any meaning, and countries would be free to apply or not to apply the provisions of the Chapter as they saw fit. That meant that on the date of implementation of the GMDSS, the majority of the more advanced countries would abandon watchkeeping, although with automatic alarm receivers on large ships no extra cost would be involved. A specific provision must be included in N 2930 to ensure that countries would continue to implement the provisions of Chapter IX until a competent conference decided otherwise.

5.10 The delegate of Mexico said that his Delegation fully endorsed the statements made by the delegates of Mauritania and Tunisia regarding the comments by the Observer for IMO at the final meeting of Committee 5.

5.11 The Chairman said he understood that the text of Resolution COM5/1 as in Document 393 had been agreed in Committee 5. The Chairman of Committee 5 said that he categorically denied having changed the text in question after the discussions in Committee 5. Document 161 had been considered at the third meeting and the summary record of that meeting had been approved by Committee 5.

5.12 The Observer for IMO said that his comments had been completely factual and he referred delegates to Annex 1 to the summary record of the eleventh meeting of Committee 5 (Document 388).

Chapter N IX

5.13 The Chairman of Committee 5 said that, with the approval of Resolution COM5/1, the square brackets in N 2930 and N 2943 could be removed. The Chairman added that the square brackets could also be removed from MOD 2930 and MOD 2943A in Chapter IX.

5.14 The delegate of Tunisia reiterated that the last sentence of N 2930 had no meaning and proposed that it should be aligned on noting further a) of Resolution COM5/1 that had just been approved. The text would then read: "However, stations of the maritime mobile service shall operate in conformity with the provisions of Chapter IX until the GMDSS has been implemented fully and until a competent conference decides otherwise". It was essential to insert that text in N 2930, because a provision of the Radio Regulations had greater force than a Resolution. The delegate of Senegal supported that proposal, observing that, whether the provision was deleted or retained, the effect would be to leave all administrations complete latitude with respect to watch-keeping under Chapter IX.

5.15 In reply to a question by the delegate of Togo, the Chairman said that the text, which was parallel to the second sentence of MOD 2930 in Chapter IX, was designed to ensure flexibility between the operation of the old and new systems.

5.16 The Chairman of Committee 5 said that the Tunisian proposal would defeat the purpose of providing for interconnection between No. 2930 in Chapter IX and N 2930 in Chapter N IX. The Tunisian delegate's points might be covered by simply adding the reference "(see No. 2945)". The delegate of Tunisia said that the problem was too important to be dealt with by merely adding a reference, but that he could agree to replace the sentence by an adaptation of noting further a) of Resolution COM5/1.

5.17 The delegate of Finland reminded the meeting that Committee 5 had from the outset decided to divide its work into three parts - Chapter IX and amendments thereto, Chapter N IX providing for the operation of the future system, and Resolution COM5/1 to cover the switchover from the Chapter IX to the Chapter N IX regime. That was why Chapter N IX had been made as self-contained as possible, and Resolution COM 5/1 contained all that was necessary to provide for the period during which both Chapters would be in force. Accordingly, the introduction into N 2930 of concepts related to Chapter IX other than the wording approved in Committee 5 would upset the balance between the Chapters and the Resolution. He therefore supported the proposal to keep the sentence unchanged and to add a reference to No. 2945. The delegates of Belgium, United States of America and the United Kingdom also supported that proposal, as did the delegate of Japan who pointed out that under revised Chapter IV of the 1974 SOLAS Convention, ships participating in the GMDSS were assigned the frequencies 2 182 kHz and 156.8 MHz for distress communications and new ships would be required to keep watch on those frequencies until the full implementation of the system; watch-keeping on those frequencies was also provided for in Chapter IX, and therefore would not be degraded by the introduction of the GMDSS.

5.18 The delegate of Sweden said it was regrettable that what now amounted to an editorial point was being discussed at such length at that very late stage of the Conference.

5.19 The delegates of Senegal, Libya, Mauritania and Algeria supported the Tunisian proposal and said they were against the mere addition of a reference to No. 2945. The delegate of Côte d'Ivoire suggested as a compromise that the full text of No. 2945 should be added at the end of N 2930. The delegate of Tunisia, supported by the delegate of Senegal, said that that solution was unacceptable, since the wording of the last sentence still gave the ships of developed countries latitude to evade their watch-keeping responsibilities; the sentence should be replaced by the text of No. 2945.

The meeting was suspended at 1600 hours and resumed at 1630 hours.

5.20 The Chairman said it had been agreed in informal discussions that the word "additionally" and the phrase "when using that equipment" should be deleted from the last sentence of N 2930 and that the reference "(see No. 2945)" should be added at the end. The delegates of Senegal and Togo said that, although the new text did not fully cover their concerns, they would not formally object to it.

5.21 The Chairman of Committee 5 said that the words "sparsely populated" should be inserted before "uninhabited" in N 2931A.

5.22 The delegate of Australia said that the words "or the alternative frequency 156.3 MHz" in the last line of N 2943 should be changed to "and, optionally, the frequency 156.3 MHz", to bring the provision into line with No. 2943B.

5.23 The delegate of Greece referred to the Notes of information to the Plenary on page B.8/2, pointing out that his Delegation and that of Spain had stated in Committee 5 that the entry into force of Chapter N IX should be contingent upon the discussion and approval of Articles 55 and 56. The Secretary-General said that the Secretariat intended to suggest that the date of entry into force of the General Provisions should be set at 0001 hours on 3 October 1989. The Plenary Meeting would decide on the matter when considering the relevant Radio Regulations.

The Eighth Series of texts submitted by the Editorial Committee (B.8), as amended, was approved on first reading.

6. Sixth Series of texts submitted by the Editorial Committee for first reading (B.6) (continued) (Document 334)

Article 14A

Approved, subject to deletion of the square brackets in the title.

The Sixth Series of texts submitted by the Editorial Committee was approved, as amended, on first reading.

7. Seventh Series of texts submitted by the Editorial Committee for first reading (B.7) (continued) (Document 336)

Article 35

Approved.

The Seventh Series of texts submitted by the Editorial Committee was approved, as amended, on first reading.

7.1 The Chairman of Committee 6 said that some provisions of Article 35 might have to be reconsidered in the light of decisions relating to RDSS.

8. Notes by the Chairman of Committee 6 (Documents 438 + Corr.1, 433 + Corr.1.)

8.1 The Chairman of Committee 6 introduced Documents 438 and 433. He pointed out a correction to Document 438, namely, in ADD 3986AA, to delete "[and maintenance]", replace "operational availability" by "maintenance", and add at the end "in accordance with relevant international agreements". He further noted that "operator" should be replaced by "personnel" throughout. He recalled that it had been agreed to forward Articles 55 and 56 together to the Plenary.

8.2 The Chairman said that in view of the continuing controversy it had been agreed to give four speakers on each side the opportunity to present their case. It was to be taken as understood that all administrations gave the highest priority to safety. The delegates of Spain, United States of America, Brazil, United Kingdom, China, Liberia, Greece and Papua New Guinea would therefore be called upon to take the floor to present the two viewpoints.

8.3 The delegate of Spain strongly urged the adoption of the proposal based on Document 232. He pointed out that the proposal was flexible in that it allowed administrations to make their own arrangements for maintenance in A1 and A2 areas, by the provision of additional personnel or by the duplication of equipment, and that only in A3 areas, on the high seas, was the presence of a second-class radioelectronic operator mandatory to ensure safety. He stressed

the importance in the latter case of having a full-time professional, since the practice of sharing responsibility for other tasks had proved unsatisfactory. He underlined the importance of including such provisions in view of the introduction of the new system.

8.4 The delegate of the United States of America called for a flexible approach. He drew attention to the work of IMO in establishing a structured framework allowing a choice between three equally safe methods and stressed that the views of a responsible sister organization should not be lightly disregarded. Within the IMO framework, countries had a free choice, to be taken in the light of economic considerations. Countries would not be forced to change their decisions but would be allowed to meet maritime safety requirements in the least costly way. He wondered why ITU should make one method mandatory when it could allow a choice between three equally safe alternatives.

8.5 The delegate of Brazil, speaking in support of the proposal based on Document 232, stressed the need for a full-time professional responsible for ship stations on board ships that sailed beyond the range of MF coast stations. To meet distress and safety concerns, it was necessary to have personnel on board capable of providing maintenance for equipment.

8.6 The delegate of the United Kingdom said that it was not for the ITU to draw up regulations in specialist fields that were within the competence of other international organizations. It was thus not for the ITU to draw up regulations demanding that ships have personnel on board to carry out the on-board maintenance of equipment, contrary to the views of IMO. Moreover, an attempt by ITU to impose a single world-wide solution for maintenance of equipment on board ship would ignore the great differences between countries in terms of trained personnel. He considered that if the proposal in Document 438 still proved controversial, it would be imprudent for the ITU to attempt to draw up regulations that would not be generally supported.

The meeting rose at 1720 hours.

The Secretary: The Chairman:

R.E. BUTLER J.W. EGAN

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

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14 October 1987
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COMMITTEE 7

NINTH SERIES OF TEXTS SUBMITTED BY COMMITTEE 6 TO THE EDITORIAL COMMITTEE

Committee 6 has completed its review of Article 60 as contained in Document 432 and the following are called to the attention of the Editorial Committee.

1. Provisions relating to the incorporation of Region 1 MF telephone and telegraph arrangements into Article 60, are shown in square brackets. The Article numbers are: 4183, 4184C, 4188B, 4188C, 4315C, 4319C, 4323R, 4368A and 4368B.

2. With respect to new Section IV, Use of Frequencies for Digital Selective Calling, the Committee notes that Recommendation COM5/B (MM) of the Regional Administrative Conference for the Planning of the Maritime Mobile and Aeronautical Radionavigation Services in Region 1 requests MOB-87 to:

a) designate the frequency pair 455.5/458.5 kHz, already designated for international DSC calling in Region 1, as an international DSC calling channel on a global basis.

The matter is currently under review in Committee 4. If this is accepted by Committee 4, then ADD 4323J and ADD 4323K can be shown without square brackets.

3. Additionally, a Committee 4 decision is pending concerning MOD 4327 and its corresponding footnote 1. If Committee 4 rejects the proposed global allocation, the text within square brackets should be deleted.

I.R. HUTCHINGS
Chairman of Committee 6

PINK PAGES

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 463-E
14 October 1987

R.5

PLENARY MEETING

FIFTH SERIES OF TEXTS SUBMITTED BY THE EDITORIAL COMMITTEE TO THE PLENARY MEETING

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

Source	Documents	Title
COM.7	443 (B.17)	Article 8
	196 (B.1)	Appendix 7(Rev.)
	435 (B.15)	Appendix 9(Rev.)
		Appendix 10(Rev.)
		Appendix 11(Rev.)
		Appendix 43(Rev.)
		Resolution COM5/4
		Resolution COM6/3
		Recommendation COM5/A

Y.C. MONGELARD
Chairman of Committee 7

Annex: 52 pages

ARTICLE 8

MOD 405 § 5. The "European Maritime Area" is bounded to the north by a line extending along parallel 72° North from its intersection with meridian 55° East of Greenwich to its intersection with meridian 5° West, then along meridian 5° West to its intersection with parallel 67° North, thence along parallel 67° North to its intersection with meridian 32° West; to the west by a line extending along meridian 32° West to its intersection with parallel 30° North; to the south by a line extending along parallel 30° North to its intersection with meridian 43° East; to the east by a line extending along meridian 43° East to its intersection with parallel 60° North, thence along parallel 60° North to its intersection with meridian 55° East and thence along meridian 55° East to its intersection with parallel 72° North.

MOD 448 The use of the bands 14 - 19.95 kHz, 20.05 - 70 kHz and 70 - 90 kHz (72 - 84 kHz and 86 - 90 kHz in Region 1) by the maritime mobile service is limited to coast radiotelegraph stations (A1A and F1B only). Exceptionally, the use of class J2B or J7B emissions is authorized subject to the necessary bandwidth not exceeding that normally used for class A1A or F1B emissions in the band concerned.

MOD 451 In the bands 70 - 90 kHz (70 - 86 kHz in Region 1) and 110 - 130 kHz (112 - 130 kHz in Region 1), pulsed radionavigation systems may be used on condition that they do not cause harmful interference to other services to which these bands are allocated.

kHz
90 - 110

Allocation to Services		
Region 1	Region 2	Region 3
90 - 110		
	RADIONAVIGATION 453	
	Fixed	
MOD		
MOD	454 453A	

ADD 453A In the band 90 - 110 kHz, the United Kingdom may continue to use its coast radiotelegraph stations in operation on 14 September 1987, on a secondary basis.

kHz
130 - 285

	Allocation to Services		
	Region 1	Region 2	Region 3
	130 - 148.5 MARITIME MOBILE /FIXED/	130 - 160 (NOC) FIXED MARITIME MOBILE	130 - 160 (NOC) FIXED MARITIME MOBILE
MOD	454 457		RADIONAVIGATION
		454	454
	148.5 - 255 BROADCASTING	160 - 190 (NOC) FIXED	160 - 190 (NOC) FIXED
		459	Aeronautical Radionavigation
		190 - 200 (NOC) AERONAUTICAL RADIONAVIGATION	
MOD	460 461 462		
MOD	255 - 283.5 (NOC) BROADCASTING	200 - 275 AERONAUTICAL RADIONAVIGATION	200 - 285 (NOC) AERONAUTICAL RADIONAVIGATION
	/AERONAUTICAL RADIONAVIGATION/	Aeronautical Mobile	Aeronautical Mobile
MOD	463	275 - 285 AERONAUTICAL RADIONAVIGATION	
		Aeronautical Mobile	
		Maritime radionavigation (radiobeacons)	
MOD	458 462 464		

MOD 458 In Region 1, the change of the band limit from 285 kHz to 283.5 kHz shall take place on 1 February 1990 (see Resolution No. 500).

kHz
283.5 - 315

Allocation to Services		
Region 1	Region 2	Region 3
283.5 - 315		
MARITIME RADIONAVIGATION (radiobeacons) 466 /AERONAUTICAL RADIONAVIGATION/ 458 465 466A	285 - 315 (NOC) MARITIME RADIONAVIGATION (radiobeacons) 466 /AERONAUTICAL RADIONAVIGATION/	

MOD

ADD 466A Additional Allocation: In Region 1, the frequency band 285.3 - 285.7 kHz is also allocated to the maritime radionavigation service (other than radiobeacons) on a permitted basis.

kHz
415 - 1 606.5

<table>
<tr><th colspan="3">Allocation to Services</th></tr>
<tr><th>Region 1</th><th>Region 2</th><th>Region 3</th></tr>
<tr><td>415 - 435 (NOC)

AERONAUTICAL
RADIONAVIGATION

/ MARITIME
MOBILE / 470

465</td><td colspan="2" rowspan="2">415 - 495

MARITIME MOBILE 470

Aeronautical Radionavigation 470A</td></tr>
<tr><td>435 - 495 (NOC)

MARITIME
MOBILE 470

Aeronautical
Radionavigation

465 471 472A</td></tr>
<tr><td colspan="3">469 469A 471 [472A]</td></tr>
<tr><td>505 - 526.5

MARITIME
MOBILE 470

/AERONAUTICAL
RADIONAVIGATION/

465 471 474 475 476</td><td>505 - 510 (NOC)

MARITIME
MOBILE 470

471

510 - 525 (NOC)

MOBILE 474

AERONAUTICAL
RADIONAVIGATION

525 - 535 (NOC)</td><td>505 - 526.5 (NOC)

MARITIME
MOBILE 470 474

/AERONAUTICAL
RADIONAVIGATION/

Aeronautical Mobile

Land Mobile

471</td></tr>
<tr><td>526.5 - 1 606.5 (NOC)

BROADCASTING

478</td><td>BROADCASTING 477

AERONAUTICAL
RADIONAVIGATION

535 - 1 605 (NOC)

BROADCASTING</td><td>526.5 - 535 (NOC)

BROADCASTING

Mobile

479

535 - 1 606.5 (NOC)

BROADCASTING</td></tr>
</table>

MOD 469 Different category of service: In Afghanistan, Australia, China, the Overseas French Territories of Region 3, India, Indonesia, the Islamic Republic of Iran, Japan, Pakistan, Papua New Guinea and Sri Lanka, the allocation of the band 415 - 495 kHz to the aeronautical radionavigation service is on a permitted basis. Administrations in these countries shall take all practical steps necessary to ensure that aeronautical radionavigation stations in the band 435 - 495 kHz do not cause interference to reception by coast stations of ship stations transmitting on frequencies designated for ship stations on a world-wide basis (see No. 4237).

ADD 469A Different category of service: In Cuba, the United States of America, and Mexico the allocation of the band 415 - 435 kHz to the aeronautical radionavigation service is on a primary basis.

ADD 470A In Region 2, the use of the band 435 - 495 kHz by the aeronautical radionavigation service is limited to non-directional beacons not employing voice transmission.

SUP 473

kHz
1 605 - 1 800

	Allocation to Services		
	Region 1	Region 2	Region 3
		1 605 - 1 625	
	1 606.5 - 1 625	BROADCASTING 480	1 606.5 - 1 800 (NOC)
MOD	MARITIME MOBILE 480A		FIXED
	/ FIXED /		MOBILE
	/ LAND MOBILE /		RADIOLOCATION
			RADIONAVIGATION
MOD	483 484	481 480A	
	1 625 - 1 635 (NOC)	1 625 - 1 705	
	RADIOLOCATION 487	BROADCASTING 480	
		/ FIXED /	
	485 486	/ MOBILE /	
	1 635 - 1 800	Radiolocation	
MOD	MARITIME MOBILE 480A	481 480A	
MOD	/ FIXED /		
	/ LAND MOBILE /	1 705 - 1 800 (NOC)	
		FIXED	
		MOBILE	
		RADIOLOCATION	
	483 484 488	AERONAUTICAL RADIONAVIGATION	482

ADD 480A In cases where a broadcasting station of Region 2 is concerned, the service area of the maritime mobile stations in Region 1 shall be limited to that provided by ground-wave propagation.

kHz
1 800 - 2 000

Allocation to Services		
Region 1	Region 2	Region 3
1 800 - 1 810 (NOC) RADIOLOCATION 487 485 486	1 800 - 1 850 AMATEUR	1 800 - 2 000 (NOC) AMATEUR FIXED MOBILE except aeronautical mobile RADIONAVIGATION Radiolocation
1 810 - 1 850 (NOC) AMATEUR MOD 490 491 492 493		
1 850 - 2 000 (NOC) FIXED MOBILE except aeronautical mobile MOD 484 488 495	1 850 - 2 000 AMATEUR FIXED MOBILE except aeronautical mobile RADIOLOCATION RADIONAVIGATION 494	489

MOD 489 In Region 3, the Loran system operates either on 1 850 kHz or 1 950 kHz, the bands occupied being 1 825 - 1 875 kHz and 1 925 - 1 975 kHz respectively. Other services to which the band 1 800 - 2 000 kHz is allocated may use any frequency therein on condition that no harmful interference is caused to the Loran system operating on 1 850 kHz or 1 950 kHz.

MOD 517 The use of the band 4 000 - 4 063 kHz by the maritime mobile service is limited to ship stations using radiotelephony (see No. 4374 and Appendix 16 (Mob-87)).

MOD 554 Additional allocation: in Albania, the Federal Republic of Germany, Austria, Belgium, Bulgaria, Côte d'Ivoire, Denmark, Spain, Finland, France, Gabon, Greece, Ireland, Israel, Italy, the Lebanon, Liechtenstein, Luxembourg, Madagascar, Mali, Malta, Morocco, Mauritania, Monaco, Nigeria, Norway, the Netherlands, Poland, the German Democratic Republic, the United Kingdom, Senegal, Sweden, Switzerland, Tunisia, Turkey and Yugoslavia, the band 47 - 68 MHz and in Romania, the band 47 - 58 MHz, are also allocated to the land mobile service on a permitted basis. However, stations of the land mobile service in the countries mentioned in connection with each band referred to in this footnote shall not cause harmful interference to, or claim protection from, existing or planned broadcasting stations of countries other than those mentioned in connection with the band.

MHz
87 - 108

Allocation to Services		
Region 1	Region 2	Region 3
		87 - 100 (NOC) FIXED MOBILE BROADCASTING
87.5 - 100 (NOC) BROADCASTING 581 582	88 - 100 (NOC) BROADCASTING	580
100 - 108 BROADCASTING		
MOD	582 584 585	
MOD	586 587 588 589	

SUP 583

MOD 587 Additional allocation: in Austria, Bulgaria, Hungary, Israel, Kenya, Mongolia, Poland, Syria, the German Democratic Republic, the United Kingdom, Somalia, Czechoslovakia, Turkey and the USSR, the band 104 - 108 MHz is also allocated to the mobile, except aeronautical mobile (R), service on a permitted basis until 31 December 1995 and, thereafter, on a secondary basis.

MOD 589 Additional allocation: in France, Romania, Sweden and Yugoslavia, the band 104 - 108 MHz is also allocated to the mobile, except aeronautical mobile (R), service on a permitted basis until 31 December 1995.

SUP 590

MHz
108 - 138

	Allocation to Services		
	Region 1	Region 2	Region 3
	108 - 117.975		
	117.975 - 136		
MOD	136 - 137	AERONAUTICAL MOBILE (R) Fixed Mobile except aeronautical mobile (R)	
MOD		591 594A 595	
NOC	137 - 138		

ADD 594A Different category of service: as from 1 January 1990, in Bulgaria, Poland, German Democratic Republic, Romania, Czechoslovakia, Turkey and the USSR, the allocation of the band 136 - 137 MHz to the aeronautical mobile (OR) service is on a permitted basis.

MOD 595 Until 1 January 1990, the band 136 - 137 MHz is also allocated to the space operation service (space-to-Earth), meteorological-satellite service (space-to-Earth) and the space research service (space-to-Earth) on a primary basis. The introduction of stations of the aeronautical mobile (R) service shall only occur after that date. After 1 January 1990, the band 136 - 137 MHz will also be allocated to the above-mentioned space radiocommunication services on a secondary basis (see Resolution COM4/1).

MHz
150.05 - 174

	Allocation to Services		
	Region 1	Region 2	Region 3
	150.05 - 153 (NOC) FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY 610 612	150.05 - 156.7625 (NOC) FIXED MOBILE	
	153 - 154 (NOC) FIXED MOBILE except aeronautical mobile (R) Meteorological Aids		
	154 - 156.7625 (NOC) FIXED MOBILE except aeronautical mobile (R) 613 613A	611 613 613A	
NOC	156.7625 - 156.8375	MARITIME MOBILE (distress and calling) 501 613	
MOD	156.8375 - 174 FIXED MOBILE except aeronautical mobile 613 614 615 613B	156.8375 - 174 (NOC) FIXED MOBILE 613 616 617 618	

MOD 613 The frequency 156.8 MHz is the international distress, safety and calling frequency for the maritime mobile VHF radiotelephone service. The conditions for the use of this frequency are contained in Articles 38 and N 38.

In the bands 156 - 156.7625 MHz, 156.8375 - 157.45 MHz, 160.6 - 160.975 MHz and 161.475 - 162.05 MHz, each administration shall give priority to the maritime mobile service on only such frequencies as are assigned to stations of the maritime mobile service by the administration (see Articles 38, N 38 and 60).

Any use of frequencies in these bands by stations of other services to which they are allocated should be avoided in areas where such use might cause harmful interference to the maritime mobile VHF radiocommunication service.

However, the frequency 156.8 MHz and the frequency bands in which priority is given to the maritime mobile service may be used for radiocommunications on inland waterways subject to agreement between interested and affected administrations and taking into account current frequency usage and existing agreements.

MOD 613A In the maritime mobile VHF service the frequency 156.525 MHz is to be used exclusively for digital selective calling for distress, safety and calling (see Resolution COM4/2). The conditions for the use of this frequency are prescribed in Articles 38, N 38 [and 60] and in Appendix 18.

ADD 613B Additional allocation: In Ireland and in the United Kingdom, the band 161.3875 - 161.4125 MHz is also allocated to the maritime radionavigation service on a primary basis, subject to agreement obtained under the procedure set forth in Article 14.

MHz
174 - 235

MOD

Allocation to Services		
Region 1	Region 2	Region 3
174 - 223 (NOC) BROADCASTING 621 623 628 629	174 - 216 (NOC) BROADCASTING Fixed Mobile 620	174 - 223 (NOC) FIXED MOBILE BROADCASTING 619 624 625 626 630
	216 - 220 FIXED MARITIME MOBILE Radiolocation 627 627A	
	220 - 225 (NOC) AMATEUR FIXED MOBILE Radiolocation 627	
223 - 230 (NOC) BROADCASTING Fixed Mobile 622 628 629 631 632 633 634 635		223 - 230 (NOC) FIXED MOBILE BROADCASTING AERONAUTICAL RADIONAVIGATION Radiolocation 636 637
	225 - 235 (NOC) FIXED MOBILE	
230 - 235 (NOC) FIXED MOBILE 629 632 633 634 635 638 639		230 - 235 (NOC) FIXED MOBILE AERONAUTICAL RADIONAVIGATION 637

MOD 621 Additional allocation: in the Federal Republic of Germany, Austria, Belgium, Denmark, Spain, Finland, France, Israel, Italy, Liechtenstein, Monaco, Norway, the Netherlands, the United Kingdom, Sweden, Switzerland and Yemen (P.D.R. of), the band 174 - 223 MHz is also allocated to the land mobile service on a permitted basis. However, the stations of the land mobile service shall not cause harmful interference to, nor claim protection from, broadcasting stations, existing or planned, in countries other than those listed in this footnote.

ADD 627A Additional allocation: in Canada, the band 216 - 220 MHz is also allocated to the land mobile service on a primary basis.

MHz
420 - 470

	Allocation to Services		
	Region 1	Region 2	Region 3
NOC	420 - 430		
MOD	430 - 440 AMATEUR RADIOLOCATION 653 654 655 656 657 658 659 661 662 663 664 665	430 - 440 RADIOLOCATION Amateur 653 658 659 660 663 664 664A	
NOC	440 - 450		
NOC	450 - 460		
NOC	460 - 470		

ADD 664A Additional allocation: in Mexico, the bands 430 - 435 MHz and 438 - 440 MHz are also allocated on a primary basis to the land mobile service, subject to agreement obtained under the procedure set forth in Article 14.

MHz
470 - 890

	Allocation to Services		
	Region 1	Region 2	Region 3
	470 - 790 BROADCASTING	470 - 512 (NOC) BROADCASTING Fixed Mobile 674 675	470 - 585 (NOC) FIXED MOBILE BROADCASTING 673 677 679
		512 - 608 (NOC) BROADCASTING 678	585 - 610 (NOC) FIXED MOBILE BROADCASTING RADIONAVIGATION 688 689 690
		608 - 614 (NOC) RADIO ASTRONOMY Mobile-Satellite except aeronautical mobile-satellite (Earth-to-space)	610 - 890 (NOC) FIXED MOBILE BROADCASTING
MOD	676 677A 680 682 683 684 685 686 687 689 693 694	614 - 806 BROADCASTING Fixed Mobile 675 692 693 693A	
	790 - 862 FIXED BROADCASTING		
MOD MOD	694 695 695A 696 697 698 702	806 - 890 FIXED MOBILE BROADCASTING	
	862 - 890 FIXED MOBILE except aeronautical mobile BROADCASTING 703		677 688 689
MOD	704	693A 700	690 691 693 701

MOD 674 Different category of service: in Mexico and Venezuela, the allocation of the band 470 - 512 MHz to the fixed and mobile services, and in Argentina and Uruguay to the mobile service, is on a primary basis (see No. 425), subject to agreement obtained under the procedure set forth in Article 14.

ADD 677A Additional allocation: in the Federal Republic of Germany, Austria, Belgium, Cyprus, Denmark, Spain, Finland, France, Ireland, Israel, Italy, Libya, Malta, Morocco, Monaco, Norway, the Netherlands, Portugal, the United Kingdom, Sweden, Switzerland, Syria, Tunisia and Turkey, the band 470 - 790 MHz is also allocated on a secondary basis to the land mobile service, intended for applications ancillary to broadcasting. Stations of the land mobile service in the countries mentioned in this footnote, shall not cause harmful interference to existing or planned stations operating in accordance with the Table of Frequency Allocations in countries other than those listed in this footnote.

MOD 680 Additional allocation: In the United Kingdom, the band 598 - 606 MHz is also allocated to the aeronautical radionavigation service on a primary basis until 31 December 1994. All new assignments to stations in the aeronautical radionavigation service in this band are subject to the agreement of the Administrations of the following countries: the Federal Republic of Germany, Belgium, Denmark, Spain, France, Ireland, Luxembourg, Morocco, Norway and the Netherlands.

SUP 681

ADD 693A Additional allocation: In Cuba, the band 614 - 890 MHz is also allocated to the radionavigation service on a primary basis, subject to agreement obtained under the procedure set forth in Article 14.

ADD 695A Additional allocation: In Austria, Italy and the United Kingdom, the band 790 - 862 MHz is also allocated to the land mobile service on a secondary basis.

MOD 697 Additional allocation: in the Federal Republic of Germany, Denmark, Egypt, Finland, Israel, Kenya, Libya, Liechtenstein, Monaco, Norway, the Netherlands, Sweden, Switzerland and Yugoslavia, the band 790 - 830 MHz, and in these same countries and in Spain, France, Malta and Syria, the band 830 - 862 MHz, are also allocated to the mobile, except aeronautical mobile, service on a primary basis. However, stations of the mobile service in the countries mentioned in connection with each band referred to in this footnote shall not cause harmful interference to, or claim protection from, stations of services operating in accordance with the Table in countries other than those mentioned in connection with the band.

SUP 699

MOD 700 Additional allocation: in Region 2, the band 806 - 890 MHz is also allocated to the mobile-satellite service on a primary basis. The use of this service is intended for operation within national boundaries and subject to agreement obtained under the procedure set forth in Article 14.

MOD 701 Additional allocation: in Region 3, the bands 806 - 890 MHz and 942 - 960 MHz are also allocated to the mobile-satellite, except aeronautical mobile-satellite (R), service on a primary basis. The use of this service is limited to operation within national boundaries and subject to agreement obtained under the procedure set forth in Article 14. In seeking such agreement, appropriate protection shall be afforded to services operating in accordance with the Table, to ensure that no harmful interference is caused to such services.

MHz
890 - 960

Allocation to Services		
Region 1	Region 2	Region 3
890 - 942 (NOC) FIXED MOBILE except aeronautical mobile BROADCASTING 703 MOD Radiolocation	890 - 902 FIXED MOBILE except aeronautical mobile Radiolocation 705 705B	890 - 942 (NOC) FIXED MOBILE BROADCASTING Radiolocation
	902 - 928 FIXED Amateur Mobile except aeronautical mobile Radiolocation MOD 705 705A 707	
	928 - 942 (NOC) FIXED MOBILE except aeronautical mobile Radiolocation	
704	705	706
942 - 960 FIXED MOBILE except aeronautical mobile BROADCASTING 703	942 - 960 (NOC) FIXED Mobile	942 - 960 (NOC) FIXED MOBILE BROADCASTING
MOD 704	708	701

ADD 705A Different category of service: In Chile, the band 903 - 905 MHz is allocated to the mobile, except aeronautical mobile, service on a primary basis and is subject to agreement obtained under the procedure set forth in Article 14.

ADD 705B Additional allocation: In Brazil, Canada and the United States of America, the band 890 - 896 MHz is also allocated to the mobile-satellite service on a primary basis. The use of this service is intended for operation within national boundaries and subject to agreement obtained under the procedure set forth in Article 14. In seeking such agreement, appropriate protection shall be afforded to services operating in accordance with the Table.

MHz
1 700 - 1 710

	Allocation to Services		
	Region 1	Region 2	Region 3
	1 700 - 1 710 FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) Mobile except aeronautical mobile	1 700 - 1 710 (NOC) FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile	
MOD	671 722 743A	671 722 743	

ADD 743A Different category of service: In the Federal Republic of Germany, Austria, Denmark, Finland, Israel, Norway, the Netherlands, the United Kingdom and Switzerland, in the band 1 700 - 2 450 MHz, in Sweden and Syria, in the bands 1 700 - 1 710 MHz and in Sweden and Yugoslavia in the band 2 290 - 2 450 MHz, the allocation to the land mobile service is on a primary basis (see No. 425), subject to agreement obtained under the procedure set forth in Article 14.

MHz
1 710 - 2 290

	Allocation to Services		
	Region 1	Region 2	Region 3
	1 710 - 2 290 FIXED Mobile	1 710 - 2 290 (NOC) FIXED MOBILE	
MOD	722 743A 744 746 747 748 750	722 744 745 746 747 748 749 750	

MHz
2 290 - 2 450

	2 290 - 2 300 FIXED SPACE RESEARCH (deep space) (space-to Earth) Mobile except aeronautical mobile	2 290 - 2 300 (NOC) FIXED MOBILE except aeronautical mobile SPACE RESEARCH (deep space) (space-to-Earth)
MOD	743A	
	2 300 - 2 450 FIXED Amateur Mobile Radiolocation	2 300 - 2 450 (NOC) FIXED MOBILE RADIOLOCATION Amateur
MOD	664 743A 752	664 751 752

MHz
2 700 - 3 100

	Allocation to Services		
	Region 1	Region 2	Region 3
(NOC)	2 700 - 2 900	AERONAUTICAL RADIONAVIGATION 717 Radiolocation 770 771	
MOD	2 900 - 3 100	RADIONAVIGATION 773 Radiolocation 772 775A	

MOD 772 In the band 2 900 - 3 100 MHz, the use of the shipborne interrogator-transponder system (SIT) shall be confined to the sub-band 2 930 - 2 950 MHz.

SUP 774-775

ADD 775A In the bands 2 900 - 3 100 MHz and 9 300 - 9 500 MHz, the response from radar transponders shall not be capable of being confused with the response from radar beacons (racons) and shall not cause interference to ship or aeronautical radars in the radionavigation service, having regard, however, to No. 347 of these Regulations.

MHz
3 100 - 3 300

	3 100 - 3 300	RADIOLOCATION
MOD		713 777 778

SUP 776

MHz
5 470 - 5 650

MOD

Allocation to Services		
Region 1	Region 2	Region 3
5 470 - 5 650	MARITIME RADIONAVIGATION Radiolocation 800 801 802	

MHz
8 850 - 9 300

MOD

9 200 - 9 300	RADIOLOCATION MARITIME RADIONAVIGATION 823 823A 824	

ADD 823A In the band 9 200 - 9 500 MHz, search and rescue transponders (SART) may be used, having due regard to the appropriate CCIR Recommendation (see also Article N 38).

MHz
9 300 - 10 000

MOD

9 300 - 9 500	RADIONAVIGATION 775A 825A Radiolocation 823A 825	

NOC

9 500 - 9 800	RADIOLOCATION RADIONAVIGATION 713	

ADD 825A In the band 9 300 - 9 320 MHz in the radionavigation service, the use of shipborne radars, other than those existing on 1 January 1976, is not permitted until 1 January 2001.

(MOD) APPENDIX 7(Rev.)
Mob-87

NOC **Table of Transmitter Frequency Tolerances**

(See Article 5)

NOC 1.

NOC 2.

NOC 3.

(MOD)

Frequency Bands (lower limit exclusive, upper limit inclusive) and Categories of Stations	Tolerances applicable until 1 January 1990 to transmitters installed before 2 January 1985	Tolerances applicable to transmitters installed after 1 January 1985 and to all transmitters after 1 January 1990
1	2	3
***Band:* 9 kHz to 535 kHz**		
1. *Fixed Stations:*		
— 9 kHz to 50 kHz	1 000	100
— 50 kHz to 535 kHz	200	50
2. *Land Stations:*		
(MOD) *a)* Coast Stations:		100 1) 2)
(MOD) — power 200 W or less	500 1)	
(MOD) — power above 200 W	200 1)	
b) Aeronautical Stations	100	100

	1	2	3
	3. *Mobile Stations:*		
(MOD)	*a)* Ship Stations	1 000 *3)*	200 3) 4)
	b) Ship's Emergency Transmitters	5 000	500 *5)*
	c) Survival Craft Stations	5 000	500
	d) Aircraft Stations	500	100
	4. *Radiodetermination Stations*	100	100
	5. *Broadcasting Stations*	10 Hz	10 Hz
NOC	***Band:* 535 kHz to 1 606.5 kHz (1 605 kHz in Region 2)**		
	***Band:* 1 606.5 kHz (1 605 kHz in Region 2) to 4 000 kHz**		
	1. *Fixed Stations:*		
	— power 200 W or less	100	100 *7) 8)*
	— power above 200 W	50	50 *7) 8)*
	2. *Land Stations:*		
(MOD)	— power 200 W or less	100 1) 9) 10)	100 1)2)7)9)10)
(MOD)	— power above 200 W	50 1) 9) 10)	50 1)2)7)9)10)
	3. *Mobile Stations:*		
(MOD)	*a)* Ship Stations	200 *3) 11)*	40 Hz 3) 4)12)
	b) Survival Craft Stations	300	100
	c) Emergency Position-Indicating Radiobeacons	300	100
	d) Aircraft Stations	100 *10)*	100 *10)*
	e) Land Mobile Stations	200	50 *13)*
	4. *Radiodetermination Stations:*		
	— power 200 W or less	100	20 *14)*
	— power above 200 W	50	10 *14)*
	5. *Broadcasting Stations*	20	10 Hz *15)*

	1	2	3
	***Band:* 4 MHz 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:*		
(MOD)	*a)* Coast Stations:		20 Hz 1) 2) 16)
(MOD)	— power 500 W or less	50 1) 9)	
(MOD)	— power above 500 W and less than or equal to 5 kW	30 1) 9)	
(MOD)	— power above 5 kW	15 1) 9)	
	b) Aeronautical Stations:		
	— power 500 W or less	100 *10)*	100 *10)*
	— power above 500 W	50 *10)*	50 *10)*
	c) Base Stations:		20 *7)*
	— power 500 W or less	100	
	— power above 500 W	50	
	3. *Mobile Stations:*		
	a) Ship Stations:		
	1) Class A1A emissions	50 *17) 18)*	10
(MOD)	2) Emissions other than Class A1A	50 *3) 11)*	50 Hz 3) 4) 19)

	1	2	3
	b) Survival Craft Stations	200	50
	c) Aircraft Stations	100 *10)*	100 *10)*
	d) Land Mobile Stations	200	40 *20)*
	4. *Broadcasting Stations*	15	10 Hz *15) 21)*
	5. *Space Stations*		20
	6. *Earth Stations*		20
NOC	***Band:* 29.7 MHz to 100 MHz**		
	***Band:* 100 MHz to 470 MHz**		
	1. *Fixed Stations:*		
	— power 50 W or less	50	20 *26)*
	— power above 50 W	20	10
	2. *Land Stations:*		
(MOD)	*a)* Coast Stations	10	10
	b) Aeronautical Stations	50	20 *28)*
	c) Base Stations:		
	— power 5 W or less	50	
	— power above 5 W	20	
	— in the band 100 - 235 MHz		15 *29)*
	— in the band 235 - 401 MHz		7 *29)*
	— in the band 401 - 470 MHz		5 *29)*
	3. *Mobile Stations:*		
	a) Ship Stations and Survival Craft Stations:		
(MOD)	— in the band 156 - 174 MHz	10	10
	— outside the band 156 - 174 MHz	50 *30) 31)*	50 *31)*
	b) Aircraft Stations	50	30 *28)*
	c) Land Mobile Stations:		
	— power 5 W or less	50	
	— power above 5 W	20	

	1	2	3
	— in the band 100 - 235 MHz		15 *29)*
	— in the band 235 - 401 MHz		7 *29) 32)*
	— in the band 401 - 470 MHz		5 *29) 32)*
	4. *Radiodetermination Stations*	50 *30) 33)*	50 *33)*
	5. *Broadcasting Stations (other than television)*	20	2 000 Hz *23)*
	6. *Broadcasting Stations (television sound and vision):*		500 Hz *24) 25)*
	— power 100 W or less	100	
	— power above 100 W	1 000 Hz	
	7. *Space Stations*		20
	8. *Earth Stations*		20
NOC	***Band:* 470 MHz to 2 450 MHz**		
NOC	***Band:* 2 450 MHz to 10 500 MHz**		
NOC	***Band:* 10.5 GHz to 40 GHz**		

Notes in the Table of Transmitter Frequency Tolerances

MOD 1) For coast station transmitters used for direct-printing telegraphy or for data transmission, the tolerance is:

- 5 Hz for narrow-band phase-shift keying;
- 15 Hz for frequency-shift keying for transmitters in use or installed before 2 January 1992;
- 10 Hz for frequency-shift keying for transmitters installed after 1 January 1992;

MOD 2) For coast station transmitters used for digital selective calling, the tolerance is 10 Hz. This tolerance applies to transmitters installed after 1 January 1992 and to all transmitters after [date of full implementation of GMDSS].

MOD 3) For ship station transmitters used for direct-printing telegraphy or for data transmission, the tolerance is:

- 5 Hz for narrow-band phase-shift keying;
- 40 Hz for frequency-shift keying for transmitters in use or installed before 2 January 1992;
- 10 Hz for frequency-shift keying for transmitters installed after 1 January 1992;

MOD 4) For ship station transmitters used for digital selective calling, the tolerance is 10 Hz. This tolerance applies to transmitters installed after 1 January 1992 and to all transmitters after [date of full implementation of GMDSS].

NOC 5) and 6)

MOD 7) For single-sideband radiotelephone transmitters except at coast stations, the tolerance is:

- 50 Hz in the bands 1 606.5 (1 605 Region 2) - 4 000 kHz and 4 - 29.7 MHz for peak envelope powers of 200 W or less and 500 W or less, respectively;
- 20 Hz in the bands 1 606.5 (1 605 Region 2) - 4 000 kHz and 4 - 29.7 MHz for peak envelope powers above 200 W and 500 W, respectively.

NOC 8) to 10)

MOD 11) For ship station single-sideband radiotelephone transmitters, the tolerance is:

a) in the band 1 606.5 (1 605 in Region 2) - 4 000 kHz:

- 100 Hz for transmitters installed before 2 January 1982;

- 50 Hz for transmitters installed after 1 January 1982;

b) in the band 4 000 - 27 500 kHz:

- 100 Hz for transmitters installed before 2 January 1978;

- 50 Hz for transmitters installed after 1 January 1978.

NOC 12) to 26)

SUP 27)

NOC 28) to 36).

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NOC

Service Documents[1]

(See Articles 10, 12, 13 17 and 26)

NOC

List I. International Frequency List

NOC

List II. List of Fixed Stations Operating International Circuits

NOC

List IV. List of Coast Stations

NOC

Part I. Tables of general or specific interest

NOC

Part II. Alphabetical index of coast stations

NOC

Part III. Particulars of coast stations

MOD

Part IV. Inland telegraph rates and rates for telegrams destined for adjacent countries, etc.

ADD The Annex containing a List of Coast Stations and Coast Earth Stations Participating in the GMDSS (see No. 2202C) shall be published as shown below:

Part A. Particulars of coast stations participating in MF, HF and VHF watch-keeping using digital selective calling techniques

Name of the coast station	Maritime mobile service identity	Emission				Service		Geographical coordinates of the transmitting antenna (longitude and latitude in degrees, minutes and seconds)	Remarks
		Frequencies (kHz or MHz)		Class	Power (kW)[3]	Mode of operation[4]	Hours of service (UTC)		
1	2	3a[1]	3b[2]	4	5	6	7	8	9

1. Transmitting frequencies.

2. Watch and/or receiving frequencies or channels.

3. In the case of directive antennas, indicate under "power" the azimuth of the direction or directions of maximum gain, in degrees, clockwise beginning from True North.

4. Indicate whether radiotelephony and/or a narrow-band direct-printing system is provided.

ADD

Part B. Particulars of coast earth stations

Name of the coast earth station	Ocean region[1]	Service			Geographical coordinates of the transmitting antenna (longitude and latitude in degrees, minutes and seconds	Remarks
		Nature of service[2]	Hours of service (UTC)	Charges[3]		
1	2	3	4	5	6	7

1. Indicate the ocean region(s) in which the service is provided.

2. Indicate whether the station is capable of providing:

   a) distress and safety communications, including distress alerting with ship earth stations capable of using direct-printing techniques only;

   b) the transmission of maritime safety information.

3. Indicate the charges, if any, applicable to subsequent distress and safety communications after the initial distress alert.

ADD

Part C. Particulars of coast stations transmitting to ships navigational and meteorological warnings and urgent information by means of narrow-band direct-printing techniques

1	2	3	4	5	6	7	8	9
Nature of the coast station	Frequencies (kHz)[1]	Call sign/identification character[2]	Times of transmission	Nature of service[3]	Language used	Power (kW)[4]	Geographical coordinates of the transmitting antenna (longitude and latitude in degrees, minutes and seconds)	Remarks

1. Indicate on which frequency(ies) information is transmitted.

2. Indicate the maritime mobile service identity number or the identification number. In the case of the international NAVTEX service, indicate the B1 character.

3. Indicate which kinds of information (navigational and meteorological warnings, ice reports, etc.) are provided.

4. In the case of directive antennas, indicate under "power" the azimuth of the direction or directions of maximum gain, in degrees, clockwise beginning from True North.

NOC

List V. List of Ship Stations

MOD

Particulars of Ship Stations and Ship Earth Stations

MOD

The information concerning these stations shall be published as shown below:

1 Name of ship	2 Call sign	3 Country	4 Auxiliary installations	5 Class of ship	6 Nature of service	7 Hours of service	8 Telegraph transmission frequency bands	9 Telephone transmission frequency bands	10 Accounting authority	11 Remarks

NOC Column 1

MOD Column 2

Call sign. This column also contains the maritime mobile service identity or the selective call number or both, where appropriate.

NOC Column 3

NOC Column 4 Auxiliary installations, including information concerning:

NOC a) number of lifeboats fitted with radio apparatus, and

MOD b) optionally, types and number of emergency position-indicating radiobeacons and search and rescue radar transponders, the operating frequency or frequency band being indicated by one of the following letters:

A =	2 182		kHz
B =	121.5		MHz
C =	243		MHz
D =	156.525		MHz
E =	406 -	406.1	MHz
F =	1 645.5 -	1 646.5	MHz
G =	9 200 -	9 500	MHz

A figure following the letter indicates the number of radiobeacons.

MOD Columns 5 to 7 In the form of service symbols (see Appendix 10). In addition, the symbols used in Column 5 to designate the class of ship are given in Part I of the List.

MOD Columns 8 and 9 Indication of the frequency bands and classes of emission by means of the following symbols:

Radiotelegraphy

S = Frequency bands used in the maritime mobile-satellite service

W =	110 -	150	kHz
X =	415 -	535	kHz
Y =	1 605 -	3 800	kHz
Z =	4 000 -	27 500	kHz

Radiotelephony

S = Frequency bands used in the maritime mobile-satellite service

T =	1 605 -	4 000	kHz
U =	4 000 -	27 500	kHz
V =	156 -	174	MHz

These symbols should, where necessary, be followed by references to brief notes and indications of the frequencies for which the transmitters are adjusted, which shall appear at the end of the List.

MOD Column 10 The accounting authority identification code (AAIC).

MOD Column 11 When two or more ship stations of the same nationality bear the same name, and no distinguishing particulars are shown in Columns 1, 2 or 5, the name of the licensee or the owner of the ship shall be given in this column.

In addition, if there is no room in the appropriate column, further information relating to Columns 1 to 10 may be given in Column 11 by means of a note reference. This column may comprise several lines.

If narrow-band direct-printing telegraphy is provided, indicate the system employed.

SUP Column 12

NOC **List VI. List of Radiodetermination and Special Service Stations**

NOC Part A. Alphabetical index of stations

NOC Part B. Particulars of stations

NOC 1 - 11

MOD 12. Fixed earth stations in the maritime radiodetermination-satellite service.

MOD Columns 3a, 3b, 3c Transmission of radiodetermination information.

MOD Columns 4a, 4b Reception of radiodetermination information.

MOD Column 7 Remarks: Special methods of modulation, charges, etc. All stations listed provide a maritime radiodetermination-satellite service except where otherwise indicated, in which case a station provides only a radiolocation or radionavigation-satellite service.

MOD 13. Space stations in the maritime radiodetermination-satellite service.

MOD Columns 2a, 2b,2c — Transmission of radiodetermination information to ships.

MOD Columns 3a, 3b — Reception of radiodetermination information from ships.

MOD Column 7 — Remarks: Orbital information, special channelling arrangements, special modulation methods, charges, etc. All stations listed provide a maritime radiodetermination-satellite service except where otherwise indicated, in which case a station provides only a radiolocation-satellite service or radionavigation-satellite service.

NOC **List VIII. List of International Monitoring Stations**

NOC **List VIIIA. List of Space Radiocommunication Stations and Radio Astronomy Stations**

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Service document symbols

ADD	FD	Aeronautical station in the aeronautical mobile (R) service
ADD	FG	Aeronautical station in the aeronautical mobile (OR) service
NOC	FA	Aeronautical station
NOC	MA	Aircraft station
ADD	TB	Aeronautical earth station
ADD	TJ	Aircraft earth station
ADD	EJ	Space station in the aeronautical mobile-satellite service
NOC	FC	Coast station
NOC	MS	Ship station
NOC	FP	Port station
MOD	TI	Coast earth station
MOD	TG	Ship earth station
NOC	EG	Space station in the maritime mobile-satellite service
MOD	TE	Typical satellite EPIRB in the mobile-satellite service
ADD	EI	Space station in the mobile-satellite service
ADD	UA	Mobile earth station
ADD	VA	Land earth station

NOC	FB	Base station
NOC	ML	Land mobile station
ADD	EU	Space station in the land mobile-satellite service
ADD	TY	Base earth station
ADD	TU	Land mobile earth station
ADD	RN	Radionavigation land station
ADD	NR	Radionavigation mobile station
NOC	RC	Non-directional radiobeacon
NOC	RD	Directional radiobeacon
NOC	RT	Revolving radiobeacon
NOC	RG	Radio direction-finding station
NOC	LR	Radiolocation land station
NOC	MR	Radiolocation mobile station
NOC	AL	Aeronautical radionavigation land station
NOC	AM	Aeronautical radionavigation mobile station
NOC	NL	Maritime radionavigation land station
NOC	RM	Maritime radionavigation mobile station
ADD	EF	Space station in the radiodetermination-satellite service
NOC	TF	Fixed earth station in the radiodetermination-satellite service
NOC	TL	Mobile earth station in the radiodetermination-satellite service

MOD	EN	Space station in the radionavigation-satellite service
MOD	TN	Fixed earth station in the radionavigation-satellite service
ADD	UM	Mobile earth station in the radionavigation-satellite service
ADD	EO	Space station in the aeronautical radionavigation-satellite service
ADD	TZ	Fixed earth station in the aeronautical radionavigation-satellite service
ADD	TO	Mobile earth station in the aeronautical radionavigation-satellite service
ADD	EQ	Space station in the maritime radionavigation-satellite service
ADD	TX	Fixed earth station in the maritime radionavigation-satellite service
ADD	TQ	Mobile earth station in the maritime radionavigation-satellite service
NOC	OD	Oceanographic data station
NOC	OE	Oceanographic data interrogation station

APPENDIX 11(Rev.)
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MOD **Documents with Which Stations on Board Ships and Aircraft Shall Be Provided**

NOC (see Articles 24, 26, 44, 46, 49, 55, 57, 59 and Appendix 9)

MOD **Section I. Ship Stations for Which a Morse Radiotelegraph Installation is Required by International Agreement**

NOC These stations shall be provided with:

NOC 1. and 2.

MOD 3. A log in which the following are recorded as they occur, together with the time of the occurrence, unless administrations have adopted other arrangements for recording all information which the log should contain:

NOC a) to g)

NOC 4. to 9.

MOD **Section II. Other Ship Stations with Morse Radiotelegraph Facilities**

NOC These stations shall be provided with the documents mentioned in items 1 to 6, 8 and 9 of Section I.

NOC **Section III. Ship Stations for Which a Radiotelephone Installation Is Required by International Agreement**

NOC These stations shall be provided with:

NOC 1. and 2.

MOD 3. A log in which the following are recorded as they occur, together with the time of the occurrence, unless administrations have adopted other arrangements for recording all information which the log should contain:

NOC a)

SUP b)

(MOD) b)

(MOD) c)

NOC 4. and 5.

NOC **Section IV. Other Ship Radiotelephone Stations**

NOC These stations shall be provided with:

NOC 1. and 2.

NOC **Section V. Ship Stations Equipped with Multiple Installations**

NOC These stations shall be provided with:

NOC 1. and 2.

ADD **Section VA. Stations on Board Ships for which a GMDSS Installation is Required by by International Agreement**

These stations shall be provided with:

1. the license prescribed by Article 24;

[2. the operators' certificates;]

3. a log in which the following are recorded as they occur, together with the time of their occurrence, unless administrations have adopted other arrangements for recording all information which the log should contain:

   a) a summary of communications relating to distress, urgency and safety traffic;

   b) a reference to important service incidents;

   c) if the ship's rules permit, the position of the ship at least once a day;

4. the Alphabetical List of Call Signs and/or Numerical Table of Identities of Stations Used by the Maritime Mobile Service and Maritime Mobile-Satellite Service (Coast, Coast Earth, Ship, Ship Earth, Radiodetermination and Special Service Stations), Ship and Ship Earth Stations, Maritime Mobile Service Identities and Selective Call Numbers or Signals, and Coast and Coast Earth Stations, Maritime Mobile Service Identities and Identification Numbers or Signals (List VIIA);

5. the annex referred to in No. 2202C giving the particulars of coast stations and coast earth stations participating in the GMDSS (see also N 3038 and N 3038B); a list of coast stations and coast earth stations with which communications are likely to be established, showing watch-keeping hours, frequencies and charges; and a list of coast stations and coast earth stations providing navigational and meteorological warnings and other urgent information for ships (see Article 26 and Appendix 9);

6. the List of Ship Stations (the carriage of the supplement is optional);

7. the Manual for Use by the Maritime Mobile and Maritime Mobile-Satellite Services.

Note - Administrations may, under appropriate circumstances (for example, when ships are sailing only within range of VHF coast stations) exempt ships from the carriage of the documents mentioned in paragraphs 4 to 7 above.

MOD **Section VI. Stations on Board Aircraft**

NOC These stations shall be provided with:

NOC 1.

MOD 2. a log, unless administrations have adopted other arrangements for recording all information which a log should contain;

NOC 3.

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MOD **Maritime Mobile Service Identities**[1]

NOC 1. and 1.1

NOC 1.2

MOD 1.3 These identities are formed in such a way that the identity or part thereof can be used by telephone and telex subscribers connected to the general telecommunications network principally to call ships automatically in the shore-to-ship direction.

MOD 1.4 There are four kinds of maritime mobile service identities:

i) ship station identities,

ii) group ship station call identities,

iii) coast station identities,

iv) group coast station call identities.

NOC 1.5

NOC 2. Maritime Identification Digits (MID)

MOD 2.1 Table 1 gives the Maritime Identification Digits (MID) allocated to each country. In accordance with No. **2087**, the Secretary-General is responsible for allocating Maritime Identification Digits to countries not included in this table. No. **2087A** authorizes the Secretary-General to allocate additional MIDs to countries in accordance with this appendix within the limits specified,[2] provided that he is satisfied that the possibilities offered by the MIDs allocated to an administration will soon be exhausted despite judicious ship station identity assignment as outlined in 3.1 below and in conformity with the guidelines contained in the relevant CCIR and CCITT Recommendations.

ADD 2.2 A single MID has been allocated to each country. A second MID should not be requested unless the MID first allocated is more than 80% exhausted in the basic category of three trailing zeros and the rate of assignments is such that 90% exhaustion is foreseen. The same criteria should be applied to subsequent requests for MIDs.

ADD [1]In this Appendix, a reference to a ship station or a coast station may include the respective earth stations.

ADD [2]In no circumstances may a country claim more MIDs than the total number of its ship stations shown in the ITU List of Ship Stations (List V) divided by 1000.

ADD 2.3 These guidelines do not require an administration to assign numerical identities until it determines that such identities are necessary. They do not concern the assignment of ship station identities without trailing zeros, since it is assumed that there is enough capacity inherent in the system to provide for the assignment of such identities to all ship stations which an administration may wish to identify in this manner.

NOC 3. Ship Station Identities

ADD 3.1 Administrations should:

ADD 3.1.1 follow the guidelines contained in the relevant CCIR and CCITT Recommendations for the assignment of ship station identities;

ADD 3.1.2 make optimum use of the possibilities of forming identities from the single MID allocated to them;

ADD 3.1.3 take particular care in assigning ship station identities with six significant digits (three-trailing-zero identities), which should be assigned only to ship stations which can reasonably be expected to require such an identity for automatic access on a world-wide basis for public switched networks;

ADD 3.1.4 assign one-trailing-zero or two-trailing-zero identities to vessels when they require automatic access only on a national or regional level, as defined in the relevant CCITT Recommendations;

ADD 3.1.5 assign ship station identities without trailing zeros to all other vessels requiring a numerical identification.

(MOD) 3.2 The 9-digit code constituting a ship station identity is formed as follows:

$$M_1\ I_2\ D_3\ X_4\ X_5\ X_6\ X_7\ X_8\ X_9$$

wherein

$$M_1\ I_2\ D_3$$

represent the Maritime Identification Digits and X is any figure from 0 to 9.

MOD

4. Group Ship Station Call Identities

Group ship station call identities for calling simultaneously more than one ship are formed as follows:

$0_1\ M_2\ I_3\ D_4\ X_5\ X_6\ X_7\ X_8\ X_9$

where the first figure is zero and X is any figure from 0 to 9.

The particular MID represents only the country assigning the group ship station call identity and so does not prevent group calls to fleets containing more than one ship nationality.

NOC

5.

ADD

6. Group Coast Station Call Identities

Group coast station call identities for calling simultaneously more than one coast station are formed as a subset of coast station identities, as follows:

$0_1\ 0_2\ M_3\ I_4\ D_5\ X_6\ X_7\ X_8\ X_9$

where the first two figures are zeros and X is any figure from 0 to 9.

The particular MID represents only the country assigning the group coast station call identity. The identity may be assigned to stations of one administration which are located in only one geographical region as indicated in the relevant CCITT Recommendation.

NOC

TABLE 1

RESOLUTION COM5/4

Relating to the Use of the Frequency 4 209.5 kHz for NAVTEX-type Transmissions in the Maritime Mobile Service

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

a) that, inter alia, high atmospheric noise levels in the 500 kHz band, mainly in the tropical and sub-tropical regions, will limit the range at which NAVTEX signals transmitted on 518 kHz can be received in these regions;

b) that atmospheric noise levels in the tropical and sub-tropical regions are significantly lower in the 4 MHz band than at 518 kHz;

c) that a non-paired narrow-band direct-printing (NBDP) channel in the 4 MHz maritime mobile band is needed to provide such transmissions in a predominantly ground wave mode;

noting

a) that NAVTEX-type transmissions include navigational and meteorological warnings and urgent information to ships;

b) that the International Maritime Organization (IMO) has agreed that there is a need for NAVTEX-type transmissions on a 4 MHz NBDP channel;

recognizing

a) that the frequency 4 209.5 kHz has been designated by this Conference exclusively for these purposes specified in considering c);

b) that the IMO, the World Meteorological Organization (WMO) and the International Hydrographic Organization (IHO) are the competent organizations to develop a plan for the global use of the HF NBDP marine NAVTEX-type transmission channel;

resolves to invite the IMO, WMO and IHO

1. to develop jointly, in consultation with the IFRB, a plan for the global coordination of NAVTEX-type transmissions using NBDP techniques;

2. to assume joint responsibility for maintaining the plan in consultation with the IFRB;

urges administrations

which need to use this channel to assign the frequency in conformity with the procedures set out in Resolution [COM4/12] and the Recommendations of the IMO, WMO and IHO for that part of the system over which they hold jurisdiction;

invites the Administrative Council

to place this Resolution on the agenda of the next competent world administrative radio conference for review and any other action that may be required;

invites the CCIR

to develop the technical characteristics to allow these transmissions to be received using automated techniques;

instructs the Secretary-General

to communicate this Resolution to the IMO, IHO and WMO for consideration and comments.

RESOLUTION COM6/3

Relating to Technical Cooperation with Developing Countries in the Field of Aeronautical Telecommunications

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

[a) that the allocations of the frequency bands and the provisions concerning the various aeronautical mobile services have been revised;]

[b) that some of these frequency bands and provisions are intended for the world-wide implementation of new aeronautical telecommunication systems;]

c) that these new systems will employ more advanced techniques, such as satellite communications, in combination with modern information transmission media;

d) that this technological modernization should serve to improve the safety and regularity of international civil aviation, the accuracy and security of aeronautical radionavigation and the efficiency of distress and rescue systems;

e) that the developing countries may require assistance in improving the training of technical staff, as well as in introducing new systems, in coping with technological modernization and enhancing the operation of aeronautical telecommunications;

recognizing

the value of the assistance which, in conjunction with other international organizations, the Union has provided and may continue to provide to developing countries in the field of telecommunications;

instructs the Secretary-General

1. to encourage ICAO to continue its assistance to developing countries which are endeavouring to improve their aeronautical telecommunications, in particular by providing them with technical advice for the planning, establishment, operation and maintenance of equipment, as well as help with the training of staff, essentially in matters relating to the new technologies;

2. for this purpose, to seek the continued collaboration of ICAO, the United Nations Conference for Trade and Development (UNCTAD) and other specialized agencies of the United Nations, as appropriate;

3. to inform ICAO that this Conference has recognized the valuable cooperation provided by that organization to developing countries in its technical assistance programmes;

4. to continue to give special attention to seeking the aid of the United Nations Development Programme (UNDP) and other sources of financial support, to enable the Union to render sufficient and effective technical assistance in the field of aeronautical telecommunications;

invites the developing countries

so far as possible, to give a high level of priority to and include in their national programmes of requests for technical assistance projects relating to aeronautical telecommunications and to support multinational projects in that field.

RECOMMENDATION COM5/A

Relating to the Identification and Location of Special Vessels, such as Medical Transports, by Means of Standard Maritime Radar Transponders

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

a) the desirability of implementing modern techniques in standard maritime radar transponders for the identification and location of vessels at sea;

b) Radio Regulations 3219A and N 3219A, which provide that the identification and location of medical transports at sea may be effected by means of appropriate standard maritime radar transponders;

c) that transponders designed to be compatible with radiolocation radars are not necessarily compatible with radars used by the maritime and aeronautical radionavigation services; nor is their coding for identification technically defined;

d) that if maritime radar transponders of the type described in CCIR Report 775-2 and CCIR Recommendations 628 and 630, or using the technology described in CCIR Report 774-2, were to be encoded for the identification of special vessels such as medical transports, they would probably be incompatible with most radiolocation radars;

invites the CCIR

to study the question of the identification and location of special vessels such as medical transports by means of standard maritime radar transponders, taking into account also the technical and economic impact of their introduction;

invites administrations

to provide the CCIR with information on this question;

requests the Administrative Council

to include this Recommendation in the agenda of the next competent world administrative radio conference for review and, if appropriate, to amend the Radio Regulations.

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 464-E
8 February 1988
Original: English

PLENARY MEETING

MINUTES

OF THE

NINTH PLENARY MEETING

Wednesday, 14 October 1987, at 1810 hrs

Chairman : Mr. J.W. EGAN (Canada)

Subjects discussed:		Documents
1.	Report by the Chairman of Committee 6 (continued)	438 + Corr.1
2.	Note from the Chairman of Committee 6 to the Plenary	433 + Corr.1
3.	Amendment to the Seventh Series of texts submitted by the Editorial Committee to the Plenary Meeting (B.7)	336

1. Report by the Chairman of Committee 6 (Document 438 + Corr.1) (continued)

General comments on Article 56 (continued)

1.1 The delegate of China said that it was stipulated in Radio Regulations 3911, 3912, 3921 and 3922 that general operators and first- and second-class radiotelegraph operators must have a knowledge of on-board maintenance and repair. Article 56 of the Radio Regulations stipulated the class and number of operators for ship stations in various categories. The Chinese experience was that those provisions were necessary to ensure the safety of navigation.

China's ocean-going ships beyond MF range had been equipped with duplicate equipment; however, experience showed that under very adverse conditions, both sets of equipment might break down. In those conditions, technicians capable of maintaining and repairing the equipment played a decisive role in maintaining safety. China did not require that there should be a professional on board every ship, it merely considered it desirable to have personnel with certain qualifications who could do other work at other times but in an emergency could repair equipment vital for safety. China considered such a requirement both reasonable and necessary.

1.2 The delegate of Liberia said that, although Liberia was a developing country, it had been involved in international shipping for almost 40 years. During those years, it had developed a professional and internationally acceptable safety record in the area of radiocommunication. Articles 55 and 56 had served Liberia well in ensuring acceptable equipment availability on its vessels.

The knowledge and carriage requirements in the SOLAS and STCW Conventions of the IMO had supplied important guidance in certifying personnel for Liberian vessels. Liberia held that the IMO was the principal United Nations specialized agency responsible for shipping and maritime matters.

Many of the mandatory provisions contained in Document 232 would, if adopted, lead to increased operating costs and an increase world-wide in the cost of living; they would in no way assist developing countries, rather, they would be an unnecessary financial burden in terms of additional personnel training and the enforcement of unwarranted regulations. Many of the provisions in Document 232 were, in his view, impractical, inflexible, insensitive and unacceptable.

Liberia considered that Document 438 was both practical and workable, respecting the sovereign rights of administrations, enabling them to choose the method best suited to their needs and ensuring equipment availability on vessels under their jurisdiction in keeping with international agreements.

1.3 The delegate of Greece recalled that the IMO had been unable to reach a decision on operation and maintenance of radio equipment, and had therefore been unable to make any relevant recommendation to the ITU; agreement had, however, almost been reached in December 1986, the stumbling-block being the refusal of some administrations to accept that the concept of maintenance should appear in the recommendation. The decision of the IMO on flexibility had been taken after discussion on a proposal by the Netherlands on limited flexibility in the course of which approximately eight administrations had spoken for, and three against. That decision, however, would eventually apply to ships falling under the scope of the SOLAS Convention whereas many more ships fell within the purview of the ITU.

The personnel required by Document 232 was available, and there were training facilities operating throughout the world. The philosophy behind Document 232 was that technology alone could not ensure safety and freedom from harmful interference at sea; it was believed that they could be achieved only by recognizing, firstly, the importance of experience: Greece had many years' experience of its system of on-board maintenance which, although not perfect, was effective and proven. That experience was a vital part of the existing Radio Regulations. Technology might one day become so reliable that it would no longer be necessary to maintain radionavigation equipment at sea, but that day was far in the future. The second factor which must be recognized was the human factor: a high technology solution was being offered in which people and their skills were ignored. Greece advocated skill, discipline and professionalism; human beings would repair defective equipment at sea where it was needed, thus achieving maximum availability. Lives would be saved and destructive interference avoided. Greece would not permit lives to be risked in order to introduce novel and theoretical techniques into the Radio Regulations, and did not believe that expensive, space-age technology should be used in the maritime environment on its own. On-board maintenance, which was a minimum and basic requirement, was a mainstay of the Radio Regulations, as shown by Articles 23, 35 and 44 of the Convention; it best served large vessels far from port out of the range of MF facilities, where it should be compulsory. The GMDSS would in that way become the valuable safety system which Greece desired.

Some delegates had said that the major concern was an economic one; that being the case, the needs of the less technologically and economically developed countries must be addressed: a system must be provided which would make use of their most valuable resource, their human resource, and which enabled them to employ their own technicians, engineers and GMDSS manufacturing and servicing facilities. Through education and wise investment in their own people, those countries would become the prosperous and technologically advanced countries of the future. In respect of Article 56, Greece believed that the proposals contained in Document 232 were sound and as flexible as they could be, while at the same time providing the maximum safety; they contained the elements of the desired solution, and were intended to regulate, not to deregulate.

1.4 The delegate of Papua New Guinea said that his country was a large island close to the equator surrounded by many hundreds of other, smaller islands; there was a history of hundreds of years of trade between those islands and the mainland in craft of native build. Papua New Guinea and the other Pacific Island States were extremely dependent on their shipping for the movement of passengers and cargo, the distribution of medicines, the transportation of the sick and injured, and the carriage of mail and news. Shipping was a vital means of communication for Papua New Guinea and vital for its development; it had an expanding merchant fleet of some 600 vessels which did not observe the SOLAS Convention, primarily because of the coastal voyages they made. However, all those vessels were fitted with radio equipment; due to the extremely high noise levels and poor propagation conditions at the equator, those vessels relied completely on HF radiotelephony, and consequently even their coastal voyages would be classified as area A3. The operators were

generally ships' captains or crew members who held radiotelephone certificates as provided for in existing Regulation 3986 e). Equipment availability was ensured in Papua New Guinea primarily by equipment duplication and shore-based maintenance; there were annual radio surveys and random inspections of radio installations to ensure that the equipment was functioning. Vessels were prevented from sailing if the radio installation was inadequate. In Papua New Guinea's experience, as in the experience of many of its Pacific neighbours, those procedures had always proved satisfactory, and had ensured the safety of life at sea. To increase the scope of the existing regulations to include a maintenance function would require a clear demonstration of need: Papua New Guinea had been unable to see any such demonstration during the course of the Conference, and considered that retraining its existing operators would place an intolerable burden on its shipowners, its education system and on its administration. Carriage requirements and marine regulation was the purview of the IMO; Papua New Guinea would participate in further discussions on that subject in that forum. Should maintenance provisions be introduced by WARC-87, it would be extremely difficult for Papua New Guinea's Administration to enforce them.

ADD...Section III (title)

1.5 The Chairman of Committee 6 drew attention to the fact that as an editorial consequence of decisions taken with regard to the detailed regulations in that Section, the word "operators" in the title, and perhaps in other parts of the document also, should be replaced by "personnel".

ADD 3986 AA

1.6 The Chairman of Committee 6 said that, as noted in the eighth Plenary meeting, the text of the provision should read:

> "Administrations shall ensure that the personnel of ship stations and ship earth stations are adequately qualified to enable efficient operation of the station, and shall take steps to ensure efficient operation of the station and shall take steps to ensure the operational availability and maintenance of equipment for distress and safety communications in accordance with the relevant international agreements and for public correspondence."

1.7 The delegate of Sweden, supported by the delegates of Norway, Finland, Spain, Argentina, Swaziland, Libya and Saudi Arabia, said it was his understanding that Committee 6 had intended to include the words "operational availability" as well as "maintenance" in the second part of the sentence, the delegate of Greece considering that replacement of "maintenance" by "availability and maintenance" would be acceptable.

With replacement of the word "maintenance" by "operational availability and maintenance", the above text of ADD 3986AA was approved.

ADD 3986AB

1.8 In reply to a question from the delegate of Cuba, the delegates of Spain and Brazil said that the Spanish text only, from which the word "dedicated" had been removed, should be aligned on the English text.

1.9 The delegate of Finland said there was a case for deleting the paragraph altogether since it was somewhat absurd to expect that on small boats with only one person on board (which had access to the frequencies and techniques of Chapter N IX), that person should be dedicated to communications to the detriment of any other measures required to ensure his own safety.

ADD 3986AD

1.10 The Chairman invited delegates to consider as a basis for discussion the text: "on stations on board ships which sail beyond the range of MF coast stations: one operator holding a first-class or second-class radio electronic certificate".

1.11 The delegate of Greece proposed that that text be adopted; he pointed out that the requirement would also be applicable for non-Convention ships.

1.12 The delegate of Norway said that in the past there had never been any mandatory requirement for any ship to carry personnel qualified to perform all types of repair to all types of radio equipment and such a requirement would represent a departure from the traditions of the Radio Regulations. It should also be borne in mind that IMO would soon complete its work on maintenance requirements so that introduction in the Radio Regulations of such a provision as proposed might adversely affect the possibility of arriving at a suitable compromise at IMO. He therefore proposed that the same minimum qualification as that required under ADD 3986AE - a general operator's certificate - should be adopted. He drew attention to the fact that his proposal should be considered in the light of what was stated in ADD 3986AA.

1.13 The delegate of Spain said that, bearing in mind the different situations under which ships sailed beyond the range of MF coast stations, particularly in tropical areas, the requirement might be for a first-class or second-class radio electronic certificate for ships going beyond 200 miles or in excess of 1 600 tons and for a general operator's certificate for others. The delegates of Brazil, Costa Rica and Morocco supported that proposal.

1.14 The delegate of the Federal Republic of Germany proposed that requirements should be for a general operator's certificate together with a second-class technical certificate and equipment duplication or shore-based maintenance. As an alternative he could also accept a second-class radio electronic certificate.

1.15 The delegate of the USSR drew attention to the high cost of equipment duplication and the desirability of on-board maintenance. The person responsible for communication on board and radionavigation and maintenance should have at least a second-class radio electronic certificate.

1.16 The delegate of Japan pointed out that the general operator's certificate required the same operational ability as did the first-class radio electronic certificate and that the second-class technical certificate required the same technical ability as did the second-class radio electronic certificate.

1.17 The delegate of the United Kingdom supported the proposal of the delegate of Norway, bearing in mind that administrations were free to impose stricter requirements if they so wished. The delegate of the United States supported the Norwegian proposal, while pointing out, in reply to the Soviet delegate's comments, that duplication of equipment as defined by IMO only affected some 10% of equipment. The delegates of Japan, Denmark, Netherlands, Australia, Finland, Canada, Papua New Guinea and Australia also supported the Norwegian proposal.

1.18 The delegate of Argentina said that the minimum requirements should be a second-class radio electronic certificate with on-board maintenance. The delegate of China supported the proposal for a first- or second-class radio

electronic certificate, particularly in view of the need to ensure on-board maintenance. The delegates of India, Yugoslavia, Cuba, Algeria, Turkey, Swaziland, Tunisia, Indonesia, Madagascar, Sri Lanka, Surinam and Uruguay also supported the Greek proposal.

1.19 The delegate of Spain withdrew his proposal.

1.20 The delegate of Kuwait tabled a motion for closure of debate, to be followed by a vote, in accordance with No. 519 of the Convention.

1.21 The Chairman said that in the absence of any opposition to the motion, the proposals would be put to the vote, in accordance with No. 571 of the Convention, in the order Norway, Federal Republic of Germany, Greece.

1.22 The delegates of Norway, Sweden, Portugal, Australia and the United States, acting under No. 551 of the Convention, requested a secret ballot on the Norwegian proposal.

1.23 The delegates of Cyprus, Kenya and Sweden were appointed tellers.

The text proposed by Norway, reading:

"Ship stations on board ships which sail beyond the range of MF coast stations: one operator holding a first- or second-class radio electronic certificate or a general operator's certificate";

was put to the vote by secret ballot of Members present and entitled to vote and was rejected by 21 votes for, 57 against and 1 abstention.

1.24 The delegates of the United States, the United Kingdom, the Federal Republic of Germany, Denmark, Malta and France requested a secret ballot on the Federal Republic of Germany's proposal.

1.25 In answer to a request for clarification from the delegate of Japan, the delegate of the Federal Republic of Germany said that the first two certificates mentioned in his proposal could be held either by the same person or by two different persons.

The text proposed by the Federal Republic of Germany, reading:

"Ship stations on board ships which sail beyond the range of MF coast stations: a general operator's certificate plus a second-class technical certificate, or as an alternative a second-class radio electronic certificate";

was put to the vote by secret ballot of Members present and entitled to vote and was rejected by 35 votes for, 42 against and 2 abstentions.

1.26 The delegates of Greece, Spain, Tunisia, Argentina, Turkey and Oman requested a secret ballot on Greece's proposal.

The text proposed by Greece, reading:

"Ship stations on board ships which sail beyond the range of MF coast stations: one operator holding a first- or second-class radio electronic certificate";

was put to the vote by secret ballot of Members present and entitled to vote and was adopted by 56 votes for, 22 against and 1 abstention.

ADD 3986AE and ADD 3986AF were approved.

ADD 3986AG, ADD 3986AH, ADD 3986 AI

1.27 After some discussion of paragraphs ADD 3986AI and 3986AH separately, ADD 3986AI was accepted as it stood. ADD 3986AH, however, was opposed by the delegate of Australia with the support of the delegates of Papua New Guinea and New Zealand, because of the particular propagation problems experienced in the tropics.

1.28 The delegate of the Federal Republic of Germany proposed that the words "and which are fitted with other than VHF equipment" be added after "coast stations".

1.29 The delegate of Norway proposed that ADD 3986AG be amended by replacing all text after "shall" by "be adequately qualified and certificated in accordance with the requirements of the Administration."

1.30 The delegate of the USSR, supported by the delegates of the Federal Republic of Germany, Algeria, Togo and Greece, called for a show of hands on the two proposals.

1.31 The Chairman observed 44 delegations in favour of the Norwegian proposal and 38 in favour of the proposal by the Federal Republic of Germany.

The Norwegian proposal was thus adopted.

Draft Article 56, as amended in discussion, was approved.

2. Note from the Chairman of Committee 6 to the Plenary
(Document 433 + Corr.1)

Article 55

2.1 The Chairman of Committee 6 said that a substantive decision was required from the Plenary with regard to the square brackets in paragraph AA 3949FC.

It was decided to defer consideration of the point until the text was before the Plenary for first reading.

2.2 The Chairman pointed out that draft new Article 55 (Document 438) made provision for a smaller number of certificates than appeared in the present text of draft new Article 56. He suggested, with the support of the delegates of Finland and Norway, that the superfluous certificates be deleted from the latter text.

2.3 A discussion ensued in which the delegate of the United States said that care should be taken not to delete anything that might have reference to the unmodified part of existing Article 55, the delegate of Japan said that some administrations would find it advantageous to be able to make use of some of the certificates involved, which should thus be retained, and the delegate of Spain, supported by the delegate of Greece, said that although new Article 55 should not contain more certificates than required by new Article 56, administrations should be given the freedom to recruit whatever technicians they considered necessary.

In the light of the discussion, it was decided that a small Drafting Group under the chairmanship of the Chairman of Committee 6 would review the draft text of new Article 55 and place any certificates that could be considered redundant in the light of proposed new Article 56 in square brackets for a final decision on retention or deletion when the text came to be considered by the Plenary in first reading.

MOD Section II (title)

2.4 The delegate of Sweden said that in the title the word "personnel" should read "operators" since that section was not affected by the modifications to Section IIA. Furthermore, a remark that also applied to MOD Section II (title) in draft Article 56 (Document 438), the last phrase of the title reading "using the frequencies and techniques prescribed in Chapter IX" was too restrictive; the text of Section II was the only one which made provision for public correspondence with the result that the needs of new stations with regard to public correspondence would not be covered anywhere its application were confined to existing stations operating under old Chapter IX.

It was decided to ask the Drafting Group to take those points into consideration in their review of proposed new Article 55.

With the exceptions above, the text of proposed new Article 55 was approved.

3. Amendment to the Seventh Series of texts submitted by the Editorial Committee to the Plenary Meeting (B.7) (Document 336)

3.1 The Chairman of Committee 6, referring to the above series of texts as approved by the sixth Plenary meeting, drew the Plenary's attention to the fact that because of the precise definition given to the term "service" in the Radio Regulations, the text of ADD 2842A should be amended to read:

> "(2A) Where a radio direction-finding station, as defined in RR 13, operates in the band between 156.0 MHz and 174.0 MHz, it should be able to .....",

the rest of the paragraph remaining unchanged.

It was so agreed.

The meeting rose at 2350 hours.

The Secretary-General: R.E. BUTLER

The Chairman: J.W. EGAN

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MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 465-E
14 October 1987

B.21

PLENARY MEETING

TWENTY-FIRST 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	Documents	Title
COM.4	373 (454) 377 (437) 389 (437) 394 (454) 412 (437) 413 (437) 437 444	Article 8

Y.C. MONGELARD
Chairman of Committee 7

Annex: 17 pages

MOD 472 The frequency 500 kHz is an international distress and calling frequency for Morse radiotelegraphy. The conditions for its use are prescribed in Articles 37, 38, N 38 and 60.

MOD 472A In the maritime mobile service, the frequency 490 kHz is, from the date of full implementation of the GMDSS (see Resolution COM5 [1]), to be used exclusively for the transmission by coast stations of navigational and meteorological warnings and urgent information to ships, by means of narrow-band direct-printing telegraphy. The conditions for use of the frequency 490 kHz are prescribed in Articles N 38 and 60, and Resolution [COM4/12]. In using the band 415 - 495 kHz for the aeronautical radionavigation service, administrations are requested to ensure that no harmful interference is caused to the frequency 490 kHz.

MOD 474 The conditions for the use of frequency 518 kHz by the maritime mobile service are prescribed in Articles 38, N 38 and 60 [(see Resolution [COM4/3] and Article 14A)].

MOD 500 The carrier frequency 2 182 kHz is an international distress and calling frequency for radiotelephony. The conditions for the use of the band 2 173.5 - 2 190.5 kHz are prescribed in Articles 37, 38, N 38 and 60.

MOD 500A The frequencies 2 187.5 kHz, 4 207.5 kHz, 6 312 kHz, 8 414.5 kHz, 12 577 kHz and 16 804.5 kHz are international distress frequencies for digital selective calling. The conditions for the use of these frequencies are prescribed in Article N 38.

MOD 500B The frequencies 2 174.5 kHz, 4 177.5 kHz, 6 268 kHz, 8 376.5 kHz, 12 520 kHz and 16 695 kHz are international distress frequencies for narrow-band direct-printing telegraphy. The conditions for the use of these frequencies are prescribed in Article N 38.

MOD 501 The carrier frequencies 2 182 kHz, 3 023 kHz, 5 680 kHz, 8 364 kHz and the frequencies 121.5 MHz, 156.8 MHz and 243 MHz may also be used, in accordance with the procedures in force for terrestrial radiocommunication services, for search and rescue operations concerning manned space vehicles. The conditions for the use of the frequencies are prescribed in Articles 38 and N 38.

The same applies to the frequencies 10 003 kHz, 14 993 kHz and 19 993 kHz, but in each of these cases emissions must be confined in a band of ± 3 kHz about the frequency.

MOD 505 The carrier (reference) frequencies 3 023 kHz and 5 680 kHz may also be used, in accordance with Articles 38 and N 38 by stations of the maritime mobile service engaged in coordinated search and rescue operations.

ADD 518A The frequency 4 209.5 kHz is used exclusively for the transmission by coast stations of meteorological and navigational warnings and urgent information to ships by means of NBDP techniques (see Resolution [COM5/4]).

MOD 520 The conditions for the use of the carrier frequencies 4 125 kHz and 6 215 kHz are prescribed in Articles 37, 38, N 38 and 60.

ADD 520B The frequencies 4 210 kHz, 6 314 kHz, 8 416.5 kHz, 12 579 kHz, 16 806.5 kHz, 19 680.5 kHz, 22 376 kHz, 26 100.5 kHz are the international frequencies for the transmission of Maritime Safety Information (MSI) (see Resolution COM5/5, Appendix 31(Rev.)).

The new footnote 520B has to be included in the bands 4 063 - 4 438 kHz, 6 200 - 6 525 kHz, 8 195 - 8 815 kHz, 12 230 - 13 200 kHz, 16 360 - 17 410 kHz, 19 680 - 19 800 kHz, 22 000 - 22 855 kHz and 26 100 - 26 175 kHz.

MOD 529A The conditions for the use of the carrier frequency 8 291 kHz, 12 290 kHz and 16 420 kHz are prescribed in Articles 38, N 38 and 60.

kHz
18 030 - 19 990

	Allocation to Services		
	Region 1	Region 2	Region 3
MOD	18 168 - 18 780	FIXED Mobile except aeronautical mobile	

MHz
68 - 75.2

Allocation to Services		
Region 1	Region 2	Region 3
74.8 - 75.2	AERONAUTICAL RADIONAVIGATION	
MOD	572 572A	

ADD 572A Additional allocation: in Afghanistan, the Federal Republic of Germany, Austria, Belgium, Cyprus, Denmark, Egypt, Spain, France, Israel, Italy, Japan, Jordan, Malta, Morocco, Mauritania, Monaco, Norway, the United Kingdom, Sweden, Switzerland, Syria and Turkey, the band 74.8 - 75.2 MHz is also allocated to the mobile service on a secondary basis subject to agreement obtained under the procedure set forth in Article 14.

In order to ensure that harmful interference is not caused to stations of the aeronautical radionavigation service, stations of the mobile service shall not be introduced in the band until it is no longer required for the aeronautical radionavigation service by any administration which may be identified in the application of Article 14.

MHz
108 - 138

Allocation to Services		
Region 1	Region 2	Region 3
108 - 117.975	AERONAUTICAL RADIONAVIGATION	
MOD	590A	

ADD 590A Additional allocation: in Afghanistan, the Federal Republic of Germany, Austria, Cyprus, Denmark, Egypt, Spain, France, Israel, Italy, Japan, Jordan, Malta, Morocco, Mauritania, Monaco, Norway, the United Kingdom, Sweden, Switzerland, Syria and Turkey, the band 108 - 117.975 MHz is also allocated to the mobile service on a secondary basis subject to agreement obtained under the procedure set forth in Article 14.

In order to ensure that harmful interference is not caused to stations of the aeronautical radionavigation service, stations of the mobile service shall not be introduced in the band until it is no longer required for the aeronautical radionavigation service by any administrations which may be identified in the application of Article 14.

MOD 593 In the band 117.975 - 136 MHz, the frequency 121.5 MHz is the aeronautical emergency frequency and, where required, the frequency 123.1 MHz is the aeronautical frequency auxiliary to 121.5 MHz. Mobile stations of the maritime mobile service may communicate on these frequencies under the conditions laid down in Articles 38 and N 38 for distress and safety purposes with stations of the aeronautical mobile service.

MHz
144 - 150.05

Allocation to Services		
Region 1	Region 2	Region 3
149.9 - 150.05	RADIONAVIGATION-SATELLITE	
MOD	609 609A	

ADD 609A Recognizing that the use of the band 149.9 - 150.05 MHz by the fixed and mobile services may cause harmful interference to the radionavigation-satellite service, administrations are urged not to authorize such use in application of No. 342.

MHz
235 - 335.4

Allocation to Services		
Region 1	Region 2	Region 3
328.6 - 335.4 AERONAUTICAL RADIONAVIGATION		
MOD 645 645A		

MOD 642 The frequency 243 MHz is the frequency in this band for use by survival craft stations and equipment used for survival purposes (see Article 38).

ADD 645A Additional allocation: in Afghanistan, the Federal Republic of Germany, Austria, Belgium, Cyprus, Denmark, Egypt, Spain, France, Israel, Italy, Japan, Jordan, Malta, Morocco, Mauritania, Monaco, Norway, the United Kingdom, Sweden, Switzerland, Syria and Turkey, the band 328.6 - 335.4 MHz is also allocated to the mobile service on a secondary basis subject to agreement obtained under the procedure set forth in Article 14.

In order to ensure that harmful interference is not caused to stations of the aeronautical radionavigation service, stations of the mobile service shall not be introduced in the band until it is no longer required for the aeronautical radionavigation service by any administration which may be identified in the application of Article 14.

MHz
335.4 - 401

Allocation to Services		
Region 1	Region 2	Region 3
399.9 - 400.05	RADIONAVIGATION-SATELLITE	
MOD	609 641A	

ADD 641A Recognizing that the use of the band 399.9 - 400.05 MHz by the fixed and mobile services may cause harmful interference to the radionavigation satellite service, administrations are urged not to authorize such use in application of No. 342.

MHz
401 - 420

Allocation to Services		
Region 1	Region 2	Region 3
406 - 406.1	MOBILE-SATELLITE (Earth-to-space)	
MOD	649 649A	

MOD 649 The use of the band 406 - 406.1 MHz by the mobile-satellite service is limited to low power satellite emergency position-indicating radiobeacons (see also Articles 38 and N 38).

ADD 649A Any emission capable of causing harmful interference to the authorized uses of the band 406 - 406.1 MHz is prohibited.

MHz
1 215 - 1 240

Allocation to Services		
Region 1	Region 2	Region 3
1 215 - 1 240	RADIOLOCATION RADIONAVIGATION-SATELLITE (space-to-Earth) 710	
MOD	711 712 712A 713	

ADD 712A Additional allocation: In Cuba, the band 1 215 - 1 300 MHz is also allocated to the radionavigation service on a primary basis subject to the agreement obtained under the procedure set forth in Article 14.

MHz
1 240 - 1 300

1 240 - 1 260	RADIOLOCATION RADIONAVIGATION-SATELLITE (space-to-Earth) 710 Amateur	
MOD	711 712 712A 713 714	
1 260 - 1 300	RADIOLOCATION Amateur	
MOD	664 711 712 712A 713 714	

MHz
1 525 - 1 530

MOD

Allocation to Services		
Region 1	Region 2	Region 3
	1 525 - 1 530 SPACE OPERATION (space-to-Earth) Earth-Exploration Satellite Fixed Mobile 723 722 723A	

ADD 723A Different category of service: In Cuba, the band 1 525 - 1 530 MHz is allocated to the aeronautical mobile service on a primary basis, under the conditions specified in No. 723.

ADD 726A The bands 1 530 - 1 544 MHz, 1 545 - 1 559 MHz, 1 626.5 - 1 645.5 MHz and 1 646.5 - 1 660.5 MHz shall not be used for feeder links of any service. In exceptional circumstances, however, an earth station at a specified fixed point in any of the mobile-satellite services may be authorized by an administration to communicate via space stations using these bands.

ADD 726B The use of the band 1 544 - 1 545 MHz by the mobile-satellite service (space-to-Earth) is limited to distress and safety communications (see Article N 38).

MOD 728 The use of the band 1 645.5 - 1 646.5 MHz by the mobile-satellite service (Earth-to-space) and for intersatellite links is limited to distress and safety communications (see Article N 38).

MHz
1 559 - 1 626.5

Allocation to Services		
Region 1	Region 2	Region 3
1 610 - 1 626.5 AERONAUTICAL RADIONAVIGATION 734A 734E 734AA 722 727 730 732 733 734 734B	1 610 - 1 626.5 AERONAUTICAL RADIONAVIGATION RADIODETERMINATION-SATELLITE (Earth-to-space) 734A 734E 722 732 733 734 734D	1 610 - 1 626.5 AERONAUTICAL RADIONAVIGATION Radiodetermination-satellite (Earth-to-space) 734A 734E 722 727 730 732 734 734B

ADD 734A In respect of the radiodetermination-satellite service the provisions of No. 953 do not apply in this frequency band.

ADD 734AA In Region 1, the bands 1 610 - 1 626.5 MHz (Earth-to-space) and 2 483.5 - 2 500 MHz (space-to-Earth) are also allocated to the radiodetermination-satellite service on a secondary basis.

ADD 734B Different category of service: In Angola, Australia, Côte d'Ivoire, Ethiopia, India, Islamic Republic of Iran, Israel, Italy, Jordan, Kenya, Liberia, Mali, Papua New Guinea, Qatar, Senegal, Sudan, Swaziland, Syria, Tanzania, Thailand, Togo and Zambia the allocation of the band 1 610 - 1 626.5 MHz to the radiodetermination-satellite service (Earth-to-space) is on a primary basis (see No. 425) subject to agreement obtained under the procedure set forth in Article 14 with other countries not listed in this provision.

ADD 734D Alternative allocation: In Cuba, the band 1 610 - 1 626.5 MHz is allocated to the aeronautical radionavigation service on a primary basis.

ADD 734E In Regions 1 and 3 harmful interference shall not be caused to stations of the radioastronomy service using the band 1 610.6 - 1 613.8 MHz by stations of the radiodetermination-satellite service.

MHz
2 450 - 2 500

	Allocation to Services		
	Region 1	Region 2	Region 3
MOD	2 450 - 2 483.5 FIXED MOBILE Radiolocation 752 753	2 450 - 2 483.5 FIXED MOBILE RADIOLOCATION 752	
MOD	2 483.5 - 2 500 FIXED MOBILE Radiolocation 752 753 753C 753F 753A 734AA	2 483.5 - 2 500 FIXED MOBILE RADIODETERMINATION-SATELLITE (space-to-Earth) 753A RADIOLOCATION 752 753E	2 483.5 - 2 500 FIXED MOBILE RADIOLOCATION Radiodetermination-satellite (space-to-Earth) 753A 752 753C

MOD 753 Alternative allocation: In France, the bands 2 450 - 2 483.5 MHz and 2 500 - 2 550 MHz are allocated on a primary basis to the radiolocation service and on a secondary basis to the fixed and mobile services (see Nos. 424 and 425). Such use is subject to agreement with the administrations having services operating or planned to operate in accordance with the Table which may be affected.

ADD 753A In respect of the radiodetermination-satellite service the provisions of No. 953 do not apply in this frequency band.

ADD 753C Different category of service: In Angola, Australia, Côte d'Ivoire, Ethiopia, India, Islamic Republic of Iran, Israel, Italy, Kenya, Liberia, Mali, Papua New Guinea, Qatar, Senegal, Sudan, Swaziland, Syria, Tanzania, Thailand, Togo and Zambia, the allocation of the band 2 483.5 - 2 500 MHz to the radiodetermination-satellite service (space-to-Earth) is on a primary basis (see No. 425) subject to agreement obtained under the procedure of Article 14 with other countries not listed in this provision.

ADD 753E Alternative allocation: In Cuba, the band 2 483.5 - 2 500 MHz is allocated to the fixed, mobile and radiolocation services on a primary basis.

ADD 753F Alternative allocation: In France, the band 2 483.5 - 2 500 MHz is allocated on a primary basis to the radiolocation service and on a secondary basis to the mobile service (see Nos. 424 and 425). Such use is subject to agreement with the administrations having services operating or planned to operate in accordance with the Table which may be affected.

MOD

MHz

2 500 - 2 655

Allocation to Services		
Region 1	Region 2	Region 3
2 500 - 2 655	2 500 - 2 655	2 500 - 2 535
FIXED 762 763 764	FIXED 762 764	FIXED 762 764
MOBILE except aeronautical mobile	FIXED-SATELLITE (space-to-Earth) 761	FIXED-SATELLITE (space-to Earth) 761
BROADCASTING-SATELLITE 757 760	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile
	BROADCASTING-SATELLITE 757 760	BROADCASTING-SATELLITE 757 760
		754 754A
		2 535 - 2 655
		FIXED 762 764
		MOBILE except aeronautical mobile
		BROADCASTING-SATELLITE 757 760
720 753 756 758 759	720 755	720

ADD 754A Additional allocation: In India, the band 2 500 - 2 516.5 MHz is also allocated to the radiodetermination-satellite service (space-to-Earth) on a primary basis, subject to agreement obtained under the procedure set forth in Article 14.

ADD 796A Additional allocation: In the Federal Republic of Germany, Austria, Denmark, Spain, France, Finland, Israel, Norway, the United Kingdom, Sweden and Switzerland, the band 5 150 - 5 250 MHz is also allocated to the mobile service, on a primary basis, subject to the agreement obtained under the procedure set forth in Article 14.

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Document 466-E
14 October 1987

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

PLENARY MEETING

TWENTY-SECOND 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	Documents	Title
COM.6	432 (462)	Article 60*
COM.4	308	Resolution No. 8
	363 (390)	Resolution No. 310 (Rev.Mob-87)
		Resolution COM4/3
	425(Rev.1)	Resolution COM4/11

* See note on next page.

Y.C. MONGELARD
Chairman of Committee 7

Annex: 35 pages

Note from Committee 6 concerning Article 60

1. Provisions relating to the incorporation of Region 1 MF telephone and telegraph arrangements into Article 60, are shown in square brackets. The Article numbers are: 4183, 4184C, 4188B, 4188C, 4315C, 4319C, 4323R, 4368A and 4368B.

2. With respect to new Section IV, Use of Frequencies for Digital Selective Calling, the Committee notes that Recommendation COM5/B (MM) of the Regional Administrative Conference for the Planning of the Maritime Mobile and Aeronautical Radionavigation Services in Region 1 requests MOB-87 to:

a) designate the frequency pair 455.5/458.5 kHz, already designated for international DSC calling in Region 1, as an international DSC calling channel on a global basis.

This matter is currently under review in Committee 4.

If this is accepted by Committee 4, then ADD 4323J and ADD 4323K can be shown without square brackets.

3. Additionally, a Committee 4 decision is pending concerning MOD 4327 and its corresponding footnote 1. If Committee 4 rejects the proposed global allocation, the text within square brackets should be deleted.

ARTICLE 60*

NOC **Special Rules Relating to the Use of Frequencies in the Maritime Mobile Service**

NOC **Section I. General Provisions**

MOD 4180 A. Single-Sideband Radiotelegraph Transmissions

SUP 4181

ADD 4181A Where these provisions specify A1A emission, class A1B or J2A emissions shall be considered equivalent.

ADD 4181B Where these provisions specify class F1B emission, class J2B emission shall be considered equivalent.

NOC 4182 B. Bands Between 415 kHz and 535 kHz

MOD 4183 § 2. Except as provided in No. 961, ship stations authorized to work in the bands between 415 kHz and 535 kHz shall transmit on the frequencies indicated in this Article (see Nos. 4237, [4184C and 4315C]).

SUP 4184

MOD 4184A § 3A. In the maritime mobile service, no assignments shall be made on the frequency 518 kHz other than for transmission by coast stations of meteorological and navigational warnings and urgent information to ships by means of automatic narrow-band direct-printing telegraphy (International NAVTEX System) (see Article 14A).

[MOD 4184B § 3B. In the maritime mobile service, after full implementation of the GMDSS, the frequency 490 kHz will be used exclusively for the transmission by coast stations of meteorological and navigational warnings and urgent information to ships by means of narrow-band direct-printing telegraphy (see Resolution [COM5/3]).]

[ADD 4184C § 3C. The channelling arrangements for Morse telegraphy, narrow-band direct-printing telegraphy and digital selective calling in the band 415 - 526.5 kHz in Region 1 are shown in Table A of Appendix A.]

SUP 4185 and 4186

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* In this Article, the dotted lines (...) which appear in some provisions indicate that the text is the same as in the current Radio Regulations. The full text will be included in the Final Acts.

NOC 4187 C. Bands Between 1 605 kHz and 4 000 kHz

NOC 4188-4188A

[ADD 4188B (1B) The channelling arrangements for narrow-band direct-printing telegraphy and digital selective calling in the bands 1 606.5 - 1 625 kHz and 2 141.5 - 2 160 kHz in Region 1 are shown in Table B of Appendix A.]

[ADD 4188C (1C) The channelling arrangements for radiotelephony in the bands 1 635 - 1 800 kHz and 2 045 - 2 141.5 kHz in Region 1 are shown in Table C of Appendix A.]

SUP 4189-4192

NOC 4193

SUP 4194

NOC 4195 D. Bands Between 4 000 kHz and 27 500 kHz

NOC 4196 § 9. (1) The bands exclusively allocated to the maritime mobile service between 4 000 kHz and 27 500 kHz (see Article 8) are subdivided as follows:

MOD 4197 a) Ship stations, telephony, duplex operation (two-frequency channels)[1]

[
4 065 - 4 146 kHz
6 200 - 6 224 kHz
8 195 - 8 294 kHz
12 230 - 12 353 kHz
16 360 - 16 528 kHz
18 780 - 18 825 kHz
22 000 - 22 159 kHz
25 070 - 25 100 kHz
]

MOD 4198 b) Coast stations, telephony, duplex operation (two-frequency channels)

[
4 351 - 4 438 kHz
6 501 - 6 525 kHz
8 707 - 8 815 kHz
13 077 - 13 200 kHz
17 242 - 17 410 kHz
19 755 - 19 800 kHz
22 696 - 22 855 kHz
26 145 - 26 175 kHz
]

MOD 4197.1 [1]For the use of some of the frequencies in these sub-bands by ship and coast stations for distress and safety purposes, see Article 38 and Article N 38.

MOD 4199

c) Ship and coast stations, telephony, simplex operation (single-frequency channels) and intership cross-band operation (two frequencies)

4 146	-	4 152	kHz
6 224	-	6 233	kHz
8 294	-	8 300	kHz
12 353	-	12 368	kHz
16 528	-	16 549	kHz
18 825	-	18 846	kHz
22 159	-	22 180	kHz
25 100	-	25 121	kHz

MOD 4200

d) Ship stations, wide-band telegraphy, facsimile and special transmission systems

4 152	-	4 172	kHz
6 233	-	6 261	kHz
8 300	-	8 340	kHz
12 368	-	12 420	kHz
16 549	-	16 617	kHz
18 846	-	18 870	kHz
22 180	-	22 240	kHz
25 121	-	25 161.25	kHz

MOD 4201

e) Ship stations, oceanographic data transmission (see note c) in Appendix 31)

4 063	-	4 065	kHz
6 261	-	6 262.75	kHz
8 340	-	8 341.75	kHz
12 420	-	12 421.75	kHz
16 617	-	16 618.75	kHz
22 240.3	-	22 241.75	kHz

MOD 4202

f) Ship stations, narrow-band direct-printing telegraph and data transmission systems, at speeds of 100 bauds (frequencies paired with those in No. 4207)

4 172	-	4 181.75	kHz
6 262.75	-	6 275.75	kHz
6 280.75	-	6 284.75	kHz
8 376.25	-	8 396.25	kHz
12 476.75	-	12 549.75	kHz
12 554.75	-	12 559.75	kHz
16 683.25	-	16 733.75	kHz
16 738.75	-	16 784.75	kHz
18 870	-	18 892.75	kHz
22 284.25	-	22 351.75	kHz
25 172.75	-	25 192.75	kHz

MOD 4203

g) Ship stations, narrow-band direct-printing telegraph and A1A Morse telegraphy working at speeds not exceeding 100 bauds for FSK and 200 bauds for PSK (non-paired frequencies)[1]

4	202.25	-	4	207.25 kHz
6	300.25	-	6	311.75 kHz
8	396.25	-	8	414.25 kHz
12	559.75	-	12	576.75 kHz
16	784.75	-	16	804.25 kHz
18	892.75	-	18	898.25 kHz
22	351.75	-	22	374.75 kHz
25	192.75	-	25	208.25 kHz

MOD 4204

h) Ship stations, A1A Morse telegraphy, calling

4	181.75	-	4	186.75 kHz
6	275.75	-	6	280.75 kHz
8	365.75	-	8	370.75 kHz
12	549.75	-	12	554.75 kHz
16	733.75	-	16	738.75 kHz
22	279.25	-	22	284.25 kHz
25	171.25	-	25	172.75 kHz

MOD 4205

i) Ship stations, digital selective calling[1]

4	207.25	-	4	209.25 kHz
6	311.75	-	6	313.75 kHz
8	414.25	-	8	416.25 kHz
12	576.75	-	12	578.75 kHz
16	804.25	-	16	806.25 kHz
18	898.25	-	18	899.75 kHz
22	374.25	-	22	376.25 kHz
25	208.25	-	25	210 kHz

MOD 4205.1

[1]For the use of some of the frequencies in these sub-bands by ship and coast stations for distress and safety purposes, see Article 38 and Article N 38.

MOD 4206

j) Ship stations, A1A Morse telegraphy, working

4	186.75	-	4	202.25 kHz
6	284.75	-	6	300.25 kHz
8	341.75	-	8	365.75 kHz
8	370.75	-	8	376.25 kHz
12	421.75	-	12	476.75 kHz
16	618.75	-	16	683.25 kHz
22	241.75	-	22	279.25 kHz
25	161.25	-	25	171.25 kHz

MOD 4207

k) Coast stations, narrow-band direct-printing telegraph and data transmission systems, at speeds not exceeding 100 bauds for FSK and 200 bauds for PSK (frequencies paired with those in No. 4202)

4	209.25	-	4	219.25 kHz
6	313.75	-	6	330.75 kHz
8	416.25	-	8	436.25 kHz
12	578.75	-	12	656.75 kHz
16	806.25	-	16	902.75 kHz
19	680.25	-	19	703.25 kHz
22	375.75	-	22	443.75 kHz
26	100.25	-	26	120.75 kHz

MOD 4208

l) Coast stations, digital selective calling

4	219.25	-	4	221 kHz
6	330.75	-	6	332.5 kHz
8	436.25	-	8	438 kHz
12	656.75	-	12	658.5 kHz
16	902.75	-	16	904.5 kHz
19	703.25	-	19	705 kHz
22	443.75	-	22	445.5 kHz
26	120.75	-	26	122.5 kHz

MOD 4209

m) Coast stations, wide-band and A1A Morse telegraphy, facsimile, special and data transmission systems and direct-printing telegraph systems

4	221	-	4	351 kHz
6	332.5	-	6	501 kHz
8	438	-	8	707 kHz
12	658.5	-	13	077 kHz
16	904.5	-	17	242 kHz
19	705	-	19	755 kHz
22	445.5	-	22	696 kHz
26	122.5	-	25	145 kHz

MOD 4210

(2) Frequencies in the bands 25 010 - 25 070 kHz, 25 210 - 25 600 kHz and 26 175 - 27 500 kHz may be assigned to coast stations.

NOC 4211

NOC 4212

MOD 4212A (3) The bands 4 000 - 4 063 kHz and 8 100 - 8 195 kHz, allocated on a shared basis to the maritime mobile service (see Article 8) shall be used in accordance with Sections C-1 and C-2 of Appendix 16 when used for radiotelephony.

NOC 4213 E. Bands Between 156 MHz and 174 MHz

NOC 4214

NOC **Section II. Use of Frequencies for Morse Radiotelegraphy**

NOC 4215 A. General

ADD 4215A § 11A. Stations employing single-sideband Morse radiotelegraph transmissions shall use upper-sideband emissions. The frequencies specified in these Regulations for class H2A and H2B* emissions, such as 500 kHz and 8 364 kHz, shall be used as carrier frequencies.

NOC 4216

NOC 4217 B. Bands Between 415 kHz and 535 kHz

NOC B1. Call and Reply

MOD 4218 The frequency 500 kHz is the international distress frequency for Morse radiotelegraphy (see No. 2970 for details of its use for distress, urgency and safety purposes).

NOC 4219-4231

NOC B2. Traffic

NOC 4232-4236

NOC * This is to cater for the automatic reception of radiotelegraph alarm signals.

MOD 4237 § 20. (1) Ship stations operating in the authorized bands between 415 kHz and 535 kHz shall use working frequencies chosen from the following: 425 kHz[1], 454 kHz, 468 kHz, 480 kHz and 512 kHz, except as permitted by No. 961. However, when a regional administrative radio conference has established a frequency plan, the frequencies specified in that plan may be used, except as permitted by No. 961, in the Region concerned,

NOC 4238-4243

MOD 4244 C. Bands Between 1 605 kHz and 4 000 kHz

Additional Provisions Applicable
in Region 3 Areas
North of the Equator Only

SUP C1. Region 2

SUP 4245

SUP C2. Additional Provisions Applicable in Region 3 Areas North of the Equator Only

MOD 4246 § 22. (1) The band 2 089.5 - 2 092.5 kHz is the calling and safety band for Morse radiotelegraphy in those parts of the band between 1 605 kHz and 2 850 kHz in which Morse radiotelegraphy is authorized.

NOC 4247-4248

MOD 4249 (4) Coast stations which use frequencies in the band 2 089.5 - 2 092.5 kHz for calling shall be able to use at least one other frequency in those parts of the band between 1 605 kHz and 2 850 kHz in which Morse radiotelegraphy is authorized.

NOC 4250-4251

[ADD 4237.1 [1]In Region 1 458 kHz will replace 425 kHz on 1 April 1992.]

NOC 4252 D. Bands Between 4 000 kHz and 27 500 kHz

NOC D1. General

MOD 4253 § 23. (1) Ship Morse radiotelegraph stations equipped to operate in the bands specified in Nos. 4204 and 4206 shall employ only the classes of emission mentioned in 4181A for Morse telegraphy at speeds not exceeding ... .

SUP 4254

MOD 4255 (3) Except as provided for in No. 4376.1, coast Morse radiotelegraph stations operating in the bands exclusively allocated to the maritime mobile service between 4 000 kHz and 27 500 kHz shall not use Type 2 emissions (see No. 4216).

MOD 4256 (4) Coast Morse radiotelegraph stations employing single-channel class A1A emissions and operating in the bands exclusively allocated to the maritime mobile service between 4 000 kHz and 27 500 kHz shall at no time use a mean power in excess of the following:

Band	Maximum mean power
4 MHz	5 kW
6 MHz	5 kW
8 MHz	10 kW
12 MHz	15 kW
16 MHz	15 kW
22 MHz	15 kW
25 MHz	15 kW

SUP 4257

MOD 4258 § 24. Nos. 4200 to 4209 and the corresponding columns of Appendix 31 show those parts of the band exclusively allocated to the maritime mobile service between 4 000 kHz and 27 500 kHz which are to be used by coast stations and ship stations for Morse radiotelegraphy.

NOC D2. Call and Reply

MOD 4259 § 25. (1) In order to establish communication with a coast station, each ship station shall use an appropriate Morse radiotelegraphy calling frequency in one of the bands listed in No. 4204.

NOC 4260-4262

MOD 4263 § 28. (1) The calling frequency to be used for Morse radiotelegraphy by a coast station, in each of the bands for which it is equipped, is its normal working frequency as shown in heavy type in the List of Coast Stations.

NOC 4264

SUP 4265

NOC 4266-4270

MOD 4271 § 33. In order to reduce interference on Morse radiotelegraphy calling frequencies, a coast station shall take adequate steps to ensure, under normal conditions, the prompt receipt of Morse radiotelegraphy calls (see Nos. 4755).

NOC D3. Traffic

MOD 4272 § 34. (1) A ship station, after establishing communication on a Morse radiotelegraphy calling frequency (see No. 4259), shall change to a Morse radiotelegraphy working frequency for the transmission of traffic. The use of frequencies in the Morse radiotelegraphy calling bands for any purpose other than Morse radiotelegraphy calling shall be prohibited.

MOD 4273 (2) Morse radiotelegraphy working frequencies shall be assigned to ship stations in accordance with the provisions of Nos. 4291 and 4306.

NOC 4274

MOD 4275 (2) Countries which share a Morse radiotelegraphy channel in one of the bands exclusively allocated to the maritime mobile service between 4 000 kHz and 27 500 kHz should give special consideration to the countries among them which have no other Morse radiotelegraphy channel in the same band and should endeavour to use their primary Morse radiotelegraphy channel to the greatest extent possible, in order to permit the latter countries to satisfy their minimum communication requirements.

NOC 4276 E. Assignment of Frequencies to Ship Stations

NOC E1. Calling Frequencies of Ship Stations

MOD 4277 § 36. Each Morse radiotelegraphy calling band between 4 000 kHz and 27 500 kHz indicated in No. 4204 is divided into four groups of channels and two common channels. The 25 MHz band is divided into three channels of which one is a common channel (see Appendix 34).

MOD 4278 § 37. (1) When providing international service as published in the List of Coast Stations, coast stations shall keep watch on the Morse radiotelegraphy common calling channels in each band throughout their hours of service in the bands concerned, and on the appropriate Morse radiotelegraphy group channel or channels during busy periods. The times during which watch will be kept on the Morse radiotelegraphy group channel or channels shall be published for each country in the List of Coast Stations.

MOD 4279 (2) If necessary, an indication of the Morse radiotelegraphy channels on which watch is kept may be included in the coast station transmissions.

MOD 4280 § 38. In the bands between 4 000 kHz and 27 500 kHz, the administration to which a ship station is subject shall assign to it at least two Morse radiotelegraphy calling frequencies in each band in which the station is equipped to transmit. One of the calling frequencies in each band shall be within one of the common coast station receiving channels contained in Appendix 34; another in each band shall be selected from within the other channels listed in Appendix 34, taking account of the receiving channel or channels of the coast station with which the ship station most frequently communicates. In the 25 MHz band, administrations shall assign to ship stations under their control a frequency within the common channel. Another calling frequency in this band shall be selected from Appendix 34, taking account of the receiving channel of the coast station with which the ship station most frequently communicates.

SUP 4280.1

MOD 4281 § 39. A ship station should, wherever possible, be assigned additional Morse radiotelegraphy calling frequencies (see No. 4262).

MOD 4282 § 40. If it is not intended to maintain watch on all the Morse radiotelegraphy receiving ..... (see Resolution No. 312).

MOD 4283 § 41. Administrations which assign to their ship stations frequencies in two or more Morse radiotelegraphy calling ..... use.

MOD 4284 § 42. In order to ensure an even distribution of Morse radiotelegraphy calls ..... ships.

MOD 4285 § 43. Administrations ..... assigned Morse radiotelegraphy channels (see Appendix 7).

SUP 4286

NOC E2. Working Frequencies of Ship Stations

NOC 4287 a) Channel Spacing and Assignment of Frequencies

SUP 4288-4290

MOD 4291 § 48. In all bands, the working frequencies for ship stations using A1A Morse telegraphy, at speeds not exceeding 40 bauds, are spaced 0.5 kHz apart.

SUP 4292-4304

(MOD) 4305 b) Working Frequencies for Ship Stations Using A1A Morse Telegraphy

MOD 4306 § 56. Each administration ..... sufficient number of Morse radiotelegraphy working frequencies in any ..... not less than two Morse radiotelegraphy working frequencies should ..... throughout the bands.

MOD 4306A § 56A. In cases ..... on the Morse radiotelegraphy working frequency stated ..... transmission on any other Morse radiotelegraphy working frequency, whenever ..... QOO.

MOD 4307 § 57. For the exclusive purpose of communication by Morse radiotelegraphy with stations of the maritime mobile service, an aircraft station may be assigned one or more Morse radiotelegraphy working frequencies in the bands shown in No. 4206. These ..... as for ship stations.

MOD 4308 c) Abbreviations for the Indication of Morse Radiotelegraphy Working Frequencies

MOD 4309 § 58. In the ..... designate a Morse Radiotelegraphy working frequency:

NOC 4310-4311

NOC **Section III. Use of Frequencies for Narrow-Band Direct-Printing Telegraphy**

NOC 4312 A. General

MOD 4313 § 59. Frequencies assigned to coast stations for narrow-band direct-printing telegraphy shall be indicated ..... each coast station.

NOC 4314 B. Bands Between 415 kHz and 535 kHz

MOD 4315 § 60. (1) All ship stations equipped with narrow-band direct-printing apparatus to work in the authorized bands between 415 kHz and 535 kHz shall be able to send and receive class F1B emissions as specified in No. 4123S. Additionally, ship stations complying with the provisions of Chapter N IX shall be able to receive class F1B emissions on 518 kHz (see No. 4123T).

SUP 4315A

*[ADD 4315C § 60B. The channelling arrangements for narrow-band direct-printing telegraphy and digital selective calling in the band 415 - 526.5 kHz in Region 1 are shown in Table A of Appendix A.]

NOC 4316

NOC 4317 C. Bands Between 1 605 kHz and 4 000 kHz

NOC 4318

MOD 4319 (2) Narrow-band ..... No. [N2971F].

*[ADD 4319C § 61B. The channelling arrangements for narrow-band direct-printing telegraphy and digital selective calling in the bands 1 606.5 - 1 625 kHz and 2 145.5 - 2 160 kHz in Region 1 are shown in Table B of Appendix [ ].]

SUP 4315.1

NOC 4320 D. Bands Between 4 000 kHz and 27 500 kHz

MOD 4321 § 62. All ship ..... F1B emissions as specified in No. 4123. The assignable frequencies are indicated in Appendices 32 and 33.

SUP 4321A

ADD 4321B § 62B. Coast stations employing class F1B emissions and operating in the bands exclusively allocated to the maritime mobile service between 4 000 kHz and 27 500 kHz shall at no time use mean powers in excess of the following:

Band	Maximum mean power
4 MHz	5 kW
6 MHz	5 kW
8 MHz	10 kW
12 MHz	15 kW
16 MHz	15 kW
18 MHz	15 kW
22 MHz	15 kW
25 MHz	15 kW

ADD 4321C (1) In all bands, the working frequencies for ship stations using narrow-band direct-printing telegraphy at speeds not exceeding 100 bauds for FSK and 200 bauds for PSK, including those paired with the working frequencies assignable to coast stations (see No. 4207), are spaced 0.5 kHz apart. The frequencies assignable to ship stations which are paired with those used by coast stations are shown in No. 4202. The frequencies assignable to ship stations which are not paired with those used by coast stations are shown in No. 4203.

[ADD 4321D (2) When assigning frequencies listed in No. 4202 for narrow-band direct-printing telegraphy, administrations shall apply the procedure described in Resolution No. C]

ADD 4321E (3) Each administration shall if necessary, assign to each ship station under its jurisdiction and employing non-paired narrow-band direct-printing telegraphy one or more frequencies reserved for this purpose and shown in No. 4203.

NOC 4322 E. Bands Between 156 MHz and 174 MHz

MOD 4323 § 63. All ship stations equipped with direct-printing telegraph apparatus may work in the authorized bands between 156 MHz and 174 MHz and shall conform to the provisions of Appendix 18.

ADD **Section IIIA. Use of Frequencies for Digital Selective Calling**

ADD 4323A A. General

ADD 4323B The provisions described in this section are applicable to calling and acknowledgement, when digital selective-calling techniques are used, except in cases of distress, urgency and safety, to which the provisions of Chapter N IX apply.

ADD 4323C The characteristics of the digital selective-calling equipment shall be in accordance with the relevant CCIR Recommendations.

ADD 4323D The frequencies on which coast stations provide services using digital selective calling techniques shall be indicated in the List of Coast Stations, which shall also supply any other useful information concerning such services.

ADD 4323E B. Bands Between 415 kHz and 526.5 kHz

ADD B1. Mode of Operation

ADD 4323F The class of emission to be used for digital selective calling and acknowledgement in the authorized bands between 415 kHz and 526.5 kHz shall be F1B.

ADD 4323G When transmitting digital selective calls and acknowledgements in the bands between 415 kHz and 526.5 kHz, coast stations should use the minimum power necessary to cover their service area.

ADD 4323H Transmissions of digital selective calls and acknowledgements by ship stations shall be limited to a mean power of 400 watts.

ADD B2. Call and Acknowledgement

ADD 4323I For call and acknowledgement by digital selective calling techniques an appropriate channel shall be used.

ADD [4323J The international digital selective calling frequency [455.5] kHz may be assigned to any coast station. In order to reduce interference on this frequency, it may be used as a general rule by coast stations to call ships of another nationality, or in cases where it is not known on which digital selective calling frequencies within these bands the ship station is maintaining watch.]

ADD [4323K The international digital selective calling frequency [458.5] kHz may be used by any ship station. In order to reduce interference on this frequency, it shall only be used when calling cannot be made on national frequencies assigned to the coast station.]

ADD 4323L The frequency to be used for transmission of an acknowledgement shall normally be the frequency paired with the calling frequency used.

ADD B3. Watch

ADD 4323M A coast station providing international public correspondence service using digital selective calling techniques within the bands between 415 kHz and 526.5 kHz should, during its hours of service, maintain automatic digital selective calling watch on appropriate national or international calling frequencies. The hours and frequencies shall be indicated in the List of Coast Stations.

ADD 4323N Ship stations equipped with apparatus for digital selective calling to work in the authorized bands between 415 kHz and 526.5 kHz should, when within the coverage area of coast stations providing services using digital selective calling techniques in these bands, maintain an automatic digital selective calling watch on one or more appropriate digital selective calling frequencies within these bands, taking into account the digital selective calling frequencies operated by the coast stations.

ADD 4323O C. Bands Between 1 605 kHz and 4 000 kHz

ADD C1. Mode of Operation

ADD 4323P The class of emission to be used for digital selective calling and acknowledgement in the bands between 1 605 kHz and 4 000 kHz shall be F1B.

ADD 4323Q Coast stations should, when transmitting digital selective calls and acknowledgements in the bands between 1 605 kHz and 4 000 kHz, use the minimum power necessary to cover their service area.

ADD 4323R [In Region 1, transmissions of digital selective calls and acknowledgements by ship stations shall be limited to a mean power of 400 Watts.]

ADD C2. Call and Acknowledgement

ADD 4323S When calling a coast station by digital selective calling techniques, ship stations should use for the call, in order of preference:

a) a national digital selective calling channel on which the coast station is maintaining watch;

b) subject to the provisions of No. 4323T, the international digital selective calling frequency 2 189.5 kHz.

ADD 4323T The international digital selective calling frequency 2 189.5 kHz may be assigned to any ship station. In order to reduce interference on this frequency, it may be used as a general rule by ship stations to call coast stations of another nationality.

ADD 4323U A ship station calling another ship station by digital selective calling techniques should use the coast station calling frequency 2 177 kHz for the call.

ADD 4323V When calling ship stations by digital selective calling techniques, coast stations should use for the call, in the order of preference:

a) a national digital selective calling channel on which the coast station is maintaining watch;

b) subject to the provisions of No. 4323W, the international digital selective calling frequency 2 177 kHz.

ADD 4323W The international digital selective calling frequency 2 177 kHz may be assigned to any coast station. In order to reduce interference on this frequency, it may be used as a general rule by coast stations to call ships of another nationality, or in cases where it is not known on which digital selective calling frequencies within the bands between 1 605 kHz and 4 000 kHz the ship station is maintaining watch.

ADD 4323X The frequency to be used for transmission of an acknowledgement shall normally be the frequency paired with the frequency used for the call received.

ADD C3. Watch

ADD 4323Y The provisions detailed in this sub-section are applicable to watch-keeping by digital selective calling, except for distress, urgency and safety purposes, to which the provisions of Section III of Article N 38 apply.

ADD 4323Z A coast station providing international public correspondence service using digital selective calling techniques within the bands between 1 605 kHz and 4 000 kHz should, during its hours of service, maintain automatic digital selective calling watch on appropriate national or international calling frequencies. The hours and frequencies shall be indicated in the List of Coast Stations.

ADD 4323AA Ship stations equipped with apparatus for digital selective calling to work in the authorized bands between 1 605 kHz and 4 000 kHz should, when within the coverage area of coast stations providing services using digital selective calling techniques in these bands, maintain an automatic digital selective calling watch on one or more appropriate digital selective calling frequencies within these bands, taking into account the digital selective calling frequencies operated by the coast stations.

ADD 4323AB D. Bands Between 4 000 kHz and 27 500 kHz

ADD D1. Mode of Operation

ADD 4323AC The class of emission to be used for digital selective calling and acknowledgement in the authorized bands between 4 000 kHz and 27 500 kHz shall be F1B.

ADD 4323AD When transmitting digital selective calls and acknowledgements in the bands between 4 000 kHz and 27 500 kHz, coast stations shall at no time use a mean power in excess of the following values:

Band	Maximum mean power
4 MHz	5 kW
6 MHz	5 kW
8 MHz	10 kW
12 MHz	15 kW
16 MHz	15 kW
18 MHz	15 kW
22 MHz	15 kW
25 MHz	15 kW

ADD 4323AE Transmissions of digital selective calls and acknowledgements by ship stations in the bands between 4 000 kHz and 27 500 kHz shall be limited to a mean power of 1.5 kW.

ADD D2. Call and Acknowledgement

ADD 4323AF A station calling another station by digital selective calling techniques within the authorized bands between 4 000 kHz and 27 500 kHz should choose an appropriate digital selective calling frequency, taking into account propagation characteristics.

ADD 4323AG When calling a coast station by digital selective calling techniques on frequencies within the authorized bands between 4 000 kHz and 27 500 kHz, ship stations should use for the call, in order of preference:

a) a national digital selective calling channel on which the coast station is maintaining watch;

b) subject to the provisions of No. 4323AH, one of the international digital selective calling frequencies indicated in No. 4683.

ADD 4323AH The international digital selective calling frequencies indicated in No. 4683 may be used by any ship station. In order to reduce interference on these frequencies, it shall only be used when calling cannot be made on nationally assigned frequencies.

ADD 4323AI When calling ship stations by digital selective calling techniques on frequencies within the bands between 4 000 kHz and 27 500 kHz coast stations should use for the call, in order of preference:

a) a national digital selective calling channel on which the coast station is maintaining watch;

b) subject to the provisions of No. 4323AJ, one of the international digital selective calling frequencies indicated in No. 4684.

ADD 4323AJ The international digital selective calling frequencies indicated in No. 4684 may be assigned to any coast station. In order to reduce interference on these frequencies, they may be used as a general rule by coast stations to call ships of another nationality, or in cases where it is not known on which digital selective calling frequencies within the bands concerned the ship station is maintaining watch.

ADD D3. Watch

ADD 4323AK The provisions detailed in this sub-section are applicable to watch-keeping by digital selective calling, except for distress, urgency and safety purposes, to which the provisions of Section III of Article N 38 apply.

ADD 4323AL A coast station providing international public correspondence service using digital selective calling techniques within the bands between 4 000 kHz and 27 500 kHz should, during its hours of service, maintain automatic digital selective calling watch on the appropriate digital selective calling frequencies as indicated in the List of Coast Stations.

ADD 4323AM Ship stations equipped with apparatus for digital selective calling to work in the authorized bands between 4 000 kHz and 27 500 kHz should maintain automatic digital selective calling watch on appropriate digital selective calling frequencies within these bands, taking into account propagation characteristics and the calling frequencies for coast stations providing service using digital selective calling techniques.

ADD 4323AN E. Bands Between 156 MHz and 174 MHz

ADD E1. Mode of Operation

ADD 4323AO The class of emission to be used for digital selective calling and acknowledgement in the authorized bands between 156 MHz and 174 MHz shall be G2B.

ADD E2. Call and Acknowledgement

ADD 4323AP The frequency 156.525 MHz is an international frequency in the maritime mobile service used for distress, urgency, safety and calling by digital selective-calling techniques (see Nos. N 2993B, N 3195P, N 3230 and 4686 to 4689B).

ADD 4323AQ Calling by digital selective calling techniques within the authorized bands between 156 MHz and 174 MHz, from ship to coast station, from coast station to ship and from ship to ship should, as a general rule, be made on the digital selective calling frequency 156.525 MHz.

ADD E3. Watch

ADD 4323AR Information concerning watch-keeping by automatic digital selective calling on the frequency 156.525 MHz by coast stations shall be given in the List of Coast Stations (see also No. N 3038).

ADD 4323AS Ship stations equipped with apparatus for digital selective calling to work in the authorized bands between 156 MHz and 174 MHz should, while at sea, maintain an automatic digital selective calling watch on the frequency 156.525 MHz (see also No. N 3041).

ADD **Section IIIB. Use of Frequencies for Wide-Band Telegraphy, Facsimile, Special Transmission Systems and Oceanographic Data Transmissions**

ADD 4323AT A. Wide-Band Telegraphy, Facsimile and Special Transmission Systems

ADD 4323AU A1. Bands Between 1 605 kHz and 4 000 kHz

ADD 4323AV § 63A. In Region 2, the frequencies in the band 2 068.5 - 2 078.5 kHz are assigned to ship stations using wide-band telegraphy, facsimile and special transmission systems. The provisions of No. 4323BB apply.

ADD 4323AW A2. Bands Between 4 000 kHz and 27 500 kHz

ADD 4323AX § 63B. In all bands, the working frequencies for ship stations equipped to use wide-band telegraphy, facsimile and special transmission systems are spaced 4 kHz apart. The assignable frequencies are shown in No. 4200.

ADD 4323AY § 63C.(1) Each administration shall assign to each ship station under its jurisdiction and employing wide-band telegraphy, facsimile and special transmission systems one or more series of the working frequencies reserved for this purpose shown in No. 4200. The total number of series assigned to each ship station shall be determined by traffic requirements.

ADD 4323AZ (2) When ship stations employing wide-band telegraphy, facsimile and special transmission systems are assigned less than the total number of working frequencies in a band, the administration concerned shall assign working frequencies to such ships in accordance with an orderly system of rotation that will ensure approximately the same number of assignments on any one working frequency.

ADD 4323BA (3) However, within the limits of the bands given in No. 4200, administrations may, to meet the needs of specific systems, assign frequencies in a different manner from that shown in No. 4200. Nevertheless administrations shall take into account, as far as possible, the provisions of No. 4200, concerning channelling and the 4 kHz spacing.

ADD 4323BB § 63D. Ship stations equipped for wide-band telegraphy, facsimile and special transmission systems may, in the frequency bands reserved for such use, employ any class of emission provided that such emissions can be contained within the wide-band channels indicated in No. 4200. However, the use of A1A Morse telegraphy and telephony is excluded except for circuit alignment purposes.

ADD 4323BC § 63E. Coast radiotelegraph stations employing multichannel telegraph emissions and operating in the bands allocated exclusively to the maritime mobile service between 4 000 kHz and 27 500 kHz shall at no time use a mean power in excess of 2.5 kW per 500 Hz bandwidth.

ADD 4323BD B. Oceanographic Data Transmission Systems

ADD 4323BE § 63F. In all bands, the assignable frequencies for oceanographic data transmissions are spaced 0.3 kHz apart. The assignable frequencies are shown in No. 4201.

ADD 4323BF § 63G. The frequency bands for oceanographic data transmission systems (see No. 4201) may also be used by buoy stations for oceanographic data transmission and by stations interrogating these buoys.

NOC **Section IV. Use of Frequencies for Radiotelephony**

NOC 4324 A. General

NOC 4325-4326

ADD 4326A However, coast stations in automatic service in the VHF or UHF band may emit marking signals. The emission power of the signals shall however be limited to the minimum value necessary for effective operation of the signalling. Such emissions shall not cause harmful interference to the maritime mobile service in other countries (see Appendix 19).

NOC 4327

MOD 4328 § 67. Single-sideband apparatus in radiotelephone stations of the maritime mobile service operating in the bands allocated to this service between 1 605 kHz and 4 000 kHz and in the bands allocated exclusively to this service between 4 000 kHz and 27 500 kHz shall satisfy the technical and operational conditions specified in Appendix 17 [and Resolution No. 307].

SUP 4329-4330

NOC 4331 B. Bands Between 1 605 kHz and 4 000 kHz

NOC B1. Mode of Operation of Stations

SUP 4332-4334

MOD 4335 § 70A.(1A) Unless otherwise specified in the present Regulations (see Nos. 2973, 3004, 4127, 4342, 4343 and 4354) the class of emission to be used in the bands between 1 605 kHz and 4 000 kHz shall be J3E.

SUP 4336-4337

NOC 4338-4342

NOC B2. Call and Reply

MOD 4343 § 71. (1) The frequency 2 182 kHz[1] is an international distress frequency for radiotelephony (see No. 2973 for details of its use for distress, urgency, safety and emergency position-indicating radiobeacon (EPIRB) purposes). The class of emission to be used for radiotelephony on the frequency 2 182 kHz shall be J3E or H3E (see No. 4127) except for such apparatus as is referred to in No. 4130.

NOC 4344-4347

MOD 4348 § 72. To facilitate use of the frequency 2 182 kHz for distress purposes, all transmissions on 2 182 kHz shall be kept to a minimum (see also Resolution No. [ ].

SUP 4349

NOC 4350-4351

NOC B3. Traffic

NOC 4352-4356

NOC B4. Additional Provisions Applying to Region 1

NOC 4357-4358

MOD 4343.1 [1]Where administrations provide at their coast stations a watch on 2 182 kHz for receiving class J3E emissions as well as class A3E and H3E emissions, ship stations may call those coast stations for safety purposes using class H3E or J3E emissions (see also Resolution No. [ ]).

MOD 4359 a) the following ship-to-shore working frequency, if required by their service:

MOD 4360 - carrier frequency 2 045 kHz (assigned frequency 2 046.4 kHz) for class J3E emissions;

SUP 4361

MOD 4362 b) the following intership frequency, if required by their service:

MOD 4363 - carrier frequency 2 048 kHz (assigned frequency 2 049.4 kHz) for class J3E emissions.

SUP 4364

MOD 4365 This frequency may be used as an additional ship-to-shore frequency.

MOD 4366 (2) This frequency shall not be used for working between stations of the same nationality.

MOD 4367 § 78. (1) Ships frequently exchanging correspondence with a coast station of a nationality other than their own may use the same frequencies as ships of the nationality of the coast station:

- where mutually agreed by the administrations concerned; or

- where the facility is open to ships of all nationalities by virtue of a note against each of the frequencies concerned in the List of Coast Stations.

NOC 4368

[ADD 4368A The following ship-to-shore frequencies:

- carrier frequency 2 051 kHz (assigned frequency 2 052.4 kHz),

- carrier frequency 2 054 kHz (assigned frequency 2 055.4 kHz), and

- carrier frequency 2 057 kHz (assigned frequency 2 058.4 kHz),

may be assigned to coast stations as receiving frequencies under the procedure in [Article 12].]

[ADD 4368B § 78A. The channelling arrangements for radiotelephony in the bands 1 635 - 1 800 kHz and 2 045 - 2 141.5 kHz in Region 1 are shown in [Table C of Appendix [ ].]

NOC B5. Additional Provisions Applying to Regions 2 and 3

NOC 4369

MOD 4370 C. Bands Between 4 000 kHz and 27 500 kHz

NOC C1. Mode of Operation of Stations

MOD 4371 § 80. (1) The class of emission to be used for radiotelephony in the bands between 4 000 kHz and 27 500 kHz shall be J3E.

NOC 4372

MOD 4373 (3) Coast radiotelephone stations employing class J3E emissions in the bands between 4 000 and 27 500 kHz shall use the minimum power necessary to cover their service area and shall at no time use a peak envelope power in excess of 10 kW per channel.

MOD 4374 (4) Ship radiotelephone stations employing class J3E emissions in the bands between 4 000 kHz and 27 500 kHz shall at no time use a peak envelope power in excess of 1.5 kW per channel.

NOC C2. Call and Reply

MOD 4375 § 81. (1) Ship stations may use the following carrier frequencies for calling in radiotelephony:

4 125 kHz[1,2,3]
6 215 kHz[2,3]
8 255 kHz
12 290 kHz[3]
16 420 kHz[3]
18 795 kHz
22 060 kHz
25 085 kHz
25 097 kHz

SUP 4371.1

SUP 4373.1 and 4374.1

NOC 4375.1

MOD 4375.2 [2]The carrier frequencies 4 125 kHz and 6 215 kHz are also authorized for common use by coast and ship stations for single-sideband radiotelephony on a simplex basis for call and reply purposes, provided that the peak envelope power of such stations does not exceed 1 kW. The use of these frequencies for working purposes is not permitted (see also Nos. 2982 and 4375.1).

MOD 4375.3 [3]The carrier frequencies 4 125 kHz, 6 215 kHz, 8 291 kHz, 12 290 kHz and 16 420 kHz are also authorized for common use by coast and ship stations for single-sideband radiotelephony on a simplex basis for distress and safety traffic.

MOD 4376 (2) Coast stations may use the following carrier frequencies for calling in radiotelephony[1]:

4 417 kHz[2]
6 516 kHz[2]
8 779 kHz
13 137 kHz
17 302 kHz
19 770 kHz
22 765 kHz
26 172 kHz

SUP 4377

NOC 4378

MOD 4379 § 84. (1) Before transmitting on the carrier frequencies 4 125 kHz, 6 215 kHz, 8 291 kHz, 12 290 kHz or 16 420 kHz a station shall listen on the frequency for a reasonable period to make sure that no distress traffic is being sent (see No. 4915).

NOC 4380

NOC C3. Traffic

NOC 4381-4383

NOC 4376.1

MOD 4376.2 [2]The carrier frequencies 4 417 kHz and 6 516 kHz are also authorized for common use by coast and ship stations for single-sideband radiotelephony on a simplex basis, provided that the peak envelope power of such stations does not exceed 1 kW. The use of 6 516 kHz for this purpose should be limited to daytime operation (see also No. 4375.1).

MOD 4384 (4) The technical characteristics of transmitters used for radiotelephony in the bands between 4 000 kHz and 27 500 kHz are specified in Appendix 17.

NOC 4385 D. Bands Between 156 MHz and 174 MHz

NOC D1. Call and Reply

MOD 4386 The frequency 156.8 MHz is the international frequency for distress traffic and for calling by radiotelephony when using frequencies in the authorized bands between 156 MHz and 174 MHz (see Nos. 2994 and N 2994 for details of use). The class of emission to be used for radiotelephony on the frequency 156.8 MHz shall be G3E (see Appendix 19).

NOC 4387-4389

MOD 4390 (3) The frequency 156.8 MHz may be used by ship stations and coast stations for selective calling as defined in Appendix 39.

NOC 4391-4392

MOD 4393 (6) All emissions in the band 156.7625 - 156.8375 MHz capable of causing harmful interference to the authorized transmissions of stations of the maritime mobile service on 156.8 MHz are forbidden.

MOD 4394 To facilitate the reception of distress calls and distress traffic, all transmissions on 156.8 MHz shall be kept to a minimum and shall not exceed one minute.

NOC 4395-4396

NOC D2. Watch

NOC 4397-4403

NOC D3. Traffic

NOC 4404

SUP 4393.1

MOD 4405 (2) The method ... services.

NOC 4406-4408

MOD 4409 (2) In the band ... necessary.

NOC 4410

SUP 4411

NOC 4412

MOD 4413 (6) Channels are ... Appendix 18.

NOC 4414

MOD 4415 (2) The use ... such services.

NOC 4416

MOD

RESOLUTION No. 8

Relating to Implementation of the Changes in Allocations in the Bands Between 4 000 kHz and 27 500 kHz (see also Resolution PL/3 (HFBC-87))

The World Administrative Radio Conference, Geneva, 1979,

considering

a) that parts of frequency bands between 4 000 kHz and 27 500 kHz that were previously allocated on an exclusive or shared basis to the fixed service have been re-allocated to other services;

b) that existing fixed and mobile assignments must be removed progressively from those re-allocated bands to make way for other services;

c) that the assignments to be removed, termed "displaced assignments", must be re-accommodated in other frequency bands;

recognizing

the difficulties facing administrations and the IFRB during the period of transition from the previous allocations to those made by this Conference;

resolves

1. that the transitional procedure in Annex A to this Resolution shall be used for the purpose of ensuring an orderly and equitable implementation of the changeover from the previous allocations to those made by this Conference;

2. that the provisions of No. 1242 and the associated provisions of Article 12 concerning the examination and recording in the Master Register of assignments in the bands between 4 000 kHz and 27 500 kHz

allocated on an exclusive or shared basis to the fixed service shall be suspended from 1 January 1982 to 30 June 1984;

3. that the interim procedure in Annex B to this Resolution shall be used for the purpose of dealing with any urgent new frequency assignments in the relevant bands during the period of suspension of the provisions of Article 12 as specified in resolves 2;

4. that the review procedure in Annex C to this Resolution shall be used for the purpose of examining any urgent new assignments notified during the period of suspension of the provisions of Article 12 as specified in resolves 2;

SUP 5*

invites administrations

1. when seeking re-accommodation for their mobile assignments in the bands between 4 000 kHz and 27 500 kHz re-allocated to other services, to make every effort to find replacement assignments in the bands allocated exclusively to the mobile service concerned;

2. to cooperate by not submitting notices for assignments in the relevant bands during the period of suspension of the provisions of Article 12 as specified in resolves 2, except for urgent new assignments to be dealt with under the interim procedure;

requests the IFRB

not to examine any notices in the relevant bands under Article 12 during the period of suspension of the provisions of that Article as specified in resolves 2, other than those notices requesting deletions of existing assignments.

NOC Annexes A, B, and C.

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* Under its terms of reference, the World Administrative Radio Conference for the Mobile Services, Geneva, 1987 considered this Resolution and decided to delete resolves 5.

RESOLUTION No. 310 (Rev.Mob-87)

Relating to Frequency Provisions for Development and Future Implementation of Ship Movement Telemetry, Telecommand and Data Exchange Systems

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

a) the need to specify radio frequencies which may be used by the maritime mobile service on a world-wide basis for ship movement requirements, including transmission of electronic nautical chart data corrections, using digital automated data exchange, telemetry and telecommand techniques;

b) the developments now in progress in different portions of the frequency spectrum which will require common frequency bands in the future for efficient frequency utilization;

c) the importance of these systems in the safe and efficient operations of ships;

d) the advantages to port authorities for safe and efficient port management and operations;

noting

a) that the CCIR is considering this matter particularly within its Question 55/8;

b) that further operational and technical information is needed in deciding the most effective frequency utilization and sharing criteria;

c) that the International Maritime Organization (IMO) has identified a need for data exchange, using digital transmission techniques, between shore and ship for ship's position and movement data, correction data of radionavigation systems and electronic nautical charts (see CCIR Report 1044);

resolves

that the next competent world administrative radio conference shall review possible frequency provisions in the light of additional studies;

requests the CCIR

to examine and advise on bandwidths and data formats in coordination with administrations developing and testing these digital transmission systems;

invites the Administrative Council

to include this Resolution in the agenda of a forthcoming competent world administrative radio conference.

RESOLUTION COM4/3

Relating to the Procedures to be Applied for the Coordination of the Use of the Frequency 518 kHz for the International NAVTEX System

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

a) that this Conference has adopted, as a new Article 14A, a procedure to be applied by administrations and the IFRB for the coordination of 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);

b) that this Conference has decided to abrogate Resolution No. 318 (Mob-83);

resolves

that the administrations and the Board shall, with immediate effect, apply the procedures as described in the new Article 14A in their activities to coordinate the planned use of the frequency 518 kHz for the International NAVTEX system.

instructs the Secretary-General

to communicate this Resolution to the International Maritime Organization (IMO), the International Hydrographic Organization (IHO) and the World Meteorological Organization (WMO).

RESOLUTION COM4/11

Relating to the Transfer of Frequency Assignments to Coast Stations for Wideband Telegraphy, for A1A or A1B Morse Telegraphy, for Facsimile, Special and Data Transmission Systems and for Direct-Printing Telegraphy Systems Operating in the Bands Allocated Exclusively to the Maritime Mobile Service Between 4 000 and 27 500 kHz

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

a) that the frequency bands allocated to the maritime mobile service for coast stations have been changed as a result of the general review of the HF maritime mobile service bands;

b) that new frequency limits for coast stations for wideband telegraphy, for A1A or A1B Morse telegraphy, for facsimile, special and data transmission systems and for direct-printing telegraphy systems (hereafter referred to collectively as "wideband telegraphy" in this Resolution), are laid down in the revised provisions of Appendix 31(Mob-87);

c) that this Conference has not established a channelling arrangement for these bands;

d) that there should be an orderly transition of the frequency assignments to the newly allocated bands;

e) that, in order to effect this transfer, a fixed translation frequency should be determined in each of the frequency bands;

resolves

1. that those frequency assignments recorded in the Master Register, having an assigned frequency band totally within that part of the band which is no longer allocated to coast station wideband telegraphy, shall be transferred in blocks, as follows:

4 MHz band: from 4 219.4 - 4 221 to 4 349.4 - 4 351

6 MHz band: from 6 325.4 - 6 332.5 to 6 493.9 - 6 501

8 MHz band: from 8 435.4 - 8 438 to 8 704.4 - 8 707

12 MHz band: from 12 652.3 - 12 658.5 to 13 070.8 - 13 077

16 MHz band: from 16 859.4 - 16 904.5 to 17 196.9 - 17 242

22 MHz band: from 22 310.5 - 22 445.5 to 22 561 - 22 696

2. that the IFRB shall identify those frequency assignments recorded in the Master Register having an assigned frequency band overlapping the part of the band which is no longer allocated to coast station wideband telegraphy, shall search for an alternative frequency in accordance with Nos. 1445 - 1450 and shall propose it to the administration concerned;

3. that when the frequency transfer results in a degradation of operating conditions of any of these coast stations, the IFRB shall search for an alternative frequency in accordance with Nos. 1445-1450 and shall propose it to the administration concerned;

4. that at 0001 UTC on [Date D4] administrations shall transfer the transmitting frequencies of their stations to the newly designated frequencies, notifying the IFRB of these transfers, in accordance with the provisions of Article 12 of the Radio Regulations;

5. that replacement frequency assignments whose basic characteristics, other than the frequency, are not modified, shall be recorded without modifying the date appearing in column 2;

6. that frequency assignments for which the Board has received no notification of changeover shall be examined under Article 12 of the Radio Regulations with respect to all the transferred assignments irrespective of the date of their notification to the Board. Following this examination the Board shall advise the administration to delete this assignment, and if necessary shall modify the findings and enter a symbol to indicate that the assignment is not in conformity with this Resolution.

Article 16: NOC

Article 61: NOC

Appendix 5: NOC

Appendix 41: NOC

Appendix 42: NOC

Appendix 44: NOC

Resolutions

Resolution No. 301: REP by Resolution COM6/2

Resolution No. 311: SUP

Resolution No. 320: SUP

Recommendations

Recommendation No. 7: NOC

Recommendation No. 315: SUP

Recommendation No. 703: SUP

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

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15 October 1987
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PLENARY MEETING

REPORT BY AD HOC GROUP 2 OF THE PLENARY TO THE PLENARY MEETING

1. Ad hoc Group 2 submits for consideration by the Plenary draft texts for:

- modification of Article 28 contained in Annex 1;
- modification of Article 11 contained in Annex 2;
- Resolution [PLEN/...] contained in Annex 3.

2. With regard to the modification of Articles 11 and 28 the point was made that this might be beyond the competence of the Conference because these articles were not included in its agenda. It should, however, be noted that item 4 of the Conference agenda permits consequential changes in the Radio Regulations as may be necessary as a result of decisions of the Conference regarding other agenda items.

3. The text in square brackets in MOD 2563 (see Annex 1) has to be aligned with the final decision of the Conference with respect to the allocation for the radiodetermination-satellite service in parts of Regions 3.

4. No final agreement could be reached concerning ADD 1107.2 (see Annex 2). Two alternatives are therefore given in square brackets. The delegation of Pakistan indicated that neither of the two was acceptable for that delegation.

5. The delegation of Pakistan reserved its position concerning the inclusion of the band 2 500 - 2 516.5 MHz in draft Resolution [PLEN/...] (see Annex 3). The delegation of the Islamic Republic of Iran observed that the draft Resolution with the exception of the invitation to CCIR to continue relevant studies served no useful purpose.

E. GEORGE
Chairman of PLEN ad hoc 2

Annexes: 3

ANNEX 1

Modification of Article 28

ADD 2548A (10) The equivalent isotropically radiated power (e.i.r.p.) transmitted in any direction by an earth station in the radiodetermination-satellite service in the band 1 610 - 1 626.5 MHz shall not exceed 0 dBW in any 4 kHz band.

MOD 2558 b) The limits given in No. 2557 apply in the frequency bands listed in No. 2559 which are allocated to the following space radiocommunication services:

- meteorological-satellite service (space-to-Earth)
- space research service (space-to-Earth)
- space operation service (space-to-Earth)

for transmission by space stations where these bands are shared with equal rights with the fixed or mobile service and to the

- radiodetermination-satellite service (space-to-Earth).

MOD 2559 1 525 - 1530 MHz[1] (for Regions 1 and 3)
1 530 - 1 535 MHz[1] (for Regions 1 and 3, up to 1 January 1990)
1 670 - 1 690 MHz
1 690 - 1 700 MHz (on the territory of the countries mentioned in Nos. 740 and 741)
1 700 - 1 710 MHz
2 290 - 2 300 MHz
2 483.5 - 2 500 MHz

NOC 2561 (3) Power flux-density limits between 2 500 MHz and 2 690 MHz.

MOD 2562 a) The power flux-density at the Earth's surface produced by emissions from a space station in the broadcasting-satellite service or, the fixed-satellite service or the radiodetermination-satellite service for all conditions and for all methods of modulation shall not exceed the following values:

-152 dB(W/m^2) in any 4 kHz band for angles of arrival between 0 and 5 degrees above the horizontal plane;

$-152 + 0.75(\delta - 5)$ dB(W/m^2) in any 4 kHz band for angles of arrival δ (in degrees) between 5 and 25 degrees above the horizontal plane;

-137 dB(W/m^2) in any 4 kHz band for angles of arrival between 25 and 90 degrees above the horizontal plane.

These limits relate to the power flux-density which would be obtained under assumed free-space propagation conditions.

MOD 2563 b) The limits given in No. 2562 apply in the frequency band:

2 500 - 2 690 MHz

which is shared by the broadcasting-satellite service or the fixed-satellite service with the fixed or mobile service.; and in the frequency band 2 500 - 2 516.5 [(for Region 3)] allocated to the radiodetermination-satellite service.

ANNEX 2

Modification of Article 11

NOC **Section III. Coordination of Frequency Assignments to an Earth Station in Relation to Terrestrial Stations**

NOC 1106 Requirement for Coordination

(MOD) 1107 § 16. (1) Before an administration notifies to the Board or brings into use any frequency assignment to an earth station[2], whether for transmitting or receiving, in a particular band allocated with equal rights to space and terrestrial radiocommunication services in the frequency spectrum above 1 GHz, it shall, except in the cases described in Nos. **1108** to **1111**, effect coordination of the assignment with each administration whose territory lies wholly or partly within the coordination area[1] of the planned earth station. The request for coordination concerning an earth station may specify all or some of the frequency assignments of the associated space station, but thereafter each assignment shall be dealt with individually.

NOC 1107.1

ADD 1107.2 For the application of this procedure to earth stations in the radiodetermination-satellite service Appendix 28, paragraph 7 shall be applied using a uniform coordination distance in the bands 1 610 - 1 626.5 MHz, 2 483.5 - 2 500 MHz and 2 500 - 2 516.5 MHz of 360 km corresponding to an airborne RDSS earth station; [administrations may agree to use a coordination distance of 100 km for RDSS systems not using airborne earth stations.]

[In cases where the RDSS system is limited to ground based earth stations, the IFRB shall use a coordination distance of 100 km.]

ANNEX 3

DRAFT RESOLUTION [PLEN/...]

Relating to Criteria for the Sharing between the Radiodetermination-Satellite Service and terrestrial services in the Bands 1 610 - 1 626.5 MHz, 2 483.5 - 2 500 MHz and 2 500 - 2 516.5 MHz

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

a) that this Conference allocated frequencies for the radiodetermination-satellite service in the bands 1 610 - 1 626.5 MHz, 2 483.5 - 2 500 MHz and 2 500 - 2 516.5 MHz;

b) that the technical criteria specified for this service, and in particular the provisions of RR 1107.2, 2548A and 2556-2564 were established or adapted for the purpose of allowing implementation of this service;

c) that further studies are required in order to obtain more precise results concerning the conditions of sharing in these bands, between the RDSS and other services, either similar or of the same nature;

resolves

that the next competent WARC should consider to review the limits in considering b) above, taking into account the results of relevant CCIR studies;

invites the CCIR

to continue its studies in order to obtain more precise results concerning the conditions of sharing in the bands 1 610 - 1 626.5 - MHz, 2 483.5 - 2 500 MHz and 2 500 - 2 516.5 MHz between the radiodetermination-satellite service on the one hand and the aeronautical radionavigation, fixed, mobile, radiolocation and radioastronomy services;

urges administrations

1. to use the most recent information developed by the CCIR in assessing the probability of interference between the radiodetermination-satellite service and the terrestrial services sharing the same frequency bands;

2. to accept the application of the most recent CCIR Recommendations relating to the technical criteria referred to in considering b) above when they are consulted in the application of Resolution No. 703;

invites the Administrative Council

to include this matter in the agenda of the next competent WARC.

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

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COMMITTEE 7

TENTH SERIES OF TEXTS FROM THE CHAIRMAN OF COMMITTEE 6 TO THE EDITORIAL COMMITTEE

The consolidated texts for Articles 55 and 56, as amended by the Ninth Plenary Meeting, after due consideration of Documents 433 (+ Corr.1) and 438 (+ Corr.1) are submitted to the Editorial Committee.

I.R. HUTCHINGS
Chairman of Committee 6

PINK PAGES

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

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R.6

PLENARY MEETING

SIXTH SERIES OF TEXTS SUBMITTED BY THE EDITORIAL COMMITTEE TO THE PLENARY MEETING

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

Source	Document No.	Title
COM.7	334 (B.6)	Article 14A

Y.C. MONGELARD
Chairman of Committee 7

Annex: 2 pages

ADD

ARTICLE 14A

Procedure to be Applied by Administrations and the International Frequency Registration Board 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)

1631 Before an administration notifies to the Board 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.

1632 To this effect, the administration shall communicate to the Board, not earlier than one year before the proposed date of bringing the assignment into use, the information listed in Section A of Appendix 1 together with the following additional characteristics:

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

2) the regular transmission schedule assigned to the station;

3) the duration of transmissions;

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

The administration shall also indicate the results of any coordination* already effected in relation with the projected use.

1633 In order to enable the procedure to be completed in good time before notification under No. 1214, the administrations should communicate the above information not later than six months before the proposed date of bringing the assignment into use.

1634 In cases where the Board 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 Board.

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* Note - Administrations are strongly recommended to coordinate the above characteristics in accordance with the procedures of the International Maritime Organization (IMO).

1635 The Board 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 at an earlier date, and shall identify the administrations whose assignments are likely to be affected.

1636 The Board 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 No. 1635. The Board 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 Board, any information which may assist in reaching agreement on coordination.

1637 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 Board in accordance with No. 1214, indicating the names of administrations with which agreement has been reached and those which have signified their disagreement.

1638 Upon receipt of the notice, the Board 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.

1639 An administration which does not reply to the Board's request made under No. 1638 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.

1640 When examining the proposed use in accordance with Article 12, the Board shall apply the provisions No. 1245, except with respect to those assignments for which the administration responsible has signified its disagreement with respect to the proposed use.

1641 The Board shall examine the notified assignments in accordance with No. 1241 on the basis of its technical standards and shall record them in accordance with the pertinent provisions of Article 12. The recording shall contain symbols reflecting the result of the application of this procedure.

1642 The Board shall, at appropriate intervals, update and publish the data referred to in No. 1637 in a special list in an appropriate format.

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 470-E
15 October 1987
Original : French

BUDGET CONTROL
COMMITTEE

REPORT OF THE BUDGET CONTROL COMMITTEE

TO THE PLENARY MEETING

The Budget Control Committee held 4 meetings during the Conference and examined the questions arising from its terms of reference.

Under Nos. 475 to 479 of the International Telecommunication Convention (Nairobi, 1982), the Committee's terms of reference are :

a) to determine the organization and the facilities available to delegates ;

b) to examine and approve the accounts for expenditure incurred throughout the duration of the Conference ;

c) to estimate the costs that may be entailed by the execution of the decisions taken by the Conference.

1. Determination of the organization and facilities available to delegates

The Committee took note of the fact that no delegation had made any comments on the subject of the organization and facilities or the administrative arrangements made by the Secretary-General. It expressed the view that the organization and the arrangements made by the Secretary-General had been entirely satisfactory and thanked him and his staff for the same, especially in view of the fact that expenditure was kept well below the budget.

2. Conference budget

The Budget Control Committee examined the Conference budget, amounting to 1,916,000 Swiss francs, which was approved by the Administrative Council at its 41st session (1986).

The Committee noted that the Conference budget did not comprise expenditure on common services supernumerary staff salaries, which are charged to a special section of the ordinary budget. This expenditure was estimated at 1,069,000 Swiss francs.

In addition, the Committee noted that the Conference budget had been adjusted to take into account changes in the common system of the United Nations and the specialized agencies with regard to the salaries and allowances of short-term supernumerary staff and fluctuations in the rate of exchange between the US dollar and the Swiss franc, as required by Administrative Council Resolution No. 647. As a result of these adjustments, the budget of the Conference stands at 1,855,400 Swiss francs, i.e. a decrease of 60,600 Swiss francs.

3. Final Acts

Under the terms of Administrative Council Resolution No. 83 (amended),

> "... if a conference or meeting prints, for its own use, documents of which the typographical composition can subsequently be used, in whole or in part, for the printing of the Final Acts, it must bear a percentage of the composition costs and the whole of the printing costs of the said document ;"
>
> "... the percentage of the composition costs shall be decided by the Plenary Meeting of the conference or meeting."

As all the documents which can be used as a basis for the sales edition of the Final Acts of the Conference are prepared using word processing systems, no expenditure under this heading need be charged to the supplementary publications budget.

On the other hand, in accordance with the provisions of Nos. 119 and 122 of the Convention (Nairobi, 1982), the costs of translating the Final Acts of the Conference into the six official languages are charged to the Conference.

4. Situation of the Conference expenditure

Under No. 478 of the Convention, the Budget Control Committee has to submit a report to the Plenary Meeting showing, as accurately as possible, the estimated total expenditure of the Conference.

Accordingly, Annex 1 contains a statement showing the Conference budget, as approved by the Administrative Council and adjusted under Resolution No. 647, together with a breakdown of credits among the budget sub-heads and items as well as the actual expenditure incurred as at 10 October 1987. There is also an indication of the expenditure committed up to that date and an estimate of expenditure up to the close of the Conference's work.

The above statement shows that the total amount to be charged to the ordinary budget for WARC-MOB 87 is estimated at 1,692,300 Swiss francs, i.e. 163,100 Swiss francs less than the amount allocated by the Administrative Council and adjusted under Resolution No. 647. It can therefore be assumed that Conference expenditure will remain within the limits laid down.

Annex 2 to this document show, for information, the situation of expenditure on preparatory work for Study Group 8 of the CCIR and for the Regional Administrative Conference (EMA), 1985.

5. Expenditure limit fixed by Additional Protocol I to the Convention (Nairobi, 1982)

Committee 3 considered the situation of Conference expenditure, including expenditure on preparatory work, in relation to the expenditure limit fixed for WARC-MOB 87 by the Plenipotentiary Conference (see Annex 3 to this document). It is noted that the expenditure limit of 4,600,000 Swiss francs may leave a ceiling balance of 1,656,000 Swiss francs and this, without taking into account the margins existing in the Conference's accounts.

6. Recognized private operating agencies and international organizations taking part in the Conference

Under Article 16 of the Financial Regulations, the report of the Budget Control Committee must include a list of the recognized private operating agencies and international organizations which contribute to the expenses of the Conference. To this shall be added a list of the international organizations which have been exempted from payment in accordance with Resolution No. 925 of the Administrative Council.

A list is found in Annex 4 to this document.

7. Additional expenditure to be envisaged for implementation of the decisions of the Conference

No. 478 of the International Telecommunication Convention (Nairobi, 1982) provides that the Budget Control Committee's report to the Plenary Meeting must show, as accurately as possible, the costs that may be entailed by the execution of the decisions taken by the Conference. Article 80 of the Convention, concerning the financial responsibilities of administrative conferences, specifies that before adopting proposals with financial implications, conferences must take account of all the Union's budgetary provisions with a view to ensuring that those proposals will not result in expenses beyond the credits which the Administrative Council is empowered to authorize.

Pursuant to the above provisions, the Budget Control Committee wishes to draw the attention of the Plenary Meeting to the following expenditure arising from the decisions of the Conference, as estimated by the Secretary-General.

a) General Secretariat

The additional costs for the publication of the List of Coast Stations are estimated as follows :

56,000 Swiss francs for 1989, and
28,000 Swiss francs for 1990.

The Secretary-General will have to include these sums in the draft budgets for the relevant years.

It should be recalled that, in approving the budget for 1988, the Administrative Council authorized a credit of 30,000 Swiss francs for post-Conference work to be carried out by the General Secretariat.

b) IFRB

The financial implications of the decisions of the Conference are explained in detail in Annex 5 to the present document.

The IFRB has emphasized that these are only preliminary estimates and has pointed out that, after making a thorough examination of the decisions of the Conference, the Board will have to prepare a document for the 43rd session of the Administrative Council to be held in June/July 1988.

The financial implications of the IFRB's requirements can be summed up as follows :

Staff costs

24 man-months at P4 level	275,000 Sw.frs.
18 man-months at G5 level	95,000 Sw.frs.
	370.000 Sw.frs.
Office accommodation, office equipment, office supplies and furniture	80,000 Sw.frs.
	450,000 Sw.frs.

The IFRB has pointed out that a start will have to be made on some post-Conference work at the beginning of 1988, i.e. before the 43rd session of the Administrative Council has been able to authorize credits for this purpose.

c) CCIR

The tasks assigned to the CCIR are included in the regular programme of work of the CCIR.

The Budget Control Committee agreed to the above estimates of expenditure and proposes that a sum of not more than 100,000 Swiss francs, to be taken from the surplus credits of the present Conference which are estimated at 163,100 Swiss francs (see section 4 of this report), should be carried over to the financial year 1988 and used to finance the post-Conference work of the IFRB for the first six months of 1988.

The Plenary Meeting is requested to approved this proposal.

* * *

In accordance with No. 479 of the Convention, this report, after consideration and approval, will be transmitted to the Secretary-General, together with the observations of the Plenary Meeting, for submission to the Administrative Council at its next session.

The Plenary Meeting is requested to examine this report.

Dr. M.K. RAO
Chairman of the
Budget Control Committee

Annexes : 5

ANNEX 1

Situation of accounts for WARC MOB (1987) as at 10 October 1987

Heading		Budget approved by AC	Budget adjusted on 01.09.87	Expenditure at 10.10.1987 actual	committed estimated	total
col.		1	2	3	4	5
				thousands of Swiss francs		
Sub. II	Staff expenditure					
11.621	Salaries & relat.exp.	1394	1333	9	1092	1101
11.622	Travel (recruitment)	81	81	4	48	52
11.623	Insurance	36	36	0	31	31
		1511	1450	13	1171	1184
Sub.III	Premises & equip.					
11.631	Prem.,furniture,mach.	47	47	0	44	44
11.632	Document production	110	110	30	138	168
11.633	Office supp.& overh.	45	45	22	36	58
11.634	PTT	80	80	48	21	69
11.635	Techn. installat.	5	5	5	0	5
11.636	Sundry & unforeseen	10	10	11	4	15
		297	297	116	243	359
Sub.IV	Other expenditure					
11.643	Finals Acts	108	108	0	149	149
TOTAL, SECTION 11.6		1916	1855	129	1563	1692
		xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx
UNUSED CREDITS						163
						xxxxxxxxxx

Col. 2 Budget including additional credits to take account of changes in the common system of the United Nations and its specialized agencies.

ANNEX 2

Preparatory work in 1986
for the WARC MOB 87

Items		Budget 1986*)	1986 Accounts
		- Swiss francs -	
Sub-head I	Staff expenditure		
11.611	Salaries and related expenses	192,400	138,285.85
11.612	Travel (recruitment)	44,000	8,092.65
11.613	Insurance	5,000	1,323.80
		241,400	147,702.30
Sub-head II	Premises and equipment		
11.621	Premises, furniture, machines	10,000	13,306.31
11.622	Document production	17,000	20,040.55
11.623	Office supplies and expenses	15,000	6,446.35
11.624	PTT	15,000	5,973.90
11.625	Technical installations	0	0
11.626	Sundry and unforeseen	10,000	1,726.34
		67,000	47,493.45
		308,400	195,195.75

*) Budget 1986 including additional credits

ANNEX 3

Expenditure limit fixed by Additional Protocol I
to the Convention (Nairobi, 1982)

WARC MOB 87	Sections 11 and 17		
	Limit on expenditure Add.Prot.I	Actual or estimated expenditure	Difference
	- Swiss francs -		
Limit on expenditure	4,600,000		
1986 : Preparatory work		* 270,000	
1987 : Cost of the Conference		** 2,630,000	
1988 : Post-Conference work		** 44,000	
	4,600,000	2,944,000	1,656,000

The figures given in the table correspond to 1 September 1982 values.

* Actual expenses
** Expenses provided for in the budget.

ANNEX 4

List of recognized private operating agencies and international organizations contributing to the work of the conference

		No. of contributory units
I.	Recognized private operating agencies	
	None	
II.	International organizations	
II.1	United Nations	*)
II.2	Specialized agencies	
	International Civil Aviation Organization	*)
	International Maritime Organization	*)
	World Meteorological Organization	*)
II.3	Regional telecommuication organizations	
	European Conference of Postal and Telecommunications Administrations	*)
	Arab Telecommunication Union	*)
	Panafrican Telecommunication Union	*)
II.4	Other international organizations	
	European Space Agency	1/2
	International Air Transport Association	*)
	International Association of Lighthouse Authorities	1/2
	International Chamber of Shipping	1/2
	International Committee of the Red Cross	*)
	International Maritime Radio Association	*)
	International Electrotechnical Commission	*)

International Transport Workers' Federation	1/2
International Maritime Satellite Organization	1/2
International Telecommunications Satellite Organization	1/2
International Society for Aeronautical Telecommunications	1/2
International Amateur Radio Union	*)

*) Exempted from any contribution by Administrative Council Resolution No. 925.

Extract of document DT/82-E

ANNEX 5

NOTE BY THE IFRB

FINANCIAL IMPLICATIONS OF THE DECISIONS OF WARC-MOB-87

From the activities of the various Committees, as well as the decisions taken by the Plenary and the Committees, it is evident that the major tasks for the IFRB arise from the decisions of Committee 4. Some of these decisions represent one-time tasks and require execution prior to the entry into force of the Final Acts of the Conference during the period in the calendar years 1988/89. Some other tasks are of an on-going nature, and have to be carried out from the date of entry into force.

2. The tasks of an on-going nature are more or less a continuation of the tasks which the Board already carries out in conformity with the provisions of the Radio Regulations, such as Article 16 and Resolution No. 300. Any additional tasks of this type arising from the decisions of the present Conference can be absorbed by the available manpower within the IFRB, and do not require any additional resources.

3. The tasks which have to be executed on a one-time basis during the period 1988/89 result essentially from the rearrangement of the frequency bands allocated exclusively to the maritime mobile service between 4 and 27.5 MHz. Some of the major tasks in this group are listed below:

i) establishment of initial allotment plan for coast radiotelephone transmitting stations for the additional channels in Appendix 25 (commencement of the work in early 1988 and termination by mid-1989) (Resolution No. COM 4/6);

ii) transfer of allotments in the present Appendix 25 to frequencies in the revised Appendix 25 (Resolution No. COM 4/7);

iii) transfer of assignments from the present paired NBDP channels to the revised NBDP channels (Resolution No. COM 4/10);

iv) transfer of assignments to coast radiotelegraph stations (Resolution No. COM 4/11).

4. There are many other additional tasks which the Board has identified which are not listed below, but can be explained to Committee 3 and to the Plenary, if required. Taken individually these tasks may appear to be minor, but when considered together they represent a substantial additional workload on the Specialized Secretariat of the IFRB. These tasks can be categorized into two groups:

a) tasks requiring review and updating of the Master International Frequency Register;

b) revision and updating of the Technical Standards and Rules of Procedure of the IFRB relating to the treatment of frequency assignment notices of stations in the mobile services.

5. There is also the task of continuation of the monitoring activities in the frequency bands allocated to the aeronautical mobile, maritime mobile, radionavigation and radiodetermination services. Although this task represents on-going work, the Board has to examine the implications of the Resolution on the subject which does represent a certain amount of one-time additional task.

6. Without giving a detailed breakdown of the manpower requirements for executing each of the tasks resulting from specific decisions of the Conference, the Board has considered the overall impact of the additional workload on the available resources, and has concluded that some additional manpower will be necessary to execute the immediate post-conference work, comprising a certain number of one-time tasks. The additional manpower requirements amount to the preliminary estimates as given below:

- 24 man-months @ P4 level (Engineer/System Analyst)

- 18 man-months @ G5 level (Administrative assistance including Data Capture)

7. Associated with these man-power requirements, it is necessary to foresee a provision for office accommodation, office equipment, office supplies and furniture. This is estimated to be approximately Sw.frs. 80,000.-.

8. The Board endeavoured to include in its normal work the greatest number of tasks referred to in paragraph 4 above. The above estimates could only be reduced to this level by modifying the priorities of the Frequency Management System (FMS).

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 471-E
15 October 1987
Original English

PLENARY MEETING

REPORT OF CHAIRMAN OF AD HOC GROUP PL-3 OF THE PLENARY

In examining the questions relating to the date of implementation of Appendix 31 the Group PL-3 of the Plenary has taken account of the following:

a) the Plenary adopted 3 October 1989 as the date of entry into force of the Final Acts;

b) the date of implementation of Appendix 31 is linked to other provisions of the Radio Regulations and other appendices;

c) unless resources from this Conference are available, the IFRB can start its post conference activities requiring additional resources only after the Administrative Council in mid 1988 has authorized these resources. These activities require 18 months to be completed;

d) if different dates are adopted for the implementation of the newly available channels of Appendix 25 and for the changeover from the present Appendix 31 to the new one this would lead to having a part of the spectrum in the HF bands not used by the Maritime Mobile Service during the period between these dates.

Having considered the above the Group recommends the following actions:

1. The date of entry into force of the Final Acts (3 October 1989) does not need to be modified provided it does not apply to all the provisions (see Document 451).

2. The changeover to the new Appendix 31, the transfer of all the stations concerned (telephony and telegraphy) and the use of the newly available channels of Appendix 25 shall take place together at one date D4. This date is proposed to be [1 January 1991].

3. The date D3 of paragraph 9 of Resolution [COM4/6] and the date D4 of Resolutions [COM4/7], [COM4/10] and COM4/11] shall be the same date as in paragraph 2, i.e., [1 January 1991].

4. The same date [(1 January 1991)] shall be adopted for the entry into force of the following provisions:

- Article 8 for the band 4 000 - 27 500 kHz
- Article 12 for the band 4 000 - 27 500 kHz
- Chapter IX(Rev.)
- Chapter N IX
- Article 60 for the bands 4 000 - 27 500 kHz
- Appendices 16 and 31 to 35.

5. Consequently the Annex to Resolution COM4/6 shall be modified as follows:

- paragraph 1, replace "1 May 1988" by "1 January 1989"
- paragraph 6, replace "1 February 1989" by 1 July 1990"
- paragraph 7, delete bracket around "60 days".

O. VILLANYI
Chairman of ad hoc Group PL 3

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WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 472-E
15 October 1987

B.23

PLENARY MEETING

TWENTY-THIRD SERIES OF TEXTS SUBMITTED BY THE EDITORIAL COMMITTEE TO THE PLENARY MEETING

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

Source	Documents	Title
COM.6	366 (456)	Article 65
	367 (456)	Resolution No. 319 (Rev.Mob.87)
	434 (456)	Resolution COM6/5

Y.C. MONGELARD
Chairman of Committee 7

Annex: 7 pages

ARTICLE 65*

General Radiotelephone Procedure in the Maritime Mobile Service

NOC **Section I. General Provisions**

NOC 4903

MOD 4904 § 2. (1) The service of ship radiotelephone stations shall be performed or controlled by an operator satisfying the conditions specified in Article 55.

NOC 4905-4907

MOD 4908 (2) The use of devices for continuous or repetitive calling or identification in a manually operated radiotelephony service is not permitted.

NOC 4909

MOD 4910 (4) A station shall not emit any carrier wave between calls. However, stations in an automatically operated service may emit marking signals under the conditions provided for in No. 4326A.

NOC 4911-4914

NOC **Section II. Preliminary Operations**

NOC 4915-4919

NOC **Section III. Calls by Radiotelephony**

NOC 4920

SUP 4921

NOC 4922-4945

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* In this Article, the dotted lines (...) which appear in some provisions indicate that the text is the same as in the current Radio Regulations. The full text will be included in the definitive version of the Final Acts.

MOD **Section IV. Method of Calling, Reply to Calls and Signals Preparatory to Traffic when Using Calling Methods Other than Digital Selective Calling**

NOC 4946 A. Method of Calling

NOC 4947-4950

MOD 4951 When the coast station is fitted with equipment for selective calling in accordance with Section II of Article 62, and the ship station is fitted with equipment for receiving such selective calls, the coast station shall call the ship by transmitting the appropriate code signals. The ship station shall call the coast station by speech in the manner given in No. 4947 (see also Section II of Article 62).

NOC 4952-4954

NOC 4955 B. Frequency to be Used for Calling and for Preparatory Signals

NOC 4956-4958

NOC 4959 b)

NOC 4960 c)

ADD 4960A d) in Region 2 except for Greenland, the carrier frequency 2 191 kHz as a supplementary calling frequency in those areas of heavy usage of 2 182 kHz.

NOC 4961-4967

MOD 4968 B2. Bands Between 4 000 kHz and 27 500 kHz

NOC 4969

MOD 4970 (2) A coast ... 4 125 kHz or 6 215 kHz, in accordance with the provisions of Nos. 4375.2 and 4375.3.

NOC 4971-4985

MOD 4986 (2) When a ship station is called by selective calling in accordance with Section II of Article 62, it shall reply on a frequency on which the coast station keeps watch.

NOC 4987-4993

MOD 4994 D2. Bands Between 4 000 kHz and 27 500 kHz

NOC 4995-4997

MOD 4998 (4) When a station is called on the carrier frequency 6 215 kHz it ... calling station.

NOC 4999-5001

MOD 5002 (2) When a coast station open to public correspondence calls a ship either by speech or by selective calling in accordance with Section II of Article 62, using a two-frequency channel, the ship station shall reply by speech on the frequency associated with that of the coast station; conversely, a coast station shall reply to a call from a ship station on the frequency associated with that of the ship station.

NOC 5003-5005

MOD 5006 E2. Bands Between 4 000 kHz and 27 500 kHz

NOC 5007-5054

NOC **Section VI. Duration and Control of Working**

NOC 5055-5057

NOC **Section VII. Tests**

NOC 5058-5059

MOD 5060 (2) Any signals ... identified in Articles 38 and N 38 for the ... purposes.

SUP 5061

ADD **Section VIII. Calling, Acknowledgement of Calls, and Subsequent Exchange of Traffic when Using Digital Selective Calling Techniques**

ADD 5062 A. Method of Calling and Frequencies to be Used for Calling

ADD 5063 § 37. (1) Calling by digital selective calling techniques shall be carried out in accordance with the provisions of Nos. 4686A to 4686H.

ADD 5064 (2) An appropriate digital selective calling channel chosen in accordance with the provision of Nos. [4419D to 4419H] or Nos. [4420D to 4420H], as appropriate, shall be used for the call.

ADD 5065 B. Acknowledgement of Calls and Agreement on the Frequency to be Used for Traffic

ADD 5066 § 38. (1) Acknowledgement of a received digital selective call and the exchange of information concerning the frequency to be used for traffic should be carried out in accordance with the provisions of Nos. 4688A to 4690H.

ADD 5067 (2) When agreement regarding the working frequency or channel to be used for the exchange of traffic has been reached in accordance with the provisions of Nos. 4688A to 4690H, the two stations then transfer to the working frequency or channel agreed for the exchange of traffic.

ADD 5068 C. Forwarding of Traffic and Control of Working

ADD 5069 § 39. The forwarding of traffic and the control of working shall be carried out in accordance with the provisions of Nos. 5028 to 5054, No. 5056 and No. 5057.

MOD 5070 to 5084 NOT allocated.

(MOD) RESOLUTION No. 319 (Rev. Mob-87)

MOD **Relating to a General Review of the Bands 4 000 - 4 063 kHz and 8 100 - 8 195 kHz Allocated on a Shared Basis to the Maritime Mobile Service[1]**

MOD The World Administrative Radio conference for the Mobile Services, Geneva, 1987,

NOC noting

MOD a) that the World Administrative Radio Conference for the Mobile Services, Geneva, 1983 established ... 1 kHz;

SUP b)

MOD b) that it was not within the competence of the World Administrative Radio Conference for the Mobile Services, Geneva, 1983 to carry out ... bands;

ADD c) that this Conference has decided not to include frequencies in the bands 4 000 - 4 063 kHz and 8 100 - 8 195 kHz in either Appendix 31 or the Allotment Plan of Appendix 25, and that this decision was made taking into account the continuation of the related studies in the CCIR;

SUP recognizing a) - f)

NOC considering a) - b)

NOC resolves

MOD that the next ... revision of the bands 4 000 - 4 063 kHz and 8 100 - 8 195 kHz allocated on a shared basis ... administration;

ADD [1]Replaces Resolution No. 319 of the WARC (Mob.83)

SUP 2-4

NOC invites the Administrative Council

MOD 1. to include on the agenda of the next competent WARC the Articles and Appendices of the Radio Regulations relevant to the review and revision of the bands 4 000 - 4 063 kHz and 8 100 - 8 195 kHz;

NOC 2.

NOC requests the CCIR

MOD to study the technical issues involved in the establishment of sharing criteria between the maritime mobile and fixed services in the 4 000 - 4 063 kHz and 8 100 - 8 195 kHz frequency bands including the possibility of using other emissions in the maritime mobile service by ship stations;

SUP a) - c)

NOC invites administrations

RESOLUTION COM6/5

Relating to Certain Resolutions and Recommendations Which Remain in Effect Until the Provisions of the Radio Regulations, as Partially Revised by WARC MOB-87 Take Effect

The World Administrative Radio Conference for the Mobile Services, Geneva, 1987,

considering

a) that the essential parts of Resolution No. 320 (Mob.83) have been incorporated into the Radio Regulations, as partially revised by WARC MOB-87;

b) that, this Conference has therefore decided that Resolutions Nos. [304 and 320 (Mob-83)] and Recommendations Nos. [302 and 312] shall eventually be suppressed;

noting

a) that as a general rule, Resolutions and Recommendations become effective at the time of the signing of the Final Acts of a Conference;

b) that the provisions of the Radio Regulations, as partially revised by this Conference, will become effective only at a much later date;

noting further

that, as a general rule, Resolutions and Recommendations which a WARC has decided to suppress, become ineffective at the time of the signing of the Final Acts of the Conference;

recognizing

a) that, in accordance with the general rule, such a suppression would effectively remove the guidelines contained in the Resolutions and Recommendations referred to above upon the signing of the Final Acts;

b) that these guidelines should, however, remain in effect until the entry into force of the provisions of the Radio Regulations, as partially revised by this Conference;

resolves

that Resolutions Nos. [304 and 320 (Mob-83)] and Recommendations Nos. [302 and 312] shall remain in effect until the entry into force of the provisions of the Radio Regulations, as partially revised by this Conference, at which date they shall become ineffective and definitively suppressed.

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MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 473-E
15 October 1987

R.7 PLENARY MEETING

SEVENTH SERIES OF TEXTS SUBMITTED BY THE EDITORIAL COMMITTEE TO THE PLENARY MEETING

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

Source	Document	Title
COM.7	403 (B.10)	Appendix 19(Rev.)

Y.C. MONGELARD
Chairman of Committee 7

Annex: 1 page

MOD

APPENDIX 19(Rev.)
Mob-87

Technical Characteristics for Transmitters and Receivers Used in the Maritime Mobile Service in the Band 156 - 174 MHz

(see Articles 59 and 60 and Appendix 18)

1. Only frequency modulation with a pre-emphasis of 6 dB/octave (phase modulation) shall be used.

2. The frequency deviation corresponding to 100% modulation shall approach ±5 kHz as nearly as practicable. In no event shall the frequency deviation exceed ±5 kHz.

3. The frequency tolerance for coast and ship stations shall be 10 parts in 10^6.

4. In transmission on any of the frequencies designated in Appendix 18, the emission of each station shall be vertically polarized at the source.

5. The audio-frequency band shall be limited to 3 000 Hz.

6. It must be possible readily to reduce the mean power of a ship station transmitter to 1 W or less, except for digital selective calling equipment operating on 156.525 MHz (channel 70) in which case the power reduction facility is optional.

7. Stations using digital selective calling shall have the following capabilities:

a) sensing to determine the presence of a signal on 156.525 MHz (channel 70), and

b) automatic prevention of the transmission of a call, except for distress and safety calls, when the channel is occupied by calls.

8. The remaining characteristics of transmitters and receivers used for digital selective calling shall comply with the relevant CCIR Recommendations.

9. When coast station transmitters emit marking signals required for the operation of an automatic service, this shall be done with a mean power attenuation of at least 10 dB (see Nos. 4326A and 4910).

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MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 474-E
15 October 1987

B.24

PLENARY MEETING

TWENTY-FOURTH SERIES OF TEXTS SUBMITTED BY
THE EDITORIAL COMMITTEE TO THE PLENARY

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

Source	Document	Title
COM.6	468	Article 55 Article 56

Y.C. MONGELARD
Chairman of Committee 7

Annex: 9 pages

NOC

ARTICLE 55

MOD

Certificates for Personnel of Ship Stations and Ship Earth Stations

NOC

Section I. General Provisions

MOD 3860 § 1. (1) The service of every ship Morse radiotelegraph station shall be performed by an operator holding a certificate issued or recognized by the government to which the station is subject.

MOD 3861 (2) The service of every ship radiotelephone station, ship earth station and ship station using the frequencies and techniques prescribed in Chapter N IX shall be controlled by an operator holding a certificate issued or recognized by the government to which the station is subject. Provided the station is so controlled, other persons besides the holder of the certificate may use the equipment.

SUP 3862

SUP 3862A

NOC 3863-3866

MOD 3867 (2) When it is necessary to employ a person without a certificate or an operator not holding an adequate certificate as a temporary operator, his performance as such must be limited solely to signals of distress, distress alerting, urgency and safety, messages relating thereto, messages relating directly to the safety of life and urgent messages relating to the movement of the ship. Persons employed in these cases are bound by the provisions of No. 3877 regarding the secrecy of correspondence.

NOC 3868-3877

ADD 3877A 5. Each administration may determine the conditions under which personnel holding certificates specified in Nos. 3879-3883 may be granted certificates under Nos. ADD 3890C-3890F[B].

MOD

Section II. Categories of Certificates for Operators of Ship Stations and Ship Earth Stations Using the Frequencies and Techniques Prescribed in Chapter IX and for the Public Correspondence Service

NOC 3878-3890

ADD **Section IIA. Categories of Certificates for Personnel of Ship Stations and Ship Earth Stations Using the Frequencies and Techniques Prescribed in Chapter N IX**

ADD 3890B (1) There are [six] categories of certificates for personnel of ship stations and ship earth stations using the frequencies and techniques prescribed in Chapter N IX.

ADD 3890C a) First-Class Radio Electronic Certificate;

ADD 3890D b) Second-Class Radio Electronic Certificate;

ADD 3890E c) General Operator's Certificate;

ADD 3890F d) Restricted Operator's Certificate;

ADD 3890FA [e) First-Class Technical Certificate;]

ADD 3890FB [f) Second-Class Technical Certificate.]

ADD 3890G (2) The holder of one of the certificates specified in Nos. 3890C, 3890D, 3890E and 3890F may carry out the service of ship stations or ship earth stations using the frequencies and techniques prescribed in Chapter N IX.

ADD 3890H [(3) The holder of a certificate specified in Nos. 3890FA and 3890FB may carry out the technical service of ship stations and ship earth stations using the frequencies and techniques prescribed in Chapter N IX.]

MOD **Section III. Conditions for the Issue of Certificates for Operators of Ship Stations and Ship Earth Stations Using the Frequencies and Techniques Prescribed in Chapter IX and for the Public Correspondence Service**

NOC 3891-3949

ADD **Section IIIA. Conditions for the Issue of Certificates for Personnel of Ship Stations and Ship Earth Stations Using the Frequencies and Techniques Prescribed in Chapter N IX**

ADD 3949A A. First-Class Radio Electronic Certificate

ADD 3949B The First-Class Radio Electronic Certificate is issued to candidates who have given proof of the technical and professional knowledge and qualifications enumerated below:

ADD 3949BA a) knowledge of the principles of electricity and the theory of radio and electronics sufficient to meet the requirements specified in Nos. 3949BB, 3949BC and 3949BD;

ADD 3949BB b) theoretical knowledge of GMDSS radiocommunication equipment, including narrow-band direct-printing telegraph and radiotelephone transmitters and receivers, digital selective calling equipment, ship earth stations, emergency position-indicating radiobeacons, marine antenna systems, radio equipment for survival craft together with all auxiliary items, including power supply equipment, as well as general familiarity with any other equipment commonly used for radionavigation, with particular reference to equipment maintenance;

ADD 3949BC c) practical knowledge of the operation and knowledge of the preventive maintenance of the equipment indicated in No. 3949BB;

ADD 3949BD d) practical knowledge necessary for the location and repair (using appropriate testing equipment and tools) of faults in the equipment indicated in No. 3949BB which may occur during a voyage;

ADD 3949BE e) detailed practical knowledge of the operation of all GMDSS sub-systems and equipment;

ADD 3949BF f) ability to send and receive correctly by radiotelephone and direct-printing telegraphy;

ADD 3949BG g) detailed knowledge of the regulations applying to radiocommunications, knowledge of the documents relating to charges for radiocommunications and knowledge of those provisions of the International Convention for the Safety of Life at Sea, 1974 which relate to radio;

ADD 3949BH h) sufficient knowledge of one of the working languages of the Union. Candidates should be able to express themselves satisfactorily in that language, both orally and in writing.

ADD 3949BI B. Second-Class Radio Electronic Certificate

ADD 3949BJ The Second-Class Radio Electronic Certificate is issued to candidates who have given proof of the technical and professional knowledge and qualifications enumerated below:

ADD 3949BK a) general knowledge of the principles of electricity and the theory of radio and electronics sufficient to meet the requirements specified in Nos. 3949BL, 3949BM and 3949BN;

ADD 3949BL b) general theoretical knowledge of GMDSS radiocommunication equipment, including narrow-band direct-printing telegraph and radiotelephone transmitters and receivers, digital selective calling equipment, ship earth stations, emergency position-indicating radiobeacons, marine antenna systems, radio equipment for survival craft together with all auxiliary items, including power supply equipment, as well as general familiarity with any other equipment commonly used for radionavigation, with particular reference to equipment maintenence;

ADD 3949BM c) practical knowledge of the operation and knowledge of the preventive maintenance of the equipment indicated in No. 3949BL;

ADD 3949BN d) practical knowledge sufficient for effecting repairs in the case of faults in the equipment indicated in No. 3949BL, using the means available on board and, if necessary, replacing modular units;

ADD 3949BO e) detailed practical knowledge of the operation of all GMDSS sub-systems and equipment;

ADD 3949BP f) ability to send and receive correctly by radiotelephone and direct-printing telegraphy;

ADD 3949BQ g) detailed knowledge of the regulations applying to radiocommunications, knowledge of the documents relating to charges for radiocommunications and knowledge of those provisions of the International Convention for the Safety of Life at Sea, 1974, which relate to radio;

ADD 3949BR h) sufficient knowledge of one of the working languages of the Union. Candidates should be able to express themselves satisfactorily in that language, both orally and in writing.

ADD 3949CA C. General Operator's Certificate

ADD 3949CB The General Operator's Certificate is issued to candidates who have given proof of the knowledge and qualifications enumerated below:

ADD 3949CC a) detailed practical knowledge of the operation of all GMDSS sub-systems and equipment;

ADD 3949CD b) ability to send and receive correctly by radiotelephone and direct-printing telegraphy;

ADD 3949CE c) detailed knowledge of the regulations applying to radiocommunications, knowledge of the documents relating to charges for radiocommunications and knowledge of those provisions of the International Convention for the Safety of Life at Sea, 1974, which relate to radio;

ADD 3949CF d) sufficient knowledge of one of the working languages of the Union. Candidates should be able to express themselves satisfactorily in that language, both orally and in writing.

ADD 3949DA D. Restricted Operator's Certificate

ADD 3949DB The Restricted Operator's Certificate is issued to candidates who have given proof of the knowledge and qualifications enumerated below:

ADD 3949DC a) practical knowledge of the operation of the GMDSS sub-systems and equipment which is required while the ship is sailing within the range of VHF coast stations;

ADD 3949DD b) ability to send and receive correctly by radiotelephone;

ADD 3949DE c) knowledge of the regulations applying to radiotelephony communications and specifically of that part of those regulations relating to the safety of life;

ADD 3949DF d) an elementary knowledge of one of the working languages of the Union. Candidates should be able to express themselves satisfactorily in that language, both orally and in writing. Administrations may waive the above language requirements for holders of a restricted operating certificate when the ship station is confined to a limited area specified by the administration concerned. In such cases the certificate shall be suitably endorsed.

ADD 3949E [E. First-Class Technical Certificate]

ADD 3949EA [The First-Class Technical Certificate is issued to candidates who have given proof of the technical and professional knowledge and qualifications enumerated below:]

ADD 3949EB [a) knowledge of the principles of electricity and the theory of radio and electronics sufficient to meet the requirements specified in Nos. 3949EC, 3949ED and 3949EE;]

ADD 3949EC [b) theoretical knowledge of GMDSS radiocommunication equipment, including narrow-band direct-printing telegraph and radiotelephone transmitters and receivers, digital selective calling equipment, ship earth stations, emergency position-indicating radiobeacons, marine antenna systems, radio equipment for survival craft together with all auxiliary items, including power supply equipment, as well as general familiarity with any other equipment commonly used for radionavigation, with particular reference to equipment maintenance;]

ADD 3949ED [c) practical knowledge of the operation and knowledge of the preventive maintenance of the equipment mentioned in No. 3949EC;]

ADD 3949EE [d) practical knowledge necessary for the location and repair (using appropriate testing equipment and tools) of faults in the equipment indicated in No. 3949EC which may occur during a voyage;]

ADD 3949F [F. Second-Class Technical Certificate]

ADD 3949FA [The Second-Class Technical Certificate is issued to candidates who have given proof of the technical and professional knowledge and qualifications enumerated below:]

ADD 3949FB [a) basic knowledge of the principles of electricity and the theory of radio and electronics sufficient to meet the requirements specified in Nos. 3949FC, 3949FD and 3949FF;]

ADD 3949FC [b) basic theoretical knowledge of GMDSS radiocommunication equipment, including narrow-band direct-printing telegraph and radiotelephone transmitters and receivers, digital selective calling equipment, ship earth stations, emergency position-indicating radiobeacons, marine antenna systems, radio equipment for survival craft together with all auxiliary items, including power supply equipment, as well as a general familiarity with any other equipment commonly used for radionavigation, [with particular reference to equipment maintenance;]

ADD 3949FD [c) practical knowledge of the operation and knowledge of the preventive maintenance of the equipment mentioned in No. 3949FC;]

ADD 3949FF [d) practical knowledge sufficient for effecting repairs in the case of minor faults in the equipment mentioned in No. 3949FC, using the means available on board and, if necessary, replacing modular units;]

NOC **Section IV. Qualifying Service**

NOC 3950-3953

NOC

ARTICLE 56

MOD

Personnel of Stations in the Maritime Mobile and the Maritime Mobile-Satellite Service

MOD

Section I. Personnel of Coast Stations and Coast Earth Stations

MOD 3979 Administrations shall ensure that the staff on duty in coast stations and in coast earth stations are adequately qualified to operate the stations efficiently.

MOD

Section II. Class and Minimum Number of Operators for Stations on Board Ships in the Public Correspondence Service

NOC 3980-3986

ADD

Section III. Class and Minimum Number of Personnel for Ship Stations and Ship Earth Stations on Board Ships using the Frequencies and Techniques Prescribed in Chapter N IX

ADD 3986AA Administrations shall ensure that the personnel of ship stations and ship earth stations are adequately qualified to permit efficient operation of the station, and shall take steps to ensure the operational availability and maintenance of equipment for distress and safety communications in accordance with the relevant international agreements.

ADD 3986AB An adequately qualified person shall be available to provide a dedicated communications service in cases of distress.

ADD 3986AC The personnel of ship stations for which a radio installation is compulsory under international agreements and which use the frequencies and techniques prescribed in Chapter N IX shall, with respect to the provisions of Article 55, include at least:

ADD 3986AD a) for stations on board ships which sail beyond the range of MF coast stations: a holder of a first- or second-class radio electronic certificate.

ADD 3986AE b) for stations on board ships which sail within the range of MF coast stations: a holder of a first- or second-class radioelectronic certificate or a general operator's certificate.

ADD 3986AF

c) for ship stations on board ships which sail within the range of VHF coast stations: a holder of a first- or second-class radio electronic certificate or a general operator's certificate or a restricted operator's certificate.

ADD 3986AG

The personnel of ship stations for which a radio installation is not compulsory under international agreements and which use the frequencies and techniques prescribed in Chapter N IX shall be adequately qualified and certificated in accordance with the administration's requirements.

3987 to 4011 NOT Allocated

ADD 3986AF c) for ship stations on board ships which sail within the range of VHF coast stations: a holder of a first- or second-class radio electronic certificate or a general operator's certificate or a restricted operator's certificate.

ADD 3986AG The personnel of ship stations for which a radio installation is not compulsory under international agreements and which use the frequencies and techniques prescribed in Chapter N IX shall be adequately qualified and certificated in accordance with the administration's requirements.

3987 to 4011 NOT Allocated

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 475-E
8 February 1988
Original: English

PLENARY MEETING

MINUTES

OF THE

TENTH PLENARY MEETING

Thursday, 15 October 1987, at 1005 hrs

Chairman: Mr. J.W. EGAN (Canada)

Subjects discussed:	Documents
1. Eighteenth Series of texts submitted by the Editorial Committee for first reading (B.18)	445
2. Nineteenth Series of texts submitted by the Editorial Committee for first reading (B.19)	451
3. Twentieth Series of texts submitted by the Editorial Committee for first reading (B.20)	457

1. Eighteenth Series of texts submitted by the Editorial Committee for first reading (B.18) (Document 445)

Articles 1, 12 and Resolution No. 200 (Rev.Mob-87)

Approved.

Resolution No. 205 (Rev.Mob-87)

considering b)

1.1 The delegate of the United States said that as a result of the approval of N 3010 (series B.10, Document 403) and the adoption of 649A in Article 8 (Document 444), it would be appropriate to replace "No. 649" by "Nos. 649 and 649A"; as a consequence, the word "limits" should read "limit".

considering further j)

It was agreed to make editorial amendments to the English text only as pointed out by the Chairman and the delegate of Sweden.

Resolution No. 205 (Rev.Mob-87) was approved as amended.

Resolution GT-TEC PLEN/3

Approved.

Resolution COM4/16

considering a)

1.2 A suggestion from the delegate of Paraguay that concern about failure to abide by provisions of the Radio Regulations should be expressed by inserting the word "unfortunately" before "some administrations" received no support and was thus rejected.

considering b)

1.3 A suggestion from the delegate of Argentina that the word "prohibits" should be replaced by "does not permit", in alignment with the wording of RR 3633, was approved.

recognizing a)

1.4 The delegate of Paraguay, supported by the delegate of Cuba, suggested that the paragraph be deleted for the same reasons as given in his first comment.

1.5 The delegate of Sweden, supported by the delegates of the USSR, Togo and the United Kingdom, said that, on the contrary, the square brackets should be deleted and the paragraph retained. With the adoption of ADD 1344A and ADD 1348A (Series B.11, Document 411), the former making specific reference to RR 1240 which provided for conformity with the Radio Regulations (and hence RR 3633), appropriate amendments had in fact been made to Article 12 to allow the IFRB the flexibility required in dealing with notices not in conformity with RR 3633.

The Swedish proposal was approved.

1.6 The delegates of Cuba and Brazil proposed that "(R)" should be added after the words "aeronautical mobile service" wherever they appeared in the text in view of the fact that the provisions of the draft new Article 51 (Series R.3, Document 436) permitted public correspondence, and the definitions of the aeronautical mobile service and aeronautical mobile-satellite service (Radio Regulations, Article 1) did not exclude it.

1.7 There being no support for that proposal, and after the delegate of Sweden pointed out that the suffix would not be consistent with RR 3633, the Cuban delegate withdrew his proposal.

Resolution COM4/16, as amended, was approved.

Resolution COM4/17 and Recommendations COM4/E and COM4/G

Approved.

p.18/14

Resolutions and Recommendations

1.8 The Chairman of the Editorial Committee drew the Plenary's attention to the fact that "Recommendation No. 302: NOC" should be deleted from the list since a modified version would be considered during the first reading of the twentieth Series of texts (Series B.20, Document 452).

It was so agreed.

The Eighteenth Series of texts submitted by the Editorial Committee (Series B.18) was approved on first reading as amended.

2. Nineteenth Series of texts submitted by the Editorial Committee for first reading (B.19) (Document 451)

Preamble to the Final Acts

Fifth paragraph

2.1 Following information from the Chairman of Committee 4 that the report of Working Group ad hoc PL-3 on the dates for entry into force of the revised Radio Regulations would be available later that day, the Secretary-General explained that those dates were the specific and different dates on which certain individual Radio Regulations came into force and would thus be more appropriately entered in the body of the Radio Regulations themselves. In reply to a question from the representative of the IFRB (Mr. Berrada), he said that, in application of the practice followed since 1979 of bringing together in one place all the provisions regarding entry into force of changes to the Radio Regulations, the Legal Adviser was working on an appropriate text to modify Article 69, which would be submitted to the Plenary at an appropriate time. Those exceptions apart, the other changes to the Radio Regulations would enter into force on the date decided on by the Plenary at an earlier meeting, namely 3 October 1989, which was thus the date that should be inserted in the fifth paragraph.

On that understanding, the date of 3 October was inserted before "1989" and the square brackets deleted.

Sixth paragraph

2.2 The delegate of Spain said that the words "this partial revision of the Radio Regulations" in the first line should be amended since they were legally inaccurate. What Members were in fact signing was the Final Acts (see the last paragraph of the Preamble) together with the annexes, of which the partial revision of the Radio Regulations was only one.

2.3 The delegate of India suggested that the paragraph might be more acceptable if the phrase "this partial revision of the Radio Regulations" were replaced by "the Final Acts of the Conference" and the words "annexed to the Final Acts" were inserted in the third line after "Radio Regulations".

2.4 The Secretary-General explained that the present wording, which was the traditional formula in use by all ITU administrative conferences, indicated that although it was the Final Acts that Members signed, as stated in the final paragraph of the Preamble, it was the changes to the Radio Regulations that formed the binding and regulatory part of the whole package and the one to which any reservations submitted by Members were directed. Any change in wording would cause practical problems. However, he suggested that the opinion of the Legal Adviser should be sought on the issue; in the meantime a decision on the paragraph might be deferred by placing it in square brackets.

It was so agreed.

Resolution COM4/5

Approved.

Resolution COM4/8.

resolves to urge administrations 5

2.5 The delegate of Mexico recalled that during discussion of the first draft of the paragraph at the ninth meeting of Committee 4 (Document 364) a final decision on the wording had been postponed. With the support of the delegates of Paraguay, Tunisia, Islamic Republic of Iran, Costa Rica and Swaziland, he maintained the reservation he had expressed at that meeting with regard to the words "to request their governments to enact such legislation as necessary"; such wording represented an unwarrantable constraint on sovereign States which were entitled to decide for themselves the measures which were most appropriate for the end in view, especially - an opinion endorsed by the delegates of Spain and France -since legal, administrative and regulatory measures and procedures to attain such an end differed from country to country. Furthermore, no national legislation was applicable outside the national territory. While recognizing that the present wording reproduced that in Resolutions Nos. 309 and 407, he maintained that there was no need to perpetuate errors made in the past. Suitable replacement wording had already been adopted by the ninth Plenary meeting in paragraph invites administrations 2 of Resolution COM5/2; he therefore proposed that the first part of the paragraph be amended to read:

> "to request their respective governments to take all legislative or other appropriate measures as they may consider necessary to prevent stations located off their coasts .....".

2.6 The delegate of Tunisia said that as national legislation could not be applied in international waters off the coast of the country concerned it would be more correct to amend that proposal to read:

> "to request their respective governments to take all necessary measures under their jurisdiction as they may consider necessary ....",

an amendment endorsed by the delegate of Mexico.

2.7 The Secretary-General said that although the point made by Tunisia was correct it should not be forgotten that the laws and other regulatory procedures of any given country were applicable to ships and aircraft under the jurisdiction of that country; such countries should be encouraged to take steps to prevent their ships and aircraft from operating in contravention of RR 2665 off the coasts of other countries. To clarify that point, to allow for the fact that the measures requested were not exclusively the prerogative of governments in some countries and to meet the concerns of Mexico and Tunisia, he suggested that the first part of the paragraph might be amended to read:

> "to request their competent authorities to take such legal or regulatory measures as necessary and applicable within their territory and for ships and aircraft under their jurisdiction to prevent stations located off their coasts ....."

2.8 The delegate of Sweden, supported by the delegate of Kenya, noted that although national legislative and regulatory procedures did not apply in international waters off coasts, measures were still open to countries, such as by preventing supplies being delivered through their territorial waters, to render the operation of ships and aircraft in contravention of RR 2665 very difficult if not impossible.

2.9 The delegate of Finland considered that point to be covered by the Secretary-General's proposal, which he supported.

2.10 The delegate of the United Kingdom, supported by the delegate of Lebanon, said the Swedish point could perhaps be met by inserting the words "or take other appropriate measures" after "jurisdiction" in the Secretary-General's proposal, as did the delegates of Saudi Arabia and Cuba.

2.11 The delegate of the Federal Republic of Germany, supported by the delegate of the United States, moved closure of the debate.

2.12 The delegates of Tunisia and Paraguay opposed the motion to close the debate.

The motion for closure of the debate was put to the vote by a show of hands and was approved by 68 votes to 9 with no abstentions.

2.13 The Chairman proposed that a small Drafting Group be set up under the chairmanship of the delegate of Mexico and with Argentina, Finland, Sweden, Tunisia, the United Kingdom and the Legal Adviser as members to prepare, in the light of the discussion, a suitable text for the paragraph, which would be placed in square brackets for the time being.

It was so agreed.

Resolution COM4/8, with the exception of paragraph resolves to urge administrations 5, was approved.

Recommendation COM4/C

2.14 The Chairman of Committee 4 indicated that paragraph considering g) should be moved up to follow paragraph considering d).

2.15 The delegate of Spain noted, with regard to paragraph invites the Administrative Council, that it was not normal practice to place the provisions of a Recommendation on the agenda of a WARC and suggested that the Secretary-General should be requested to amend the wording appropriately.

With those amendments, Recommendation COM/4C was approved.

Recommendation COM4/D

2.16 The Chairman of Committee 4 indicated that the words "Recommendations and" should be inserted after "CCIR" in paragraph recommends administrations b).

The Nineteenth Series of texts submitted by the Editorial Committee (B.19) (Document 451) was approved on first reading, as amended, with the wording of two paragraphs left pending.

3. Twentieth Series of texts submitted by the Editorial Committee for first reading (B.20) (Document 457)

Article 62

MOD 4679A

It was agreed to remove the square brackets and replace the frequency 22 765 kHz by 22 756 kHz.

MOD 4681A

It was agreed to remove the square brackets.

The meeting rose at 1200 hours.

The Secretary-General: The Chairman:

R.E. BUTLER J.W. EGAN

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 476-E
22 February 1988
Original: English

PLENARY MEETING

MINUTES

OF THE

ELEVENTH PLENARY MEETING

Thursday, 15 October 1987, at 1400 hrs.

Chairman : Mr. J.W. EGAN (Canada)

Subjects discussed:	Documents
1. Twentieth series of texts submitted by the Editorial Committee for first reading (B.20) (continued)	457
2. Twenty-first series of texts submitted by the Editorial Committee for first reading (B.21)	465
3. Twenty-second series of texts submitted by the Editorial Committee for first reading (B.22)	466
4. Twenty-third series of texts submitted by the Editorial Committee for first reading (B.23)	472
5. Twenty-fourth series of texts submitted by the Editorial Committee for first reading (B.24)	474
6. First series of texts submitted by the Editorial Committee for second reading (R.1)	296 + Corr. 1
7. Second series of texts submitted by the Editorial Committee for second reading (R.2)	386
8. Third series of texts submitted by the Editorial Committee for second reading (R.3)	436
9. Fourth series of texts submitted by the Editorial Committee for second reading (R.4)	448, 471 477

		Documents
10.	Fifth series of texts submitted by the Editorial Committee for second reading (R.5)	463
11.	Sixth series of texts submitted by the Editorial Committee for second reading (R.6)	469
12.	Seventh series of texts submitted by the Editorial Committee for second reading (R.7)	473
13.	Eighth series of texts submitted by the Editorial Committee for second reading (B.8 amended)	393
14.	Sixteenth series of texts submitted by the Editorial Committee for second reading (B.16 amended)	442

1. Twentieth series of texts submitted by the Editorial Committee for first reading (B.20) (Document 457) (continued)

Article 62 (continued)

MOD 4683

Following modifications indicated by the Chairman and proposed by the delegate of the Netherlands respectively, it was agreed that MOD 4683 should remain pending until an ad hoc Group chaired by the Chairman of Committee 4 could present a modified text.

MOD 4684

1.1 The Chairman indicated that the title "Coast stations" should be followed by a double asterisk with reference to a note reading as for Note 1) in Document 442 (page B.16/6). The frequency 22 445.5 kHz should be modified to read 22 445 kHz.

It was so agreed.

Article 62, as amended, with the exception of MOD 4683, was approved.

Article 63

Approved.

Appendix 25(Rev.)

1.2 The Chairman indicated that 23 000 kHz in the title and in Note b) should be replaced by 27 500 kHz.

1.3 The representative of the IFRB (Mr. Berrada) drew attention to the need to align Note b) to the French text, i.e. to read "in no case exceed a peak envelope power...". In reply to comments concerning the footnote, the Secretary-General confirmed that when the final Radio Regulation was reproduced, the General Secretariat would insert the appropriate note. He further reminded delegates that upon publication of the Final Acts, references to NOC, currently inserted for convenience, would be omitted.

With those amendments, Appendix 25(Rev.) was approved.

Resolution No. 312(Rev. Mob-87)

1.4 The representative of the IFRB (Mr. Berrada) pointed out that the last line of MOD c) should read "(Article 60 and Appendix 34)"

1.5 The delegate of the United Kingdom said that MOD 2 under instructs the Secretary-General should read "as necessary to update the Distribution Plan Annex to the List of Coast Stations;".

Resolution No. 312 (Rev. Mob-87) was approved as amended and with the removal of the square brackets.

Resolution No. 704 (Mob-83)

Footnote 1

1.6 The delegate of the United Kingdom, supported by the delegate of Denmark, suggested that the footnote should read:

"although this Resolution has been reviewed by the WARC MOB-87, some of the action required has not been completed and it is retained until such time as appropriate action is taken in a future competent WARC and pending consideration of Resolution COM4/5 by the Plenipotentiary Conference in 1989."

Resolution No. 704 (Mob-83) footnote 1 was approved as amended.

Resolution COM4/12

1.7 The Observer for IMO suggested that the word "requests" should be replaced by "invites", that paragraph 1. should read "the IMO to communicate as soon as practicable after receipt of the information...", that the word "requests" should be inserted after paragraph 2. and that paragraphs 3. and 4. should be renumbered 1. and 2. respectively. The delegate of the USSR supported that proposal.

Resolution COM4/12 was approved as amended.

Resolution COM6/4

1.8 The delegate of the United Kingdom said that in considering a), the words "capable of operating" should be replaced by "using" and that d) should be deleted.

1.9 The delegate of Kenya suggested some minor editorial adjustments to considering a), to be finalized by the Editorial Committee

1.10 The delegate of Argentina pointed out that the title in the Spanish text should be aligned with the English and French texts.

1.11 The representative of the IFRB (Mr. Berrada) suggested that the "resolves" paragraph should remain pending for the time being.

Resolution COM6/4, as amended, was approved, except for the resolves section left in square brackets.

Recommendation No. 302(Rev. Mob-87)

1.12 The delegate of the United Kingdom, referring to considering g), pointed out that the reference to Resolution D should be modified to refer to Resolution COM4/6.

Recommendation No. 302(Rev. Mob-87), as amended, was approved, with the removal of the square brackets.

The twentieth series of texts submitted by the Editorial Committee (B.20) (Document 457) was approved on first reading, as amended, with the wording of two paragraphs left pending.

2. Twenty-first series of texts submitted by the Editorial Committee for first reading (B.21) (Document 465)

MOD 472A

2.1 The Chairman of Committee 4 indicated that the square brackets should be removed.

ADD 572A

2.2 The delegates of Greece, Lebanon, Portugal and the Netherlands requested that their countries be added to those listed under additional allocation. The delegate of Mauritania requested that his country be deleted.

It was so agreed.

2.3 The delegate of Spain pointed out that the Spanish text should be aligned with the other language versions, as was also the case for ADD 590A and ADD 645A.

ADD 590A

2.4 The delegate of the United States, supported by the delegate of Denmark, proposed that the band should be modified to 108 - 111.975 MHz.

It was so agreed.

2.5 The delegates of Lebanon, Pakistan and Portugal requested that their countries be added to the list. The delegate of Mauritania requested that his country be deleted.

It was so agreed.

ADD 645A

2.6 The delegates of Greece, the Netherlands and Portugal requested that their countries be added; the delegate of Mauritania requested that his country be deleted.

It was so agreed.

ADD 734A

2.7 Following a request from the delegate of Thailand for clarification, the representative of the IFRB (Mr. Berrada) stated that the meaning of the footnote was that the radiodetermination satellite allocation should not be considered as a service having safety uses.

ADD 734B

2.8 The delegates of Burundi, Lebanon, Libya, Madagascar, Pakistan and Zaire requested that their countries be added to the list; the delegate of Qatar requested that his country be deleted.

It was so agreed.

Frequency Allocation Table: 1 559 - 1 626.5 MHz

2.9 The delegate of Argentina said that he could not agree to the proposal as contained in the Table and related footnotes that allocation to the radiodetermination-satellite service in Region 2 should be on a primary basis. He therefore proposed that the Table should reflect allocation on a secondary basis for all Regions and that a footnote be included to provide for allocation on a primary basis for those countries which so wished. In other words, he proposed that the situation for Regions 1 and 3 should remain as it was, that allocation in Region 2 should be on a secondary basis, and that there should be a footnote to cover those countries specifically requesting allocation on a primary basis. The delegates of Swaziland, Cuba, Senegal and Venezuela supported that proposal.

2.10 The delegate of the United Kingdom pointed out that it might become necessary to revert to the matter in the light of the report by the Chairman of Working Group 4 ad hoc 6.

2.11 The delegate of the USSR said that his Administration objected to the Table in its present form and to the footnotes, especially ADD 734AA, for reasons similar to those of previous speakers. His Delegation reserved the right to express its views on the radiodetermination-satellite service at the time of consideration of the Final Acts.

2.12 The delegate of the United States, recapitulating the stages having led to presentation of the current Frequency Allocation Table and footnotes, recalled that it was presented as an acceptable basis on which the Conference might move forward towards a consensus and that there had been a strong preference among Region 2 countries for the radiodetermination-satellite service on a secondary basis. Previous discussions had shown that, in accordance with the guidelines adopted for the Conference, it was permissible to change allocations and that, as the IFRB had demonstrated, interregional sharing problems were not unsurmountable. He strongly supported the Table and footnote as presented and urged other delegates to accept that compromise.

2.13 The delegate of Italy said that the current text was not entirely satisfactory to his Administration but it was prepared to accept the proposed text in a spirit of compromise.

2.14 The delegate of Senegal moved closure of the debate and the taking of a vote on the matter. There being no opposition to that motion, the Chairman closed the debate.

2.15 The Secretary-General emphasized the need to consider the impact of the proposal on ADD 734AA and ADD 734B in particular and with regard to Region 2.

2.16 The delegate of France pointed out that ADD 734AA referred to the bands 1 610 - 1 626.5 MHz and 2 483.5 - 2 500 MHz, whereas the Table referred specifically to the first of these bands.

2.17 The Chairman invited the meeting to vote by show of hands on the Table and footnotes, with the amended list of countries in ADD 734B. The result of the vote was 52 in favour, 16 against and 10 abstentions.

2.18 The delegate of Spain, speaking in explanation of his vote, said that he had supported the text in order to maintain the situation as it was presented for Region 1. In reply to his question concerning the procedure of voting, the Chairman pointed out that the Table for the 1 559 - 1 626.5 MHz band plus the related footnotes represented a delicate balance and compromise among a number of administrations and that, having considered them and the proposal by the delegate of Argentina as concurrent proposals, he had invited delegates to vote first upon the text in Document 465 as the proposal which had been presented first.

2.19 At the request of the delegate of Saudi Arabia, the Chairman of the IFRB confirmed what had already been stated in Committee 4, namely, that from the viewpoint of the practical application of the Radio Regulations, the secondary allocation in the Table concerned would be equivalent to the secondary allocation in the footnote and that there was therefore no difference for any region between inclusion in the Table or inclusion in the footnote.

2.20 The delegate of Sweden drew attention to agreement reached in Committee 4 to include a reference to footnote 731 covering Sweden only.

2.21 The delegate of Venezuela requested inclusion of a footnote concerning a different category of service, on a secondary basis, for his country.

It was so agreed.

The meeting was suspended at 1705 hours and resumed at 1810 hours.

2.22 The delegate of the USSR repeated his Delegation's reservation concerning the band 1 559 - 1 626.5 MHz.

Table: 2 450 - 2 500 MHz

ADD 753B

2.23 The delegate of France, supported by the delegate of the United States, pointed out that ADD 753B, as contained on page 4 of Document 373, should be inserted.

2.24 The delegate of India proposed that mention of Region 3 should be deleted from that note; the delegate of Swaziland proposed that mention of Region 1 should be deleted; the delegate of Côte d'Ivoire considered that the footnote was unnecessary and proposed that it be deleted entirely.

2.25 In reply to a question from the delegate of Switzerland, the representative of the IFRB (Mr. Berrada) confirmed that the intention of the footnote, when read in conjunction with ADD 734AA and ADD 753C, was to place the radiodetermination-satellite service on a lower basis than secondary in the interest of protection of the service. The delegates of the USSR and the United Kingdom supported the delegate of Switzerland in his view that the footnote should be retained.

2.26 The delegate of Australia said that he had no objection to the retention of the footnote but, together with the delegate of Côte d'Ivoire, requested further clarification.

2.27 The Chairman of Committee 4 explained that in the Table originally considered by Committee 4, the radiodetermination satellite service had been on a secondary basis in both Regions 1 and 3. However, that situation had subsequently changed so that the service was on a secondary basis for Region 1 and a primary basis for Region 3. There was therefore no longer the same reason to mention Region 3 in the footnote. The representative of the IFRB (Mr. Berrada), by way of illustration, said that in a case where one of two countries in Region 1 which had a secondary allocation for the radiodetermination-satellite service might wish to be included in a footnote indicating a primary basis in accordance with Article 14, and with the agreement of the countries concerned, footnote 734B would apply in the sense that the relevant status would be provided, although that at the same time the other of the two countries would be protected.

It was agreed to retain ADD 753B with reference to Region 1 only.

ADD 753C

2.28 The delegates of Jordan, Lebanon, Libya, Madagascar and Pakistan requested that their countries be added to the list; the delegate of Qatar requested that his country be deleted.

It was so agreed.

ADD 753E

2.29 The delegate of Cuba, referring to the above note in connection with ADD 734D, said that the first-mentioned stated little that was not already included in the Table. He reserved the right to make a statement clarifying the position of his Administration on the matter when the texts were submitted for second reading.

2.30 The delegate of the USSR repeated his Delegation's reservation concerning the band 2 450 - 2 500 MHz.

Table: 2 500 - 2 655 MHz

ADD 754A

2.31 The Chairman invited delegates to consider a modified text as follows:

"Additional allocation: Subject to agreement obtained under the procedure set forth in Article 14, the band 2 500 - 2 516.5 MHz may also be used in India for the radiodetermination-satellite service (space-to-Earth) for operation limited to within national boundaries."

The above text was approved.

2.32 The delegates of the Islamic Republic of Iran, Papua New Guinea and Thailand asked to be included.

It was so agreed.

2.33 In response to a request for clarification from the delegate of Pakistan, the representative of the IFRB (Mr. Brooks) referred to No. 428 of the

Radio Regulations and further explained that, under Article 14 procedures, if two administrations wished to come to an understanding concerning secondary status, the consequent agreement between them would apply to the two countries concerned although primary status would be retained with respect to other countries.

ADD 796A

2.34 The delegates of Italy, Jordan, Morocco, Netherlands, Pakistan, Syria and Tunisia requested that their countries be added to the list.

It was so agreed.

The twenty-first series of texts submitted by the Editorial Committee (B.21) (Document 465) was approved on first reading, as amended.

3. Twenty-second series of texts submitted by the Editorial Committee for first reading (B.22) (Document 466)

3.1 The Chairman drew attention to the Note from Committee 6 and said that the Editorial Committee would check the frequencies listed throughout the document.

Article 60

MOD 4183

3.2 The Chairman of Working Group 6-A said that the square brackets and text within them should be deleted.

MOD 4184B

3.3 The Chairman of Working Group 6-A said that the square brackets should be removed.

ADD 4184C, ADD 4188B, ADD 4188C

3.4 The Chairman of Committee 4 said that all the above Notes should be deleted.

MOD 4197 and MOD 4198

3.5 The Chairman of Working Group 6-A said that the square brackets around the lists of frequencies should be removed.

MOD 4202, MOD 4203 and MOD 4207

3.6 The Chairman of Working Group 6-A suggested that the wording be amended in MOD 4202 and MOD 4207 to read: "...at speeds of 100 bauds for FSK and not excluding 200 bauds for PSK (frequencies paired with...", and in MOD 4203 to read: "... A1A Morse telegraphy (working) at speeds of 100 bauds for FSK and not excluding 200 bauds for PSK...".

3.7 The delegate of the Federal Republic of Germany urged that the text of the Notes should be consistent with that of Appendix 31.

3.8 The Chairman of Committee 4 pointed out that the text approved for Appendices 31 and 32 was: "shall not exceed 100 bauds for FSK and 200 bauds for PSK". He therefore proposed that the text should be retained as it stood.

3.9 The delegate of the Netherlands explained that the change had been suggested because he had pointed out that FSK operated at 100 bauds while PSK might operate at speeds of up to 200 bauds. In order to facilitate the discussion, however, he would be prepared to accept the text as originally proposed.

3.10 In response to a proposal by the delegate of the United Kingdom that the words "or A1B" should be added between "A1A" and "Morse" in MOD 4203, the Chairman of Working Group 6-A pointed out that the matter was already covered by ADD 4181A and the addition was therefore unnecessary.

MOD 4202, MOD 4203 and MOD 4207 were approved as originally proposed, with the introduction of parentheses around "working" in MOD 4203.

MOD 4205.1

3.11 The delegate of Japan proposed that the footnote should also contain a reference to MOD 4203.

It was agreed that the reference should be: "MOD 4203.1 and MOD 4205.1".

MOD 4212A

3.12 The representative of the IFRB (Mr. Berrada) pointed out that as the sections of Appendix 31 cited were no longer mandatory, the word "shall" in the third line should be changed to "should".

MOD 4237

3.13 The delegate of the United States proposed that the footnote reference [1] and the corresponding footnote in square brackets should be deleted, in line with the decision taken not to include Regional Plan matters in the Radio Regulations.

3.14 The delegate of Sweden, supported by the delegates of Denmark, Finland and Greece, supported retention of the footnote with removal of the square brackets on the grounds that it stated a matter of fact. The delegate of Côte d'Ivoire agreed that as the text represented a reality, there was no reason not to include it.

3.15 The delegate of the United States said that if the footnote was retained, the final sentence of MOD 4237 might be deleted.

3.16 The delegate of Finland pointed out that the final sentence was a general statement whereas the footnote was specific; both had their place in the text.

It was agreed to remove the square brackets and retain the reference to footnote 1 and the footnote, subject to editorial revision of the text of the footnote by the Editorial Committee.

MOD 4258

3.17 The Chairman of Working Group 6-A said that the text should start: "Nos. 4200, 4203, 4204, 4206 and 4209 and the corresponding columns...".

MOD 4280

3.18 The Chairman of Working Group 6-A said that the final sentence should read: "...selected from within Channel A or B of Appendix 34,...".

ADD 4315C

3.19 The Chairman of Working Group 6-A said that the provision should be deleted.

ADD 4319C

3.20 The Chairman of Committee 4 said that the provision should be deleted.

MOD 4321

3.21 The Chairman of Working Group 6-A indicated that the end of the first sentence should read: "in No. 4123X.".

ADD 4321D

3.22 The representative of the IFRB (Mr. Berrada) said that the reference should be to Resolution No. 300.

It was agreed to remove the square brackets.

ADD 4323J and ADD 4323K

3.23 The delegate of Norway, supported by the delegates of Denmark, Italy, Spain, Sweden and the USSR proposed removal of the square brackets.

3.24 The delegate of Brazil, supported by the delegate of the United States was concerned at the inclusion in the Radio Regulations of provisions emanating from regional conferences.

3.25 The delegate of the Federal Republic of Germany supported the Norwegian proposal on the grounds that the text made no reference to a regional plan and that the provision on which it was based had been adopted for world-wide use.

3.26 The delegate of India, supported by the delegate of Japan, said that while he did not object to the inclusion of the text, he was uneasy about the principle of having a provision of world-wide application which could be amended at a regional conference.

3.27 In response to a suggestion by the Chairman to specify in the text, "in Region 1", the delegate of Denmark said that he would be prepared to accept such a solution in the spirit of compromise. The delegates of Finland and Norway

opposed any such modification. The delegate of Sweden also opposed restriction of the text to Region 1 in the interests of general standardization and on the grounds that the provision was not mandatory. The delegate of Côte d'Ivoire expressed the opinion that the text should either be included as it stood or deleted entirely.

It was agreed that ADD 4323J and ADD 4323K should be retained and the square brackets removed.

ADD 4323R

3.28 The delegate of the Federal Republic of Germany expressed the view that ADD 4323R could be deleted since the substance was already covered in ADD 4323H. The delegate of Denmark, supported by the delegate of Norway pointed out that the notes referred to different frequency bands and should therefore be retained.

3.29 The delegate of Kenya said that while he could accept inclusion of the text, he foresaw practical difficulties in its operation.

It was agreed to retain ADD 4323R and remove the square brackets.

ADD 4323U

3.30 The delegate of Denmark, supported by the delegates of Finland and Sweden proposed that, for clarification, the words "coast station calling" should be deleted and a final sentence added to read: "Acknowledgements of such calls should also be made on this frequency".

It was so agreed.

ADD 4323X

3.31 The delegate of India, supported by the delegate of Canada, was of the opinion that the text might give rise to difficulties, especially the inclusion of the word "normally". He therefore suggested that it should be deleted.

3.32 In response to a question by the delegate of the Federal Republic of Germany, the delegate of Denmark said that the frequency paired with 2 177 kHz was 2 189.5 kHz internationally: for national calling, pairs would be given in the list of coast stations. He added, in reply to the delegate of India that it would seem natural to respond on the same channel as was used for calling. Following consultation with previous speakers, he proposed that the text should be amended so that the final sentence reads: "...the call received as indicated in the list of coast-stations (see No. 4323D)".

It was so agreed.

ADD 4326A

3.33 The delegate of Norway, supported by the delegate of Italy, proposed that the text be placed in square brackets pending consideration of Article 65 and Appendix 19. The delegate of the Federal Republic of Germany argued that it would be more appropriate to take a decision on ADD 4326A before proceeding to related texts. The delegate of Israel proposed deletion of the text on the grounds that it was contrary to the spirit of the Radio Regulations.

3.34 The delegate of France supported retention of the text. It seemed to him to be necessary to establish provisions for systems described in CCIR Recommendations. He was supported by the delegates of Monaco and Syria. The delegate of the United Kingdom also supported retention, pointing out that the clause would not apply only to Appendix 18 but for any frequency used in the maritime environment.

3.35 The delegate of Israel proposed in a spirit of compromise that the words "VHF or" should be deleted.

3.36 The delegate of Norway said that if a definitive decision was to be taken at the current stage, he would be in favour of deleting those words, together with "(see Appendix 19)" at the end. The delegates of the Federal Republic of Germany, Italy, Malta and Sweden supported that proposal.

3.37 The delegate of France, supported by the delegate of Saudi Arabia, said that on the grounds of coherence he could not accept such a deletion.

3.38 The delegate of the United Kingdom then proposed that the words "(except those covered by Appendix 18)" should be added after "VHF". The delegate of France said that he could support that amendment, together with the reference to Appendix 19, as a compromise solution.

It was finally agreed that ADD 4326A should be retained with the inclusion of the above addition and the deletion of "VHF or" and "see Appendix 19".

MOD 4343 and MOD 4348

3.39 The delegate of Tunisia said that the note should be completed by the addition, in parentheses, of a reference to No. 3026 of the Radio Regulations.

3.40 The delegates of Denmark and Egypt proposed that the reference should be deleted in both cases; the delegates of the United States and Finland supported deletion of the reference to the Resolution, which was no longer appropriate.

3.41 The delegate of the United Kingdom proposed deletion of any cross-reference on the grounds of redundancy.

It was so agreed.

ADD 4368A

3.42 The delegate of the Unites States said that as a matter of principle, the Radio Regulations should not be encumbered with matters relating to specific regions. However, he would not insist on deletion.

3.43 The delegate of Denmark pointed out that the note was included under a special section entitled: "Additional provisions applying to Region 1".

The representative of the IFRB (Mr. Berrada) said that the final phrase "under the procedure in [Article 12]" was unnecessary and could be deleted.

It was so agreed and the square brackets were removed.

ADD 4368B

3.44 The Chairman said that ADD 4368B should be deleted.

Article 60, as amended, was approved.

Resolution No. 8

Approved.

Resolution No. 310(Rev. Mob-87)

3.45 The Chairman of Committee 5 proposed that, taking account of noting c), the following should be added at the end of the Resolution, "instructs the Secretary-General to communicate the present Resolution to the International Maritime Organization (IMO) and the International Hydrographical Organization (IHO)."

It was so agreed.

Resolution No. 310(Rev. Mob-87), as amended, was approved.

Resolution COM4/3

Approved.

Resolution COM4/11

3.46 The delegate of the Federal Republic of Germany said that considering e) was superfluous and should be deleted.

3.47 The delegate of the Federal Republic of Germany proposed the deletion of ", and if necessary shall modify the findings" from the final sentence of resolves 6.

Resolution COM4/11 was approved as amended.

Recommendation No.7

3.48 The Chairman of Committee 6 said that the footnote to Recommendation No. 7 had been modified to read:

"Throughout this Recommendation references to ship stations may include references to ship earth stations and references to aircraft stations may include references to aircraft earth stations".

It was so agreed.

Recommendation No. 7 was approved as amended.

The twenty-second series of texts submitted by the Editorial Committee (B.22) (Document 466) was approved as amended on first reading.

4. Twenty-third series of texts submitted by the Editorial Committee for first reading (B.23) (Document 472)

Article 65

MOD 4910

4.1 The delegate of Israel proposed that the second line be modified to read: "...an automatically operated radiotelephone system...".

It was so agreed.

ADD 5064

4.2 The delegate of Denmark pointed out that the numbers indicated should now read 4323S - 4323X and 4323AF - 4323AJ respectively.

ADD 5068

4.3 The delegate of Spain pointed out that the heading in Spanish should be aligned with the other language versions.

Resolution No. 319 (Rev. Mob-87)

Approved.

Resolution COM6/5

4.4 The Chairman of Committee 6, referring to considering b) and resolves, observed that Resolutions Nos. 304 and 320 (Mob-83) were indicated since it was intended to retain the Resolution until the Final Acts of the Conference came into force and that they were therefore not to be suppressed at the signature of the Final Acts.

It was agreed to remove the square brackets around the Resolution and Recommendation numbers in those paragaphs.

The twenty-third series of texts submitted by the Editorial Committee (B.23) (Document 472) was approved, as amended, on first reading.

5. Twenty-fourth series of texts submitted by the Editorial Committee for first reading (B.24) (Document 474)

Article 55

5.1 The Chairman of Committee 6 said that while no changes of substance had been made to the text, there had been considerable editorial changes in Document 474 in an attempt to find adequate descriptive texts to meet the point raised in Committee 6 by the delegate of Sweden concerning headings.

5.2 The delegate of Greece said that he considered some of the alterations to be more of substance than editorial and he would in some cases prefer to revert to the original text.

5.3 The delegate of Brazil said that SUP 3862A should be deleted, since there was no such provision in the Radio Regulations.

5.4 In reply to a question from the delegate of the United Kingdom, the Chairman of Committee 6 said that the provision ADD 3893A in Document 422 was included in the present document as ADD 3877A as a general provision as it referred to both existing and new certificates.

Section IIA Title

5.5 The delegate of Spain, supported by the delegate of Greece, proposed addition of the words "and for the Public Correspondence Service" at the end of the title in the interests of consistency with other similar titles.

It was so agreed.

ADD 3890B, ADD 3890FA, ADD 3890FB, ADD 3890H

5.6 The delegate of Paraguay proposed that the word "six" should be replaced by "four" in ADD 3890B, and that the other provisions mentioned above should be deleted.

5.7 The delegate of Japan said that his Administration was considering requiring ships governed by 3986AD to carry a simple certificate for technical services in order to ensure the operability and availabililty of those ships for safety services. He therefore proposed that the provisions of 3890FA, 3890FB and 3890H should be retained for administrations wishing to be able to select a flexible option. The delegate of the Federal Republic of Germany said that in view of the previous speaker's remark, he would be prepared to support retention of the provisions.

5.8 The delegate of Norway said that, taking into account that no reference was made in Article 56 to technical certificates, it would be appropriate to delete such reference from Article 55. While he appreciated that some countries might consider that there was a national need for such a certificate, the matter should be solved on a national basis.

5.9 The proposal of the delegates of Paraguay and Norway was supported by the delegates of Algeria, Brazil, Spain and Sweden.

5.10 The delegate of Japan said that since ADD 3986AA and ADD 3986AE indicated that administrations could use a technical certificate as an option, he could accept, in a spirit of compromise, the deletion of ADD 3890FA, ADD 3890FB and ADD 3890H.

It was agreed to remove the square brackets and to insert the word "four" in ADD 3890B and to delete ADD 3890FA, ADD 3890FB and ADD 3890H.

Section IIIA

5.11 The delegate of Spain proposed that the words "and for the Public Correspondence Service" should be added at the end of the title.

It was so agreed.

ADD 3949BA, ADD 3949BB

5.12 The delegate of Greece drew attention to the modification of the last three lines of text in 3949BB and proposed to revert to the original text as contained in Document 433. The same wording should also be used in ADD 3949BA.

It was so agreed.

He also proposed that the original wording "mentioned" should be retained in ADD 3949BD rather than "indicated".

It was so agreed.

5.13 In reply to a further proposal to replace "sufficient" by "necessary" in ADD 3949BA, the Chairman pointed out that the wording approved in Document 433 had been "sufficient".

ADD 3949BG

5.14 The delegate of Spain, supported by the delegate of Argentina, proposed that "1974" should be deleted and the word "existing" inserted before "International Convention". The same proposal would apply to subsequent references to the SOLAS Convention. The delegate of Finland objected to a change in practice by inclusion of the word "existing". In response to a suggestion from the Observer for IMO that after the name of the Convention, the words "as may be amended and is in force" might be added, the Secretary-General observed that knowledge required of the Convention applied to the Convention in force at the time the certificate was awarded and not to future amendments.

It was agreed to delete the date "1974" in ADD 3949BG and in subsequent references to the SOLAS Convention.

ADD 3949BL

5.15 In the fourth line from the bottom modify the word "supply" to "supplies" and replace the text that follows this word to the end of the paragraph by: "..., as well as general knowledge of other equipment generally used for radionavigation, with particular reference to maintaining the equipment in service;..."

It was so agreed.

ADD 3949CB, ADD 3949DB

5.16 The delegate of Spain indicated that the Spanish text should be aligned with the English version.

ADD 3949E - ADD 3949FF

5.17 The Chairman said that as a consequence of a decision taken concerning Section IIA, the above provisions in square brackets should be deleted.

Article 55 was approved as amended.

Article 56

Section I

Approved.

Section II: Title

5.18 In response to an expression of concern by the delegate of Norway relating to possible ambiguity, the Chairman of Committee 6 said that the title had been drafted with the intention of drawing a clear distinction between Sections II and III and between existing and new certificates. He agreed that the wording might be revised, bearing that in mind, in the interest of clarity.

5.19 The delegate of Spain proposed that the title should be aligned with corresponding titles of Article 55, Section II and Article 56, Section III. The delegates of Argentina, Brazil, Greece and Paraguay supported the proposal.

5.20 Following a discussion concerning the wording of the title and the role of the Editorial Committee in ensuring alignment, in which the delegates of Greece, Paraguay, Spain, United States and the USSR took part, the delegate of Norway, supported by the delegate of the United Kingdom and the delegate of Greece, moved to close the debate.

Article 56 was approved, as amended.

The twenty-fourth series of texts submitted by the Editorial Committee (B.24) (Document 474) was approved on first reading, as amended.

6. First series of texts submitted by the Editorial Committee for second reading (R.1) (Document 296 and Corrigendum 1)

Appendix 17 Mob-87

6.1 The delegate of the Federal Republic of Germany proposed deletion of provision 1a), which would in turn require the deletion of the reference to R3E in 6 and "reduced carrier or" in 6a). He further proposed that the words "in use or" in 6a) should be deleted, that reference to footnote 4 should be added in the table in 6a) after "assigned frequency" and that the text in the right hand column of the table should be aligned with that of 6b).

It was so agreed.

Appendix 17, as amended, was approved.

Appendices 20, 36, 37A and 38 (Mob-87)

Approved.

SUP Appendix 40

Approved.

The first series of texts submitted by the Editorial Committee (R.1) (Document 296 and Corrigendum 1) was approved, as amended, on second reading.

7. Second series of texts submitted by the Editorial Committee for second reading (R.2) (Document 386)

Article 39

Approved.

Article 40

7.1 The Chairman of Committee 5 said that 3219A should be noted as MOD 3219A, and that the square brackets should be removed from MOD 3201 with the addition of "(see Recommendation COM5/A)" to the existing text.

7.2 The indication NOC 3211-3220 should be split as follows:

NOC 3211-3219

MOD 3219A § 11A The identification and location of medical transport at sea may be affected by means of appropriate standard maritime radar transponders (see Recommmendation COM5/A).

Approved, with those amendments.

Articles 41, 42, 45, 46, 47 and 58

Approved.

Article 66

7.3 The delegate of the United Kingdom said that NOC A.66 should read NOC 5085. He observed that any action taken in amending Article 66 would in no way prejudice any decision that might be taken by the 1988 World Administrative Telephone and Telegraph Conference. The delegate of Japan endorsed that statement.

MOD 5098

7.4 In response to a proposal by the delegate of China to delete the final phrase, the delegate of Argentina, supported by the delegate of Sweden, said that he understood Nos. 5096 and 5097 to refer to the date of payment following normal receipt of the account, whereas 5098 provided an additional period in the event of delay in receipt of an account.

Article 66 was approved unchanged.

Resolutions No. 316(Rev. Mob-87), No. 601(Rev. Mob-87) and GT-TEC PLEN/1

Approved.

Resolution GT-TEC PLEN/2

7.5 The delegate of the Federal Republic of Germany said that in resolves that administrations 2), the words "in ensuring that information is exchanged" should be deleted.

Approved, as amended.

Resolution COM6/1

Approved.

Resolution COM6/2

7.6 The Chairman pointed out that the reference in parentheses below the title should read: "(see Article 60 and Appendix 33(Rev.)".

7.7 The representative of the IFRB (Mr. Berrada) observed that under Article 12, administrations were not required to make such notifications. The Resolution might therefore be deleted and the Board be authorized to delete the existing entry in the Master Register.

7.8 The delegate of Saudi Arabia said that he preferred the Resolution to be retained.

7.9 The Chairman of Committee 7 said that the words "(see No. 4304)" should be deleted in considering e).

Resolution COM6/2 was approved, as amended.

Recommendation No. 312(Rev. Mob-87)

7.10 The delegate of Mexico pointed out that as worded, the text did not make any specific recommendation. The Secretary-General suggested that the final paragraph should be modified to read "and recommends administrations".

It was so agreed.

Recommendation No. 312(Rev. Mob-87) was approved, as amended.

Recommendations No. 603(Rev. Mob-87), No. 604(Rev. Mob-87) and No. 605(Rev. Mob-87)

Approved.

The second series of texts submitted by the Editorial Committee (R.2) (Document 386) was approved, as amended, on second reading.

8. Third series of texts submitted by the Editorial Committee for second reading (R.3) (Document 436)

Article 1

ADD 67A, ADD 68A

8.1 The Chairman of the IFRB said that the phrase "within a specified area on land" implied that a station might be notified by indicating an area only and not the coordinates. The Board considered, however, that such definitions did not overrule the provisions of Articles 11 and 13, which limited the notifications of typical stations without coordinates to mobile earth stations only.

Article 1 was approved.

Articles 19 and 24

Approved.

Article N 38

N 2968

8.2 The Chairman pointed out that the square brackets should be removed.

N 2973

8.3 The Chairman of Committee 5 said that 3026 should be added at the end of N 2973 so that it reads "(see also Nos. 2973, 3026 and 4323)". In response to a comment by the delegate of Tunisia, he said that although N 2973 did not specifically mention distress calling, reference was made to it indirectly by the inclusion of No. 3026.

N 2990A

8.4 The delegate of Spain proposed that "as shown in Appendix 37A" should be added.

It was so agreed.

N 2993D

8.5 In response to a comment by the delegate of China, the Chairman of Committee 5 said that while in similar references the word "exclusive" had been used to indicate only distress and safety calls, it had been omitted in N 2993D in order to indicate that the frequency could be used for other purposes, explained more fully in other provisions.

N 2994

8.6 The delegate of Argentina pointed out the need to align the Spanish text with the other language versions.

N 3023

8.7 The Chairman of Committee 5 said that the square brackets should be removed.

Article N 38 was approved, as amended.

Article N 39

N 3183A and N 3195CA

8.8 The delegate of the United Kingdom said that "the signal DE" should be amended to read "the word DE" for the sake of consistency.

It was so agreed.

N 3195M, N 3195N

8.9 In response to a proposal from the delegate of Italy to delete b) in 3195M and all of N 3195N, the representative of the CCIR said that as under GMDSS it was envisaged that VHF EPIRB should be used, it would not be advisable to delete the provision.

Article N 39 was approved, as amended.

Articles N 40, N 41, 42A and 43

Approved, with the removal of square brackets in the text.

Article 44

8.10 The Chairman of Committee 7 said that "International" should be added before "Convention" in MOD 3425 and MOD 3435.

Approved, with that amendment.

Articles 48, 49, 51, 52, N 52, 53, 54, 57, 64, 67 and 68

Approved.

Appendices 12, 13, 14 and 26

Approved.

Resolution No. 38(Rev. Mob-87)

Approved.

Resolution No. 322(Rev. Mob-87)

Approved, subject to removal of the square brackets.

Resolutions GT-TEC PLEN/4, COM5/2, COM5/3 and COM5/5

Approved.

Recommendation No. 316(Rev. Mob-87)

8.11 The delegate of Israel suggested that the words "to the extent possible" should be inserted in recommends 1 after "permitting".

It was so agreed.

Recommendation No. 316(Rev. Mob-87), as amended, was approved.

Recommendation No. 317(Rev. Mob-87)

Approved.

The third series of texts submitted by the Editorial Committee (R.3) (Document 436) was approved, as amended, on second reading.

List of Resolutions and Recommendations

Approved.

9. Fourth series of texts submitted by the Editorial Committee for second reading (R.4) (Documents 448, 471, 477)

Articles 9, 12 and 25

Approved.

Article 26

9.1 In reply to a comment by the delegate of Argentina, the Chairman of Committee 7 confirmed that the French and Spanish versions of No. 2246 would be aligned with the English text.

Approved, on that understanding.

Article 38

9.2 The Chairman of Committee 5 said that the square brackets around Resolution COM5/1 should be removed throughout.

MOD 3016

9.3 The delegate of Spain confirmed that his Administration would maintain its reservation.

Article 38 was approved.

Article 59

Approved.

Appendices 18 Mob-87, 37 and 39

Approved.

Resolutions Nos. 302 and 314

9.4 The Chairman said that the square brackets should be removed; the delegate of the United States pointed out that Resolution No. 316 should be qualified as MOD and not SUP.

Approved, as amended.

Resolution No. 300(Rev. Mob-87) and COM4/1

Approved.

Resolution COM4/2

9.5 The Chairman said that the square brackets in considering c) should be removed; the Secretary-General said that considering c) would more appropriately read: "that the partial revision of the Radio Regulations will enter into force on 3 October 1989".

It was so agreed.

Resolution COM4/2 was approved, as amended.

Resolution COM4/6 and Annex

Resolution COM4/6 was approved.

9.6 In response to an invitation from the Chairman to present the information which would provide a basis for the Plenary to take a decision concerning the procedure for allotment arrangements for duplex radiotelephony, the Chairman of ad hoc Group PL-3 introduced Document 471 and proposed the date of 1 January 1991 for the Board to enter the arrangement for the new channels in Appendix 25.

9.7 The delegate of the United States said he was not sure about the date. He was looking at the document that came from ad hoc Group PL-3 in which paragraph 4 indicated that the provisions would come into force on 1 January 1991. The United States would have some difficulty with that and would much prefer Document 477 which was a note by the Secretary-General speaking of a date of 3 October 1989 for the coming into force of those items set out in paragraph 4 of Document 471, or at least the majority of them. In other words, his Delegation would rather support the information set out in Document 477.

After various interventions he said that he had still not received clarification on the point raised about paragraph 4 of Document 471. As he read it, it stated that Chapter IX and new Chapter IX would enter into force on 1 January 1991. He would hope that the meeting was not considering bringing those two chapters into force at that date, unless he had read it incorrectly, because a Resolution had been adopted which implied that they would be brought into force with the Final Acts, which was what was set out in the Secretary-General's paper (Document 477). He would like clarification. The date being referred to would give his Administration great difficulty if it applied to Chapter IX and new Chapter IX as set out in paragraph 4.

Mr. Berrada said he understood that the United States Delegation saw a contradiction between Document 471 and Document 477, which was not the case. Document 477 stated clearly that the partial revision entered into force on 3 October 1989 except for the other provisions (listed) for which the date was given as 1 January 1991. In reply to the first question as to why those provisions were left apart, he said it was for the simple reason that in all the provisions relating to the bands between 4 000 and 27 500 kHz, as well as in Chapters IX and N IX, the frequencies to be used were dependent on the changeover from the present Appendix 31 to the new Appendix 31, and if the new frequencies decided by the Conference were to be used before the changeover, there would be some problem. Mr. Villanyi, Chairman of Committee 4 might confirm that the Group had considered the possibility of identifying each provision and associating it with a footnote, but it was found that such a task would take a long time and would lead to some errors which it would not be possible to correct after the Conference.

The delegate of the United States repeated that he had no trouble with the wording of Document 477. He was not sure that he fully understood the intervention by Mr. Berrada. He did have difficulty with what was set out in paragraph 4 of Document 471.

The Secretary-General said that Document 477 had been prepared in close collaboration by all those concerned and they had had the impression that the two documents were the same.

9.8 The delegate of the United Kingdom said that as there were likely to be unspent credits at the conclusion of the Conference, the IFRB might be able to commence its post-conference activities earlier than envisaged. He therefore proposed that the date be brought forward from 1 January 1991 to 1 March 1990. The Chairman of the IFRB said that March might be too early given the amount of work to be done: a date between July and October 1990 might be more appropriate. The representative of the IFRB (Mr. Berrada) said that while the IFRB would be in a position to commence processing the information should funds remain available after the Conference, the balance of the work would require subsequent, additional resources and staff would have to be recruited, of necessity after authorization by the Administrative Council. In the light of those considerations, the earliest date that could be fixed would be 1 October 1990.

9.9 The delegates of Denmark, Federal Republic of Germany, Finland, Netherlands, Norway, Sweden and Switzerland supported that date.

9.10 The delegate of Japan said that taking into consideration the time needed for users and licensees to change equipment and for administrations to revise the rules in order to implement the new system, 1 July 1991 would be appropriate. The delegates of Cuba, Ethiopia and Oman supported that date.

9.11 The delegate of Tunisia said that the changes of frequency required would take time, particularly in developing countries. The date of 1 July 1991 would therefore seem to be too early and it should be postponed until at least 1994. The delegates of Algeria, the Islamic Republic of Iran, Jordan and Saudi Arabia supported that statement.

9.12 The delegate of Swaziland said that he would prefer a date after 1991 but in a spirit of compromise could accept 1 October 1990.

9.13 The delegate of India said that to effect the necessary changes by July 1991 would be very difficult for many developing countries. In a spirit of compromise he could agree to the end of 1991. The delegate of Togo said that although 1995 would be a more acceptable date to his Administration, 1991 was the earliest possible deadline.

9.14 The delegate of Argentina said that in view of the difficulties involved in the changes required, he would prefer a date as late as possible after 1991. The delegate of Mexico also supported a date beyond 1991.

9.15 The Chairman suggested that the date should be fixed at 1 July 1991.

It was so agreed.

9.16 The Chairman of ad hoc Group PL-3 indicated that the square brackets should be removed throughout in the Annex to Resolution COM4/6 and that the dates should be established in function of the decision just taken.

9.17 The representative of the IFRB (Mr. Berrada) said that the dates in paragraphs 1, 6 and 9 should be 1 April 1989, 1 October 1990 and 1 July 1991 respectively.

It was so agreed.

9.18 The Secretary-General, referring to the question of specific determination of the date for the commencement of operations in the maritime mobile service for the frequencies subject to transfer, said that an appropriate reference would be added in Article 69 as contained in Document 477.

The Annex to Resolution COM4/6, as amended, was approved.

Resolutions COM4/7 and COM4/10

9.19 The Chairman indicated that the date to be inserted in resolves 1 and 2 in Resolutions COM4/7 and COM4/10 respectively was 1 July 1991.

Approved.

Recommendation COM4/A

9.20 The representative of the IFRB (Mr. Brooks) pointed out that the words in square brackets in the title and in considering b) should be inserted or deleted by the Editorial Committee in accordance with the decisions to be taken on the land-mobile satellite service.

On that understanding, Recommendation COM4/A was approved.

Recommendation COM4/B

Approved.

The fourth series of texts submitted by the Editorial Committee (R.4) (Document 448) was approved, as amended, on second reading.

10. Fifth series of texts submitted by the Editorial Committee for second reading (R.5) (Document 463)

Article 8

Table: 415 - 1 606.5 kHz

10.1 The Chairman of Committee 4 indicated that the square brackets should be removed from round 472A in the above table.

Table: 1 800 - 2 000 kHz

10.2 The delegates of Jordan, Libya, Swaziland, Syria and Togo requested that their countries be added to the list in MOD 554 for the frequency band 47 - 68 MHz.

It was so agreed.

Table: 108 - 138 MHz

10.3 The delegate of the United Kingdom pointed out that a footnote 590A should be added for the aeronautical radionavigation subband 108 - 111.975 MHz.

MOD 613A

10.4 The Chairman of the Editorial Committee said that the square brackets should be removed from MOD 613A.

ADD 677A

10.5 The delegate of Swaziland said that a further sentence should be added at the end of ADD 677A reading: "In Swaziland the band 470 - 490 MHz is also allocated to land-mobile services on a secondary basis." A similar sentence applying to the band 790 - 862 MHz should be added at the end of MOD 697.

It was so agreed.

10.5bis SUP 699 should read SUP 698.

It was so agreed.

Table: 1 700 - 1 710 MHz

ADD 743A

10.6 The delegate of Syria said that his country should be mentioned after Switzerland in the third line and not after Sweden.

10.7 The Chairman of the Editorial Committee indicated that the band allocated in Yugoslavia was 2 300 - 2 450 MHz.

Article 8 was approved, as amended.

Appendix 7(Rev.) (Mob-87)

10.8 The delegate of the Federal Republic of Germany proposed that the square brackets in MOD 2) and MOD 4) should be removed and reference added in parentheses "(see Resolution COM5/1)".

Appendix 7(Rev.) was approved, with that amendment.

Appendix 9(Rev.) (Mob-87)

List V. List of Ship Stations

10.9 The delegate of Finland said that "and satellite EPIRBs" should be inserted after "radiobeacons" in MOD b) and throughout the text where appropriate.

Approved, as amended.

Appendix 10(Rev.) (Mob-87)

10.10 The delegate of the United Kingdom proposed that the word "typical" should be deleted in MOD TE.

Approved, as amended.

Appendix 11(Rev.) (Mob-87)

10.11 The Chairman of Committee 6 said that Section VA2 should read "the certificates prescribed by Article 56".

Approved, as amended.

Appendix 43(Rev.) (Mob-87)

Approved.

Resolution COM5/4

Approved, subject to removal of the square brackets in paragraph "urges administrations".

Resolution COM6/3

Approved, on the understanding that the square brackets in considering a) and b) would be reviewed as appropriate by the Editorial Committee when the relevant decision was taken.

Recommendation COM5/A

Approved.

The fifth series of texts submitted by the Editorial Committee (R.5) (Document 463) was approved on second reading as amended.

11. Sixth series of texts submitted by the Editorial Committee for second reading (R.6) (Document 469)

Article 14A

Approved.

The sixth series of texts submitted by the Editorial Committee (R.6) (Document 469) was approved on second reading.

12. Seventh series of texts submitted by the Editorial Committee for second reading (R.7) (Document 473)

Appendix 19 (Rev.)

12.1 The delegate of the Federal Republic of Germany said that item 9 should be deleted.

It was so agreed.

The seventh series of texts submitted by the Editorial Committee (R.7) (Document 473) was approved on second reading as amended.

13. Eighth series of texts submitted by the Editorial Committee for second reading (B.8 amended) (Document 393)

Resolution COM5/1, Article 37, Chapter N IX/Article N 37

13.1 The Chairman said that the square brackets should be removed from Resolution COM5/1 throughout.

The eighth series of texts submitted by the Editorial Committee (B.8 amended) (Document 393) was approved on second reading as amended.

14. Sixteenth series of texts submitted by the Editorial Committee for second reading (B.16 amended) (Document 442)

Approved.

The sixteenth series of texts submitted by the Editorial Committee (B.16 amended) (Document 442) was approved on second reading.

The meeting rose at 0305 hours on Friday, 16 October 1987.

The Secretary-General:

R.E. BUTLER

The Chairman:

J.W. EGAN

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 477(Rev.1)-E
16 October 1987
Original: English

PLENARY MEETING

Note by the Secretary-General

MOD

ARTICLE 69

Entry into force of the Radio Regulations

ADD 5194 § 8.1 The partial revision of the Radio Regulations contained in the Final Acts of WARC MOB-87 shall enter into force on 3 October 1989 at 0001 hours UTC, except for those provisions relating to the frequency band 4 000 - 27 500 kHz which are contained in:

a) Articles 8 and 12,

b) Chapters IX and N IX,

c) Articles 60, 62 and 65, and

d) Appendices 16, 25 and 31 to 35,

and which shall enter into force on 1 July 1991 at 0001 hours UTC.

§ 8.2 The use of the frequency bands as listed in Nos. 532 and 544 of the Radio Regulations by the maritime mobile service shall commence on 1 July 1991 at 0001 hours UTC under the conditions specified in Resolution COM4/6 (Mob-87)

R.E. BUTLER
Secretary-General

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 477-E
15 octobre 1987
Original : English

PLENARY MEETING

Note by the Secretary-General

MOD

Article 69

Entry into force of the Radio Regulations

ADD 5194 § 8. The partial revision of the Radio Regulations contained in the Final Acts of WARC-MOB-87 shall enter into force on 3 October 1989 at 0001 hours UTC, except for those provisions relating to the HF bands 4000 - 27500 kHz which are contained in:

a) Articles 8 and 12,
b) Chapters IX and N IX,
c) Articles 60, 62 and 65, and
d) Appendices 16, 25 and 31 to 35,

and which shall enter into force on 1 January 1991 at 0001 hours UTC.

R.E. BUTLER
Secretary-General

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 478-E
22 February 1988
Original: English

PLENARY MEETING

MINUTES

OF THE

TWELFTH PLENARY MEETING

Friday, 16 October 1987, at 1100 hrs

Chairman: Mr J.W. EGAN (Canada)

		Documents
11.	Report by the Chairman of Working Group ad hoc PL-1	453
12.	Report by the Chairman of Working Group ad hoc PL-2	467
13.	Note by the Secretary-General	477(Rev.1)
14.	Action on existing Recommendations	410
15.	Note by the Chairman of Committee 4 - Footnote on feeder links in Region 2	DT/80
16.	Note by the Chairman of Committee 4 - Draft Recommendation	DT/81
17.	Proposals concerning the radiodetermination-satellite service (RDSS)	-
18.	First and second readings of outstanding texts	336, 410, 446, 453, 467, 477(Rev.1), DT/80, DT/81, 455
19.	Time limit for submission of reservations	-
20.	Announcement by the Chairman of Committee 2	-
21.	Statement by the Observer for the International Committee of the Red Cross	-
22.	Final report by the Chairman of Committee 5 (continued)	455, DL/76

1. Timetable of the meeting

1.1 The Chairman drew attention to the programme for the meeting, namely that it should continue until 1400 hours and should resume at 1500 hours to continue until 1800 hours if necessary.

1.2 The delegate of Saudi Arabia recalled that on a Friday the lunch break should be made between 1200 and 1330 hours. The Secretary-General had been informed of that requirement.

1.3 The Secretary-General said that, while he understood the sensitivity of the issue of arranging working hours to meet the particular spiritual interests of certain delegations on specific days, the Conference was now in a situation where there was no alternative to the timetable most recently published if the Final Acts were indeed to be signed at 1600 hours on Saturday, 17 October. Moreover, there were the aspects of hotel accommodation and return flights to be considered. Perhaps the delegations concerned would contemplate some special arrangement such as those adopted at other conferences when work on Sundays had been exceptionally accepted. If the timetable was not respected, he could guarantee that the Final Acts would be available at the stated time.

1.4 The Chairman suggested that the problem raised by the delegate of Saudi Arabia should be recorded in the minutes of the meeting.

1.5 The delegate of Saudi Arabia said that the matter could not be dealt with merely by recording it in the minutes. Surely the signature of the Final Acts could be postponed from 1600 hours to 1800 hours.

1.6 The Secretary-General said that whereas some delegates were in a position to extend their stay in Geneva, others were not. He drew attention to the document he had submitted to an earlier Plenary meeting concerning the extension of the duration of conferences, in pursuance of a decision of the Administrative Council. He suggested that the Plenary could return to the matter in the light of the progress made in the following hour and a half.

1.7 The delegate of Switzerland, referring to the decision taken some years previously to introduce a special timetable on Fridays to accommodate the religious observances of a number of participants in conferences, said that his Delegation continued to stand by that decision and suggested that an adjustment of about half an hour might be made to meet the wishes of the delegations in question.

1.8 The delegate of Saudi Arabia said that everyone was aware of the decision to which the delegate of Switzerland had referred. That delegate was perhaps the only one who did not understand the implications of the decision but it would be even worse if he did understand and refused to admit it. He had no objection to the proposal made by the Secretary-General but would request a suspension of the meeting at 1200 hours.

2. Eighteenth series of texts submitted by the Editorial Committee for second reading (B.18) (Document 445)

Resolution No. 205 (MOB-87)

2.1 The Chairman noted that the reference in NOC b) should be to No. 649A as well as to No. 649, and that in MOD j) the band in the second line should be 406 - 406.1 MHz and the reference in the third line to No. 649.

Resolution COM4/16

2.2 The Chairman said that the square brackets round recognizing a) should be removed and the word "prohibits" in considering b) replaced by "does not permit".

List of Resolutions and Recommendations

2.3 The Chairman said that Recommendation No. 302 should be deleted.

The eighteenth series of texts (B.18), as amended, was approved on second reading.

3. Nineteenth series of texts submitted by the Editorial Committee for second reading (B.19) (Document 451)

Preamble to the Final Acts

3.1 The Chairman said that the date in the fifth paragraph, with the square brackets removed, should be "3 October 1989".

3.2 The Secretary-General said that the last phrase in that paragraph should read "except for such elements of the partial revision for which the date of entry into force is specifically stipulated therein". In the sixth paragraph, the words "contained in the present Final Acts" should be inserted after "Radio Regulations" in the first line, and the word "revised" should be inserted in the third line just before "Radio Regulations".

Resolution COM4/8

3.3 The delegate of Mexico said that a small group of delegates of Sweden, Finland, the United Kingdom, Tunisia, Argentina and Mexico had agreed on the following wording to replace resolves to urge administrations 5:

> "5. to request their competent authorities to take, within their respective jurisdictions, such legislative or regulatory measures which they consider necessary or appropriate in order to prevent stations from operating in contravention of No. 2665 of the Radio Regulations;"

Recommendation COM4/C

3.4 The Chairman observed that considering g) should be placed between considering d) and e).

Recommendation COM4/D

3.5 The Chairman said that the words "Recommendations and" should be inserted before "Reports" at the end of recommends administrations b).

The nineteenth series of texts (B.19), as amended, was approved on second reading.

4. Twentieth series of texts submitted by the Editorial Committee for second reading (B.20) (Document 457)

Article 62

MOD 4679A

4.1 The Chairman said that the square brackets should be removed from the table and the frequency 22 765 kHz should be replaced by 22 756 kHz.

MOD 4683

The Chairman noted that a new footnote 4683.2 should be added, reading "The frequency 2 177 kHz is available to ship stations for intership calling only".

Appendix 25(Rev. MOB-87)

4.2 The Chairman noted that the text of Note b) should be aligned on the Spanish version and that the reference to frequency 23 000 kHz therein and in the title of the Appendix should be replaced by 27 500 kHz.

Resolution No. 312(Rev. MOB-87)

4.3 The Chairman said that the wording of considering c) and d), referring to Appendix 31A, should be aligned on the corresponding paragraphs of Appendix 31.

4.4 The Secretary-General said that the second line of instructs the Secretary-General 2 should read "... to update, as necessary, the ...".

Resolution No. 704 (MOB-83)

4.5 The Chairman said that the footnote should be replaced by the following text:

> "1. Although this Resolution has been reviewed by the WARC MOB-87, some of the action required had not been completed and it is retained until such time as appropriate action is taken in a future competent world administrative radio conference and pending consideration of Resolution COM4/5 by the Plenipotentiary Conference, 1989."

Resolution COM4/12

4.6 The Chairman noted that requests 1 and 2 should become invites 1 and 2 and that the new invites 1 should begin with the words "the IMO to communicate as soon as practicable after receipt of the information ...". The present requests 3 and 4 should then become requests 1 and 2.

Resolution COM6/4

4.7 The Chairman said that the words "capable of operating radiotelephony also to be able" in considering a) should be replaced by "using radiotelephony to be able also" and that considering d) should be deleted.

4.8 The Chairman of Committee 6 said that the resolves paragraph should end with the words "working channels". The Chairman said that the date in that paragraph should be aligned with other decisions.

Recommendation No. 302(Rev. MOB-87)

4.9 The Chairman said that the square brackets in MOD b) could be removed and that the references in the third line of ADD g) should be to Resolution COM4/6.

The twentieth series of texts (B.20), as amended, was approved on second reading.

5. Twenty-first series of texts submitted by the Editorial Committee for second reading (B.21) (Document 465)

5.1 The Chairman said that the square brackets could be removed from MOD 474.

ADD 572A

Delete the name of Mauritania, and add those of Greece, the Netherlands, Lebanon and Portugal.

ADD 590A

Delete Mauritania and add Pakistan, Lebanon and Portugal. The Chairman said that the band referred to should be 108 - 111.975 MHz.

ADD 645A

Delete Mauritania and add Greece, the Netherlands and Portugal.

ADD 734B

Delete Qatar and add Madagascar, Pakistan, Lebanon, Libya, Zaire and Burundi.

Table 1 559 - 1 626.5 MHz

5.2 The Chairman said that footnote 731 should be inserted under Region 1 and the upper band limit of 1 610 MHz in the text should be changed to 1 626.5 MHz.

5.3 The representative of the IFRB (Mr. Berrada) said that a new footnote should be inserted under Region 2, reading "Different category of allocation: In Venezuela, the band 1 610 - 1 626.5 MHz is allocated to the radiodetermination-satellite service on a secondary basis".

5.4 The delegate of Cuba made the following declaration on behalf of his Administration.

"The Administration of the Republic of Cuba wishes to state its position with regard to the decision which has been taken to incorporate provisions concerning the radiodetermination-satellite service in the Table of Frequency Allocations in Article 8 of the Radio Regulations.

In the first place, the decision to include in the Regulations provisions relating to a service which has not yet been fully studied by the CCIR or defined from the regulatory standpoint constitutes a departure from the practice generally followed in the Union. At the present juncture, there are no provisions or procedures which make it possible to guarantee that the inclusion

of this new service in the Regulations will not adversely affect the services which have thus far been included in the Table on a primary basis, neither is there any assurance that services currently operated in accordance with the Table may not at some future date have limitations imposed on them in order to protect the radiodetermination-satellite service.

The decision to include the radiodetermination-satellite service on a primary basis in Region 2 will certainly cause serious harm to the services listed in the Table in the bands 1 610 to 1 626.5 MHz, 2 483.5 to 2 500 MHz as well as in part of the band 5 000 to 5 250 MHz; it is also inconsistent with the stipulation made by the Conference itself in Document 184, to the effect that no services other than those included in the agenda of the Conference are to be affected. In our view, these changes should not be made to the Table at this Conference because they will have considerable repercussions on all Region 2 countries, most of which are not present at the Conference.

A solution which might have proved acceptable to all was put forward in the amendment which sought to secure that allocations to the radiodetermination-satellite service would be on a secondary basis in Region 2, with notes indicating that those countries interested in the new service were making additional allocations on a primary basis in their respective territories.

Unfortunately the amendment, which had been submitted and supported in the proper way, was not put to the vote; instead, in manifest disregard of Nos. 552, 570 and 556 of the International Telecommunication Convention, another amendment was submitted which had neither been supported nor even considered by the eleventh Plenary Meeting of the Conference.

In the opinion of the Cuban Administration, the abortive procedure by which this new service has been included in the Regulations at this Conference nullifies the objectives pursued, however estimable they may be, and - as we see it - is unworthy of the Union's working methods.

In addition to the above considerations, the Cuban Administration is exercised by the failure, in the case of both the radiodetermination-satellite and the mobile-satellite services, to analyze a number of legal issues arising in respect of coverage by these space systems, which use the geostationary-satellite orbit - a resource belonging to mankind as a whole - and may consequently cover countries that are not interested in this type of service.

In Cuba, for example, personal transmitter earth stations have been used to send data streams coded by officials of the Central Intelligence Agency of the United States of America in order to transmit information to the intelligence centre in the United States. These RS 804 radio stations use the same segments of the VHF and UHF bands as the United States Government's FLTSATCOM network uses for the maritime mobile and aeronautical services which are being discussed at this Conference.

We take the opportunity of condemning these activities in the technical context of this Conference, for both national sovereignty and the International Telecommunication Convention are being flouted, first because harmful interference is being caused on Cuban territory where the stations are used, and second because the geostationary-satellite orbit is being put to improper use for contemptible espionage purposes. For the above reasons, the Communications Administration of Cuba is obliged to deny recognition to this service and to state that it will not accept harmful interference to its terrestrial systems operating in accordance with the Table of Frequency Allocations, nor can it undertake to extend any protection to radiodetermination-satellite services.

The Cuban Administration will enter the appropriate reservations in the Final Acts of this Conference."

In consequence of that statement, the word "exclusively" should be inserted after "allocated" in ADD 734D, and the words "on a primary basis" should be deleted.

Table 2 450 - 2 500 MHz

5.5 The Chairman said that footnote 753B should be entered under Region 1 for the 2 483.5 - 2 500 MHz band, reading as follows:

> "In Region 1, in countries other than those listed in No. 753C, harmful interference shall not be caused to or protection shall not be claimed from stations of the radiolocation service by stations of the radiodetermination-satellite service."

The name of Qatar should be deleted from ADD 753C and the names of Jordan, Madagascar, Lebanon, Libya, Pakistan, Zaire and Burundi should be added.

5.6 The delegate of Cuba said that the word "only" should be inserted after "allocated" in ADD 753E and the words "on a primary basis" should be deleted.

Table 2 500 - 2 655 MHz

5.7 The Chairman said that ADD 754A had been amended to read:

> "Subject to agreement obtained under the procedure set forth in Article 14, the band 2 500 - 2 516.5 MHz may also be used in India, the Islamic Republic of Iran, Thailand and Papua New Guinea for the radiodetermination-satellite service (space-to-Earth) for operation limited to within national boundaries."

The names of Jordan, Syria, the Netherlands, Italy, Morocco, Tunisia and Pakistan were to be inserted in ADD 796A.

5.8 The delegate of Algeria made the following statement:

"The Algerian Delegation to the World Administrative Radio Conference for the Mobile Services (WARC MOB-87) takes note of the decisions adopted by the Conference with regard to the inclusion of the radiodetermination-satellite service in the Radio Regulations and the corresponding new frequency allocations.

Notwithstanding the legal, regulatory and technical uncertainties which subsist following these decisions, the Algerian Delegation states that its Administration does not intend to use the radiodetermination-satellite service, having regard to the use which it makes or intends to make of radiocommunication services in accordance with the current Radio Regulations (in particular Article 8).

Consequently, and until further notice, the Algerian Delegation states on behalf of its Administration that emissions of the radiodetermination-satellite service are not authorized either from or to the national territory of the People's Democratic Republic of Algeria. In particular, space stations of this service in all regions without exception will have to be designed so that their emissions do not cover Algerian national territory (with the exception of what is commonly termed "unavoidable technical coverage", which will have to be defined by mutual agreement on a case-by-case basis).

The Algerian Administration gives an undertaking to the administrations of all countries, on a basis of reciprocity."

The twenty-first series of texts submitted by the Editorial Committee was approved, as amended, on second reading.

6. Twenty-second series of texts submitted by the Editorial Committee for second reading (B.22) (Document 466)

Article 60

6.1 The Chairman indicated the following changes made during the first reading:

- MOD 4183: the reference in brackets at the end should be "(see No. 4237);
- MOD 4184B: remove square brackets;
- ADD 4184C, ADD 4188B, ADD 4188C to be deleted;
- MOD 4197 and MOD 4198: remove square brackets;
- MOD 4199 to MOD 4209: square brackets to be retained until the texts had been aligned to the relevant parts of Article 13 and other alignments had been completed;
- Footnote MOD 4205.1 to also bear the identification MOD 4203.1;
- MOD 4212A: change "shall" in the third line to "should";
- MOD 4237: delete square brackets and delete the words "except as permitted by No. 961";
- ADD 4237.1: remove square brackets and read "In Region 1, the frequency 458 kHz...";
- MOD 4258: the first line to read: "Nos. 4200, 4203, 4204, 4206 and 4209 and the ...";
- MOD 4280: In the last sentence, just before "Appendix 34", insert "within Channel A or B of";
- ADD 4315C and ADD 4319C to be deleted;
- MOD 4319: delete square brackets, the reference should be to N 2971D;
- in MOD 4237, delete the words "except as permitted by No. 961";
- ADD 4237.1: remove the square brackets and insert the words "the frequency" after "Region";
- MOD 4258: the provisions referred to in the first line should be Nos. 4200, 4203, 4204, 4206 and 4209;
- in MOD 4280 insert the words "within Channel A or B of" after "selected from" in the last sentence;

- ADD 4315C and ADD 4319C to be deleted and the reference at the end of MOD 4319 should be to No. N 2971D;

- ADD 4321D: the reference should be to No. 4123X; MOD 4321, the square brackets to be removed and the reference at the end to read Resolution No. 300(Rev.);

- in ADD 4323J, ADD 4323K: all the square brackets to be removed;

- ADD 4323R: the square brackets to be removed;

- ADD 4323U: a sentence reading "Acknowledgements of such calls should also be made on this frequency" should be added at the end;

- ADD 4343X: the words "as indicated in the List of Coast Stations (see also No. 4323D)" to be added;

- in ADD 4326A, delete the words "VHF or" and the reference to Appendix 19;

- MOD 4328: delete the reference to Resolution No. 307;

- MOD 4348 and MOD 4343.1: delete the references;

- in ADD 4368A remove the square brackets and end the provisions with the words "receiving frequencies" in the penultimate line;

- ADD 4368B to be deleted;

- in MOD 4375, remove the square brackets. The delegate of the United States said that the frequency 25 085 kHz should be deleted from the table;

- in MOD 4376, the square brackets to be retained pending alignment with other provisions.

Resolution No. 310

The Chairman noted that "instructs the Secretary-General to communicate this Resolution to the IMO and the IHO" had been added.

Resolution COM4/11

6.2 The Chairman said that considering e) should be deleted. The Editorial Committee would fill in the date in the first line of resolves 4 and the words "and if necessary shall modify the findings" should be deleted from the fifth and sixth lines of resolves 6.

Recommendations

6.3 The Chairman of Committee 6 pointed out that since some changes had been made in footnotes to Recommendation No. 7, it should be referred to as "MOD", not "NOC".

The twenty-second series of texts (B.22), as amended, was approved on second reading.

7. Twenty-third series of texts submitted by the Editorial Committee for second reading (B.23) (Document 472)

Article 65

7.1 The Chairman said that the word "service" in the second line of MOD 4910 should be replaced by "radiotelephone system" and that provisions referred to in ADD 5064 should be 4323S to 4323X and 4323AF to 4323AJ.

Resolution COM6/5

7.2 The Chairman said that all the square brackets could be removed.

The twenty-second series of texts (B.23), as amended, was approved on second reading.

The meeting was suspended at 1225 hours and resumed at 1400 hours.

8. Twenty-fourth series of texts submitted by the Editorial Committee for second reading (B.24) (Document 474)

Article 55

8.1 The Chairman indicated the following changes made during the first reading:

- the reference to SUP 3862A and the letter B in square brackets at the end of ADD 3877A should be deleted;
- the words "the" and "Service" should be deleted from the title of Section II;
- titles of Sections IIA and III should be adjusted by the addition of the words "and for Public Correspondence" and by the deletion of the words "the" and "Service", respectively;
- in ADD 3890B, "six" should be replaced by "four";
- ADD 3890FA, ADD 3890FB and ADD 3890H should be deleted;
- the words "and for Public Correspondence" should be added at the end of the title of Section IIIA;
- the last four lines of ADD 3949BB should be aligned on Document 433, to read "... auxiliary items, including power supplies as well as general knowledge of the principles of other equipment generally used for radionavigation, with particular reference to maintaining the equipment in service". The same amendment should be made to the last five lines of ADD 3949BL;
- the date "1974" following references to the SOLAS Convention in ADD 3949BG, ADD 3949BQ and ADD 3949CE should be deleted;
- all the provisions from ADD 3949E to ADD 3949FF should be deleted.

Article 56

8.2 The Chairman observed that the title of Section II should read "Class and Minimum Number of Operators for Ship Stations and Ship Earth Stations on Board Ships using the Frequencies and Techniques Prescribed in Chapter IX and for Public Correspondence". The words "and for Public Correspondence" should be added at the end of the title of Section III and, without initial capitals, at the end of ADD 3986AA.

8.3 The delegate of Greece observed that the word "service" had been erroneously included in ADD 3986AB, and should perhaps be replaced by "operator". The Chairman of Committee 6 suggested that the words "provide a dedicated communications service" should be replaced by "act as a dedicated communications operator".

The twenty-fourth series of texts (B.24), as amended, was approved on second reading.

9. Report by the Chairman of Working Group 4 ad hoc 6 (Document 446)

9.1 The Chairman of Working Group 4 ad hoc 6, introducing the document, pointed out that the purpose of the three annexes was to add to Articles 8 and 50 provisions relating to the aeronautical mobile services, particularly to aeronautical public correspondence (APC). He drew special attention to footnote 726B in Annex 1, proposing the additional allocation of two bands to the aeronautical mobile service on a primary basis in Region 1 and on a secondary basis in Region 2 and possibly in Region 3. The Group had been unable to agree on the exact range of the bands, and the frequencies appearing in square brackets were those which had received most general support; the Group had been a very small one, with very few participants from Regions 2 and 3 - indeed, only one participant from Region 3 - and some administrations had not wanted even a secondary allocation for that Region. It would be seen from noting 1 of Recommendation COM4/H in Annex 3 that the bands in question would be allocated to the aeronautical mobile service to provide the initial allocations for pre-operational and experimental APC systems.

Footnote 726C was a stronger provision, under which the bands concerned were to be allocated on a primary basis to certain countries subject to the provisions of Article 14. The last two footnotes were self-explanatory. Annex 2 represented a review of Article 50 in the light of other Conference decisions, and consisted mainly of additions to take account of the needs of the aeronautical mobile-satellite service. Finally, the draft Recommendation in Annex 3 was designed for the development of a world-wide system for public correspondence with aircraft.

9.2 The Chairman thanked the Chairman and members of the ad hoc Group for their work.

Annex 1

9.3 The delegate of the United Kingdom said that, in view of the considerable interest taken in APC, which was already provided on an international basis in some countries, everything possible should be done to develop world-wide provisions for that service. The Conference had found it very difficult to find a solution which could be integrated with all the other discussions on the mobile services and the radiodetermination-satellite service, but the solution proposed in Annex 1 seemed to be acceptable for the time being.

The proposals raised a potential problem of incompatibility between the APC and at least one system in the radionavigation-satellite service, and studies would certainly be required to solve that problem, but in the meantime footnote 731A provided the assurance that the aeronautical radionavigation and radionavigation-satellite services would be fully protected. His Delegation therefore proposed that Annex 1 should be approved with removal of all the square brackets. The delegates of France and Spain supported that proposal.

9.4 The delegate of the United States of America made the following statement:

"The United States Administration supports the arrangements reached by Working Group 4 ad hoc 6 in Document 446 concerning provisions relating to the introduction of pre-operational and experimental testing of a public correspondence system from aircraft by terrestrial means. The United States nevertheless has difficulty with the specific frequencies selected because of the very real possibility that interference will be caused to an existing satellite radionavigation system, GPS, operating on frequencies in the vicinity of those selected for the testing of the public correspondence system. Assurances have been given to the United States by administrations which have shown interest in the development of terrestrial systems for the public, namely, several administrations in Western Europe, that the use of the terrestrial system will be coordinated with the world-wide satellite radionavigation system, in which they also have important interests, so that there will be no impact on the United States GPS satellite system. On this basis, the United States has not insisted on an Article 14 procedure, which would have been the normal condition for such an allocation to be made in advance of specific sharing conditions to prevent interference to existing systems. We assume that the studies referred to in the Recommendation in Document 446 will confirm that sharing between the existing systems in these bands and the public correspondence systems will participate in these studies, as appropriate, but at this time does intend to develop or use the envisaged public correspondence system in the bands identified in No. 726B."

9.5 The delegate of Canada said that, although his Delegation had serious difficulties with the choice of the bands concerned, it recognized that the different needs of various countries had to be met, and could therefore accept the proposals with the safeguards provided in footnote 731A.

9.6 The delegate of Japan said that his country, which had started to use terrestrial APC in the 800 - 900 MHz band some years previously, was interested in the development of a world-wide APC system, but had considerable doubts concerning the allocation of bands for international use for a purpose which was admittedly pre-operational and experimental.

9.7 The delegate of Senegal endorsed those views. It was clearly premature to make any allocation on a primary basis to a service which was operated in different frequency bands in different countries. The most that could be done at that stage was to allocate the bands concerned on a secondary basis pending further study and experimentation. The delegate of Tunisia said he fully endorsed those views.

9.8 The delegate of Thailand asked why the safeguards provided in footnote 731A only covered Region 1 and suggested that they might be extended to the other Regions.

9.9 The delegate of Finland pointed out that it was essential to provide suitable frequencies in order to be able to carry out pre-operational and experimental studies. The fact that the Region 1 countries at WARC-79 had been unable to agree on such frequencies for APC had caused major difficulties in the Region and had considerably inhibited developments in that area. The time had therefore come to open a very modest part of the spectrum in order to get the experimental work started.

9.10 The delegate of Japan asked whether the allocation of frequency bands for experimental purposes only was permissible under the Radio Regulations. The representative of the IFRB (Mr. Berrada) replied that the Regulations contained no allocations to services on an experimental basis and that the only relevant reference was to experimental stations in Article 34. In the early years of space development, a notice had been received for space networks operated on an experimental basis, and the Board had been unable to accept it as such, but had referred the administration concerned to Article 34, indicating the conditions for the operation of such systems.

9.11 The delegate of New Zealand pointed out that WARC-83 had adopted a series of enabling provisions for the development of future maritime distress systems which had culminated in the present FGMDSS. The intention of the proposals in Annex 1 was exactly the same - to allow for experimentation and development in the system. There could be no doubt about the need for the service, particularly in Region 3, which consisted mostly of ocean area and where there was no other way of communicating with aircraft. His delegation therefore supported Annex 1 as a whole.

9.12 The delegate of Denmark also supported that text, which provided a compromise solution to a thorny problem. While it was true that the allocations would be used on an experimental basis, it should be borne in mind that an operational system was required to carry out experiments. The demand for the service was undeniable, and the final allocations on a primary basis for all the Regions would probably be made at the 1992 Conference. His Delegation was concerned by the tendency, whenever allocations to new services were proposed, to postpone a decision pending further studies.

9.13 The delegate of Romania proposed that, since other services were already operating in the bands concerned, the allocation should be made on a secondary basis in all Regions.

9.14 The Chairman of Working Group 4 ad hoc 6 said that the Group had investigated all the bands that might possibly be suitable for use on a world-wide basis but had been unable to find a band acceptable to all its members. He repeated that the frequencies in square brackets were the ones most generally acceptable, and the compromise had been the result of very careful consideration.

In reply to the delegate of Thailand, he said that footnote 731A referred only to Region 1 because the allocation to Regions 2 and 3 was proposed on a secondary basis and was covered by Nos. 420 to 422, which had a content similar to that of footnote 731A.

The proposal that the allocation in Region 1 should also be on a secondary basis ran counter to the hope that in the long term the primary allocation would become world-wide; in any case, footnotes 730A and 731A provided the necessary protection for all existing and future services in the bands concerned.

9.15 The Chairman, noting that a majority seemed to be in favour of Annex 1 as it stood with removal of the square brackets, requested the meeting to confirm that impression by a show of hands.

The delegates indicated their positions by a show of hands.

9.16 The Chairman observed that a majority of approximately three to one were in favour of the annex as set out in the document.

9.17 The delegate of Swaziland said that he had not taken part in the show of hands because it was customary for allocations of a primary basis to be subject to the provisions of Article 14, and particularly because the bands in question were allocated to the radiodetermination-satellite service in some countries of Region 1.

9.18 The delegate of New Zealand, speaking on a point of order, moved the closure of the debate.

The motion was carried by 46 votes to 7, with 16 abstentions.

9.19 The Chairman suggested that, in view of the majority that had emerged from the show of hands, Annex 1 with the square brackets removed could be regarded as approved. The delegate of Norway drew attention to the last sentence of No. 520 of the Convention, under which, if a motion for closure of debate succeeded, the Chairman should immediately call for a vote on the point at issue. The Secretary-General endorsed that statement, pointing out that no formal decision had been taken before the closure of the debate had been moved.

9.20 The delegate of Senegal said that, since a decision had in effect been taken on the issue, his Delegation considered itself entitled to make a statement. Senegal was alarmed by the apparent tendency at the Conference to interfere quite arbitrarily with the Table of Frequency Allocations on the basis of studies not yet completed. Moreover, at previous conferences, such as WARC HFBC, when developing countries had submitted planning requirements, they had been told that tests and experiments must be carried out before those requirements could be met, yet now that attitude had been completely reversed, demonstrating intellectual honesty on the part of certain delegations. His Administration greatly regretted that the services of new systems were being given allocations on a primary basis without any sharing criteria, so that the existing services in the bands concerned were exposed to serious dangers of interference.

9.21 The delegate of Tunisia associated his Delegation with the previous speaker's views and proposed that the vote on the annex should be held by secret ballot. The delegate of Oman supported that proposal and suggested that the vote should be held on the primary or secondary nature of the allocation in the different Regions.

9.22 The Secretary-General said that the decision of a WARC must be taken on a world-wide basis, even if the issue concerned only one region or one country. Under No. 520 of the Convention, the vote should be taken immediately.

9.23 The Chairman called for a vote on Annex 1 with the square brackets removed.

Annex 1 was approved by 37 votes to 13, with 25 abstentions.

9.24 The delegate of Tunisia, speaking on a point of order, observed that he had requested a vote by secret ballot on the issue of the primary or secondary nature of the allocations in the three Regions. The delegate of Côte d'Ivoire pointed out that, under No. 551 of the Convention, a vote by secret ballot had to be requested by at least five delegations before the voting procedure began.

9.25 The delegate of Japan made the following statement in explanation of his vote:

"The Japanese Administration regrets that the frequency allocation indicated in Annex 1 to Document 446 for only pre-operational and experimental APC systems is permitted on a world-wide basis. It also regrets that such an important issue of the choice of frequency has been decided without thorough discussion. It believes that the frequency allocation just decided upon in this Conference is premature because of the lack of technical and operational bases of terrestrial APC systems. The frequency allocations for operational APC systems will be reconsidered at the next competent WARC, taking the CCIR study into account."

9.26 The delegate of Togo asked what criteria had been used to determine the allocation to terrestrial APC on a primary basis in Region 1 and on a secondary basis in the other two Regions. He wished his question and the answer thereto to be recorded in the minutes of the meeting.

9.27 In reply to a question by the delegate of New Zealand, the Secretary-General suggested that the document should be regarded as a text submitted for first reading and approved as such, since there had been no opportunity for it to be examined in Committee 4.

9.28 The delegate of Tunisia said he could not see how a document emanating from a restricted group and not considered in Committee could be regarded as a blue document. Like the delegate of Togo, he wished to know why the allocation had been made on a primary basis in Region 1 and on a secondary basis in Regions 2 and 3 - particularly since Region 2 contained two of the most technologically advanced countries.

9.29 The Chairman said that the debate on Annex 1 was closed.

Annex 2

Annex 2 was approved.

Annex 3

9.30 The representative of the CCIR said that he had had discussions with the Chairman of the CCITT concerning the interworking of another mobile radiocommunication service with public switched networks and the latter would prefer a general statement at the end of proposed Recommendation COM4/H, a similar note having been approved in Document 445:

> "invites the CCITT
>
> to study the interworking of a world-wide system for public corrrespondence with aircraft with the public switched telecommunication networks."

The Secretary-General said that he hesitated to speak; there might well be an element connected with interworking but there were some fundamental issues that needed to be studied and hopefully studied for appropriate consideration in a competent World Administrative Telegraph and Telephone Conference - the issue of tariff principles and accounting and numbering, and he spoke as one involved in the application of operational matters inside the house.

9.31 The delegate of the Federal Republic of Germany said that as the Conference had already adopted a Recommendation for a world-wide operation of so-called hand-held telephones with a similar text for the CCITT, he was in favour of the proposal.

9.32 In response to a comment by the Secretary-General, the representative of the CCIR said that the explanation of the word "interworking" for the CCITT was that it comprised tariffs, numbering and all operational questions.

The Chairman suggested that the paper be put aside for the time being and the meeting proceed with other texts and then come back to it later on.

9.33 The delegate of the United States of America said it was his impression that the ad hoc Group had approved a more general text of the invites Administrations paragraph, as follows:

> "invites Administrations
>
> to take note of this Recommendation and as appropriate to consider various aspects related to the implementation of terrestrial APC systems,"

9.34 The delegate of Mauritania observed that it would have been useful to have heard the views of ICAO on the substance of Recommendation COM4/H. The Chairman of Working Group 4 ad hoc 6 said that the meetings of the Group, which had been open to all participants, had been attended by observers for ICAO and IATA.

Annex 3 was approved as amended.

9.35 The delegate of Tunisia proposed the addition of a sentence to footnote 726B, reading "In Tunisia, the bands 1 573 - 1 594 MHz are allocated on a secondary basis to the public correspondence service". The representative of the IFRB (Mr. Berrada) said it would be preferable to add a separate footnote reading "Different category of service: In Tunisia, the allocation of the bands 1 573 - 1 594 MHz to the aeronautical mobile service for public correspondence is on a secondary basis".

9.36 The delegate of Sweden, speaking on a point of order, said that, since the Plenary had taken a decision on Annex 1, it was incorrect to return to the subject. The delegate of Norway referred to the firm decision taken at the previous Plenary Meeting that no further footnotes could be added to texts which had been approved on first or second reading.

9.37 The delegate of Côte d'Ivoire pointed out that the wording of footnote 731A in effect meant that in Region 1 the APC service was secondary to the services already entered in the Table.

10. Final report by the Chairman of Committee 4 (Document 455)

10.1 The Chairman of Committee 4, introducing the document, said that it had become clear during the discussions on the 1.5 to 1.6 GHz bands in Working Group 4 ad hoc 3 and in the Committee that opinions were so diametrically opposed that it would be impossible to find a single solution acceptable to all. The ad hoc Group had therefore suggested a solution that would be equally unsatisfactory to everyone and had prepared Annexes 1, 2 and 3, which formed a package. After long discussions in Committee 4, a majority had emerged in favour of approving the three Annexes as a whole, although a number of delegations had expressed strong objections against allocations to the land-mobile satellite service (LMSS) on a primary basis in the bands allocated to the maritime mobile-satellite service (MMSS). The table of those allocations was given in Annex 2. Committee 4 had finally approved Annex 1, from which the remaining square brackets could not be deleted, and had approved the principles in Annex 3 on the understanding that decisions taken on Annex 2 would affect the precise wording of resolves 1 and the frequency band limits set out in that paragraph.

One question left open in the package was that of the width of the band which could be allocated to the LMSS on a primary basis in the band allocated to the MMSS. It would be seen from Annex 2 that the bandwidth proposed in both the down-link and the up-link directions was 3 MHz, but proposals had been made to increase or reduce the bandwidth, or even to reduce it to zero, in which case there could be not allocation to the LMSS on a primary basis in the bands concerned. No consensus had been reached on that point, and all the other parts of package had been approved on the understanding that if the bandwidth of 3 MHz was changed, delegations could return to other aspects of the Annexes.

Section 2.2 on page 1 of the document gave a list of the texts that the Committee had been unable to consider for lack of time. The words in brackets in item 2.2.4 should be deleted.

10.2 The delegate of Senegal said that his Delegation had entered rservations to the Annexes in Committee 4, on the principle that all new systems should be given allocations on a secondary basis to allow for experimentation. Nevertheless, in view of the precedent just set by giving primary status to public correspondence systems in the bands allocated to the aeronautical mobile service, Senegal withdrew its reservations.

10.3 The delegate of Denmark said that, although the report might give the impression of insoluble disagreements in Committee 4 and its Working Groups, in his opinion it should not be too difficult to reach agreement on the compromise solution.

10.4 The delegate of Brazil said he could not agree with that view. Brazil had considerable difficulties with the alllocations in Annex 2, and had accepted them and the bandwidths in Annexes 1 and 2 in a spirit of compromise. It hoped, however, that no major amendments would be proposed to the package which had been worked out with such difficulty.

10.5 The delegate of Israel, supported by the delegates of the Federal Republic of Germany and Swaziland, suggested that, since nothing could be gained by reopening the long debates held in Committee 4, the document should be approved by a show of hands.

10.6 The delegate of the United States said that, although Document 455 provided a basis for a compromise, it did not itself represent such a compromise. While his Delegation could generally support the document with respect to world-wide allocations, the package might not meet the needs of

individual administrations whose delegations would like to have an opportunity of introducing country footnotes. The delegate of Canada endorsed that view and suggested that the feeling of the meeting might be taken on the world-wide allocations without precluding subsequent discussion on country footnotes.

10.7 The delegate of Spain pointed out that the words "the Radio Regulations" in considering h) and at the end of resolves to recommend in Annex 3 should be replaced by "WARC-79".

10.8 The delegate of the USSR said that his Delegation in Committee 4 had wished to draw attention to the fact that the band proposed for allocation to the LMSS on a primary basis was also allocated on a primary basis to the space operation service, but had been prevented from doing so by lack of time. The USSR would not reopen the discussion on that point and would accept the contents of Annexes 1 and 2 in a spirit of compromise, provided that a new invites paragraph was inserted, reading "the CCIR to study the conditions of sharing among the different services in this range".

10.9 The delegate of Indonesia observed that, since No. 730B provided protection for the countries listed in No. 730 which appeared in the table for the band 1 555 - 1 559 MHz, it should also appear in that table, with the appropriate reference in the footnote itself.

10.10 The Chairman suggested that the meeting should pronounce on the tables on pages 2, 3 and 4, without footnotes.

10.11 The delegate of France said that the footnotes were an integral part of the compromise package and could not be considered separately. The delegate of Sweden added that that also applied to Annex 3. The delegate of Japan agreed that the document formed an integral whole.

10.12 The delegate of the Netherlands, speaking on a point of order, moved closure of the debate.

10.13 The delegate of the United States, also speaking on a point of order, said he opposed that motion if it would preclude the possibility of discussing the addition of country footnotes. His Delegation in Committee 4 had agreed to the compromise package on the understanding that such a possibility, denied to it in the Committee because a great deal of time had been taken up by the discussion of relatively minor issues, would be given it in the Plenary Meeting. A great many additional allocations had been made during the Conference to meet countries' special concerns, and the United States was now only seeking equitable treatment. The success of the Conference could only be enhanced by allowing sovereign administrations to express their unique and particular needs.

10.14 The delegate of Canada, speaking on a point of order, said that he too opposed the motion for closure of the debate. In accepting the package with respect to world-wide allocations, Canada had realized that attempts to obtain certain spectrum requirements were unacceptable to other administrations, and now sought the limited option of introducing a country footnote which would at least give North American countries the right to implement the system in their own territories.

10.15 The Chairman invited the meeting to vote on the motion for closure of the debate.

The motion was carried by 42 votes to 4, with 25 abstentions.

10.16 The Chairman then called for a vote on Document 455 as amended.

The document as amended was approved by 61 votes to none, with 17 abstentions.

10.17 The delegate of the United States, speaking in explanation of his vote, said that his Delegation had abstained because, although it regarded the document as an acceptable compromise for world-wide allocation, it did not consider that it went far enough in accommodating the right to return to the matter when the document was submitted for first reading.

10.18 The delegate of Canada made the same reservation.

11. Report by the Chairman of Working Group ad hoc PL-1 (Document 453)

11.1 The Chairman of Working Group ad hoc PL-1 said that modified Resolution No. 314 could be dealt with quickly in view of the decision already taken with regard to Document 448.

11.2 The delegate of the Netherlands pointed out that the term "(Rev.)" should be added after "Appendix 31" in considering b).

Document 453 was approved, as amended.

12. Report by the Chairman of Working Group ad hoc PL-2 (Document 467)

12.1 The Chairman of Working Group ad hoc PL-2, introducing the report, recalled that the ad hoc Group had been set up to cover certain unsolved technical issues relating to the radiodetermination-satellite service (RDSS), mainly those of power flux-density, e.i.r.p. and methods of effecting coordination. Annex 1 contained some proposed modifications to Article 28 with respect to e.i.r.p. and power flux-density values for the bands in question, while Annex 2 gave some amendments to Article 8 to make coordination possible. Annex 3 contained a draft Resolution on criteria for sharing betwen the RDSS and terrestrial services in the bands, with emphasis on the need for further studies by the CCIR on the matter and urging administrations to accept the application of the latest CCIR Recommendations on the technical criteria specified for the RDSS when they were consulted in the application of Resolution No. 703.

During the discussion of possible modifications of Articles 11 and 28, the question had been raised whether the Conference was competent to deal with those two Articles, since they were not explicitly mentioned in its agenda. It should be noted, however, that item 4 of the agenda permitted the Conference to make such consequential changes in the Radio Regulations as might be necessary as a result of its decisions on other items.

Apart from two alternative texts in square brackets in Annex 2 the ad hoc Group had been able to reconcile a number of opposing views in a spirit of compromise. Some minor amendments should also be made to the texts in the document: in the penultimate line of MOD 2563 in Annex 1, "MHz" should be inserted after the band numbers and "(for Region 3)" should be replaced by "(on the territory of the countries mentioned in No. 754A)"; in the fifth line of ADD 1107.2 in Annex 2, "360 km" should be replaced by "400 km", which was the rounded off line-of-sight distance calculated for a height of 10 km; the word "other" in the last line of considering c) in Annex 3 should be replaced by "the terrestrial"; and the words "on the other hand" should be added at the end of the invites the CCIR paragraph in that Annex.

12.2 The delegate of Pakistan said that, in addition to the reservation referred to in paragraph 5 of the document, his Delegation had difficulties with certain other technical parameters which did not affect Pakistan alone but were of concern to all other administrations operating public services. For the same reasons as those stated in Document 277, it was possible that a large number of RDSS mobile transmitters might be placed in an area where there was a large number of other terrestrial and satellite services with e.i.r.p. limited to 40 dBW under No. 2451 and therefore requiring protection; in Document 277, it was suggested that the e.i.r.p. of an RSS terminal should be 40 dBW below that value, and in Document 467 that suggestion was further specified at 0 dBW; his Delegation believed, however, that that level was too high, since the aeronautical and radionavigation services for which the band was primarily intended operated at a much lower value, and therefore considered that the limit in the last line of ADD 2548A in Annex 1 should be changed from 0 dBW to -3 dBW in the space-to-Earth direction. With regard to the down-link, the power flux-density for the RDSS was set at the same level as that for the broadcasting and fixed-satellite services, which were clearly more important than the RDSS for all administrations operating public services; that value would, however, increase the noise level in those essential services to the extent of constituting a potential source of interference to the fixed terrestrial services operating in the 2.5 GHz bands, and there again his Delegation recommended a reduction of the power flux-density for the RDSS in the space-to-Earth direction by 3 dBW from the levels given in MOD 2562. Finally, Pakistan proposed that the words "either similar or of the same nature" at the end of considering c) in Annex 3 should be deleted, since they caused difficulties for some delegations.

12.3 The delegate of Argentina said that his Delegation had participated in the ad hoc Group and had expressed the opinion that the modification of Articles 11 and 28 was not part of the agenda of the current Conference. More important, however, was the fact that CCIR Study Group 8, which had produced the technical bases, considered that further studies were necessary. He again expressed his admiration for the work done by the Chairman and members of the ad hoc Group, and his appreciation of the assistance lent by the IFRB. However, he very much doubted whether such a small Group, with so little time at its disposal, could seriously be regarded as having conducted the further studies recommended by the CCIR. In the circumstances, therefore, he thought it preferable - instead of taking a hasty decision - to have the precise technical parameters worked out by a body which comprised the entire membership of the ITU. In other words, the CCIR should be requested to define the definitive standards for adoption at the first suitable administrative conference.

12.4 The delegate of the United States, supported by the delegate of Brazil, said that it would be most unwise the reopen the difficult technical issues that had been discussed at great length in the ad hoc Group. All that remained was to decide on the alternative texts given at the end of ADD 1107.2 in Annex 2.

12.5 The delegate of the USSR said that, while his Delegation did not object to Document 467 as a whole and indeed considered it to be useful, it was important to recognize that the figures and other data in Annexes 1 and 2 were provisional only, pending their substantiation by the studies to be carried out under the draft Resolution in Annex 3.

12.6 The delegate of the United Kingdom, referring to the Pakistani suggestion concerning MOD 2562, observed that the Conference was not competent to change the power flux-density figures of the fixed-satellite and broadcasting-satellite services. The delegate of the United States endorsed that statement, adding that he would prefer all figures to remain unchanged.

12.7 The Chairman of Working Group ad hoc PL-2 said that he agreed with the United Kingdom delegate concerning MOD 2562 but thought that the other Pakistani suggestions were acceptable. He further suggested that the second alternative in ADD 1107.2 in Annex 2 should be substituted for the first, with a full stop after "earth station" in the sixth line.

It was so agreed.

13. Note by the Secretary-General (Document 477(Rev.1))

13.1 The Secretary-General said that the previous evening he had suggested that Article 69 should also include specifically the question covered by points in 532 and 544 of the Radio Regulations. He thought the document was straightforward: the revised version was due to the need to include the reference to the action envisaged in those provisions on the transfer of assignments for a particular operational use.

Article 69 was approved.

The delegate of Algeria pointed out that paragraph 8.2 (in the French version) contained a reference to the date of 1 July at 0001 hrs UTC but did not mention the year.

The Chairman said that the French text was incorrect; the date was 1 July 1991.

The delegate of Mexico asked for clarification because he had difficulty in understanding ADD 5194. He had understood that in Document 471 (paragraph 4) agreement had been reached on the date of 1 July 1991 for the entry into force of Chapter N IX, Chapter IX revised and Appendices 17, 31 and 35, and referring to the bands 4000 - 27 500 kHz, Articles 8, 12 and 60. That seemed to be contradicted by the document now before the meeting.

The Chairman thought there might be a text difference: Document 477(Rev.1) did state that the Final Acts would enter into force on 3 October 1989 except for the items listed, for which the date was indicated below, i.e. 1 July 1991. So it should state that the Final Acts would come into force on that date except for the ones contained in a), b), c) and d) which had their own dates. It had also been pointed out that the exception was limited within that band.

The delegate of the Islamic Republic of Iran shared the concern expressed by the delegate of Mexico. He thought that the Plenary had decided that Chapter IX as revised and new Chapter IX (all of it) would come into force on 1 July 1991. Document 477, however, stated that only the portion relating to the HF bands would come into force on that date, so there was a contradiction and he would like some clarification.

Mr. Berrada said that that statement was correct because in the text adopted many parts of Chapter N IX were related to the introduction of the GMDSS. To overcome that, in b) Chapter N IX should be deleted and a separate provision needed to be created for Chapter N IX. He would come back to the matter, after other items had been dealt with.

The delegate of Tunisia thanked the delegate of Mexico for drawing attention to the fact that the document was full of errors and confusion and needed correction.

The Chairman said that it would be considered that the document had not been approved, and the meeting would return to it later.

Mr. Berrada asked first for the numbers a), b), c) and d) to be deleted, and in the third line after "except for" put a colon, and then start a sub-paragraph a) to read as in the text "those provisions relating to the frequency band 4 000 - 27 500 kHz which are contained in:

- Articles 8 and 12;
- Chapter IX;
- Articles 60, 62 and 65; and
- Appendices 25, 26, 31 to 35"

then start a new sub-paragraph b):

"Chapter N IX", and then continue with the sentence "which shall enter into force on 1 July 1991", and so on.

The delegate of Tunisia said that the above text had been read out so quickly that the confusion remained as to the date 3 October 1989 and 0001 hours UTC and which provisions would enter into force at that date, and those which would enter into force on 1 July 1991.

Mr. Berrada thought it might be preferable to prepare a clean draft while the meeting was considering other documents, but a decision was needed from the Conference that the delegations were clear as to what was wanted from the provision. His understanding was as follows: all the Final Acts entered into force on 3 October 1989 except:

1) Chapter N IX, which would enter into force on 1 July 1991;

2) the series of Articles listed but only for the HF part of them.

If that understanding was correct, a clearer text would be drafted.

The delegate of Tunisia said that it was becoming clearer but if possible he would like to have a text in writing.

The delegate of the United States asked Mr. Berrada why it was necessary to place all of Chapter IX and bring it into force in 1991 (he could certainly understand that administrations might not wish to use frequencies until after the transfer was complete). That was the point he had asked the Secretary-General about at the previous meeting, when he had stated that the wording in the Secretary-General's Note was certainly acceptable to the United States but that they might have some difficulty with what was in the Report from the Plenary Working Group.

Mr. Berrada said that his understanding, when the meeting started to discuss the document, was that the Administration of the Islamic Republic of Iran had some doubts about the question and he had understood that there was a wish for the whole of Chapter N IX to be left until 1991. From the point of view of the Board, the only constraint on Chapter N IX was with respect to the HF bands. Probably it was for the Chairman of Committee 5 to tell the Plenary if it considered that the whole of Chapter N IX should be left until 1991 or only the HF part.

The delegate of Mexico wondered whether the meeting was going to go back on decisions already taken. There was a report from the Chairman of Plenary ad hoc Group 3 (Document 471) which had been discussed and a decision taken that a number of provisions would enter into force on a certain date (of revised Chapter IX and Chapter N IX). He thought it was rather dangerous to change decisions already adopted.

The delegate of the Islamic Republic of Iran said that a decision had been taken the previous night (on Document 471, page 2, paragraph 4) which stated that the same date (1 July 1991) should be adopted for the entry into force of the following provisions: and the fourth indent was Chapter N IX. He did not think it was appropriate at the present stage to re-open the whole debate.

The delegate of Tunisia supported the statement by the delegate of Mexico, namely that the Conference had taken a decision and should not go back on it.

The delegate of India fully agreed with what had been said by the delegates of Mexico, the Islamic Republic of Iran and Tunisia, and thought that the meeting should move forward without any further delay.

The Chairman asked if there was any disagreement to retaining the dates decided the previous night and that the text before the meeting should be aligned to present the matter clearly. From his own notes, he thought he had a clear understanding, but realized that it was difficult. He therefore asked if the meeting accepted that the text should reflect the decisions taken on Document 471.

(He saw nods and suggested that the meeting proceed on the basis of that had been approved).

13.2 Going back to Document 477, the Secretary-General considered that he must draw attention to the fact that one of the reasons for an apparent discrepancy between Document 471 and Document 477 (which had been drafted by the General Secretariat, the IFRB Secretariat and others) was the fact that in Document 471 the English and Spanish texts contained a mistake. It was intended that, in regard to Chapter IX(Rev.) and new Chapter IX, it also related to the 4 000 - 27 500 kHz and the descriptions of designation of what should follow underneath 4 000 - 27 500 was not in the text. He apologized for the text discrepancy which led to the differences in answering the United States the previous evening, saying that he thought that Document 471 was in line with the intention of Document 477.

The delegate of the United States did not press the point. The matter was settled all right and the sense of the Group seemed to want to go with a later date and his Administration could accept that.

The delegate of Spain, after the Secretary-General's explanation, wondered whether the conclusion was that Document 477(Rev.) was correct or if not, what the situation was with regard to that document.

The Secretary-General thought that both Chapter IX and Chapter N IX had to be seen in the same perspective, which was slightly different from what Mr. Berrada had put forward.

Mr. Berrada said that it had really been a typing error which had led to all the misunderstanding, and in reply to the delegate of Spain, his understanding was that Document 477(Rev.) as it stood and as it was distributed to administrations was correct.

The delegate of the Islamic Republic of Iran repeated that a decision had been taken on Document 471. The English text had been before the meeting and it was that text which had been agreed upon. It was not fair to change it at the present stage and if that were the case, he thought the whole debate should be re-opened. For that reason, he would strongly recommend sticking with the decision taken the previous night.

The delegate of Mexico shared that view. The decision the previous night with respect to the entry into force of revised Chapter IX had been taken on the English and Spanish texts. It was now claimed that those texts had contained an erroneous date. Even though it was very late, the matter was a very delicate one and a solution had to be found.

13.3 The Secretary-General said that Document 477 had been prepared at the same time as the report in Document 471 (the meeting would notice the dates) and the Secretariat had been working from notes. Certainly Document 477(Rev.) reflected what was intended to be presented in Dr. Villanyi's document. He acknowledged that one reason was that the report did contain typing errors. It meant that if the meeting took the decision based on the previous night's presentation of Document 471, then it was not only Chapter N IX but also Chapter IX(Rev.) which would have a date of introduction of 1 July 1991. To that extent, what he was about to read out was different to what Mr. Berrada read out before:

"§ 8.1 The partial revision of the Radio Regulations contained in the Final Acts of WARC MOB-87 shall enter into force on 3 October 1989 at 0001 hours UTC, except for:

a) those provisions relating to the frequency band 4 000 - 27 500 kHz which are contained in:

- Articles 8 and 12;

- Articles 60, 62 and 65;

- and Appendices 16, 25 and 31 to 35, and

b) Chapter IX and new Chapter IX of the Radio Regulations which shall enter into force on 1 July 1991 at 0001 hours UTC."

The delegate of Tunisia said that Document 477(Rev.1) as just read out, reflected Document 471 and he was ready to adopt it, if other delegations did the same.

The delegate of Norway said that although he had had a slightly different understanding the previous night, he thought the delegate of the Islamic Republic of Iran was quite correct and the meeting should adopt the text read out by the Secretary-General.

The Chairman presumed that the meeting could agree to Document 477(Rev.1) with the text as read out by the Secretary-General being approved on first reading, with the reference in b) to Chapter IX as well as Chapter N IX.

The delegate of the United States said he was reluctant to come back on the matter, but he would like to understand whether Chapter IX as currently in the Radio Regulations was going to come into force in 1991. He thought that was what he had heard but he was not certain, and wished to have clarification.

The Chairman said he understood that the text began with the words "The partial revision of ...".

The delegate of the United States said that in that case it was acceptable.

Document 477(Rev.1) was approved as amended.

14. Action on existing Recommendations (Document 410)

Recommendation No. 302

The Chairman noted that, since modification of this Recommendation had been approved by this Plenary in Document 457, reference to it should be deleted from Document 410.

Recommendation No. 303

14.1 The delegate of the United States observed that, in connection with MOD Recommendation No. 303, it had been decided in Committee 5 to delete the geographical restrictions.

Document 410 was approved, as amended.

15. Note by the Chairman of Committee 4 - Footnote on feeder links in Region 2 (Document DT/80)

15.1 The delegate of the United Kingdom, supported by the delegates of the Federal Republic of Germany and Spain, said that the words "per 4 kHz" in the last line of the footnote should be replaced by "in any 4 kHz band".

15.2 The representative of the IFRB (Mr. Brooks) said that the footnote should be preceded by the words "Additional allocation:".

15.3 The delegate of Côte d'Ivoire, supported by the delegates of Italy, France, Mali, Israel, the Islamic Republic of Iran and Togo, proposed that the words "In Region 2" at the beginning of the footnote should be deleted in order to make the provision world-wide, since otherwise the countries in Regions 1 and 3 would have no allocation for RDSS feeder links. The allocation to the other two Regions might be made on a primary or secondary basis.

15.4 The delegate of Egypt, supported by the delegate of the USSR, said that it would be incorrect to deleted the reference to Region 2, since the 2.5 GHz band was allocated on a primary basis in that Region. Moreover, the Plenary had just approved No. 796A, under which the band 5 150 - 5 250 MHz was also allocated to the mobile service on a primary basis in a number of countries, subject to the Article 14 procedure.

15.5 The delegate of Denmark observed that, if Region 1 were to be included in the footnote, it might be specified that the allocation was on a secondary basis in that Region and on a primary basis in Region 2.

15.6 The delegate of Japan said that he was in favour of leaving the text unchanged, since feeder links for the RDSS were not required for the time being.

15.7 The delegate of the USSR pointed out that the microwave landing system (MLS) was operated in the band in question in Region 2 with a view of ensuring safety of flight. He appealed to the delegate of Côte d'Ivoire and his supporters to withdraw their proposal since it could have serious effects on radionavigation.

15.8 The delegate of Côte d'Ivoire observed that not all the bands were needed for radionavigation.

15.9 The Observer for the International Civil Aviation Organization (ICAO) said that, in his organization's opinion, the band 5 000 - 5 250 MHz was required for the MLS. On the other hand, it might be concluded from the reference in Document DT/81 to the need for studies by the CCIR and ICAO of the precise amount of spectrum needed in the band that such studies had not yet been carried out and that it would indeed be premature to make the provision world-wide.

15.10 The Chairman suggested that the Plenary should provisionally approve the footnote as it stood with the editorial amendments proposed and should return to the question at first reading.

It was so agreed.

16. Note by the Chairman of Committee 4 - Draft Recommendation (Document DT/81)

16.1 The representative of the CCIR observed that the term "at all locations" in considering e) in the English text of the Recommendation should be taken account of by the modification of invites the CCIR to read "a portion of the 5 000 - 5 250 MHz band which may not be required ...". This, he noted, would also align the English language text with the French.

16.2 The delegate of Italy pointed out that "MHz"" should be inserted after the band numbers in the title and in considering c) and e).

Document DT/81 was approved with those changes.

17. Proposals concerning the radiodetermination-satellite service (RDSS)

17.1 The Chairman of Committee 6 said that of the four outstanding proposals two related to Article 35, Section II, and two to Article 1, Definitions. The first proposal was to add No. 2838A, reading "A radiodetermination-satellite service may also provide services for reporting and the communication of ancillary information related to movement and safety".

17.2 In reply to a request for clarification by the delegate of Japan the delegate of Australia said that the purpose of the provision was to delineate the service by specifying that ancillary information might be directly communicated.

17.3 The delegate of the USSR, supported by the delegates of the Ukrainian SSR, Egypt and Cuba, said that the definition of the RDSS in No. 39 was perfectly clear and that the addition of an ambiguous text could only blur that definition. Unless the ancillary information concerned could be specified, the text would be unacceptable.

17.4 The delegate of the Unites States, speaking on behalf of the delegations which had sponsored the proposal in Committee 6, withdrew that text.

17.5 The Chairman of Committee 6 said that the next proposal was to add No. 2838B, reading "The provisions of Nos. 2831 to 2838, excluding Nos. 2832 and 2833, shall be applied to the radiodetemination-satellite service".

That provision was approved.

17.6 The Chairman of Committee 6 said that his Committee had not decided on the principle of whether definitions of fixed and mobile RDSS earth stations should be inserted in the Radio Regulations.

17.7 The delegate of New Zealand, supported by the delegate of the USSR, said that there was no need for such definitions, since the Radio Regulations contained no reference to the earth stations concerned.

It was agreed not to insert those definitions.

17.8 The Chairman noted that the only proposal approved was the addition of No. 2838B.

18. First and second readings of outstanding texts (Documents 336, 410, 446, 453, 467, 477(Rev.1), DT/80, DT/81, 455)

18.1 Seventh series of texts submitted by the Editorial Committee for second reading (B.7) (Document 336, page B.7/3)

18.1.1 The Chairman drew attention to the new version of the first three lines of No. 2842A, reading "Where a radio direction-finding station, as defined in No. 13, operates in the bands between 156.0 MHz and 174.0 MHz, it should be able to take bearings...".

The seventh series of texts (B.7), as amended, was approved on second reading.

18.2 Action on existing Recommendations (Document 410)

Document 410 as previously amended (deletion of Recommendation No. 302 and modification of Recommendation No. 303) was approved on first and second readings.

18.3 Report by the Chairman of Working Group 4 ad hoc 6 (Document 446)

18.3.1 The Chairman drew attention to the fact that the first sentence of No. 726B on page 2 had been amended to read "The bands 1 593 - 1 594 MHz and 1 625.5 - 1 626.5 MHz are also allocated to the aeronautical mobile service in Region 1, except Tunisia, on a primary basis and in Regions 2 and 3 and in Tunisia on a secondary basis".

18.3.2 The delegate of Syria said that his country's name should be added to that of Tunisia in that sentence.

18.3.3 The representative of the CCIR said that after approval of the text he had put foward this morning for "invites the CCITT" in Recommendation COM4/H, some discussion had taken place on the meaning of the word "interworking". To clarify that, he would suggest a few words to be added at the end of the text:

> "... networks, including tariff principles, accounting and numbering schemes".

That suggestion was endorsed by the delegate of Sweden.

18.3.4 The delegate of Egypt, supported by the delegates of Saudi Arabia, Togo and Tunisia, questioned the propriety of the reference to market research studies in considering a) in a Recommendation for telecommunication technicians. The reference should perhaps be deleted.

18.3.5 The delegate of Norway, supported by the delegate of Sweden, said that the reference was a statement of fact. Market research studies had been carried out and had provided valuable information for the CCIs in their work.

18.3.6 The delegate of Canada proposed that the words "market research" should be deleted, to meet the concerns of certain delegations. The delegates of Tunisia and the USSR supported that proposal.

Document 446, as amended, was approved on first and second readings.

18.4 Report by the Chairman of Working Group ad hoc PL-1 (Document 453)

Document 453 was approved on first and second readings.

18.5 Report by the Chairman of Working Group ad hoc PL-2 (Document 467)

18.5.1 The Chairman of Working Group ad hoc PL-2 said that the acronym "RDSS" should be replaced by "radiodetermination-satellite service" in considering c) of the annexed draft Resolution.

Document 467, as amended, was approved on first and second readings.

Mr. Brooks pointed out that the abbreviation RDSS had been used in the text so it should be inserted in parentheses in the title of the draft Resolution after "radiodetermination-satellite service".

The Chairman of the Technical Working Group of the Plenary (Mr. George) said he could agree, or, since it occurred only once, the term could be spelled out in full in the text of considering c).

For the sake of consistency, the same approach should be taken wherever the term or the abbreviation appeared.

It was so agreed.

18.6 The Chairman submitted Document 477(Rev.1) for second reading.

Document 477(Rev.1), as amended verbally by the Secretary-General, was approved on first and second readings.

18.7 Note by the Chairman of Committee 4 - Footnote on feeder links in Region 2 (Document DT/80)

18.7.1 The Chairman noted that it remained to be decided whether or not to delete the words "In Region 2" at the beginning of No. 797A.

18.7.2 The delegate of the Netherlands suggested that an appropriate solution might be to add to No. 797A the provision that in countries having a primary allocation for the RDSS in the band 1 610 - 1 626.5 MHz, the band 5 150 - 5 216 MHz should also be allocated on a primary basis, and that in those countries where the 1.6 GHz allocation was on a secondary basis, the 5 GHz allocation should also be on a secondary basis. The delegate of Egypt welcomed that suggestion.

18.7.3 The representative of the IFRB (Mr. Brooks) said he did not quite see how the Netherlands suggestion could relate to the present text of No. 797A. A better approach might be to refer to the primary allocation in Region 2 and to specify the footnotes listing the countries in Region 1 where the allocation was also on a primary basis. The delegate of the Federal Republic of Germany supported that approach, adding that the primary status of the allocation for the countries should be stated to be subject to the Article 14 procedure.

18.7.4 The delegate of the USSR said any compromise solution could be accepted only at the cost of endangering flight safety. It was clearly stated in the Recommendation approved in Document DT/81 that further studies of the possibility of sharing between the MLS and other aeronautical radionavigation systems by the CCIR and ICAO were required, and that was why Committee 4 had left No. 797A in the form in which it appeared in DT/80. His Delegation had not objected to that course in Committee 4, since the situation in Region 2 did not affect the USSR, but it believed that it should be recognized from the purely engineering point of view that until the automatic landing system (ALS) was replaced, the MLS or any other radionavigation or radiodetermination system operating independently of the ALS could disrupt the operation of that system. He agreed with the delegate of the Federal Republic of Germany that the allocation should be made subject to the Article 14 procedure, but considered that any further addition to or change in No. 797A would constitute a real danger to safety of flight and hence to human lives.

18.7.5 The representative of the IFRB (Mr. Brooks) pointed out that three types of additional allocations were in fact involved, and suggested that the first sentence of No. 797A should be replaced by the following text:

> "Additional allocation: In the countries listed in Nos. 734B and 753C and subject to the agreement obtained under the procedures set forth in Article 14, the band 5 150 - 5 216 MHz is also allocated to the radiodetermination-satellite service (space-to-Earth) on a primary basis. In Region 2, this band is also allocated to the radiodetermination-satellite service on a primary basis. In Regions 1 and 3, except for those countries listed in Nos. 734B and 753C, this band is allocated to the radiodetermination-satellite service on a secondary basis. Such use is limited to feeder links in conjunction with the radiodetermination-satellite service operating in the bands 1 610 - 1 626.5 MHz and 2 483 - 2 500 MHz".

18.7.6 The delegate of Côte d'Ivoire said that the text met his Delegation's concerns. In reply to the delegate of the USSR, he pointed out that the MLS had not yet been implemented in Region 1, so that the band in question could well be allocated to the RDSS on a secondary basis in that Region. Moreover, he could not see how the allocation in Region 2 differed from a world-wide allocation.

18.7.7 The Chairman noted that there were no objections to the proposed addition to No. 39.

Document DT/80, as amended. was approved on first and second readings.

18.8 Note by the Chairman of Committee 4 - Draft Recommendation (Document DT/81)

Document DT/81 was approved on first and second readings.

18.9 Proposal concerning the radiodetermination-satellite service (No. 2838B)

No. 2838B was approved on first and second readings.

18.10 Final report by the Chairman of Committee 5 (Document 455)

18.10.1 The delegate of Canada said that, in its haste to complete its proceedings, the Conference had overlooked a major issue concerning the mobile-satellite service which was very important for Canada. His Delegation was now being asked to go home with inadequate spectrum for the accomplishment of a most essential objective, that of providing basic telecommunications to Canadians in remote and largely unserved areas of the country - a problem faced by many other countries with a widely scattered population. Canada's requirement was not experimental or even discretionary, for it had the necessary technology, but the need was immediate and urgent. It therefore found it inexplicable that earlier in the meeting it had been denied the sovereign right to bring the matter up in connection with Document 455, since shortage of time was surely no excuse. His Delegation would not press for the re-opening of the substance of the issue, but requested the meeting to take note of its proposed amendment to Document 455 in the form of a footnote which was a national proposal, concerning operations within Canada and relating to a secondary allocation. The proposed footnote read as follows:

> "In Canada, in the bands 1 549 - 1 555 MHz and 1 650 - 1 656.5 MHz, the administration may, on a secondary basis, also authorize earth stations of the land mobile-satellite service and the maritime mobile-satellite service to communicate with space stations in the aeronautical mobile-satellite (R) service. Such communications must cease immediately when necessary to permit transmission of messages with priority 1 to 6 in Article 51".

18.10.2 The delegate of Mexico said that his Delegation had made several interventions in an attempt to obtain more spectrum, for the reasons stated by the delegate of Canada, and would therefore like to be added to the footnote proposed.

18.10.3 The delegate of the United States said that his country, like its neighbours, had requirements which were not covered by Document 455, but could be met with the satellite technology that had been developed over many years. All that was needed to implement that technology was a minimal amount of spectrum. One reason why the ITU worked as well as it did was that it tried to satisfy the legitimate internal requirements of its Members, and the Conference had witnessed numerous examples of such accommodation: indeed, some hours had just been spent discussing a system designed to serve a regional need, which was of little interest to the United States and other countries - yet an effort had been made to satisfy that need. The United States and its neighbours were thus asking for simple equity in calling for consideration of a country footnote to satisfy internal requirements. His Administration had not accepted the so-called compromise and indeed could not do so because that text at no point gave it enough of an allocation to enable it to go ahead with the implementation of the system in its own country. That non-acceptance had been made clear at every stage of the discussion. The United States therefore supported the Canadian amendment and wished its name to be added to the proposed footnote.

18.10.4 The delegate of Costa Rica supported the Canadian amendment and said that his country's name should be added to the footnote.

18.10.5 The delegate of Australia said it was his Delegation's view that all administrations were entitled to the insertion of national footnotes, particularly when operation in accordance with such provisions would have no detrimental effect on services operating in other countries. Members of the Union had the obligation to help accommodate the needs of countries which wished

to provide new services, since all nations stood to benefit thereby. He therefore urged all delegations to consider whether the insertion of the Canadian footnote would have any serious effect on the existing or planned services in the band concerned.

18.10.6 The delegate of the USSR, speaking on a point of order, observed that the meeting had decided by a majority of 61 votes to leave Document 455 unchanged. The delicate compromise reached after three weeks of discussion would be destroyed by the last-minute addition of the proposed footnote. He therefore moved closure of the debate.

18.10.7 The delegate of the United States, speaking on a point of order, said he could not agree with that interpretation of the consequences of the vote taken earlier. It was indeed alarming to note the opposition of some administrations to free and open discussions of issues of concern to others. The delegate of Norway agreed that the USSR delegate's interpretation was not entirely correct, since two delegations had reserved the right to return to the issue of national footnotes.

18.10.8 The Secretary-General said that the proposal to add a national footnote for four countries should be dealt with in a constitutional manner. The motion for closure of the debate must have priority, and if that motion was carried a vote must then be taken on the proposed footnote.

18.10.9 The delegate of Spain pointed out that a motion for closure of debate had to be opposed by two speakers before a vote was taken on it.

18.10.10 The Secretary-General observed that the issue was one of the most critical ones before the Conference and that it would be inadvisable to end the proceedings on such a note of disagreement. Delegations should try to show understanding of the positions of others and leave the door open for some discussion.

18.10.11 The delegate of the USSR said that understanding that all were expected to give way to the requirements of new systems and of countries wishing to use space technology was the very reason why a difficult compromise had been worked out over three weeks of serious technical discussion and why it had been decided by a large majority not to discuss the document in parts, but to treat it as a package. That was why he had moved the closure of the debate, which he was sure reflected the views of the majority of delegations.

18.10.12 The Chairman suggested that consideration of Document 455 should be deferred.

It was so agreed.

19. Time-limit for submission of reservations

The Secretary-General indicated that the time-limit for submission of reservations had been established as two hours after the close of the meeting.

The meeting was suspended at 2010 hours and resumed at 2120 hours.

20. Announcement by the Chairman of Committee 2

20.1 The Chairman of Committee 2 announced that the Government of Pakistan had submitted the credentials of its Delegation and that the name of that country could now be transferred from Section 1 of the Annex to Document DT/76.

21. Statement by the Observer for the International Committee of the Red Cross (ICRC)

21.1 The Chairman announced that the Observer for the ICRC had been unavoidably prevented by urgent duties from attending the last meeting of the Conference, but wished to thank all the delegations which had responded positively to the ICRC proposals concerning the protection of rescue craft. He suggested that the written statement submitted to him by the Observer for the ICRC should be annexed to the minutes of the current meeting.

It was so agreed.

22. Final report by the Chairman of Committee 5 (continued) (Documents 455, DL/76)

22.1 The Chairman said that, in an attempt to reconcile the views expressed concerning the addition of a country footnote to Document 455, he had developed the text appearing in Document DL/76; the parties concerned might be equally unhappy but it probably represented the only way of reaching a successful conclusion of the Conference. The name of Costa Rica had been inadvertently omitted from the text.

22.2 The delegate of Brazil said that the footnote would have the effect of destroying the compromise reached with such difficulty. The success of the Conference should also be measured in terms of respect for decisions taken by the whole body. With the proposed new additional allocation, the world-wide system envisaged by ICAO would be greatly endangered. Moreover, the delegations which had voted for Document 455 had done so in the belief that the decision would be final; if any further material was added, eveyone should have the right to review the document and submit amendments to it.

22.3 The delegate of Cuba said that the first action was to determine whether the Plenary was in a position to accept last-minute modifications; only if the answer was positive could the substance be carried.

22.4 The Chairman said that, from the procedural point of view, Document 455 had been approved by the Plenary acting as Committee 5 and that there was nothing to prevent its further discussion and amendment at the stage of the first reading. That was the way in which all other texts had been handled.

22.5 The delegate of France said he regretted that the Chairman had connected his proposal with the success of the Conference - which, indeed, was being jeopardized by the submission of an entirely new text at that late hour. France could not accept the so-called compromise, for although the footnote related to a limited sub-region, the decision on it would have effects far beyond that area, not only the Atlantic area, but the whole world.

22.6 The delegate of Colombia queried the exact meaning of the term "limited sub-region", which was not an accepted definition to his knowledge.

22.7 The delegate of Cuba said that the issue was a serious one since the proposed modification threatened acceptance of Document 455 as a balanced package.

22.8 The Observer of the International Civil Aviation Organization (ICAO) said that ICAO's view that the spectrum for aeronautical mobile (R) needs must be exclusive was compatible with the consensus reached earlier during the meeting when proposals concerning a generic mobile-satellite system had been introduced. Although some delegations in the Technical Working Group of the Plenary had felt that the necessary studies proving the advisability of reallocating the spectrum for generic mobile-satellite use had been carried out,

a large number of delegations had felt that no change was warranted in view of the very preliminary nature of the studies. In addition, a few delegations thought that a very small amount of spectrum might be allocated or reallocated to a land mobile-satellite system. In ICAO's opinion, therefore, the general consensus was that it was premature to consider providing for aeronautical safety needs in a shared generic mobile-satellite system.

22.9 The Observer for the International Air Transport Association (IATA) said that IATA, although representing the air carrier industry and thus greatly interested in public correspondence with aircraft, was also vitally concerned with aircraft safety as a first priority. The sub-region covered by the proposed footnote was the most heavily travelled air traffic area in the world and had the most demanding spectrum requirements in the world for safety services. Independent estimates by ICAO and other organizations led to the conclusion that the full 14 MHz would in fact be required for safety services in the long run, so that adoption of the footnote could potentially endanger the satisfaction of requirements for those vitally important services.

22.10 The delegate of Canada supported the Chairman's appeal to delegations to accept the text proposed in DL/76.

22.11 The delegate of Israel, speaking on a point of order, moved the closure of the debate.

22.12 The delegate of the Ukrainian SSR said that he was not opposed to that motion, but wished to draw attention to the importance of the statements by the observers for ICAO and IATA. Delegates should bear in mind that their countries were Members not only of the ITU but also of ICAO, and that under the Chicago Convention a basic purpose of that organization was safety of flight and international air navigation.

22.13 The Chairman observed that safety concerns were fully taken into account in his proposal, since the allocation was to be on a secondary basis and the communications in question were to cease immediately to permit transmission of messages with priority 1 to 6 in Article 51.

22.14 The delegate of Israel pointed out that his motion for closure of the debate should have priority over all other discussion.

22.15 The delegate of France opposed the motion for closure. The delegate of Norway also opposed that motion, adding that the fact that the proposed allocation would be used in a highly crowded area must mean that the countries concerned could accommodate the needs of the aeronautical mobile service.

The motion for closure of the debate was carried by 14 votes to 6, with 31 abstentions.

22.16 The Secretary-General pointed out that the number of abstentions exceeded half the number of votes cast and that under No. 544 of the Convention consideration of the matter under discussion should be postponed to a later meeting, at which time abstentions would not be taken into account.

22.17 The delegate of Sweden supported by the delegate of Finland, proposed that the current meeting should be closed forthwith followed immediately by another Plenary meeting.

It was so agreed.

The meeting rose at 2350 hours.

The Secretary-General: The Chairman:

R.E. BUTLER J.W. EGAN

Annex: 1

Annex 1

Statement by the ICRC

"Mr. Chairman, Ladies and Gentlemen,

We would first like to thank you warmly for allowing the International Committee of the Red Cross (ICRC) to attend your Conference as an observer.

Pursuant to the adoption of Article N 40 of the Radio Regulations;

Pursuant to the decision by WARC/MOB-87 to send Recommendation COM5/A to CCIR of the ITU and to all national administrations;

the ICRC wishes to state the following:

a) At the request of the International Lifeboat Conference and in order to discharge the mandate given to it by the Twenty-fifth International Conference of the Red Cross, the ICRC had asked Switzerland, the depositary State for the 1949 Geneva Convention, to submit to the present Conference a draft addition to Article 40 of the Radio Regulations.

b) This proposal was aimed at improving the identification and hence the protection of rescue craft which - although covered by the rules relating to medical transports in Article 40, Section II of the Radio Regulations and by Article 27 of the Geneva Convention of 1949 - are exposed to particular danger because of their size and the risk of being confused with other types of craft.

c) Switzerland accepted this request of the ICRC and with the support of other States proposed in Documents 223 and 223(Rev.1) that specific identification prefixes be reserved for rescue craft.

d) The proposal was not agreed to by certain delegations which felt that rescue craft were in any case already protected and, moreover, that adopting means of identification specially reserved for rescue craft could cause confusion.

e) The ICRC has noted with satisfaction the proposal made by certain delegations that a Recommendation, relating to the identification and location of special craft such as medical transports by means of standard maritime radar transponders, should be submitted to the ICRC and the national administrations.

f) Finally, the International Committee for the Red Cross would like to thank the Swiss Delegation for its tireless efforts to promote the above-mentioned issues. We would also like to thank the many delegations which supported its proposals and all others which allowed positive compromise solutions to be reached."

MOB-87 UNION INTERNATIONALE DES TÉLÉCOMMUNICATIONS
CAMR POUR LES SERVICES MOBILES
GENÈVE, septembre-octobre 1987

Document 479-F/E/S
16 octobre 1987
Original : français
anglais
espagnol

NOTE DU SECRETAIRE GENERAL

A la suite de la douzième séance plénière et en réponse à la demande formulée par certaines délégations, le télégramme-circulaire ci-joint a été envoyé aux administrations de tous les pays Membres de l'UIT.

R.E. BUTLER
Secrétaire général

NOTE BY THE SECRETARY GENERAL

As indicated in the twelfth Plenary Meeting, and in response to requests from some delegations, the enclosed circular-telegram has been sent to the administrations of all countries Members of the ITU.

R.E. BUTLER
Secretary-General

NOTA DEL SECRETARIO GENERAL

Tal como se indicó en la duodécima sesión plenaria, y en respuesta a las peticiones formuladas por algunas delegaciones, se ha enviado a las administraciones de todos los países Miembros de la UIT el telegrama circular adjunto.

R.E. BUTLER
Secretario General

ANNEXE / ANNEX / ANEXO

Copie du télégramme-circulaire Nº A687
adressé aux Membres de l'UIT

Copy of Circular-telegram No. A687
addressed to Members of the ITU

Copia del telegrama circular N.º A687
dirigido a los Miembros de la UIT

TCUIT A687

SUR LA BASE DE L'EVALUATION ACTUELLE DE L'AVANCEMENT DES TRAVAUX DE LA CAMR POUR LES SERVICES MOBILES, LA CONFERENCE A REVISE LE CALENDRIER DES REUNIONS DES DERNIERS JOURS ET PREVU QUE SES TRAVAUX TERMINERONT LE SAMEDI 17 OCTOBRE 1987 STOP R.E. BUTLER, SECGEN

CTITU A687

IN THE LIGHT OF THE CURRENT PROGRESS OF WORK OF THE WARC FOR THE MOBILE SERVICES, THE CONFERENCE HAS REVISED THE TIMETABLE OF MEETINGS FOR THE LAST DAYS WITH THE EFFECT THAT THE CONFERENCE WILL COMPLETE ITS WORK ON SATURDAY 17 OCTOBER 1987 STOP R.E. BUTLER, SECGEN.

TCUIT A687

TRAS EVALUAR LA MARCHA ACTUAL DE LOS TRABAJOS DE LA CAMR PARA LOS SERVICIOS MOVILES, LA CONFERENCIA, QUE HA REVISADO EL CALENDARIO DE SESIONES DE LOS ULTIMOS DIAS, TERMINARA EL SABADO 17 DE OCTUBRE DE 1987 STOP R.E. BUTLER, SECGEN.

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 480-E
24 November 1987
Original: English

COMMITTEE 3

SUMMARY RECORD

OF THE

FOURTH AND LAST MEETING OF COMMITTEE 3

(BUDGET CONTROL)

Thursday, 15 October 1987, at 0900 hrs

Chairman: Dr. M.K. RAO (India)

Subjects discussed:	Documents
1. Approval of the summary record of the third meeting of Committee 3	370
2. Financial implications of decisions taken by the Conference	DT/82
3. Draft report of the Budget Control Committee to the Plenary Meeting	DT/79
4. Completion of the Committee's work	-

1. Approval of the summary record of the third meeting of Committee 3 (Document 370)

The summary record of the third meeting was approved.

2. Financial implications of decisions taken by the Conference (Document DT/82)

2.1 The Chairman said that Document DT/82 had only just been issued, since a number of decisions involving financial implications had been taken quite late. Although delegations had not had time to study the document previously, he invited them to spend a few minutes in examining the details, bearing in mind their provisional nature, with a view to commenting thereon during the current meeting.

2.2 The delegate of the United Kingdom asked to be reminded what credits, if any, would be available for the remainder of the year, and what sum the Administrative Council had finally approved for 1988.

2.3 The Secretary of the Committee said that, from the figures given in the Committee's draft report to the Plenary meeting (Document DT/79), it could be seen that an amount of 160,000 Swiss francs was still available. For 1988, the Administrative Council had authorized a credit of 30,000 Swiss francs for preparation of the final version of the Final Acts; in addition, there was likely to be an available margin of 1,656,000 Swiss francs within the expenditure limit fixed in Additional Protocol I to the Convention (Nairobi, 1982), as shown in Section 5 of the draft report. He stressed that the estimates contained in Document DT/82 were provisional and that the IFRB was to undertake a number of additional tasks, as mentioned in Annex A.

2.4 The delegate of Spain noted that there was no indication of costs relating to the CCIR work to be done on matters stemming directly from the Conference. He wondered whether such post-Conference expenditure would be attributed to the Conference budget or to the respective organ's operating costs, bearing in mind the expenditure limit established.

2.5 The Deputy Secretary-General said it was too early to give a definite reply, bearing in mind the complexities and the dependence on Conference decisions not yet taken. With regard to the margin of 1,656,000 Swiss francs, the decision was up to the Administrative Council.

2.6 The delegate of the United Kingdom said there seemed, at first sight, to be no problem in respect of the Conference budget. A considerable sum would be required, however, for the IFRB's tasks. There was an available margin, under the Conference budget ceiling, for such work; but if the budget for post-Conference work was meant to apply, the ceiling for that had almost been reached because of costs relating to other conferences, and only the sum of 30,000 Swiss francs would be additionally available pending the authorization of additional credits by the Administrative Council in mid-1988.

2.7 The Chairman said that normally a conference budget did not cover any work taking place beyond six months from the end of the conference.

2.8 The Secretary of the Committee suggested that the Committee, in its report to the Plenary Meeting, should propose that an amount of a maximum of 100,000 Swiss francs in the budget of the current Conference be appropriated for expenditure during the first six months of 1988; credits for the period beyond that were, of course, a matter for decision by the Administrative Council.

2.9 The delegate of the United Kingdom thought the suggestion was helpful, subject to ascertainment that the sum was sufficient, bearing in mind that the ITU could not commit itself to expenditure in excess of funds already in hand.

2.10 The Chairman of the IFRB pointed out that the current Conference gave rise to some highly complex and interrelated tasks for the IFRB, some of which had to be completed for administrations as early as May 1989. Moreover, as had been noted, the estimates contained in Document DT/82 were probably incomplete. Despite the IFRB's constant efforts to absorb as much of the cost of smaller tasks as it could, it had little margin to absorb more, given also the voluntary cuts which the Administrative Council had accepted. Therefore, in view of the new tasks to be carried out, the sum of 100,000 Swiss francs was needed by the IFRB.

2.11 The delegate of the United States of America said that, whilst appreciating the speedy action taken by the Secretariat, the IFRB and the CCIR in presenting the preliminary details given in Document DT/82, he advised caution in deciding upon any transfer. He had noted the additional manpower estimated in paragraph 6 of the annex. He also welcomed the degree of flexibility reflected in paragraph 8; perhaps the IFRB could find room, on further consideration, for further redeployment in that computer-related area. In any case, in early 1988 the Administrative Council and the group of voluntary experts would be studying the requirements in that regard.

2.12 The Deputy Secretary-General said it seemed unnecessary to discuss figures in detail at the current stage; all that was required was an authorization to cover a commitment to the tasks involved. All avenues should be explored, of course, with a view to rationalizing costs relating to the tasks referred to in paragraph 8 of the annex to Document DT/82; at the same time, means must be available to ensure that the tasks were properly carried out.

2.13 The Chairman of the IFRB said he hoped that there had been no misunderstanding with regard to paragraph 8. The personnel involved in the FMS was already heavily committed to the work; the reference to modifying priorities implied no changes in manning.

2.14 The Chairman said it was important that the members of the Committee should deliberate to their satisfaction the matters before them; therefore, whilst there was clearly a need for brevity, there could be no question of any constraint on discussion.

2.15 The delegate of the United Kingdom supported the suggestion made by the Secretary of the Committee; the Committee's reports to the Plenary Meeting in that regard should be so worded as to enable the latter to take an early decision.

2.16 The Chairman of the IFRB suggested that Annex A to Document DT/82 should be annexed to Committee 3's report to the Plenary. It would also help if a reference could be made to the need for an immediate start to the IFRB's post-Conference work and to the transfer of 100,000 Swiss francs, if authorized, for that work. Replying to a further question by the delegate of the United States of America, he said that no resources were available for such tasks until the Administrative Council next met. In recent years it had been the IFRB's policy to keep permanent specialist personnel to a minimum and rely on ad hoc recruitment.

7.17 The Secretary of the Committee, replying to a question by the delegate of Lebanon on the procedure for allocating additional post-Conference funds, said that there was usually no difficulty in awaiting the next Administrative Council session. But a precedent for early action had been set at RARC-BC-R2 following a decision by the Budget Control Committee to make available a balance of 140,000 Swiss francs for a post in the IFRB.

The proposal to request the Plenary Meeting to recommend the transfer of the credit of 100,000 Swiss francs for use during the period to mid-1988, pending consideration by the Administrative Council in due course, was approved.

3. Draft report of the Budget Control Committee to the Plenary Meeting (Document DT/79)

3.1 The Chairman invited the Committee to consider the draft report. As could be seen from the heading to Annex 1, the situation of accounts had been updated to 10 October 1987. In view of the decision taken under the previous agenda item, he took it that the request to the Plenary Meeting concerning the transfer of 100,000 Swiss francs would be annexed to the report. In response to an observation by the delegate of the United Kingdom, he said that in the text of section 5 the term "credit balance" would be amended, since it could be ambiguous in English in that context.

3.2 The Chairman of the IFRB suggested the term "ceiling balance". With regard to the transfer of 100,000 Swiss francs for post-Conference work, he hoped it was understood that it was the post-Conference work within the IFRB which was intended.

3.3 The Deputy Secretary-General thought that it would suffice, for the time being, simply to refer to post-Conference work and leave actual allocations to the permanent organs themselves, so as to avoid any possible difficulty. This was agreed to by the Committee.

3.4 The Secretary of the Committee said that the 1988 budget already included a credit of 30,000 Swiss francs for post-Conference work. As shown in Document DT/82, credits were requested for 1989 and 1990 only, subject to decisions taken at the next Administrative Council session. The figure of 100,000 Swiss francs represented a precise calculation of six months' salary for one P-4 and one G-5 post, as requested by the IFRB. However, there should be no objection for adopting the suggestion of the Deputy Secretary-General.

The draft report contained in Document DT/82 was approved.

4. Completion of the Committee's work

4.1 The delegate of the United Kingdom thanked the Chairman for his work during the current session, and expressed appreciation of the Secretariat's efforts, particularly in preparing timely documentation for the Committee.

4.2 The Chairman thanked the participants and the Secretariat for their contributions and declared the work of the Committee completed.

The meeting rose at 0950 hours

The Secretary: The Chairman:

R. PRELAZ M. K. RAO

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 481 -E
22 February 1988
Original : English

PLENARY MEETING

MINUTES

OF THE

THIRTEENTH PLENARY MEETING

Friday, 16 October 1987, at 2350 hours and Saturday, 17 October 1987

Chairman : Mr. J.W. EGAN (Canada)

Subjects discussed:	Documents
1. Final report by the Chairman of Commitee 5 (continued)	455, DL/76

1. Final report by the Chairman of Committee 5(Documents 455, DL/76) (continued)

1.1 The Chairman invited the meeting to vote again on the motion for closure of the debate on Document DL/76.

The motion was carried by 16 votes to 5.

1.2 The Chairman called for a vote on Document DL/76 as an amendment to Document 455.

1.3 The delegate of Cuba, supported by more than five delegations, requested a vote by secret ballot.

A vote was taken by secret ballot,.

The delegates of Sweden, Brazil and India were called upon to act as scrutineers.

The results of the vote were as follows:

Number of ballots cast:	64
Number of invalid ballots:	0
Abstentions:	7
Majority required:	29
In favour:	15
Against:	39

The amendment in Document DL/76 was rejected.

Document 455 was approved on first and second readings.

1.4 The delegates of the United States and Canada reserved their Administrations' positions with regard to that document.

The meeting rose at 0045 hours on Saturday, 17 October 1987.

The Secretary-General:
R.E. BUTLER

The Chairman:
J.W. EGAN

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Corrigendum 1 to
Document 482-E
2 November 1987

FINAL PROTOCOL

Page 24, Declaration 51, replace paragraphs 1 and 2 by the following:

The Final Acts of the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, would impose on all countries rigid obligations to require on-board passenger ships with more than 12 passengers and on-board cargo ships of 300 tons gross tonnage and upwards engaged on international voyages beyond the range of MF coast stations, the carriage of personnel certificated for the maintenance of shipborne equipment for distress and safety communications. The consequences would be an unnecessary and unacceptable burden upon the world-wide maritime community.

Furthermore, these obligations would be inconsistent with the actions of the Maritime Safety Committee of the International Maritime Organization which, in May 1987, endorsed the principle of flexibility in the choice of means of maintaining shipborne equipment for distress and safety purposes. Under these circumstances the Delegations making this statement declare that:

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 482-E
17 October 1987

PLENARY MEETING

FINAL PROTOCOL

At the time of signing the Final Acts of the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, the undersigned delegates take note of the following statements made by signatory delegations.

1

Original: English

For the Kingdom of Saudi Arabia

In signing the Final Acts of the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, the Delegation of the Kingdom of Saudi Arabia to this Conference reserves its Government's right to take any measures it considers necessary to safeguard its interests should any other country fail in any way to observe the provisions laid down in the Final Acts, or should the reservations made by any other country jeopardize the radiocommunication services of the Kingdom of Saudi Arabia

2

Original: English

For the Democratic Socialist Republic of Sri Lanka

The Delegation of the Democratic Socialist Republic of Sri Lanka, at the Administrative Radio Conference for the Mobile Services, Geneva, 1987, hereby reserves the rights of its Government to take any measures deemed necessary to protect its interests if in any way any of its Members fail to observe the decisions taken at this Conference or should the reservations of any country jeopardize its radiocommunication service.

3

Original: Spanish

For Peru:

In signing ad-referendum the Final Acts of the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, the Delegation of Peru declares that it does not consider itself bound by the Acts, Agreements, Decisions and Resolutions of this Conference insofar as they may jeopardize the national rules and regulations applicable to its national communication systems for these services in Peru, and it reserves for its Government the right to take any decisions or measures it may consider necessary to safeguard its interests in these services in the event that the Final Acts and related agreements may in any way be opposed to its Constitution and laws or its interests affected by the decisions of this Conference or by any reservations submitted by other administrations.

4

Original: French

For the Republic of Côte d'Ivoire:

The Delegation of Côte d'Ivoire to the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, declares that in signing the Final Acts of this Conference it reserves its Government's right to approve them and, if necessary, to take whatever steps it may consider necessary to safeguard its interests in the event that any other administration may refuse or fail in any way to comply with them.

5

Original: English

For the State of Kuwait and the State of Qatar:

The Delegations of the State of Kuwait and the State of Qatar declare that their Administrations reserve the right to take such action as they may consider necessary to protect their interests, should a Member of the Union fail, in any way to observe the Resolutions in the Final Acts of the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, or should the reservations made by such Member jeopardize their telecommunication services.

6

Original: English

For the Republic of the Philippines:

In signing the Final Acts of WARC MOB-87, the Philippine Delegation to the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, reserves the right of the Philippine Government to take such measures that it considers necessary to safeguard its interests should the reservations made by other countries to these Final Acts prejudice or jeopardize the telecommunication services of the Republic of the Philippines or that another country should in any way fail to comply with the provisions thereof.

7

Original: English

For the Republic of Suriname:

The Delegation of the Republic of Suriname to the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, reserves the right of the Government of the Republic of Suriname to take any action it deems necessary to safeguard its interests if any Member fails in any way to comply with any Provision, Resolution or Recommendation contained in the Final Acts of this Conference or if reservations made by other countries jeopardize the implementation or operation of the provisions contained therein.

8

Original: English

For the Federal Republic of Nigeria:

In signing this Conference Final Acts, the Delegation of the Federal Republic of Nigeria hereby declares that its Government reserves the right to take any action which it considers necessary to safeguard its interests should certain Members fail to comply with the Articles in the Radio Regulations or the provisions in the Final Acts of this World Administrative Radio Conference for the Mobile Services, Geneva, 1987, and thereby endanger in any way the telecommunication services of the Federal Republic of Nigeria or should reservations by other countries endanger these services in any way.

9

Original: English

For the Republic of Singapore:

The Delegation of the Republic of Singapore reserves for its Government the right to take such action as it may consider necessary to safeguard its interests should any country fail in any way to comply with the requirements of the Final Acts of the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, or should any reservations by any country jeopardize its radiocommunication services.

10

Original: English

For the Socialist Republic of Viet Nam:

The Delegation of the Socialist Republic of Viet Nam to the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, declares as follows:

1. The Administration of Viet Nam reminds that the transmission of broadcasting stations of some countries has been causing harmful interference to the distress and safety communication in the maritime mobile service of Viet Nam. This transmission is not in conformity with Article 35 of the International Telecommunication Convention (Nairobi, 1982).

2. The allocation of frequencies and definitions of operation of aeronautical stations within the sub-area ZLARN-6G in item 27/132A of Appendix 27 Aer.2 to the Radio Regulations are not in conformity with Article 6 (346) and Article 50 (3630) of the Radio Regulations and does not ensure the equal right of usage of frequencies, causing harmful interference to the telecommunication in the aeronautical mobile service, impeding the operation and regulation of flight of the Socialist Republic of Viet Nam.

The Government of Viet Nam declares not to recognize these definitions and they should be revised in the next competent WARC.

3. The Delegation of the Socialist Republic of Viet Nam reaffirms the standpoint of the Government of the Socialist Republic of Viet Nam in its statement of the WARC MOB-83 Final Protocol (No. 16) and reserves for its Government the right to take any measure it deems necessary to safeguard its interest in the mobile telecommunication service.

11

Original: English

For the German Democratic Republic:

In signing the Final Acts of the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, and in reaffirming its support for international cooperation in the telecommunication area, the Delegation of the German Democratic Republic reserves the right for its Government to take any measure it may deem necessary to protect and ensure the proper operation of its telecommunication services.

On behalf of its Government, the Delegation of the German Democratic Republic wishes to put on record that it will not recognize any obligations resulting from:

a) the introduction of the radiodetermination-satellite service;

b) allocating frequencies for land mobile services to bands formerly available to aeronautical radionavigation services;

c) reallocating frequencies for the land mobile satellite service to bands formerly available to the aeronautical radionavigation service, and

d) reallocating frequencies for the mobile aeronautical-satellite service to bands formerly available to the aeronautical radionavigation service.

12

Original: English

For the Sultanate of Oman:

The Delegation of the Sultanate of Oman for the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, hereby, declares that its Government reserves the right to take any measures deemed necessary to protect its interest should any Member or Members fail in any way to observe the decisions of the Final Acts of this Conference, or should the reservation made by such Member or Members jeopardize our telecommunication services.

13

Original: English

For the Democratic People's Republic of Korea:

In signing the Final Acts of the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, the Delegation of the Democratic People's Republic of Korea reserves the right of its Government to take any action it deems necessary to protect its interest if any other country fails in any way to observe the provisions of the Final Acts of the Conference or if reservations entered by other countries jeopardize the proper operation of its telecommunication services or its sovereignty.

14

Original: English

For the Democratic Republic of Afghanistan, the People's Democratic Republic of Algeria, the Kingdom of Saudi Arabia, the Islamic Republic of Iran, the Republic of Iraq, the Hashemite Kingdom of Jordan, the State of Kuwait, Lebanon, the Socialist People's Libyan Arab Jamahiriya, the Kingdom of Morocco, the Islamic Republic of Mauritania, the Sultanate of Oman, the Islamic Republic of Pakistan, the State of Qatar, the Syrian Arab Republic, the Republic of the Sudan and Tunisia:

The above-mentioned Delegations declare that the signature and possible subsequent approval by their respective Governments of the Final Acts of the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, are not valid with respect to the Zionist entity listed under the name of so-called Israel and in no way whatsoever imply its recognition.

15

Original: French

For the Togolese Republic:

The Delegation of the Togolese Republic reserves for its Government the right to take any action it deems necessary to safeguard its telecommunication interests should any country:

- fail to comply with the provisions of the Radio Regulations and the amendments adopted by the World Administrative Radio Conference for the Mobile Services, Geneva, 1987;
- upon signing the Final Acts, formulate reservations which might jeopardize the operation of its telecommunication services.

16

Original: English

For the Democratic Republic of Afghanistan, the Byelorussian Soviet Socialist Republic, the People's Republic of Bulgaria, the People's Republic of Poland, the German Democratic Republic, the Ukranian Soviet Socialist Republic, the Czechoslovak Socialist Republic and the Union of Soviet Socialist Republics:

In connection with frequency allocations in various parts of the spectrum for the radiodetermination-satellite service at the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, the above-mentioned Delegations in signing the Final Acts of the Conference are empowered to declare on behalf of their respective Governments that:

1. They cannot accept as sufficient the currently available technical data on feasibility of sharing between the proposed radiodetermination-satellite service (RDSS) and other radio services in the shared frequency bands with minimal RDSS effect on these radio services.

2. In view of the above, they cannot accept as justified the allocations for the RDSS in the frequency bands 1 610 - 1 626.5 MHz, 2 483.5 - 2 500 MHz and in a part of the band 5 000 - 5 250 MHz which have been made at this Conference by modifying the Table of Frequency Allocations or by introducing a footnote in Article 8 of the Radio Regulations.

3. They cannot ensure that harmful interference is not caused to RDSS earth and space stations and reserve their right not to accept any claims related to such interference from other administrations as well as to take any measures they will deem necessary to provide the operation of their radio services using the frequency bands mentioned in item 2 in accordance with the Radio Regulations adopted by the WARC-79.

17

Original: English

For the Republic of Liberia:

In signing the Final Acts of the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, and having regard to the many opposing opinions expressed on the Conference's agenda (with respect to matters such as the radiodetermination-satellite service, the mobile-satellite service, etc.) by other participating administrations, the Liberian Delegation views with concern the action taken by the Conference, particularly in respect of the revision of Articles 55 and 56, inter alia. It therefore reserves the right to accept only those declarations in the Final Acts that serve the best interests of its Government.

Moreover, in signing the Final Acts, the Delegation of the Republic of Liberia reserves for its Government the right to safeguard its own interests should other administrations or their Governments choose to contravene the valid principles embodied in the Final Acts of the Conference.

18

Original: English

For Thailand:

The Delegation of Thailand to the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, reserves the right of its Government to take any action that it deems necessary to safeguard its interests should any country fail, in any way, to comply with the requirements of the Final Acts of the present Conference, or should reservations made by any country jeopardize its telecommunication services or lead to an increase in its share toward defraying the expenses of the Union.

19

Original: French

For the Republic of Burundi:

The Delegation of the Republic of Burundi to the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, reserves for its Government the right to take any action it deems necessary to safeguard its interests should any country fail, in any way, to comply with the provisions of the Final Acts of the present Conference, or should reservations made by other delegations jeopardize the operation of its telecommunication services, particularly with the introduction of new radiodetermination-satellite services, public correspondence on board aircraft and the mobile-satellite service.

20

Original: French

For Tunisia:

The Delegation of Tunisia reserves for its Government the right to take any action it deems necessary to safeguard its interests should any Member of the Union fail to comply with the provisions adopted by the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, or should reservations entered by other Members jeopardize the operation of its telecommunication services.

21

Original: French

For Burkina Faso:

In signing the Final Acts of the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, the Delegation of Burkina Faso reserves for its Government the right to take such action as it may deem necessary to protect its interests should any country fail, in any way, to comply with the provisions of the Final Acts of the Conference, or should reservations made by any Member jeopardize the operation of its telecommunication services.

Our country or our life - we shall overcome!

22

Original: English

For Papua New Guinea:

In signing the Final Acts of the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, the Delegation of Papua New Guinea reserves for its Government the right to take any measures as it deems necessary to safeguard its interests if Members in any way fail to observe the provisions of the Final Acts of this Conference or if reservations entered by other Delegations jeopardize the operations of its telecommunication services.

23

Original: English

For the Republic of Kenya:

The Kenya Delegation to the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, reserves the right of the Government of the Republic of Kenya to take any action it deems necessary to safeguard its interests if any Member country fails in any way to comply with any provisions, Resolutions or Recommendations contained in the Final Acts of this Conference or if any reservations made by other countries jeopardize the implementation or operation of the provisions contained therein.

The Kenya Delegation further reserves the right of its Government to adhere to all or some of the provisions contained in the Final Acts and the Annexes to the World Administrative Radio Conference for Mobile Services, Geneva, 1987.

24

Original: French

For the Republic of Mali:

In signing the Final Acts of the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, the Delegation of the Republic of Mali reserves for its Government the right to take such action as it may deem necessary to protect its telecommunication interests should any country fail, in any way, to comply with the provisions of the Final Acts of the Conference.

25

Original: English

For the United Republic of Tanzania:

In signing the Final Acts of the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, the Delegation of the United Republic of Tanzania reserves for its Government, the right to take any measures it might deem necessary to safeguard its interests, if another country should in any way fail to respect the conditions specified in these Final Acts, or if the reservations made by any country should be prejudicial to the telecommunication services of the United Republic of Tanzania.

26

Original: English

For Malaysia:

The Delegation of Malaysia, on behalf of the Government and her Administration hereby:

1. associates itself with the partial revision of the Radio Regulations, its Appendices, Resolutions and Recommendations as laid out in the Final Acts of the World Administrative Radio Conference for the Mobile Services, Geneva, 1987;

2. reserves for its Government the right to take such actions as it may deem necessary to safeguard her interest should any Member country fail in any way to comply with the Provisions of the Final Acts, or should reservations by other Member countries jeopardize her mobile services need.

27

Original: French

For the Republic of Senegal:

In signing the Final Acts of the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, the Delegation of the Republic of Senegal reserves for its Government, by which they are to be ratified, the right to take such action as it may deem necessary to safeguard its interests should other Members fail to comply with the provisions of these Final Acts, or should reservations entered by other Members jeopardize the operation of its telecommunication services.

28

Original: Spanish

For Costa Rica:

The Delegation of Costa Rica reserves for its Government the right:

1. to take any action it deems necessary to protect its telecommunication services, should other Member countries fail to comply with the provisions of the Final Acts of the World Administrative Radio Conference for the Mobile Services, Geneva, 1987;

2. to enter any reservations it deems necessary regarding texts in the Final Acts of the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, which affect its sovereignty either directly or indirectly.

29

Original: Spanish

For the Republic of Colombia:

The Delegation of the Republic of Colombia reserves for its Government the right to take such action as it may deem necessary, in accordance with its internal legal order and with international law, to safeguard national interests, should the reservations expressed by representatives of other States regarding these Final Acts affect Colombia's telecommunication services or its sovereignty, or should such action be necessitated by the application or interpretation of these Final Acts.

30

Original: English

For the Hungarian People's Republic:

In signing the Final Acts of the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, the Delegation of the Hungarian People's Republic reserves the right for its Government to take such action as it may consider necessary to safeguard its interests should any Member States of the Union fail in any way to observe or comply with the provisions of these Final Acts or should reservations by other countries jeopardize the proper operation of its mobile services.

31

Original: English

For the Islamic Republic of Iran:

The Delegation of the Islamic Republic of Iran reserves for its Government the right to take any action as it may consider necessary to safeguard its interests should they be affected by decisions taken at this Conference, or by failure on the part of any other country or administration in any way to comply with the requirements of the International Telecommunication Convention (Nairobi, 1982) or its Annexes or the Protocols or the Regulations attached thereto, or these Final Acts, or should Reservations or Declarations by other countries or administrations jeopardize the proper and efficient operation of its telecommunications services, or infringe the full exercise of the sovereign rights of the Islamic Republic of Iran.

32

Original: French

For France:

In signing the Final Acts of the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, the French Delegation wishes to enter a reservation regarding certain passages of Resolution COM5/1, insofar as the latter tend to compel administrations, or ships, taking part in the Global Maritime Distress and Safety System (GMDSS), to comply with all the provisions of Chapter IX of the Radio Regulations, without taking account of the coordination and transition plans established in the International Maritime Organization, nor of arrangements made in that respect by administrations at a national level.

33

Original: French

For the Republic of Cameroon:

In signing the Final Acts of the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, the Delegation of the Republic of Cameroon states on behalf of its Government that although the latter attaches special importance to its international commitments, it reserves the right to take all appropriate measures should the application of new provisions adopted for the Global Maritime Distress and Safety System (GMDSS), the allocation of frequency bands to the radiodetermination-satellite, land mobile-satellite or aeronautical mobile-satellite services for public correspondence with aircraft, or should reservations entered by other delegations on behalf of their Governments affect or jeopardize the proper operation of its telecommunication services.

34

Original: French

For the Socialist People's Libyan Arab Jamahiriya:

The Delegation of the Socialist People's Libyan Arab Jamahiriya reserves for its Government the right to accept or refuse the consequences of any reservation entered by other countries which might entail an increase in its contributory share to the expenditure of the Union and to take such measures as it may deem necessary to safeguard its interests and its telecommunication services should any Member fail to comply with the provisions of the Final Acts to the World Administrative Radio Conference for the Mobile Services, Geneva, 1987.

35

Original: French

For the People's Republic of Angola:

The Delegation of the People's Republic of Angola to the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, reserves for its Government the right to take whatever action it may deem necessary to safeguard its interests, should any Member country fail in any way to comply with the provisions, Resolutions or Recommendations in the Final Acts of this Conference, or should reservations entered by other countries jeopardize the operation of its telecommunication services.

36

Original: Spanish

For Mexico:

The Delegation of Mexico declares that its Government reserves the right to take such action as it may deem necessary to safeguard its interests, should other Members fail in any way to comply with the provisions adopted by the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, or should reservations entered by Members jeopardize its telecommunication services.

37

Original: Spanish

For the Republic of Panama:

The Delegation of the Republic of Panama reserves for its Government the right to take such action as it may consider necessary, in accordance with its national laws and with international law, to safeguard its national interests, should reservations by representatives of other States affect its telecommunication services or the full exercise of its sovereign rights, or should such action be necessitated by the application or interpretation of any of the provisions of the Final Acts of the World Administrative Radio Conference for the Mobile Services, Geneva, 1987.

38

Original: French

For Monaco:

The Delegation of Monaco reserves for its Government the right to take any decision it deems necessary to safeguard the interests of its national sovereignty, should any Member fail to comply with the provisions adopted by this Conference and thus jeopardize the operation of its radio services.

39

Original: French

For the People's Democratic Republic of Algeria:

The Delegation of the People's Democratic Republic of Algeria to the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, reserves for its Government the right to take such action as it may deem necessary to protect its interests, should any Member fail in any way to comply with the provisions of the Final Acts of this Conference, or should reservations entered by other Members jeopardize its telecommunication services or lead to an increase of its share in defraying the expenses of the Union.

40

Original: Spanish

For the Eastern Republic of Uruguay:

In signing the Final Acts of the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, the Delegation of the Eastern Republic of Uruguay reserves for its Government the right to adopt any measures it deems necessary to ensure the protection and proper operation of its radio services in the event that:

a) other Members of the Union fail to comply with the provisions of the Final Acts of this Conference;

b) reservations entered by delegations of other countries jeopardize the satisfactory operation of those services.

41

Original: Arabic

For the Republic of Iraq:

The Delegation of the Republic of Iraq reserves for its Government the right to take such action as it may deem necessary to safeguard its interests should other Members of the Union fail in any way to comply with the provisions, Resolutions and Recommendations of the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, or should reservations made by other Members jeopardize the operation of the telecommunication services of the Republic of Iraq or entail an increase in its contribution to defraying the expenses of the Union.

42

Original: Spanish

For the Argentine Republic:

I

The Argentine Delegation hereby declares on behalf of its Government that it accepts the rules and provisions of the Radio Regulations and of its Appendices, Resolutions and Recommendations, taking into account that the Preamble to those Regulations explicitly states that their application does not imply the expression of any opinion whatsoever on the part of the International Telecommunication Union concerning the sovereignty or the legal status of any country, territory or geographical area.

The Argentine Delegation also declares on behalf of its Government that the continued inclusion of the Malvinas Islands as a separate territory in the revised text of Appendix 43, paragraph 2, "Maritime Identification Digits (MID)" (Table 1), and the corresponding allotment of frequencies, in no way affects the indefeasible and inalienable sovereign rights of the Argentine Republic over those Islands and over the South Georgia and South Sandwich Islands. Their de facto occupation by the United Kingdom of Great Britain and Northern Ireland resulting from an act of force never accepted by the Argentine Republic led the United Nations, in resolutions 2065 (XX), 3160 (XXVIII), 31/49 (XXXI), 37/9 (XXXVII), 38/12 (XXXVIII) and 39/6 (XXXIX), to urge both countries to negotiate a peaceful settlement of the dispute concerning sovereignty over the said Islands with a view to ending the colonial situation.

The United Nations General Assembly has also adopted Resolutions 40/21 (XL) and 41/40 (XLI) again urging both parties to resume negotiations to this end.

Accordingly, the Argentine Republic expressly reserves its sovereign rights over the Malvinas, South Georgia and South Sandwich Islands.

II

In considering the Final Acts, the Argentine Delegation declares that the decision taken with regard to the introduction of the radiodetermination-satellite service in the bands 1 610 - 1 626.5 MHz and 2 483.5 - 2 500 MHz on a primary basis in Region 2 is not the most appropriate, for the following reasons:

1. The report of CCIR Study Group 8 (Document 1050) and its counterpart entitled "Technical and operational bases for the World Administrative Radio Conference for Mobile Services, 1987" (30 June - 11 July 1986) refers to the radiodetermination-satellite service in Chapter 6, section 2.9, and concludes, in section 6.2.9.3, that further studies are needed to determine the technical and coordination steps.

2. Document 277 of WARC MOB-87 contains several references to the possibility of harmful interference caused by the new service to other services currently occupying the bands in question.

3. The Radio Regulations do not yet contain any procedure for coordinating the planned installation of a radiodetermination-satellite service with the land services.

4. In view of the foregoing, it cannot be affirmed that potential interference from the new radiodetermination service will in all cases be insignificant; consequently, the land services will be adversely affected without there being any possibility of coordination.

5. Since this important issue has not been satisfactorily settled, it should be referred to a future competent world administrative conference once the relevant technical and regulatory studies have been conducted.

The Argentine Delegation therefore reserves for its Government the right to take such action as it may deem necessary to protect existing services in the bands concerned against harmful interference from the radiodetermination-satellite service.

III

In considering the Final Acts, the Argentine Delegation declares that the decision to introduce the land mobile-satellite service on a primary basis in certain bands constitutes an encroachment on other services which currently operate on a primary basis in those bands and, in some cases, were not placed on the Conference's agenda.

Accordingly, the Argentine Delegation reserves for its Government the right to take such action as it may deem necessary to protect existing services against harmful interference from the land mobile-satellite service.

IV

The Argentine Delegation's efforts to obtain consideration and amendment of Articles 11 and 28 of the Radio Regulations were unsuccessful, since those Articles had not been placed on the Conference's agenda and the amendments in question related to the establishment of coordination procedures for the radiodetermination-satellite service and the fixed, aeronautical radionavigation and radiolocation services not represented at the Conference.

Accordingly, the Argentine Delegation reserves for its Government the right to take such action as it may deem necessary to protect the above-mentioned services against harmful interference from the radiodetermination-satellite service.

43

Original: Spanish

For Chile:

1. The Delegation of Chile wishes to place on record that, wherever there appears in the Radio Regulations or in any of the documents emanating from this Conference (WARC MOB-87) mention of or references to "Antarctic Territories" as dependencies of any State, they neither do nor can include the Chilean Antarctic sector between the meridians 53° and 90° longitude West, which is an integral part of Chile's territory and over which Chile has indefeasible rights and exercises sovereignty.

Accordingly, the Chilean Delegation reserves for its Government the right to take such measures as it deems necessary for safeguarding its interests should other States in any way encroach on all or part of the above-mentioned territory, invoking the provisions of the Regulations or to that end seeking to assert rights that the Government of Chile does not recognize.

2. The Delegation of Chile further reserves for its Government the right to take such steps as it deems necessary to safeguard its interests should other Members of the Union fail to comply with the provisions of the Radio Regulations and its Annexes, as amended by this Conference, or should reservations entered by other Members directly or indirectly affect the operation of its telecommunication services or its sovereignty.

3. It further declares that the Global Maritime Distress and Safety System (GMDSS) will be introduced on the territory of its country at the discretion of the Chilean Government, with the degree of flexibility deemed by the latter to be appropriate, and that the land-based distress and safety services for ships not subject to the 1974 SOLAS Convention will be maintained to provide assistance to such ships in the form laid down by the Government of Chile and until such time as the latter decides otherwise.

4. The Delegation of Chile further reserves the right of its country to take appropriate steps in the event that its frequencies are affected by transfers or changes.

44

Original: Spanish

For Cuba:

The Delegation of the Republic of Cuba to the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, declares on behalf of its Government that signature of the Final Acts does not signify recognition of the frequency allotments identified as CUB (Guantánamo) (7) in Part IV of Appendix 26 to the Radio Regulations partially revised at this Conference, or of their use by the Government of the United States of America at the naval base which it is occupying illegally and against the wishes of the Cuban Government and people in the Cuban territory of the Province of Guantánamo.

Furthermore, the use of radio frequencies by the Government of the United States of America in the territory which it has usurped in Guantánamo, Cuba, impedes and interferes with the communication services of Cuba and also limits and encroaches upon our country's sovereignty over the radio frequency spectrum which, as stated in Declaration No. 9 of the Final Protocol of the World Administrative Radio Conference, Geneva, 1979, is a limited resource.

The Government of Cuba reserves the right to take all the necessary steps to safeguard its legitimate interests.

45

Original: Spanish

For Cuba:

In signing the Final Acts, the Delegation of the Republic of Cuba to the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, declares on behalf of its Government, with regard to the allocation of frequency bands for the radiodetermination-satellite service in Article 8 of the Radio Regulations:

That it is not satisfied with the technical studies conducted to date on the possibility of sharing between the new radiodetermination-satellite service and other radio services to which frequencies in the bands concerned are already allocated.

That it therefore does not recognize the allocations to the radiodetermination-satellite service in the bands 1 610 - 1 626.5 MHz and 2 483.5 - 2 500 MHz, as well as in part of the bands between 5 000 and 5 250 MHz, decided at this Conference.

Consequently, the Administration of Cuba cannot undertake to prevent harmful interference to earth and space stations in the radiodetermination-satellite service, and reserves the right to refrain from such preventive action as would affect the other services to which frequencies are allocated on a primary basis in the Table of Frequency Allocations.

Finally, the Delegation of Cuba declares that its Administration does not authorize radiodetermination-satellite emissions to or from the territory of the Republic of Cuba and, consequently, that other countries' space stations in the radiodetermination-satellite service in particular may not cover Cuban territory with their emissions.

46

Original: Spanish

For the Republic of Venezuela:

In signing the Final Acts of the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, the Delegation of the Republic of Venezuela reserves for its Government the right to ratify or withhold ratification of these Final Acts, in whole or in part, as well as the right to take any measures which it may deem appropriate to safeguard its interests in the event that any Member, present or future, should fail to comply with the provisions of these Final Acts or take any other action which may undermine the sovereignty of Venezuela or its internal juridical order.

The Venezuelan Delegation likewise reserves for its Government the right to refuse to accept any consequences in the event that any acts or reservations of other Administrations result in an increase in the Venezuelan contribution to defraying the costs of the International Telecommunication Union.

47

Original: Arabic

For the Syrian Arab Republic:

The Delegation of the Syrian Arab Republic declares that its Government reserves the right to take such action as it may deem necessary to safeguard its interests should a Member for any reason infringe the Resolutions adopted by the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, or should reservations by other Members jeopardize the Syrian Arab Republic's telecommunication interests.

48

Original: English

For the Republic of Indonesia:

In signing the Final Acts of the World Administrative Radio Conference for the Mobile Services (Geneva, 1987), the delegation of the Republic of Indonesia hereby reserves the right of its Government:

1. Not to be bound by the provisions of the Final Acts, Resolutions and Recommendations of the World Administrative Radio Conference for the Mobile Services (Geneva, 1987) which are not in conformity with the Constitution, laws, regulations, as well as policy of the Government of Indonesia.

2. To take any action as may be deemed necessary to safeguard its interests should Members, in any way, fail to comply with the requirements of the provision of these Final Acts or should reservations by other countries jeopardise its telecommunications system and services.

49

Original: Spanish

For the Republic of Paraguay:

In signing the Final Acts, the Delegation of the Republic of Paraguay to the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, reserves for its Government the right to take such action as it may deem necessary to safeguard its telecommunication services, should they be adversely affected by the implementation of the provisions adopted at this Conference or by any reservation entered by another Member of the Union.

50

Original: English

For the Democratic Republic of Afghanistan:

The Delegation of the Democratic Republic of Afghanistan reserves the right of its Government to take any measures, if necessary, to safeguard its interests if certain Members in any way fail to observe the provisions of the Final Acts of the Conference (WARC for the Mobile Services, Geneva, September - October 1987) and its annexes and protocols or if reservations entered by other countries jeopardize the operation of its telecommunication services.

51

Original: English

For the Federal Republic of Germany, Australia, Austria, the Commonwealth of the Bahamas, Belgium, Canada, Denmark, the United States of America, Finland, France, Ireland, the Republic of Liberia, the Republic of Malta, Monaco, Norway, New Zealand, the Republic of Panama, the Kingdom of the Netherlands, the United Kingdom of Great Britain and Northern Ireland, the Republic of Singapore, Sweden and the Confederation of Switzerland

The Final Acts of the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, would impose on all countries rigid obligations to require on-board passenger ships with more than 12 passengers, and on-board cargo ships of 300 tons gross tonnage and upwards engaged on international voyages beyond the range of MF coast stations, the carriage of personnel certificated for the maintenance of shipborne equipment for distress and safety communications. The consequences would be an unnecessary and unacceptable burden upon the world-wide maritime community.

Furthermore, these obligations would be inconsistent with the actions of the Maritime Safety Committee of the International Maritime Organization which, in May 1987, endorsed the principles of flexibility in the choice of means of maintaining shipborne equipment for distress and safety purposes. Under these circumstances the Delegations making this statement declare that:

1. Their Administrations do not accept any of the new obligations which might be held to stem from Articles 55(Rev.) and 56(Rev.) of the Radio Regulations relating to the mandatory carriage on board ships of personnel certificated for the on-board maintenance of shipborne radio and electronic equipment.

2. Their Administrations will take action by all appropriate means to ensure the necessarily high standards of maintenance and operational availability of shipborne radio equipment essential for distress and safety communications.

52

Original: English

For the State of Israel:

The Final Acts of the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, would impose on all countries rigid obligations for ships carrying GMDSS equipment. The consequences may cause an unnecessary and unacceptable burden upon our Administration and the maritime community.

Furthermore, these obligations would be inconsistent with the action of the Maritime Safety Committee of the International Maritime Organization, which in May 1987 endorsed the principal of flexibility in the choice of means of maintaining shipboard equipment for distress and safety purposes. Under these circumstances our Delegation, making this statement declares that:

1. Our Administration will study the consequences of the obligations which might be held to stem from New Article 55 and New Article 56 of the Radio Regulations, relating to the mandatory carriage on board ships of personnel certified for the on-board maintenance of shipborne GMDSS equipment, and will make an effort to avoid increasing the burden upon its maritime community and upon the Administration.

2. Our Administration will take action by all appropriate means to ensure the necessary high standards of maintenance and operational availability of shipboard radio equipment essential for distress and safety communications.

53

Original: Spanish

For Spain:

The Delegation of Spain to the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, enters the following reservation with regard to No. 3016 of the Radio Regulations, as adopted by the Conference:

Spain maintains the reservation expressed at the World Administrative Radio Conference for the Mobile Services, 1983, concerning the above-mentioned provision of the Radio Regulations, which appears as Declaration No. 17 of the Final Acts of that Conference. The reason is that it has not found adequate alternative means of carrying out at sea the complete testing of the radiotelephone alarm signal generator as required by the International Convention for the Safety of Life at Sea, 1974 (as amended in 1981 and 1983) and as recommended by Resolution No. 571 of the 14th Assembly of the International Maritime Organization.

Moreover, so far as the Spanish Administration is aware, dummy load tests performed by Spanish vessels have not caused any false alarms in the 2 MHz band.

54

Original: English

For the People's Democratic Republic of Ethiopia:

In signing the Final Acts of the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, the Delegation of the People's Democratic Republic of Ethiopia reserves the right of its Government to take any action it may deem necessary to protect its services jeopardized by reservations of other countries or systems operated in contravention of the Regulations enacted by this Conference.

55

Original: English

For the Republic of India:

In signing the Final Acts of the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, the Delegation of Republic of India reserves the right of its Administration to take necessary steps to protect its interest should any Administration either reserve its position on any provision of the Radio Regulations or operate any radiocommunication station in contravention of any provision in the Radio Regulations.

56

Original: Arabic

For the Hashemite Kingdom of Jordan:

The Delegation of the Hashemite Kingdom of Jordan reserves the right of its Government to take any measures it may deem necessary to safeguard its interests should any Member of the International Telecommunication Union in any way, and for whatever reason, fail to comply with the provisions, Resolutions and Recommendations adopted by the World Administrative Radio Conference for the Mobile Services, Geneva, 1987.

The Delegation of the Hashemite Kingdom of Jordan reserves the right to refuse to accept any reservation which may jeopardize the telecommunication interests of the Hashemite Kingdom of Jordan.

57

Original: English

For Canada:

The Delegation of Canada formally declares that Canada does not, by signature of these Final Acts on its behalf, accept certain decisions taken by this Conference in regard to the Table of Frequency Allocations and the associated footnotes and, therefore, Canada:

in view of the fact that the Conference has unduly restricted allocations for mobile satellite services in the bands 1 530 - 1 559 MHz and 1 626.5 - 1 660.5 MHz, states its intention to utilize these bands in the way most appropriate to satisfy its particular mobile satellite service requirements recognizing the priority of AMSS (R) and maritime safety communications.

58

Original: English

For the United States of America:

The Delegation of the United States of America formally declares that the USA does not, by signature of those Final Acts on its behalf, accept certain decisions taken by this Conference in regard to the Table of Frequency Allocations and the associated footnotes, and therefore, the USA:

in view of the fact that the Conference has unduly restricted allocations for mobile satellite services in the bands 1 530 - 1 559 MHz and 1 626.5 - 1 660.5 MHz, states its intention to utilize these bands in the way most appropriate to satisfy its particular mobile satellite services requirements recognizing the priority of AMSS (R) and maritime safety communications.

59

Original: French

For the Democratic Republic of Madagascar:

The Delegation of the Democratic Republic of Madagascar reserves for its Government the right to take such action as it may deem necessary to protect its interests should Members of the Union fail in any way to comply with the provisions of the Final Acts of the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, or should reservations by other countries jeopardize the operation of its telecommunication services.

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 483-E
22 February 1988
Original : English

PLENARY MEETING

MINUTES

OF THE

FOURTEENTH PLENARY MEETING

Saturday, 17 October 1987, at 0900 hrs

Chairman : Mr. J.W. EGAN (Canada)

Subjects discussed:	Documents
1. Note of declarations	482
2. Report by the Chairman of the Budget Control Committee	470
3. Procedure covering the final texts and records of the Conference	
4. Statements	

1. Note of declarations (Document 482)

1.1 The Secretary-General explained that the declarations assembled in Document 482 were submitted by individual delegations under the provisions of the Final Protocol and were merely to be noted in the formal sense. When the final version was published, only the declarations of those countries which had signed the Final Acts would appear.

1.2 The delegate of Tunisia said that his country's name should appear as the Republic of Tunisia. The Secretary-General said that the official list of names used by the ITU gave the country's name simply as Tunisia, but if the Tunisian Administration or Government wished to change that name, the ITU should be so informed. He would discuss the matter with the Tunisian delegate outside the meeting.

The Plenary took note of the statements comprising the Final Protocol.

2. Report by the Chairman of the Budget Control Committee (Document 470)

2.1 The Chairman of the Budget Control Committee introduced the report. He drew attention to the fact that the estimated saving of 163,000 Swiss francs compared to the original budget had been estimated on 10 October and would no doubt be reduced to some extent by subsequent developments.

In connection with paragraph 7 regarding estimated expenditure resulting from decisions taken at the Conference, he pointed out that further decisions had been taken since the document was prepared, in particular the one recommending that the Administrative Council convene another conference in 1992, so that item had not been taken into account. He explained that the expenditure foreseen for the IFRB which totalled 450,000 Swiss francs had not been intended for use in 1988 but the IFRB would need to make an early start on some of its tasks if it were to respect the time frame established. A credit of 30,000 Swiss francs was already entered in the 1988 budget for work in the General Secretariat but that would not suffice to meet the IFRB costs. The Committee had therefore decided to recommend to the Plenary that it make 100,000 Swiss francs (out of the amount saved on the Conference budget) available to the Secretary-General for use by the IFRB in 1988 and by the General Secretariat if necessary, pending the 1988 session of the Administrative Council. That amount would essentially meet the cost of two posts, one at P4 level and the other at G5, plus associated accommodation, office equipment expenses, etc.

From Annex 2 it was seen that expenditure on preparatory work by CCIR Study Group 8 had not exceeded the limit fixed in the Additional Protocol, but the Committee had not wished to show that as a credit in order not to have to consult the Membership of the Union.

2.2 The delegate of Kenya, referring to the fact that the report did not take into account the Recommendation to hold another Conference in 1992, recalled a similar Recommendation issued by the HFBC Conference earlier in the year and wondered whether it was usual practice to apportion certain credits within a conference budget for the expenses of a future conference.

2.3 The Secretary-General recognized that the question was complicated but he pointed out that the present situation was not to be compared with that prevailing at the HFBC Conference. The HFBC Conference offered a good example of costs for work of an intersessional nature necessary to complete certain activities and to be carried out within the ceiling determined by the Plenipotentiary Conference. However, the present case was that of a new conference to be held outside the time frame covered by the 1982 Nairobi Convention and its period, duration and budget would be decided upon within the calendar of conferences to be adopted by the 1989 Plenipotentiary Conference. A complicating factor, of course, was how to decide whether certain tasks corresponded to immediate post-conference work or intersessional work connected with a future conference. The point raised by the delegate of Kenya had been discussed in the Administrative Council which had taken certain decisions for particular budgetary reasons.

In other words, the present Conference did not have to concern itself unduly about the financial consequences of convening another conference, although the matter would of course have to be brought to the attention of the Administrative Council.

2.4 The delegate of Japan referred to the statement by the Chairman of Committee 3 that 100,000 Swiss francs would be carried over to the financial year 1988 for use by the IFRB and by the General Secretariat if necessary: since he understood that 30,000 Swiss francs were already allotted by the Administrative Council to the General Secretariat, he would have thought that the 100,000 Swiss francs was solely for IFRB use.

2.5 The Chairman of the Budget Control Committee confirmed that that sum was destined primarily for IFRB use. However, during discussions, the Deputy Secretary-General had indicated that it might be preferable to state that the funds would be available for the work of the ITU as a whole. Clearly the voluminous documentation which would have to be produced after the Conference by the General Secretariat might require adjustment of the sums allocated.

2.6 The delegate of Spain wondered whether the delayed entry into force of some of the revised Articles would have any effect on the tasks to be carried out by the IFRB, in other words whether some of those tasks could not be deferred, in view of the fact that some of the initial savings would have been reduced by the extension of the proceedings.

2.7 The Chairman of the Budget Control Committee said that that point had been raised at the final meeting of the Committee because at that time the year and month of implementation of the Final Acts had been known. However, as he had indicated, work would still have to start early in 1988 if the schedule were to be respected.

2.8 The Chairman of the IFRB confirmed that statement from the IFRB point of view. It should be borne in mind that following a decision by the Administrative Council, recruitment of an official normally took about six months. Although it was true that the schedule of activities had been changed somewhat, there was no real impact on the tasks to be carried out by the IFRB. However, by the time of the Administrative Council session in 1988, the IFRB would have evaluated the situation carefully and it would try to reduce the credits of 450,000 Swiss francs, taking into account the 100,000 Swiss francs which it was proposed to carry over.

2.9 The Secretary-General said that the provisions of the Financial Regulations authorized the Secretary-General to transfer credits unused in one year, provided the expenditure was associated with a specific objective. If the full amount of 100,000 Swiss francs were not used for the purpose for which it was intended, the remainder would revert to the Reserve Account.

The Plenary approved the report of the Budget Control Committee.

2.10 The Chairman of the Committee thanked the Secretary-General, Deputy Secretary-General, the Chairman of the IFRB and the Director of the CCIR as well as the staff from the General Secretariat who had assisted him. In particular, he wished to express his gratitude to Mr. Prélaz, Head of the Finance Department for his invaluable work as Secretary of the Committee.

3. Procedure covering the final texts and records of the Conference

3.1 The Secretary-General said that, in accordance with the provisions of the Convention and normal practice, he sought authorization from the Plenary to correct any material errors discovered and to make the necessary re-numbering of provisions in the final text which would make up the definitive version of the Final Acts.

It was so agreed.

3.2 In response to a query from the delegate of Saudi Arabia, the Chairman said that - again according to the customary practice - he would himself approve for publication the minutes of the Plenary Meetings which had not yet been prepared.

4. Statements

4.1 The delegate of the United States said that although he did not wish to take up the valuable time of the Plenary he felt obliged to make a substantive response to reckless and unfounded charges made the previous day by the delegate of Cuba regarding the RDSS.

4.2 Speaking on a point of order, the delegate of Cuba said that while any delegation had the right to make a statement if it so wished, it was inopportune for the current Plenary Meeting to be used to reply to a declaration. To his knowledge, it was not customary in ITU conferences for a delegation to comment on the declarations already considered en bloc in Document 482. The deadline for the submission of additional declarations was too close to allow for any response; he wondered whether that deadline could be deferred.

4.3 The Secretary-General said that when the time limit had been set at 1000 hours it was the expectation that the present Plenary would finish at approximately 0915 hours. Since there was some delay, he would now suggest that the deadline for submitting formal additional declarations be set 45 minutes after the close of the current meeting.

It was so agreed.

4.4 The delegate of the United States said that the statement he wished to make responded to an intervention made the previous day at the twelfth Plenary Meeting and was not connected with the declarations reproduced in Document 482.

4.5 The Secretary-General explained that it was only the declarations contained in Document 482 which could be the subject of additional declarations for the Final Protocol, and it was for the submission of those that the deadline had just been put back. Delegations were of course free to raise matters which they felt appropriate and any other statements would be recorded in the minutes of the meeting.

4.6 The delegate of the United States said that the charge made the previous day about the RDSS was unfounded. The new service was clearly recognized by the Conference for its potential benefit to nations around the world. The abusive misrepresentation of fact was unfortunately all too often characteristic of Cuban conduct in other international conferences and served no other purpose than to distort and detract from the consideration of issues which ought to be discussed on their substantive merits.

He then made the following statement:

"This Conference has seen a concerted and determined effort, during the last five weeks, to impose upon the maritime countries of the world unnecessary and unwarranted requirements for both radio operators and radio maintainers in the Global Maritime Distress and Safety System (GMDSS). The Conference did adopt related provisions in Articles 55 and 56. The burden of the adopted maintenance requirements is unacceptable to the United States, as well as to many other countries.

The United States of America seeks to implement the decision by the Maritime Safety Committee of the International Maritime Organization that, instead of specifying one method of maintenance, a flexible approach on the methods to be used by administrations should be adopted to ensure the operational availability of GMDSS equipment on ships of their flag. By the adopted new provisions of Articles 55 and 56 concerning first- and second-class radio electronic certificate holders, that decision by the Maritime Safety Committee is subjugated.

The United States wholeheartedly supports the GMDSS and it is our intention to move to the GMDSS from the present manual Morse telegraphy radiotelegraph system as soon as possible, including by "accelerated procedures, as may be appropriate."

4.7 The delegate of Cuba said he wished to place on record his Delegation's failure to understand the procedure which permitted statements to be made in Plenary after the document containing the official declarations had been considered.

The meeting rose at 1005 hours.

The Secretary-General: The Chairman:

R.E. BUTLER J.W. EGAN

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Corrigendum 1 to
Document 484-E
19 October 1987

ADDITIONAL DECLARATIONS

Declaration No. 61, replace the beginning of 2nd paragraph by the following text :

"The Delegation of the United Kingdom of Great Britain and Northern Ireland rejects..."

Replace the text of Declaration No. 73 by the following :

73

For Greece :

In relation to Declaration No. 51 of the present Final Protocol, the Delegation of Greece objects to its second paragraph. The Maritime Safety Committee of IMO has adopted the principle of flexibility mentioned in that declaration solely to facilitate study of the new Chapter IV of the SOLAS Convention by the radiocommunication Sub-Committee. Consequently there is no final IMO decision on this matter which is in contradiction with Articles 55(Rev.) and 56(Rev.) of the Radio Regulations.

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 484-E
17 October 1987

PLENARY MEETING

ADDITIONAL DECLARATIONS

60

Original: French

For the Islamic Republic of Mauritania:

Having noted the declarations which have been made, in signing the Final Acts and the Final Protocol, the Delegation of the Islamic Republic of Mauritania to the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, hereby reserves its Government's right to take any measures necessary to safeguard its interests if reservations entered by other Members should in any way jeopardize the proper operation of its telecommunication services.

61

Original: English

For the United Kingdom of Great Britain and Northern Ireland:

The Delegation of the United Kingdom of Great Britain and Northern Ireland notes statement No. 42 by the Delegation of the Argentine Republic concerning the Falkland Islands, South Georgia and the South Sandwich Islands.

The Delegation of the United Kingdom of Great Britain and Northern Island rejects the statement made regarding the Falkland Islands and South Georgia and South Sandwich Islands. The Government of the United Kingdom of Great Britain and Northern Ireland have no doubt as to British sovereignty over the Falkland Islands and South Georgia and South Sandwich Islands which are, and remain, an integral part of the territories for the international relations of which the Government of the United Kingdom of Great Britain and Northern Ireland are responsible.

62

Original: English

For the United Kingdom of Great Britain and Northern Ireland:

The Delegation of the United Kingdom of Great Britain and Northern Ireland notes statement No. 43 by the Delegation of the Chile with regard to Antarctic Territories. Insofar as this may be intended to refer to the British Antarctic Territory Her Majesty's Government in the United Kingdom of Great Britain and Northern Ireland have no doubt as to their sovereignty over the British Antarctic Territory. In connection with the aforementioned statement the Delegation of the United Kingdom draws attention to the provisions of the Antarctic Treaty and particularly Article IV thereof.

63

Original: English

For the People's Republic of China:

In signing the Final Acts, the Delegation of the People's Republic of China to the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, declares that:

1. having noted the statement No. 10, the Chinese Delegation reiterates the position of the Chinese Government, already stated in its declaration (No. 32) included in the Final Acts to the World Administrative Radio Conference for the Mobile Services, Geneva, 1983;

2. should failure to comply with the Radio Regulations or the decisions in the Final Acts of the relevant Administrative Radio Conferences, or reservations by any other Member State, affect the interests and the telecommunication services of the People's Republic of China, the Chinese Delegation reserves for its Government the right to take any action it deems necessary to ensure that its rights are not encroached upon.

64

Original: English

For the Arab Republic of Egypt:

Having noted the statements made, in signing the Final Acts, the Delegation of the Arab Republic of Egypt to the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, reserves for its Government the right to take such action as it may deem necessary to protect its interests, should any Member fail in any way to comply with the provisions of the Final Acts of this Conference, or should reservations entered by other Members jeopardize its telecommunication services.

65

Original: French

For the Socialist Republic of Romania:

Having noted the statements made by other delegations, in signing the Final Acts of the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, the Delegation of the Socialist Republic of Romania reserves its Government's right to take whatever measures it considers necessary to safeguard its country's radio services, in the event that one or more Members should fail in any way to observe the decisions of this Conference or that the reservations entered by another Member should jeopardize its radio services.

66

Original: English

For the State of Israel:

The declarations made by certain delegations in No. 14 of the Final Protocol, being in flagrant contradiction with the principles and purposes of the International Telecommunication Union and, therefore, devoid of any legal validity, the Government of Israel wishes to put on record that it rejects these declarations outright and will proceed on the assumption that they can have no validity with respect to the rights and duties of any Member State of the International Telecommunication Union.

In any case, the Government of Israel will avail itself of its rights to safeguard its interests should the Governments of those delegations in any way violate any of the provisions of the Convention, or the Annexes, Protocols or Regulations attached thereto, or the Final Acts of this Conference.

The Delegation of Israel further notes that Declaration No. 14 does not refer to the State of Israel by its full and correct name. As such it is totally inadmissible and must be repudiated as a violation of recognized rules of international behaviour.

67

Original: English

For the United States of America:

With reference to statement No. 44 by the Government of the Republic of Cuba, the Government of the United States of America notes that the United States presence in Guantanamo is by virtue of a treaty in force; the United States reserves the right to meet its radiocommunication requirements there as heretofore.

68

Original: Spanish

For the Argentine Republic:

With regard to Declaration No. 43 included in the Final Protocol of the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, the Argentine Republic expressly states that it does not accept the reservation contained therein, entered either by the State concerned or by any other State, insofar as it may affect Argentine rights over the sector included between 25° and 74° longitude West of Greenwich and south of 60° latitude South, territories over which the Argentine Republic exercises and reaffirms its indefeasible and inalienable sovereign rights.

69

Original: Spanish

For Spain:

The Delegation of Spain objects to the second paragraph of Reservation No. 51 of this Final Protocol, referring to the Maritime Safety Committee of the IMO, insofar as the latter Committee adopted the principle of flexibility mentioned in the reservation solely to facilitate study of the new Chapter IV of the SOLAS Convention by the Sub-Committee on Radiocommunications of the IMO, and insofar as no final decision of that Organization therefore contradicts the content of Articles 55 and 56 of the Radio Regulations, as revised by the present Conference.

70

Original: English

For the Islamic Republic of Pakistan:

The Delegation of the Islamic Republic of Pakistan reserves its Administration's rights to take effective steps to protect its interests if any administration operates any terrestrial services or radiocommunication services in violation of the Radio Regulations in force or of the decisions taken in the World Administrative Radio Conference for the Mobile Services, Geneva, 1987. It further reserves the right of its Administration to take steps if reservations or declarations made by any other countries or administrations jeopardize the proper and efficient operation of its telecommunication services and systems.

The Administration of Pakistan cannot also undertake to accept any transmission to or infringement of its territory by transmissions in the radiodetermination-satellite service of any other administration and reserves its right to take such steps as necessary should this happen.

71

Original: Spanish

For the Argentine Republic:

The Delegation of the Argentine Republic objects to the second paragraph of Reservation No. 51 of this Final Protocol referring to the Maritime Safety Committee of the IMO, insofar as that latter Committee adopted the principle of flexibility mentioned in the reservation solely to facilitate study of the new Chapter IV of the SOLAS Convention by the Sub-Committee on Radiocommunications of the IMO, and insofar as no final decision of that Organization therefore contradicts the content of Articles 55 and 56 of the Radio Regulations, as revised by the present Conference.

72

Original: Spanish

For Cuba:

With regard to the declaration of the United States of America, contained in Section 58 of Document 482 concerning the declarations of the Final Protocol of the Conference, the Delegation of Cuba declares that the intention of that country to utilize the frequency bands 1 530 - 1 559 MHz and 1 625.5 - 1 660.5 MHz for services not allocated by this Conference, such as the mobile satellite services, could or might imply interference with Cuban services operating in the above-mentioned bands in accordance with the Table of Frequency Allocations of Article 8 of the Radio Regulations, which mentions the aeronautical mobile-satellite (R) service and the maritime mobile-satellite service. In Cuba's opinion, these improper uses constitute an encroachment on the spectrum requirements of the said services and affect air navigation safety in the Region as well as human safety.

The Delegation of Cuba therefore declares in addition that it reserves the right to take any action to ensure that such uses do not jeopardize the use of these bands and that it cannot offer protection to the service which it is intended to use.

73

Original: English

For Greece:

In relation to Declaration No. 51 of the present Final Protocol, the Delegation of Greece objects to its second paragraph. The Maritime Safety Committee of IMO has adopted the principle of flexibility mentioned in that declaration only for study by the radiocommunication Sub-Committee for its inclusion in the new Chapter IV of the SOLAS Convention. Consequently there is no final IMO decision on this matter which is in contradiction with Articles 55(Rev.) and 56(Rev.) of the Radio Regulations.

74

Original: English

For the Federative Republic of Brazil:

In view of the declarations made by certain delegations stating that their administrations will not or may not abide by the decisions taken by this Conference, the Delegation of Brazil hereby reserves for its Government the right to take all the necessary steps to protect its interests should any Member of the Union fail to comply with the decisions of this Conference or any other provision of the Radio Regulations.

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 485-E
22 February 1988
Original: English

PLENARY MEETING

MINUTES

OF THE

FIFTEENTH AND LAST PLENARY MEETING

Saturday 17 October 1987, at 1710 hrs

Chairman : Mr. J.W. EGAN (Canada)

Subjects discussed:	Documents
1. Noting of additional declarations	484
2. Signature of the Final Acts	-
3. Closure of the Conference	-

1. Noting of additional declarations (Document 484)

1.1 The Secretary-General observed that the additional declarations were submitted to the Plenary to be noted only and that any editorial errors therein would be corrected in the usual way.

The meeting took note of Document 484.

2. Signature of the Final Acts

2.1 The Secretary-General explained the procedure for signature of the Final Acts. The Executive Secretary then called the roll of those delegations whose credentials had been found to be in order.

The Final Acts and the Final Protocol were signed by the 99 countries listed in Annex 1.

3. Closure of the Conference

3.1 The Secretary-General made the statement reproduced in Annex 2.

In thanking all the staff of the ITU and the interpreters for their valuable services to the Conference, he paid a special tribute to Madame Arnold who would be retiring at the end of the year after over 40 years of service in the Union, having joined the staff on the Provisional Frequency Board in 1947 and become an outstanding aeronautical specialist at ITU Headquarters. In addition, Mr. Neubauer of the Netherlands, who had acted as Dean of several recent conferences and had helped him enormously in his capacity, was about to retire: he was sure that everyone would join him in wishing Mr. and Mrs. Neubauer a very long, happy and prosperous retirement.

In conclusion, he wished all delegates a safe return to their countries, thanked them for their courteous treatment of the ITU staff and for their cooperation in the work of the Conference and said he looked forward to their participation in future ITU activities.

3.2 The delegate of the United States said that he wished to pay a tribute to Mr. Neubauer on behalf of all the delegations present. In opening the current Conference as Dean, Mr. Neubauer had set a tone which had pervaded the work and had contributed to the success achieved. Many of his colleagues in CEPT had had the good fortune of working with him for many years, but those delegations which had come to know him more recently were also aware of how greatly the Union had benefitted from his counsel, wise guidance and judgement, his courage in facing difficult situations and his leadership. All delegations wished Mr. and Mrs. Neubauer good health and prosperity in their retirement.

3.3 The delegate of Finland said he wished to express the gratitude of the Nordic countries to the Chairman for his conduct of the Conference, which had gone through in five weeks a seven-week agenda comprising many difficult issues: the very limited range of radio frequencies concerned was becoming more and more crowded, with the result that new services, ideas and technologies were increasingly hard to accommodate and a multitude of other important aspects - economic, developmental, educational and so forth - had to be taken into account. The Conference had thus required of its Chairman a diplomatic instinct, impartiality, patience and, above all, endurance to guide it through the work-

loaded final days; all those qualities had been amply demonstrated by Mr. Egan, who had given everyone a fair opportunity of presenting their proposals and the reasons behind them with a view to mutual understanding. Finally, the Chairman was to be congratulated personally, since the Conference constituted an important link in the chain of international events leading toward the implementation of the GMDSS, a field in which the Chairman had performed a great deal of preparatory work, so that the achievements of the Conference could be regarded as marking a personal milestone for him.

3.4 The delegate of Japan extended his Delegation's congratulations to the Chairman on the success achieved, which was largely due to his patience and impartiality in tiding the Conference over many difficult issues. WARC MOB-87 should open the way to the development of new services, taking the needs of existing services duly into account. Telecommunications were closely associated with every aspect of human activity, and mobile communications in particular had long served the interests of the navigational safety of ships and aircraft; they would continue to be extremely important for maritime distress and safety purposes and for safety and regularity of flight. Moreover, technological advances and the pursuit of economic and social efficiency would undoubtedly lead to an increased demand for mobile communications - for instance, as the most suitable means of providing telecommunication services for rural areas in developing countries. It was in the light of those social trends that the Conference had paved the way to the implementation of the GMDSS and had reallocated the 1.5 to 1.6 GHz bands to accommodate various mobile-satellite services. In the course of the deliberations, Japan had feared that the Union would be unable to keep abreast of those world trends, but was now most gratified that it had been possible to reach a compromise, through the efforts of all countries to accommodate each other's needs as far as possible in the limited frequency bands. The allocations marked a first step towards a new world of versatile and cost-effective mobile-satellite communications, and those administrations which had to some extent sacrificed their existing status and interests should take heart from the thought that those sacrifices would be like birth pangs, forgotten in the joy of producing services that would bring benefits to all in the future. The Chairman and Vice-Chairman of the Conference and the Chairmen and Vice-Chairmen of the Committees, Working Groups and ad hoc Groups were to be thanked for their strenuous efforts to achieve that worthy goal, as were the Secretary-General, the Deputy Secretary-General, the IFRB and all other ITU officials and the interpreters for their valuable assistance.

3.5 The delegate of France expressed his Delegation's wholehearted thanks to the Chairman, who for the past five weeks had spared no effort to bring the Conference safely to harbour and to ensure that the work was completed within a reasonable time. Thanks were also due to the Secretary-General, the representatives of the CCIR and the members of the IFRB, who had provided valuable guidance throughout the Conference, and to all the members of the Conference Secretariat, interpreters and other staff without whose assistance the work could not have been completed.

3.6 The delegate of the USSR said that his Delegation had greatly appreciated the Chairman's high professional qualities, his erudition and the patience and healthy optimism he had shown in guiding the Conference through its most difficult stages. It extended its warmest gratitude to him and wished him all health and prosperity. It also thanked those delegations which had cooperated closely with it for their constructive support in the solution of important problems at crucial stages, for their mutual understanding of each other's difficulties and, finally, for adopting the positive decisions that had laid a firm foundation for the further development of a new mobile communication system and generally for the solution of problems of world-wide telecommunications - the most important instrument of communication between people.

3.7 The delegate of Saudi Arabia said that it was difficult to express in words the profound gratitude of his Delegation to the Chairman for his magnificent efforts to achieve the goals of the Conference - efforts which were reflected by the results obtained. The Chairman had shouldered his important responsibilities and had accomplished the enormous tasks assigned to him in an exemplary manner. His Delegation also wished to thank all those who had contributed to the success of the Conference.

3.8 The delegate of the Netherlands (Mr. Neubauer), speaking in his personal capacity, thanked the Secretary-General and the delegate of the United States for their kind words and wished Mrs. Arnold a long period of retirement in good health.

On behalf of the CEPT countries, he expressed their warm thanks to the Chairman for his leadership of the Conference. Although the introduction of provisions on the mobile-satellite services into the Radio Regulations for the first time had been a difficult task, the prospect of the 1992 Conference had somewhat mitigated that difficulty; in any case, the current Conference had made it possible to give new services a chance to develop with completely new technologies and with technologies already used in other services, and it could now be expected that in the years to come safety of life and property at sea would be better preserved than it had been under the old system. The Chairman was to be thanked for his excellent conduct of the proceedings and for the wisdom he had shown in dealing with difficult problems, especially during the past few days. Thanks were also due to the Secretary-General, the Conference Secretariat, the IFRB and all those whose dedicated work had helped to bring the Conference to a successful conclusion only one day after the scheduled closing date.

3.9 The delegate of Senegal said that the current Conference marked yet another significant step in the consolidation of the ITU as an important instrument of international cooperation, a consolidation that had been made possible by the past contributions of such dedicated men and women as Mr. Neubauer and Mrs. Arnold, to whom he expressed his Delegation's thanks and best wishes. The success of the Conference was very largely due to the Chairman's experience, skill and dedication to international cooperation. Moreover, the WARC MOB-87 differed from most world administrative conferences, at which the developing countries were usually obliged to request planning exercises, in that the main problems to be solved had related to four new systems - GMDSS, public correspondence, the land mobile-satellite service and the radiodetermination-satellite service - for which the developing countries had no immediate requirements. The Conference's success in changing the Frequency Allocation Table to accommodate those new systems was due to the spirit of solidarity that had prevailed and to a willingness to sacrifice national susceptibilities and interests in order to take account of the needs of others. The developing countries had joined in that spirit of solidarity, which they regarded as an important element of the consolidation of the Union as an irreplaceable instrument of international cooperation. In conclusion, he extended his Delegation's warmest thanks to the Secretary-General and the Deputy Secretary-General for their availability at all hours for guidance and help and to all the ITU staff and the interpreters who had provided assistance during the Conference.

3.10 The delegate of Kuwait expressed his Administration's gratitude to the Chairman, the Secretary-General, the Deputy Secretary-General, the Chairmen of the Committees and Working Groups and all the ITU staff who had contributed to the success of the Conference. Kuwait also wished to thank those delegations which had submitted proposals promoting the development of telecommunications for the benefit of all the peoples of the world.

3.11 The delegate of Mexico said that the statements made by the Secretary-General and other speakers brought to mind the Radiotelegraph Conference held 81 years previously, which had adopted the first SOS signal for radiomaritime communications, and the fact that that event had been followed some six years later by the sinking of the "Titanic" at the very time when another Radiotelegraph Conference was being held in London, which forcefully illustrated the importance of consultation and the need for world-wide communication. Now, at a Conference which had seen the birth of new services and systems, everyone was fully aware that radiocommunications represented one of the principal features of the present century and that it was within the framework of the ITU that countries could most effectively work toward concordance of their interests and agreement on the use and allotment of the frequency spectrum. He too wished to thank the Chairman, those who had helped to run the Conference and all those who had worked so hard to make it a success.

3.12 The delegate of the Islamic Republic of Iran said that it was a great pleasure to join the previous speakers in thanking the Chairman and congratulating him on bringing the Conference to such a successful close. Delegates had had a long five weeks, working day and night, but the Chairman had certainly worked harder than anyone else. His Delegation wished to thank the Secretary-General, the IFRB, the Conference Secretariat and all those involved in the work of the Conference - not least those administrations which had cooperated actively in the work and those which had been helpful to his Delegation.

3.13 The Observer for the International Transport Workers' Federation (ITF) expressed gratitude for the efforts that had been made in the course of the Conference to improve the safety of life at sea. Speaking on his own behalf as well as for the entire international maritime community, he begged forgiveness for any arguments put forward or stands taken by the ITF which might have seemed somewhat exaggerated. He could assure all those present that at no time had there been any question of bad faith - the ITF was simply fighting for what it believed to be just. He presented his good wishes to those members of the Secretariat who were about to retire and renewed his thanks to the Chairman and all participants.

3.14 The Chairman expressed his appreciation of the kind remarks made by speakers during the meeting. In his view, they had indeed been too kind and had misplaced the credit for the results of the Conference. At the opening Plenary Meeting, he had promised to be impartial, and had tried to fulfil that promise; he had done his best to serve the Conference well and properly, and any failure to do so should be attributed to his lack of skill rather than to his lack of integrity.

In reviewing the results of the Conference, he believed that participants could be quite proud of themselves. The output was a significant document, with a staggering number of pages and of superb quality. The Conference had made a major contribution to the improvement of radiocommunications and to the safety of life and property. Indeed, very few endeavours could be as valuable to mankind or as rewarding to those involved in the work.

That astounding output could be attributed to three factors. The first was the expertise, interest and effort of the delegates. The second was the outstanding leadership of the Chairmen of the Committees, who had been the real helmsmen of the journey to success, had directed and managed the work, had contributed their knowledge and ability and had given unstintingly of themselves, both physically and mentally; on behalf of all participants, he extended the most sincere appreciation to them for their efforts. Thirdly, the success of the work had been aided beyond measure by the Conference staff, the many unsung toilers behind the scenes - typists, translators, clerks and printers - whose contributions had been so invaluable. Thanks were also due to the Secretariat members who had assisted the Committees, Working Groups and Drafting Groups and, of course, to the interpreters, who provided the only channel of verbal communication and had shown great patience and understanding throughout.

On a personal basis, he sincerely thanked all the delegations for the honour they had done him in appointing him Chairman and for their help and guidance, without which he could not have accomplished his task. His special thanks were due to the Technical Secretary and the Administrative Secretary of the Conference, who had always efficiently and cheerfully provided him with technical and practical advice. Finally, he wished to express his gratitude to the Secretary-General for his wise counsel and assistance, particularly for his guidance through the procedural mazes of the final meetings.

He bade all delegations farewell and declared closed the World Administrative Radio Conference for the Mobile Services.

The meeting rose at 1830 hours.

The Secretary-General: The Chairman:

R.E. BUTLER J.W. EGAN

Annexes: 2

ANNEX 1

List of Members which signed the Final Acts of the World Administrative Radio Conference for the Mobile Services (MOB-87), Geneva, 1987

Afghanistan (Democratic Republic of); Algeria (People's Democratic Republic of); Germany (Federal Republic of); Angola (People's Republic of); Antigua and Barbuda; Saudi Arabia (Kingdom of); Argentine Republic; Australia; Austria; Bahamas (Commonwealth of the); Belgium; Byelorussian Soviet Socialist Republic; Brazil (Federative Republic of); Bulgaria (People's Republic of); Burkina Faso; Burundi (Republic of); Cameroon (Republic of); Canada; Chile; China (People's Republic of); Cyprus (Republic of); Vatican City State; Colombia (Republic of); Korea (Republic of); Costa Rica; Côte d'Ivoire (Republic of); Cuba; Denmark; Egypt (Arab Republic of); Spain; United States of America; Ethiopia; Finland; France; Greece; Guinea (Republic of); Hungarian People's Republic; India (Republic of); Indonesia (Republic of); Iran (Islamic Republic of); Iraq (Republic of); Ireland; Israel (State of); Italy; Japan; Jordan (Hashemite Kingdom of); Kenya (Republic of); Kuwait (State of); Lebanon; Liberia (Republic of); Libya (Socialist People's Libyan Arab Jamahiriya); Madagascar (Democratic Republic of); Malaysia; Mali (Republic of); Malta (Republic of); Morocco (Kingdom of); Mauritania (Islamic Republic of); Mexico; Monaco; Nigeria (Federal Republic of); Norway; New Zealand; Oman (Sultanate of); Pakistan (Islamic Republic of); Panama (Republic of); Papua New Guinea; Paraguay (Republic of); Netherlands (Kingdom of the); Peru; Philippines (Republic of the); Poland (People's Republic of); Portugal; Qatar (State of); Syrian Arab Republic; German Democratic Republic; Democratic People's Republic of Korea; Ukrainian Soviet Socialist Republic; Romania (Socialist Republic of); United Kingdom of Great Britain and Northern Ireland; San Marino (Republic of); Senegal (Republic of); Singapore (Republic of); Sri Lanka (Democratic Socialist Republic of); Sweden; Switzerland (Confederation of); Suriname (Republic of); Swaziland (Kingdom of); Tanzania (United Republic of); Czechoslovak Socialist Republic; Thailand; Togolese Republic; Tunisia; Turkey; Union of Soviet Socialist Republics; Uruguay (Eastern Republic of); Venezuela (Republic of); Viet Nam (Socialist Republic of); Yugoslavia (Socialist Federal Republic of); Zambia (Republic of).

ANNEX 2

Statement by the Secretary-General

Thank you, Mr. Chairman.

Mr. Chairman,
Excellencies,
Ladies and Gentlemen,

When I addressed to you introductory words and my sincere wishes for the work of the Conference I was well aware that we were dealing with extremely complex and diversified issues of different perceptions. I was convinced that it would require an outstanding professional knowledge of participants as well as their prudence when acting or taking decisions. I knew that mutual understanding of all ITU Members and qualified respect for the needs of other ITU Members might be needed more than ever before. Taking account of the importance of the mobile service and associated complexity of regulatory provisions required for the mobile, i.e. the aeronautical, land and maritime services, radionavigation and radiodetermination satellite services, it was essential to review and consequently partially revise the Radio Regulations.

We know that the World Administrative Radio Conference in 1979 was not empowered to deal with matters solely related to these services. Rapid technology developments enhanced the need for appropriate integration of new requirements with the need to modify existing regulatory provisions.

This Conference has also drawn up new provisions related to the new frequency bands allocated by WARC-79 and made available for the maritime mobile service. In this process the Conference revised, amongst others, Appendices 31, 16 and 32-35 in such a way that subdivision of the bands reflect present and future requirements for an increasing use of those bands by narrow-band direct-printing telegraphy and radiotelephony. With great trust and recognition of the importance of agreement, many initially differing views have been harmonized and substantive work has been done with the establishment of the regulatory basis and definitive provisions of the Global Maritime Distress and Safety System. This will permit Member countries and IMO to go further in the implementation of the new distress and safety system in the future. Further review of present and transitional provisions might be necessary, possibly undertaken by a future competent administrative radio conference. As I indicated, this will now enable the communities of the IMO Member Governments and, to the extent that they are interested, those in ICAO, to go further in the development of their requirements and decisions in the competent institutions of those organizations.

This Conference has found practical ways to permit the introduction of new forms of satellite communication, for example, the radiodetermination satellite services and land mobile services in certain bands with common user sharing between services primarily allocated, for example mobile services with the aeronautical mobile-satellite services, to satisfy user needs. The consequences will be very important in the approach to a more general WARC.

The output of this Conference is significant if we reflect on the volume of work performed in the course of five weeks. The regulatory text and associated Resolutions amount to some 400 pages of Final Acts which you have just signed. In some cases, work patterns have been established for ongoing technical studies in administrations, in industry and in the CCIR which will pave the way for study results which, I am sure, will facilitate not only application of the new provisions and further development of the services and technology, but also the technical preparations for further revisions of the Radio Regulations as particular services evolve in the next few years. Already the Plenipotentiary Conference of 1989 has before it Recommendations from preceding conferences which will certainly be required in the early 1990s. Ongoing tasks have also been assigned to the IFRB and the General Secretariat. The present period, i.e. since the Nairobi Plenipotentiary Conference in 1982, has seen unprecedented demands for adequate regulatory requirements throughout world and regional administrative conferences. This Mobile Services Conference had been no exception; extensive, complex and particularly animated discussions at all levels have contributed to better knowledge of each other's problems. MOB-87 has accomplished an important mandate in the traditional spirit of cooperation and mutual understanding which, I believe, has led to further advances in providing ways of accommodating within the limited resources of various competent and, indeed, conflicting service needs.

My thoughts are also with you, Mr. Chairman, and your Committee Chairmen; events have focussed on you for five weeks, available day and night on reception and a transmitter site. I believe I share the view of the room if I say that the Conference found you modest, calm, impartial and extremely kind - maybe too kind. Permit me to say that your personal allocation appeared to be exclusive, always oriented towards success on a primary basis and certainly without a footnote! Being Chairman of a world conference, you demonstrated how to lead a Conference, irrespective of region, through its difficult moments. We thank you for bringing it to a successful conclusion. On behalf of my colleagues and myself I congratulate you and thank you warmly.

MOB-87 UNION INTERNATIONALE DES TÉLÉCOMMUNICATIONS
CAMR POUR LES SERVICES MOBILES
GENÈVE, septembre-octobre 1987

Document 486-F/E/S
11 novembre 1987

Cette liste comprend les sections suivantes — This list includes the following sections — Esta lista comprende las secciones siguientes

***

Symboles utilisés — Symbols used — Símbolos utilizados

C : Chef de délégation — Head of delegation — Jefe de delegación
CA : Chef adjoint — Deputy Head — Subjefe
D : Délégué — Delegate — Delegado
A : Conseiller — Adviser — Asesor

***

I. MEMBRES DE L'UNION - MEMBERS OF THE UNION - MIEMBROS DE LA UNIÓN

AFG Afghanistan (République démocratique d') - Afghanistan (Democratic Republic of) - Afganistán (República Democrática del)

C M. BURHANI Mir Azizullah
Chief Radio Inspection Dept.
Ministry of Communication
Kabul

CA M. ALAMI Raz Mohammad
Technical President of Civil Aviation
Ministry of Civil Aviation
Kabul

ALB Albanie (République populaire socialiste d') - Albania (Socialist People's Republic of) - Albania (República Popular Socialista de)

C M. PANI Perikli
Directeur général des PTT
Direction générale des PTT
Tirane

D M. GJERGJI Maksim
Spécialiste en radiocommunications
Direction générale des PTT
Tirane

D M. KOTE Frederik
Ingénieur
Direction des radiocommunications
Direction générale des PTT
Tirane

D M. PALUSHI Garip
Spécialiste en radiocommunications
Direction générale des PTT
Tirane

ALG Algérie (République algérienne démocratique et populaire) - Algeria (People's Democratic Republic of) - Argelia (República Argelina Democrática y Popular)

C M. BOUHADEB Slimane
Chef de Bureau
Ministère des Postes et Télécommunications
Alger

ALG Algérie (République algérienne démocratique et populaire) - Algeria (People's Democratic Republic of) - Argelia (República Argelina Democrática y Popular) (suite)

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ALG Algérie (République algérienne démocratique et populaire) - Algeria (People's Democratic Republic of) - Argelia (República Argelina Democrática y Popular) (suite)

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D Allemagne (République fédérale d') - Germany (Federal Republic of) - Alemania (República Federal de) (suite)

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AGL **Angola (République populaire d') - Angola (People's Republic of) - Angola (República Popular de)**

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ATG **Antigua-et-Barbuda - Antigua and Barbuda - Antigua y Barbuda**

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**BAH Bahamas (Commonwealth des) -
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BEL Belgique - Belgium - Bélgica

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BEL **Belgique - Belgium - Bélgica** (suite)

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BLR **Biélorussie (République socialiste soviétique de) - Byelorussian Soviet Socialist Republic - Bielorrusia (República Socialista Soviética de)**

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B **Brésil (République fédérative du) - Brazil (Federative Republic of) - Brasil (República Federativa del)**

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Chefe da Seção de Engenharia de frequência
Diretoria de Telecomunicaçoës do Exército
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BUL **Bulgarie (République populaire de) - Bulgaria (People's Republic of) - Bulgaria (República Popular de)**

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BFA Burkina Faso - Burkina Faso - Burkina Faso

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BDI Burundi (République du) - Burundi (Republic of) - Burundi (República de)

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CLM Colombie (République de) - Colombia (Republic of) - Colombia (República de)

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POL **Pologne (République populaire de) - Poland (People's Republic of) - Polonia (República Popular de)**

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QAT **Qatar (Etat du) - Qatar (State of) - Qatar (Estado de)**

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QAT **Qatar (Etat du) - Qatar (State of) - Qatar (Estado de)** (suite)

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SYR **République arabe syrienne - Syrian Arab Republic - República Árabe Siria**

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DDR **République démocratique allemande - German Democratic Republic - República Democrática Alemana**

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UKR **République socialiste soviétique d'Ukraine - Ukrainian Soviet Socialist Republic - República Socialista Soviética de Ucrania**

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SDN **Soudan (République du) - Sudan (Republic of the) - Sudán (República del)**

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CLN **Sri Lanka (République socialiste démocratique de) - Sri Lanka (Democratic Socialist Republic of) - Sri Lanka (República Socialista Democrática de)**

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SUI **Suisse (Confédération) - Switzerland (Confederation of) - Suiza (Confederación)**

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SWZ **Swaziland (Royaume du) - Swaziland (Kingdom of) - Swazilandia (Reino de)**

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TCH **Tchécoslovaque (République socialiste) - Czechoslovak Socialist Republic - Checoslovaca (República Socialista)**

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VIN **Viet Nam (République socialiste du) - Viet Nam (Socialist Republic of) - Viet Nam (República Socialista de)**

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II. EXPLOITATIONS PRIVÉES RECONNUES — RECOGNIZED PRIVATE OPERATING AGENCIES — EMPRESAS PRIVADAS DE EXPLOTACIÓN RECONOCIDAS

III. ORGANISATIONS INTERNATIONALES — INTERNATIONAL ORGANIZATIONS — ORGANIZACIONES INTERNACIONALES

III.1 NATIONS UNIES — UNITED NATIONS — NACIONES UNIDAS

III.2 INSTITUTIONS SPECIALISEES — SPECIALIZED AGENCIES — INSTITUCIONES ESPECIALIZADAS

Organisation de l'aviation civile internationale — International Civil Aviation Organization — Organización de Aviación Civil Internacional (ICAO)

M. SHAFER R.M.
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Mexico

M. SHILLING Franklin L.
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Air Navigation Bureau
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Organisation météorologique mondiale — World Meteorological Organization — Organización Meteorológica Mundial (OMM)

M. DEXTER Peter Edward
Chief, Ocean Affairs Division
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M. KERHERVE P.L.M.
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M. RAINER J.M.
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Organisation maritime internationale — International Maritime Organization — Organización Marítima Internacional (IMO)

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III.3 ORGANISATIONS REGIONALES (ART. 32 DE LA CONVENTION) - REGIONAL ORGANIZATIONS (ART. 32 OF THE CONVENTION) - ORGANIZACIONES REGIONALES (ART. 32 DEL CONVENIO)

Conférence européenne des administrations des postes et télécommunications - European Conference of Postal and Telecommunications Administrations - Conferencia Europea de Administraciones de Correos y Telecomunicaciones (CEPT)

M. RISUM J.

(Voir Danemark)

M. SKIFFINS Roger Martin

(Voir Royaume-Uni)

Union arabe des télécommunications - Arab Telecommunication Union - Unión Arabe de Telecomunicaciones (ATU)

M. ALGILANI Abdulwahab Abdulsalam
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Union panafricaine des télécommunications - Panafrican Telecommunication Union - Unión Panafricana de Telecomunicaciones (PATU)

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III.4 AUTRES ORGANISATIONS - OTHER ORGANIZATIONS - OTRAS ORGANIZACIONES

Agence pour la Sécurité de la navigation aérienne en Afrique et à Madagascar - Agency for the Safety of Air Navigation in Africa and Madagascar - Agencia para la Seguridad de la Navegación Aérea en África y en Madagascar (ASECNA)

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M. ROGARD Roger
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ESA/ESTEC
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M. ROSETTI C.
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M. STECIW Alexandre
Mission Manager
Paris

Association du transport aérien international - International Air Transport Association - Asociación de Transporte Aéreo Internacional (IATA)

M. KING Keith
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M. BARQUERO E.
Advisor

M. de BOS Ron
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M. FILZ Jean
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M. GARCIA Antonio
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M. GAUTIER André
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Air France
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M. WINEBERG Jonathan
Coordinator Industry Automation - Telecommunications
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Association internationale de signalisation maritime - International Association of Lighthouse Authorities - Asociación Internacional de Señalización Marítima (AISM)

M. ARNSTEIN Paul
U.S. Coast Guard Headquarters
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M. FOGELBERG Sven Ch.

M. WARD N.
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Chambre internationale de la marine marchande - International Chamber of Shipping - Cámara Naviera Internacional (ICS)

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M. STECHER Wilfried H.E.
Captain
Hamburg

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M. BOUVIER Antoine
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M. CAUDERAY Gérald C.
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Comité international radio-maritime - International Maritime Radio Association - Comité Internacional Radiomarítimo (CIRM)

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M. CHESTON T. Stephen
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M. PARKER J.D.
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London

Dr. SAFWAT Safia

M. SAMARA Noah A.
London

M. WATKINS P.W.
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Commission électrotechnique internationale - International Electrotechnical Commission - Comisión Electrotécnica Internacional (CEI)

M. BRUNSCHWIG Pierre

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Fédération internationale des ouvriers du transport - International Transport Workers' Federation - Federación Internacional de los Trabajadores del Transporte (ITF)

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Fédération internationale des ouvriers du transport - International Transport Workers' Federation - Federación Internacional de los Trabajadores del Transporte (ITF)
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M. STRICHARTZ M. Harvey
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Organisation internationale de télécommunications maritimes par satellites - International Maritime Satellite Organization - Organización Internacional de Telecomunicaciones Marítimas por Satélite (INMARSAT)

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M. ASINUGO Johnson
Engineer
London

M. EL AMIN Mohamed
Engineer
London

M. KENNEDY Don
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Organisation internationale de télécommunications maritimes par satellites - International Maritime Satellite Organization - Organización Internacional de Telecomunicaciones Marítimas por Satélite (INMARSAT)
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London

M. PHILLIPS Robert
Technical Manager
London

M. POSKETT Peter
Group Leader
London

M. WRIGHT David
Special Assistant
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Organisation internationale de télécommunications par satellite - International Telecommunications Satellite Organization - Organización Internacional de Telecomunicaciones por Satélite (INTELSAT)

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M. PERRONE Luiz
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Société internationale de télécommunications aéronautiques - International Society for Aeronautical Telecommunications - Sociedad Internacional de Telecomunicaciones Aeronáuticas (SITA)

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Neuilly/Seine

Union internationale des radio-amateurs - International Amateur Radio Union - Unión Internacional de Aficionados de Radio (IARU)

M. BALDWIN Richard L.
President
Newington, USA

MANDRINO Mirko
Member, Executive Committee,
Region 1
Belgrade

Mrs. STROM Rosella
Treasurer, Region 1
Newington, USA

M. NIETYKSZA Wojciech
Vice-Chairman, Region 1
Newington, USA

IV. SIEGE DE L'UNION — HEADQUARTERS OF THE UNION — SEDE DE LA UNIÓN

IV.1 Secrétariat général

M. R.E. Butler, Secrétaire général
Assistantes: Mme P. Taillefer
Mlle E. Miles

M. J. Jipguep, Vice-Secrétaire général
Assistante: Mme C. Gervais

M. G. Barboux, Département des conférences et services communs
M. A. Embedoklis, Département de la coopération technique
M. J. Francis, Département des relations extérieures
M. L. Goelzer, Département de l'ordinateur
M. A. Maclennan, Département du personnel
M. R. Prélaz, Département des finances

IV.2 IFRB

M. W.H. Bellchambers, Président
Assistante: Mlle M. Iglesias

M. Y. Kurihara, Vice-Président
Assistante: Mme J. Simić

M. A. Berrada, Membre
Assistante: Mme D. Phéné

M. G.C. Brooks, Membre
Assistante: Mme J. Fox

M. V.V. Kozlov, Membre
Assistante: Mme M. Zinovieff

M. K. Olms, Chef, Département de l'enregistrement et des opérations
M. M. Sant, Chef, Bureau du Comité
Assistantes: Mme M. Kellner
Mme T. Balfroid

IV.3 CCIR

M. R.C. Kirby, Directeur
Assistante: Mme G. Benoit

M. R.L. Nickelson, Conseiller supérieur
M. R.G. Struzak, Conseiller supérieur
M. Wu Deyan, Conseiller supérieur
M. A. Nalbandian, Conseiller
M. J. Meylan, Administrateur

IV.4 CCITT

M. Th. Irmer, Directeur
Assistante: Mme C. Vigneulle

V. SECRETARIAT DE LA CONFERENCE - SECRETARIAT OF THE CONFERENCE - SECRETARÍA DE LA CONFERENCIA

V.1	Secrétaire de la Conférence	:	M. R.E. Butler, Secrétaire général
	Secrétaire exécutif	:	M. X. Escofet
	Secrétaire technique	:	M. M. Harbi
	Secrétaire administratif	:	M. J. Escudero

V.2 Séance plénière, commissions et groupe technique de la plénière

Séance plénière	:	M. D. Schuster Assistante: Mlle H. Braunschweiger
Commission 1	:	M. D. Schuster
Commission 2	:	M. R. Macheret Assistante: Mlle H. Tulloch
Commission 3	:	M. R. Prélaz Assistante: Mme P. Bertinotti
Commission 4	:	M. T. Gavrilov
Commission 5	:	M. A. Zoudov
Commission 6	:	M. S. Challo
Commission 7	:	M. P.A. Traub Assistantes: Mlle J. Collet Mlle C. Brunet
Groupe technique de la Plénière	:	M. C. Stettler Assistante: Mme C. Jackson

V.3 Division technique

Secrétaire technique : M. M. Harbi, assisté de M. G. Kovacs

MM. les secrétaires des Commissions 4, 5, 6 et du Groupe technique de la Plénière

M. R. Anderson
Mme B. Arnold
M. J. Bacaly
M. T.S. Brewer
M. J.V. Cordeiro
M. P. Cross
M. M. Frachet
M. M. Konate
M. F. Lafuente
Mme S. Petter

Assistance administrative

Mlle M.L. Arocena
M. J. Bertol de la Torre
Mme F. Maisonneuve
Mme M.C. Revenga
Mme M. Sierra
Mme L. Trarieux-Leclerc

V.4 Affaires de caractère légal : M. A. Noll
Assistantes: Mlle A.C. Obellianne
Mlle M.J. Urena

V.5 Division "Services de la Conférence"

Secrétaire administratif	:	M. J. Escudero Assistante: Mlle H. Tulloch
Protocole	:	M. E. Augsburger
Relations avec la presse/ information publique	:	M. R. Fontaine Assistantes: Mme D. Perrot Mme B. Matiz
Division linguistique	:	Mlle M.A. Delgado
- Traduction française	:	M. M. Brodsky
- Traduction anglaise	:	M. A. Jennings
- Traduction espagnole	:	M. A. Peñaranda
Service des interprètes	:	Mme S. Mangelmann
Service des procès-verbalistes	:	Mlle J. Barley
Inscription des délégués	:	Mme H. Di Rosa
Salles	:	Mlle Ch. Clin
Contrôle des documents	:	Mme L. Jeanmonod
Division de la production des documents	:	M. J. Pieterse
- Composition des documents	:	Mme D. Duvernay
- Reprographie	:	M. Ph. Constantin Assistant: M. J. Allinger
- Distribution des documents	:	M. G. Delaye
Secrétaire du Président de la Conférence	:	Mlle D. Jordan
Huissiers	:	M. G. Cudré-Mauroux
Assistance générale	:	Mlle N. Obuobi

MOB-87 INTERNATIONAL TELECOMMUNICATION UNION
WARC FOR THE MOBILE SERVICES
GENEVA, September-October 1987

Document 487-E
29 February 1988
Original : English
French
Spanish

FINAL LIST OF DOCUMENTS

A. Basic documents of the Conference

	Documents
Conference Chairmanship	110
Conference Structure	102
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B. Complete list of documents in numerical order

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PL = Plenary Meeting
C = Committee
WG = Working Group

No.	Origin	Title	Destination
1	SG	Agenda of the Conference	PL
2	SG	Credentials of Delegations	PL
3	SG	CCIR's Report to the Conference - Technical and Operational Basis	C4, C5, C6, WG/PL
4 + Add. 1	SG	IFRB Report on the Application of the Radio Regulations to the Radio Services concerned	C4, C5, C6
5 + Corr.1	ARG	Proposals for the work of the Conference	C4, C5, C6 WG/PL
6	POR	Proposed amendments to Number 405 of the Radio Regulations	C4
7 + Corr.1	DDR	Proposal to the WARC-MOB-87	C4, C5, C6 WG/PL
8	DNK,FNL, ISL,NOR. S	Proposals for the work of the Conference - Agenda item 6 (Chapter XI)	C4, C5, C6 WG/PL
9 + Corr.1 2, 3, 4	*)	Proposals for the work of the Conference - Agenda item 6 - Article 8	C4, C5
10 + Corr. 1, 2	*)	Proposals for the work of the Conference - Agenda item 6 - Article 8	C4, WG/PL
11 + Corr. 1, 2, 3	*)	Proposals for the work of the Conference - Agenda item 6 - Article 8	C4
12 (Rev. 1)	*)	Proposals for the work of the Conference - Agenda item 6 - Article 8	C4

*) Administrations from certain european countries.

No.	Origin	Title	Destination
13 + Corr.1 2, 3, 4	*)	Proposals for the work of the Conference - Agenda item 6 - Article 8	C4
14 + Corr.1 2, 3, 4	*)	Proposals for the work of the Conference - Agenda item 6 - Article 25	C6
15 + Corr. 1, 2, 3	*)	Proposals for the work of the Conference - Agenda items 2 and 6 - Chapters IX, NIX and Resolution No. A	C4, C5
16 + Corr.1 2,3,4,5	*)	Proposals for the work of the Conference - Agenda item 6 - Chapter X	C6
17 + Corr. 1, 2, 3	*)	Proposals for the work of the Conference - Agenda item 6 - Articles 55 and 56	C6
18 + Corr. 1, 2, 3	*)	Proposals for the work of the Conference - Agenda item 6 - Articles 59, 60 and 65	C4, C5, C6, WG/PL
19 + Corr.1 2, 3, 4	*)	Proposals for the work of the Conference - Agenda item 6 - Appendix 18	C4
20 + Corr.1 2, 3, 4	*)	Proposals for the work of the Conference - Agenda item 6 - Appendix 31A	C4, C5, C6
21 + Corr.1 2, 3, 4	*)	Proposals for the work of the Conference - Agenda item 4 - Resolution G	C5, C6
22 + Corr.1 2, 3, 4	*)	Proposals for the work of the Conference - Agenda items 4 and 5 - Resolutions H and 204	C4, C5, C6
23 + Corr.1 2, 3, 4	*)	Proposals for the work of the Conference - Agenda item 1 - Recommendation C	C4, C6, WG/PL
24 + Corr. 1, 2	USA	Proposals for the work of the Conference	C4, C5, C6, WG/PL

*) Administrations from certain european countries.

No.	Origin	Title	Destination
25 +Add.1,2	CAN	Proposals for the work of the Conference	C4, C5, C6, WG/PL
26	SG	Action in response to WARC-79 Resolution 13 relating to the Formation of Call Signs and the Allocation of New International Series	C6
27	SG	Action in response to WARC Resolution 320 (MOB-83) relating to the Allocation of Maritime Identification Digits (MID), and the Formation and Assignment of Identities in the Maritime Mobile and Maritime Mobile-Satellite Services (Maritime Mobile Service Identities)	C6
28	SG	Action in response to WARC/RAC Resolutions and Recommendations relevant to the MOB-87 Agenda	C4, C5, C6, WG/PL
29	SG	Future Public Land Mobile Telecommunication Systems	C4, C6, WG/PL
30 + Corr.1	D	Proposals for the work of the Conference	C4, C5, C6, WG/PL
31 + Add. 1	D	Propositions - Article 38	C4, C5
32 + Corr. 1, 2	URS	Proposals for the work of the Conference	C4, C5, C6, WG/PL
33 + Corr.1	G	Proposals for the work of the Conference	C4, C5, C6, WG/PL
34 + Add. 1	D	Proposals for the work of the Conference - Agenda item 6 - Articles 38 and 41	C4, C5
35	E	Proposals for the work of the Conference - Agenda item 6 - Article 8	C4
36	E	Proposals for the work of the Conference - Article 60	C4, C5, C6, WG/PL
37 + Corr.1	E	Proposals for the work of the Conference - Agenda item 6 - Articles N55 and N56	C5, C6
38	E	Proposals for the work of the Conference - Agenda item 6 - Article 1	C4, C6

No.	Origin	Title	Destination
39	E	Proposals for the work of the Conference - Agenda item 6 - Resolutions 8, 12, 400, 401, 402, 404 - Recommendation 400	C4, C6
40 + Add. 1 + Corr.1	AUS	Proposals for the work of the Conference	C4, C5, C6, WG/PL
41	OMI	IMO Recommendations	PL
42	E	Proposals for the work of the Conference - Agenda item 6 - Articles 59 and 60	C4, C5, C6, WG/PL
43 + Corr.1	E	Proposals for the work of the Conference - Agenda items 2 and 6 - Chapters IX, NIX and Resolution No. A	C4, C5
44 + Add.1	F	Proposals for the work of the Conference - Agenda item 6 - Article 1	C6
45	F	Proposals for the work of the Conference - Agenda item 6 - Article 8	C4
46	F	Proposals for the work of the Conference - Recommendation No. 2 RARC-MM-R1	C4
47	F	Proposals for the work of the Conference - Recommendation No. A	C4, WG/PL
48	F	Proposals for the work of the Conference - Recommendation No. 310	C6, WG/PL
49	VTN	Proposals for the work of the Conference	C4, C5, C6
50 (Rev. 1)	SG	List of Documents published (1 to 50)	-
51	SG	ICAO Information paper	-
52 + Corr.1	DNK,FNL, ISL,NOR, S	Proposal for the work of the Conference - Allotment Plan for Digital Selective Calling Channels for National Use in the Maritime HF Bands	C4, C6
53	HOL	Proposals for the work of the Conference	C4

No.	Origin	Title	Destination
54	HOL	Proposals for the work of the Conference	C6
55	HOL	Proposals for the work of the Conference	C4, C5, C6
56 + Corr.1	CAN	Information Paper - Frequency reuse considerations in sharing common frequency allocations by various mobile satellite services	WG/PL
57 + Corr.1	B	Proposals for the work of the Conference	C4, C5, C6
58 + Add. 1	KEN	Proposals for the work of the Conference	C4, C5, C6 WG/PL
59 + Corr. 1, 2 + Add. 1	TUR	Proposals for the work of the Conference	C4, C5, C6
60	J	Proposals for the work of the Conference	C4, C5, C6, WG/PL
61	PRG	Proposals for the work of the Conference	C4, C5, C6, WG/PL
62	SG	Draft Resolution (PC WATTC-88)	C6
63	CHN	Proposals for the work of the Conference	C4, C5, C6, WG/PL
64	G	Proposals for the work of the Conference	C4, C6
65	USA	Information Paper - Compatibility between the Radio Astronomy Service and the Radiodetermination Satellite Service at 1.6 GHz	C4, WG/PL
66	USA	Information Paper - An Operation Description of the Radiodertermination Satellite Service	C4, WG/PL
67	USA	Information Paper - Frequency Sharing Considerations for the Radiodetermination-Satellite Service in the 1.6, 2.5 and 5.1 GHz Bands	C4, WG/PL
68	USA	Information Paper - Aeronautical Interoperability between Independent Mobile Satellite Systems	C4, WG/PL

No.	Origin	Title	Destination
69	USA	Information Paper - The Coordination of Systems in the Mobile-Satellite Service	C4, WG/PL
70	GRC	Proposals for modification of Articles 55 and 56	C5, C6
71	SG	Budget of the Conference	C3
72	SG	Contributions of Recognized Private Operating Agencies and non-exempt International Organizations	C3
73	SG	Financial Responsibilities of Administrative Conferences	C3
74	F, G	Proposals for the Revision of Appendix 18	C4
75	S	Proposals for the work of the Conference	C4
76	TUN	Proposals for the work of the Conference	C4, C5
77	PHL	Objectives of the Republic of the Philippines for the 1987 World Administrative Radio Conference for Mobile Services	C4, C5, C6, WG/PL
78	USA	Information Note - Worldwide needs for Mobile Communications by Satellite are large and diverse	C4, WG/PL
79	USA	Information Note - Economic and Operational Advantages to Users and Providers of Satellite Systems in the Mobile-Satellite Service	C4, WG/PL
80	USA	Information Note - There is sufficient Spectrum to meet the needs of the Aeronautical, Maritime and Land Mobile-Satellite Services	C4, WG/PL
81 + Corr.1 (Rev.)	USA	Intersystem Technical Sharing Considerations in the Mobile-Satellite Services	C4, WG/PL
82		Document cancelled	
83	USA	Information Note - Frequency Sharing Considerations between the Mobile Satellite Service and Terrestrial Fixed Service in the 1.5 GHz Band	C4, WG/PL

No.	Origin	Title	Destination
84	USA	Information Paper - Sharing the Aeronautical Mobile Satellite (R) Spectrum with other Mobile Satellite Services : Intrasystem Considerations	C4, WG/PL
85	SG	Resolution CITEL/RES. 125 (V-87)	C4, WG/PL
86 +Corr. 1	CTI	Proposals for the work of the Conference	C4, C5, C6, WG/PL
87 + Add. 1	SG	Participation Requests submitted by International Organizations	PL
88	SG	Invitations	-
89 + Corr.1	ALG	Proposals for the work of the Conference	C4, C5, C6, WG/PL
90	SDN	Draft Proposal on RDSS to the Mobile WARC	C4
91	SG	Loss of the Right to Vote	-
92 + Add. 1	GRC	Proposals for the Global Maritime Distress and Safety System	C4, C5
93 +Corr. 1	IND	Proposals for the work of the Conference	C4
94	CHL	Proposals for the work of the Conference	C4, C5
95	CLN	Proposals for the work of the Conference	C5, C6
96 +Corr. 1	PL	Summary Record of the 1st Plenary Meeting	PL
97 + Add. 1	I	Proposals for the work of the Conference	C4, C5, C6
98	CUB	Proposals for the work of the Conference	C4, C5, C6, WG/PL
99 (Rev. 4)	SG	Allocation of Documents	-
100	SG	List of Documents (51 - 100)	-
101	SG	Secretariat of the Conference	-
102	SG	Structure of the Conference	-

N°	Origin	Title	Destination
103 + Add. 1 (+Corr.)	SEN	Proposals for the work of the Conference	C4, C5
104	F	Proposals for the work of the Conference	C6
105	SG	General schedule of the work of the Conference	-
106	F	Proposals for the work of the Conference	C6
107	ICS	Proposals for the work of the Conference	C6
108	ITWF	The (Future) Global Maritime Distress and Safety System	-
109	IATA	Information Paper - Aeronautical Spectrum Requirements	-
110	SG	Conference Chairmanships	-
111 + Add. 1	MEX	Proposals for the work of the Conference	C4
112	MEX	Proposals for the work of the Conference - Chapter IX	C4, C5
113	MEX	Proposals for the work of the Conference - Chapter NIX	C4, C5
114	MEX	Proposals for the work of the Conference - Chapter X	C4, C6
115	MEX	Proposals for the work of the Conference - Resolutions and Recommendations	C4, C5, C6, WG/PL
116	C4	Organization of the work of Committee 4	C4
117	PL	Minutes of the Second Plenary Meeting	PL
118 +Corr. 1	C4	Summary Record of the First Meeting of Committee 4	C4
119	BFA	Proposals for the work of the Conference	C4
120	BFA	Proposals for the work of the Conference	C6
121	BFA	Proposals for the work of the Conference	C5

N°	Origin	Title	Destination
122	IRL	Proposals for the work of the Conference	C4
123	C4	Note from the Chairman of Committee 4 to the Chairman of Committee 6	C6
124	ARG	Information Document	-
125	ARG	Proposals for the work of the Conference	C6, WG/PL
126	ARG	Proposals for the work of the Conference	C6
127	ICS	Note - Appendix 11	C6
128	CIRM	Note - Appendix 11	C6
129	URG	Proposals for the work of the Conference	C4
130	URS	Proposals for the work of the Conference	C5
131	USA	Proposals for the work of the Conference	C6
132	TZA	Proposals for the work of the Conference	C4, C5, C6
133	ESA	Information Paper on Estimated Requirements of the Mobile-Satellite Services in Region 1	-
134	URS	Proposals for the work of the Conference	C6
135	URS	Proposals for the work of the Conference	C6
136	UKR	Proposals for the work of the Conference	C4
137	C4	Summary Record of the Second Meeting of Committee 4	C4
138	C5	Summary Record of the First Meeting of Committee 5	C5
139	C6	Summary Record of the First Meeting of Committee 6	C6
140	I	Proposals for the work of the Conference	C6
141	WG/4B	First Report of Working Group 4B to Committee 4	C4
142	WG/PL	Note from the Chairman of the WG/PL to the Chairman of Committee 5	C5
143	WG/PL	Note from the Chairman of the WG/PL to the Chairman of Committee 6	C6
144	ARG	Proposals for the work of the Conference	C4

N°	Origin	Title	Destination
145	C6	Organization of the work of Committee 6	C6
146	C5	Organization of the work of Committee 5	C5
147	WG/4A	First Report of WG/4A to Committee 4	C4
148	WG/4A	Note from the Chairman of WG/4A to the Chairman of Committee 4	C4
149	HOL	Proposals for the work of the Conference	WG/PL
150	SG	List of documents (101 - 150)	-
151	ITF	Information Paper - At sea, On-board Maintenance : An Objective Study of Contemporary Radio Electronics Officer Training	-
152	ITF	Information Paper - Analysis of Cost Estimates of FGMDSS Equipment	-
153	ITF	Information Paper - Training Requirement Schedule	-
154	C6	Note from the Chairman of Committee 6	C6
155	USA	Information Note - Spectrum Required for Aeronautical Safety-Related Communications Systems	C4, C6
156	USA	Information Paper - Mobile-Satellite Service Implementation and Institutional Considerations	C4
157	C2	Summary Record of the First Meeting of Committee 2	C2
158	C3	Summary Record of the First Meeting of Committee 3	C3
159	C7	Summary Record of the First Meeting of Committee 7	C7
160 +Corr. 1	C6	Summary Record of the Second Meeting of Committee 6	C6
161 (Rev.1)	WG/5-A	First Report by Working Group 5-A to Committee 5	C5
162	C3	Note by the Chairman of Committee 3 to the Chairmen of Committees 4, 5, 6 and Plenary Working Group	C4, C5, C6, WG/PL

N°	Origin	Title	Destination
163	G	Proposal for the work of the Conference - Article 41	C5
164	URS	Comments on Document 148	C4
165 +Corr. 1	C4	Summary Record of the Third Meeting of Committee 4	C4
166	C4	First Series of Texts from Committee 4 to the Editorial Committee	C7
167	USA	Considerations regarding the Competence of this Conference	C4
168	SG	Prolongation of Conferences	PL
169	C4	Summary Record of the Fourth Meeting of Committee 4	C4
170 +Corr. 1	C5	Summary Record of the Second Meeting of Committee 5	C5
171	IALA	Information Paper - General Considerations	-
172	USA	Information Paper - Safety Report on OMI YUKON	C5, C6
173	C4	Note from the Chairman of Committee 4 to the Chairman of the TG/PL	TG/PL
174	EGY	Proposal for the work of the Conference - Article 8	C4
175	DG/4-1	Report from Chairman of Drafting Group 4-1	C4
176	TG/PL	Note to the Chairmen of Committees 5 and 6 from the Chairman of the TG/PL	C5, C6
177	TG/PL	Note to the Chairman of Committee 5 from the Chairman of TG/PL	C5
178	SG	Transfer of Powers : Vatican City State-Italy	PL
179	WG/4-C	First Report of WG/4-C to Committee 4	C4
180	C5	Note by the Chairman of Committee 5 to the Chairman of the TG/PL	TG/PL

Nº	Origin	Title	Destination
181	USA	Considerations regarding the radiodetermination-satellite service	TG/PL, C4
182	WG/6-B	First Report of the Chairman of WG/6-B to Committee 6	C6
183 +Corr. 1	IATA	Information Note - Fundamental Considerations for L-Band Allocations	C4
184	C4	Guidance from Committee 4 to its Working Groups	C4
185	C4	Summary Record of the Fifth Meeting of Committee 4	C4
186	C6	Summary Record of the Third Meeting of Committee 6	C6
187	WG/2-A	First Report by Working Group 2-A to Committee 2	C2
188	C4	Note from the Chairman of Committee 4 to the Chairmen of Committees 5 and 6	C5, C6
189 (Rev. 1)	DG/4B-1	Report of the Chairman of Drafting Group 4-B-1	WG/4-B
190 + Corr.1	B	Proposal for the work of the Conference	C4
191	ZAI	Proposals for the work of the Conference	C4, C5, C6
192	TG/PL	First Series of Texts by the TG/PL to the Editorial Group	C7
193 +Corr. 1	AGL, BFA, BDI, CME, CTI, ETH, GUI, KEN, LBR, MDG, MLI, MTN, NIG, SEN, SDN, TZA, TGO, ZAI, ZMB	Proposal for the work of the Conference - Radiodetermination-Satellite Service	C4
194	WG/6-B	Second Report of the Chairman of WG/6-B	C6
195	USA	Sharing Criteria for the Radiodetermination-Satellite Service	C4, TG/PL

No.	Origin	Title	Destination
196 (Rev. 1)	C6	B.1	PL
197	C4	Note from the Chairman of Committee 4 to the Chairman of TG/PL	TG/PL
198	G/AdHoc 1	Report by the Ad Hoc Group 1 to the TG/PL	TG/PL
199	C6	Note from the Chairman of Committee 6 to the Chairman of Committee 4	C4
200	SG	List of documents (151 to 200)	-
201 +Corr. 1	C5	Summary Record of the Third Meeting of Committee 5	C5
202	SG	Information Note - International Astronomical Union	C4
203	GRC	Resolution Relating to the Introduction of Provisions for the GMDSS and the Continuation of the Existing Distress and Safety Provisions	C5
204	C5	Note by the Chairman of Committee 5 to the Chairman of Committee 4	C4
205	URS	Proposals for the work of the Conference - Article 8	C4
206	WG/4-A	Third Report of WG 4-A to Committee 4	C4
207	INMARSAT	Information Note - Facts Relating to INMARSAT and its System Characteristics	-
208	I	Proposals for the work of the Conference	WG/PL
209	TZN	Proposals for the work of the Conference	C4
210	C5	First Series of Texts from Committee 5 to the Editorial Committee	C7
211	SWG/4-A-3	Report of Drafting Group 4-A-3 to WG 4-A	WG/4-A
212	WG/6-A	First Report by the Chairman of WG 6-A to the Chairman of Committee 6	C6
213	WG/6-A	Second Report by the Chairman of WG 6-A to the Chairman of Committee 6	C6
214	WG/6-A	Third Report by the Chairman of WG 6-A to the Chairman of Committee 6	C6

No.	Origin	Title	Destination
215 + Corr.1 (Rev.)	WG/5-B	First Report of the Chairman of WG 5-B to the Chairman of Committee 5	C5
216 + Corr.1	WG/4-B	Second Report of WG 4-B to Committee 4	C4
217 +Corr. 1	WG/5-A	Second Report of WG 5-A to Committee 5	C5
218	G/AdHoc 2	Report by Ad Hoc 2 Group to WG/PL	WG/PL
219 +Corr. 1	PL	Minutes of the third Plenary Meeting	PL
220	USA	Information Paper - Power Distribution Requirements for EPIRBs Operating on the Frequencies 121.5 and 243 MHz	WG/PL
221	WG/6-B	Third Report of the Chairman of the WG 6-B	C6
222	WG/6-A	Fourth Report of the Chairman of WG 6-A to the Chairman of Committee 6	C6
223 (Rev. 1)	DNK, E, FNL, G, HOL, NOR, S, SUI	Proposals for the work of the Conference - Article 40 - Article N40	C5
224	SWG/4-A-4	Report of the Drafting Group 4-A-4 to WG 4-A	WG/4-A
225	SWG/4-A-3	Second Report of Drafting Group 4-A-3 to WG 4-A	WG/4-A
226 (Rev.1)	ARG, URG	Proposal for the work of the Conference	C4
227	WG/4-C	Second Report of WG 4-C to Committee 4	C4
228	WG/5-B	Third Report by WG 5B to Committee 5	C5
229	WG/5-B	Fourth Report by WG 5-B to Committee 5	C5
230	WG/5-B	Fifth Report by WG 5-B to Committee 5	C5
231	WG/5-B	Sixth and Final Report by WG 5-B to Committee 5	C5

No.	Origin	Title	Destination
232 + Corr.1 2, 3, 4	AFG, AlG, ARG,B,BUL CHN, CYP, E, GRC, GUI, IRN, LYB, MDG, MLI, MEX, PAK, PNR, PRG, ROU, CLN, SUR, TZN, TGO, TUN, TUR, URG, YUG	Proposals for modification of Articles 55 and 56	C6
233	E	Articles N55 and N56 - Operators' Certificates and Personnel of Coast and Ship Stations	C6
234	WG/PL	Note from the Chairman of WG/PL to the Chairman of Committee 4	C4
235	WG/4-A	Fourth Report of WG 4-A to Committee 4	C4
236	SG	State of the Conference Accounts as at 23.09.87	C3
237	USA	IMO Decisions on Radio Operators and Equipment Maintenance in GMDSS	
238	WG/PL	Second series of Text by the WG/PL to Editorial Committee	C7
239	WG/5-B	Second Report by WG 5-B to Committee 5	C5
240	C4	Note from the Chairman of Committee 4 to the Chairman of Committee 5	C5
241	CAN	Proposals for the work of the Conference - Article 60	C6
242	ARG	Articles N55 and N56 - Operators' Certificates and Personnel of Coast and Ship Stations	C6
243	SWG/6-B-2	First Report by the Chairman of SWG 6-B-2 to the Chairman of WG 6-B	WG/6-B
244	SWG/6-B-2	Report by the Chairman of SWG 6-B-2 to the Chairman of WG 6-B	WG/6-B

No.	Origin	Title	Destination
245	WG/2-2	Second Report of WG 2-2 to Committee 2	C2
246 (Rev.1)	C7	B.2 (Rev.1)	PL
247	C6	Summary Record of the Fourth Meeting of Committee 6	C6
248	SWG/4-A-5	Report of Drafting Group 4-A-5 to WG 4-A	WG/4-A
249 +Corr. 1	WG/PL	Third series of texts transmitted by the WG/PL to the Editorial Committee	C7
250	SG	List of documents (201 to 250)	-
251	C6	Note from the Chairman of Committee 6 to the Chairman of Committee 4	C4
252	AdHoc G 4	Report by Ad Hoc Group 4 to the WG/PL	WG/PL
253	WG/5 Ad Hoc 1	First Report of WG 5 Ad Hoc 1 to Committee 5	C5
254	C4	Second series of texts from Committee 4 to the Editorial Committee	C7
255	WG/PL	Note from the Chairman of WG/PL to the Chairman of Committee 4 - Use of A1A Morse telegraphy on NBDP Channels	C4
256	C5	Note by the Chairman of Committee 5 to the Chairman of WG/PL	WG/PL
257	C5	Note from the Chairman of Committee 5 to the Chairman of Committee 4	C4
258	C4	Summary Record of the sixth meeting of Committee 4	C4
259 + Corr.1	ATG, B, CTR, MEX, PNR, PRG, SUR, TRD, URG, USA	Proposal for the work of the Conference - Radiodetermination-Satellite Service	C4
260	C6	Note from the Chairman of Committee 6 to the Chairman of WG/PL	WG/PL
261	WG/6-A	Fifth Report from the Chairman of WG 6-A to the Chairman of Committee 6	C6

No.	Origin	Title	Destination
262	WG/6-A	Sixth Report of the Chairman of WG 6-A to the Chairman of Committee 6	C6
263	C5	Summary record of the fourth Meeting of Committee 5	C5
264	D, CYP, DNK, F, NOR, G, S	Proposals for the work of the Conference	C4
265	WG/PL	Note from the Chairman of WG/PL to the Chairman of Committee 4	C4
266	C6	First series of texts from Committee 6 to the Editorial Committee	C7
267	SWG/6-A-3	Report of Drafting Group 6-A-3 on Article 59 and Recommandation No. 316	WG/6-A
268	WG/5 Ad Hoc 1	Second Report of WG 5 Ad Hoc 1 to Committee 5	C5
269	WG/PL Ad Hoc 3	Report of the WG/PL Ad Hoc 3 to the WG/PL	WG/PL
270	WG/6-B	Fourth Report of the WG 6-B to Committe 6	C6
271	SWG/4-A-3	Third Report from Drafting Group 4-A-3 to WG/4-A	WG/4-A
272	SWG/6-B-1	First Report of SWG 6-B-1 to WG 6-B	WG/6-B
273 (Rev. 1)	SWG/6-B-3	Report by the Chairman of Drafting Group 6-B-3 to the Chairman of WG 6-B	WG/6-B
274	MEX	Radiodetermination-Satellite Service	C4
275	WG/4-B	Third Report by WG 4-B to Committee 4	C4
276 +Corr. 1	C5	Summary Record of the Fifth Meeting of Committee 5	C5
277	WG/PL	Note from the Chairman of the WG/PL to the Chairman of Committee 4	C4
278	WG/PL	Fourth series of texts transmitted by the WG/PL to the Editorial Committee	C7
279	ITF	Endorsement of Document 232	C6
280	C7	B.3	PL

No.	Origin	Title	Destination
281	WG/4-A	Fifth Report of WG 4-A to Committee 4	C4
282	SWG/4-A-4	Second Report of Drafting Group 4-A-4 to WG 4-A	WG/4-A
283	WG/6-A	Seventh Report by the Chairman of WG 6-A to the Chairman of Committee 6	C6
284	WG/6-A	Eighth Report by the Chairman of WG 6-A to the Chairman of Committee 6	C6
285	SWG/6-B-1	Second Report by the Chairman of SWG 6-B-1 to the Chairman of WG 6-B	WG/6-B
286	WG/5 Ad Hoc 1	Third Report of WG 5 Ad Hoc 1 to Committee 5	C5
287	WG/4-B	Fourth Report of WG 4-B to Committee 4	C4
288	URS	Proposals for the work of the Conference - Article 44	C6
289	C5	Second series of texts from Committee 5 to the Editorial Committee	C7
290	SWG/4-A-6	Report from Drafting Group 4-A-6 to WG 4-A	WG/4-A
291	C3	Summary Record of the second meeting of Committee 3	C3
292 +Corr. 1	C6	Summary Record of the fifth meeting of Committee 6	C6
293 +Corr. 1	PL	Minutes of the fourth plenary meeting	PL
294	CAN	Proposals for the work of the Conference - Appendix 38	WG/PL
295	WG/5 Ad Hoc 1	Fourth Report of WG 5 Ad Hoc 1 to Committee 5	C5
296 +Corr. 1	C7	R.1	PL
297	C4	Third series of texts from Committee 4 to the Editorial Committee	C7
298	C7	B.4	PL

No.	Origin	Title	Destination
299	WG/PL	Fifth series of texts transmitted by the WG/PL to the Editorial Committee	C7
300	SG	List of documents (251 to 300)	-
301 +Corr. 1	AFG, BLR, BUL, CUB, HNG, POL, DDR, KRE, UKR, URS, ROU, TCH, VTN	Proposals on Frequency Allocations for the Radiodetermination-Satellite Service (RDSS)	WG/4-A
302	USA	Proposals for the work of the Conference - Draft Resolution	C4, C6
303	C6	Note from the Chairman of Committee 6 to the Chairman of Committee 4	C4
304	C6	Note from the Chairman of Committee 6 to the Chairman of Committee 4	C4
305	SWG/4-A-5	Second Report of Drafting Group 4-A-5 to WG 4-A	WG/4-A
306	PRG, G	Resolutions Nos. 309 and 407	WG/4-B
307	SWG/4-C-2	Report by SWG 4-C-2 to WG 4-C	WG/4-C
308	WG/4-B	Fifth Report of WG 4-B to Committee 4	C4
309	WG/4-A	Sixth Report of WG 4-A to Committee 4	C4
310	C6	Note to the Chairman of Committee 4 from the Chairman of Committee 6	C4
311	SWG/6-B-1	Third and Final Report by the Chairman of SWG 6-B-1 to the Chairman of WG 6-B	WG/6-B
312	WG/6-B	Fifth Report by the Chairman of WG 6-B to the Chairman of Committee 6	C6
313	WG/5-A	Third Report by the Chairman of WG 5-A to the Chairman of Committee 5	C5
314	WG/5-A	Fourth and Final Report by the Chairman of WG 5-A to the Chairman of Committee 5	C5
315	C6	Second series of texts submitted to the Editorial Committee by Committee 6	C7

No.	Origin	Title	Destination
316	C5	Note by the Chairman of Committee 5 to the Chairman of Committee 4	C4
317	C5	Third series of texts from Committee 5 to the Editorial Committee	C7
318	C7	B.5	PL
319 +Corr. 1	C6	Summary Record of the sixth meeting of Committee 6	C6
320	AUS	Service Document Symbols - Appendix 10	WG/6-B
321	CTI	Inclusion in Appendices to the RR of Chanelling Arrangements for the Maritime Mobile Service in the Frequency Bands Between 415 kHz and 526.5 kHz and between 1 606.5 kHz and 2 160 kHz in Region 1 (Resolution No. 704 of WARC MOB-83)	WG/4-B
322	CTI	Allocation of Frequency Bands to the Mobile-Satellite Services (Aeronautical, Maritime and Land)	WG/4-A
323	SG	Application of Resolution No. PLEN/2 of the WARC HFBC Geneva, 1984	-
324	ICS	Information Note	C6
325	USA	Proposals for the work of the Conference - Articles 40 and N40	C5
326	SWG/4-B-1	Second Report of SWG 4-B-1 to WG 4-B	WG/4-B
327	WG/PL	Note from the Chairman of the WG/PL to the Chairman of Committee 5	C5
328	WG/PL	Note from the Chairman of the WG/PL to the Chairman of Committee 4	C4
329	WG/PL	Note from the Chairman of the WG/PL to the Chairman of Committee 4	C4
330	WG/PL	Note from the Chairman of the WG/PL to the Chairman of Committee 4	C4
331	WG/PL	Sixth series of texts from the WG/PL transmitted to the Editorial Committee	C7
332	WG/C2	Third Report of the WG of the Committee 2 (Credentials)	C2

No.	Origin	Title	Destination
333	C4	Summary Record of the seventh meeting of Committee 4	C4
334	C7	B.6	PL
335	C5	Summary Record of the sixth meeting of Committee 5	C5
336	C7	B.7	PL
337	WG/6-B	Sixth Report by the Chairman of WG 6-B to the Chairman of Committee 6	C6
338	WG/5 Ad Hoc 1	Fifth Report of WG 5 Ad Hoc 1 to Committee 5	C5
339	WG/5 Ad Hoc 1	Sixth Report of WG 5 Ad Hoc 1 to Committee 5	C5
340	F, HOL, G	Resolution No. 704	WG/4-B
341	BEL, F, GRC, I	Proposed Definitions - Article 1	WG/4-B
342	C6	Third series of texts submitted by Committee 6 to the Editorial Committee	C7
343	SWG/4-A-8	Report by Drafting Group 4-A-8 to WG 4-A	WG/4-A
344	SWG/4-A-9	Report by Drafting Group 4-A-9 to WG 4-A	WG/4-A
345	SWG/4A-10	Report of Drafting Group 4-A-10 to WG 4-A	WG/4-A
346 (Rev. 1)	SWG/6-A-6	Report of Drafting Group 6-A-6 to WG 6-A - Draft Amendments to Article 26 and Appendices 9 and 11	WG/6-A
347	C5	Summary Record of the seventh meeting of Committee 5	C5
348	C5	Summary Record of the eighth meeting of Committe 5	C5
349	WG/6-B	Seventh Report by the Chairman of WG 6-B to the Chairman of Committee 6	C6
350	SG	List of Documents (301 to 350)	-
351 +Corr. 1	C6	Summary Record of the seventh meeting of Committee 6	C6

No.	Origin	Title	Destination
352	WG/6 Ad Hoc 1	Report by the Chairman of WG Ad Hoc 1 to the Chairman of Committee 6	C6
353	WG/6-A	Ninth Report by the Chairman of WG 6-A to the Chairman of Committee 6	C6
354	C5	Fourth series of texts from Committee 5 to the Editorial Committee	C7
355	SWG/6-A-5	Report of Drafting Group 6-A-5 to WG 6-A	WG/6-A
356	C5	Note from the Chairman of Committee 5 to the Chairman of Committee 6	C6
357	SWG/4-B-2	Report of Drafting Group 4-B-2 to WG 4-B	WG/4-B
358	WG/4-A	Seventh Report of WG 4-A to Committee 4	C4
359	C4	Summary Record of the eighth meeting of Committee 4	C4
360	C5	Summary Record of the ninth meeting of Committee 5	C5
361	C6	Summary Record of the eighth meeting of Committee 6	C6
362 (Rev. 1)	AUS, CAN, F, S	Draft Recommendation Relating to Future Public Land Mobile Telecommunication Systems	C4
363	WG/4-B	Sixth Report from the Chairman of WG 4-B to the Chairman of Committee 4	C4
364	C4	Summary Record of the ninth meeting of Committee 4	C4
365 (Rev. 1)	C5	Fifth series of texts from Committee 5 to the Editorial Committee	C7
366	WG/6-A	Tenth Report by the Chairman of WG 6-A to the Chairman of Committee 6	C6
367	WG/6-A	Eleventh Report by the Chairman of WG 6-A to the Chairman of Committee 6	C6
368	C6	Fourth series of texts submitted to the Editorial Committee by Committee 6	C7
369	B, NZL, USA	Resolution No. 704	C4

No.	Origin	Title	Destination
370	C3	Summary Record of the third meeting of Committee 3	C3
371	PL	Minutes of the fifth Plenary Meeting	PL
372 +Corr. 1	WG/4 Ad Hoc 2	Report by the Chairman of WG 4 Ad Hoc 2	C4
373	WG/4-A	Eighth Report of WG 4-A to Committee 4	C4
374	WG/4-B	Seventh Report of the Chairman of WG 4-B to the Chairman of Committee 4	C4
375	SG	Radiodetermination-Satellite Service	C4
376	C6	Note by the Chairman of Committee 6	C6
377	F	Proposals for the modification of Article 8	C4
378	WG/6-A	Twelfth Report of the Chairman of WG 6-A to the Chairman of Committee 6 concerning modifications to Appendix 9	C6
379	WG/6-A	Thirteenth Report of the Chairman of WG 6-A to the Chairman of Committee 6 concerning modifications to Article 26	C6
380	WG/6-A	Fourteenth Report of the Chairman of WG 6-A to the Chairman of Committe 6	C6
381	WG/6-A	Fifteenth Report by the Chairman of WG 6-A to the Chairman of Committee 6	C6
382	WG/6-A	Sixteenth Report of the Chairman of WG 6-A to the Chairman of Committee 6	C6
383	SWG/4-A11	Report from the Chairman of Drafting Group 4-A-11 to the Chairman of WG 4-A	WG/4-A
384	C6	Summary Record of the ninth meeting of Committee 6	C6
385	C5	Summary Record of the tenth meeting of Committee 5	C5
386	C7	R.2	PL
387	C4	Summary Record of the tenth meeting of Committee 4	C4

No.	Origin	Title	Destination
388	C5	Summary Record of the eleventh meeting of Committee 5	C5
389	WG/4-A	Ninth Report of WG 4-A to Committee 4	C4
390	C4	Fourth series of texts from Committee 4 to the Editorial Committee	C7
391	SG	Matters for clarification : Appendix 25 and No. 2246 of the Radio Regulations	C6, C7
392	WG/PL	Seventh series of texts transmitted by the WG/PL to the Editorial Committee	C7
393	C7	B.8	PL
394	WG/4-B-1	Third Report of Drafting Group 4-B-1 to Committee 4	C4
395	WG/4-A-8	Second Report of Drafting Group 4-A-8 to WG 4-A	WG/4-A
396	WG/C2	Fourth Report of the WG of Committee 2 (Credentials)	C2
397	C5	Sixth series of texts from Committee 5 to the Editorial Committee	C7
398	C5	Note from the Chairman of Committee 5 to the Chairman of Committee 7	C7
399	SG	Final days of the Conference	-
400	SG	List of documents (351 to 400)	-
401	C7	B.9	PL
402	WG/6-B	Eighth Report by the Chairman of WG 6-B to the Chairman of Committee 6	C6
403	C7	B.10	PL
404	C4	Note from the Chairman of Committee 4	C4
405	C4	Fifth series of texts from Committee 4 to the Editorial Committee	C7
406	C6	Summary Record of the tenth meeting of Committee 6	C6

No.	Origin	Title	Destination
407	C4	Summary Record of the eleventh meeting of Committee 4	C4
408	C4	Summary Record of the twelfth meeting of Committee 4	C4
409	C6	Note by the Chairman of Committee 6	C6
410	WG/4-C	Note from the Chairman of WG 4-C to the Chairman of Committee 4	C4
411	C7	B.11	PL
412 + Corr.1	WG/4-C	Third and last report by WG 4-C to Committee 4	C4
413	WG/4-A	Tenth report of WG 4-A to Committee 4	C4
414	WG/4-A	Eleventh and last report of the Chairman of WG 4-A to Committee 4	C4
415	WG/6-A	Seventeenth report of the Chairman of WG 6-A to the Chairman of Committee 6	C6
416	WG/6-A	Eighteenth report by the Chairman of WG 6-A to the Chairman of Committee 6	C6
417	C6	Fifth series of texts from Committee 6 to the Editorial Committee	C7
418	WG/4 Ad Hoc 6	First Report of WG 4 Ad Hoc 6 to Committee 4	C4
419	C6	Sixth series of texts from Committee 6 to the Editorial Committee	C7
420	C7	B.12	PL
421 (Rev.1)	WG/4 Ad Hoc 3	Report of WG 4 Ad Hoc 3 to Committee 4	C4
422	WG/4 Ad Hoc 5	Report of WG 4 Ad Hoc 5 to Committee 4	C4
423	C4	Summary Record of the thirteenth meeting of Committee 4	C4
424	C6	Summary Record of the eleventh meeting of Committee 6	C6

No.	Origin	Title	Destination
425 (Rev. 1)	WG/4 AdHoc 2-1	Third Report of WG 4 Ad Hoc 2-1	C4
426	WG/4 Ad Hoc 7	Report of WG 4 Ad Hoc 7 to Committee 4 - Draft Resolution (COM4/5)	C4
427	C2	Summary Record of the second meeting of Committee 2	C2
428	C7	B.13	PL
429	PL	Minutes of the sixth Plenary Meeting	PL
430 + Corr. 1, 2, 3	C2	Report of Committee 2 to the Plenary Meeting (Credentials)	PL
431	C7	B.14	PL
432	WG/6-A	Nineteenth Report of the Chairman of WG 6-A to the Chairman of Committee 6	C6
433 + Corr.1	C6	Note from the Chairman of Committee 6 to the Plenary Meeting	PL
434	WG/6 Ad Hoc 3	First Report of the Chairman of Committee 6 Ad Hoc 3 to the Chairman of Committe 6	C6
435	C7	B.15	PL
436	C7	R.3	PL
437	C4	Sixth series of texts from Committee 4 to the Editorial Committee	C7
438 +Corr. 1	C6	Note from the Chairman of Committee 6 to the Plenary Meeting	PL
439	SG	Preamble to the Finals Acts of WARC(MOB-87)	PL, C7
440	C4	Summary Record of the fourteenth meeting of Committee 4	C4
441	C4	Summary Record of the fifteenth meeting of Committee 4	C4
442	C7	B.16	PL
443	C7	B.17	PL

No.	Origin	Title	Destination
444	C4	Seventh series of texts from Committee 4 to the Editorial Committee	C7
445	C7	B.18	PL
446	WG/4 Ad Hoc 6	Second Report of Chairman of WG 4 Ad Hoc 6 to Committee 4	C4
447	PL	Minutes of the seventh Plenary Meeting	PL
448	C7	R.4	PL
449	C6	Seventh series of texts submitted by Committee 6 to the Editorial Committee	C7
450	SG	List of documents (401 to 450)	-
451	C7	B.19	PL
452	C5	Report on the work of Committee 5	C5
453	WG/PL	Proposed modification of Resolution No. 314	PL
454	C4	Eighth and last series of texts from Committee 4 to the Editorial Committee	C7
455	C4	Final Report from the Chairman of Committee 4 to the Plenary	PL
456	C6	Eighth series of texts submitted by Committee 6 to the Editorial Committee	C7
457	C7	B.20	PL
458	C6	Summary Record of the twelfth meeting of Committee 6	C6
459	C6	Summary Record of the thirteenth meeting of Committee 6	C6
460	C6	Summary Record of the fourteenth meeting of Committee 6	C6
461	PL	Minutes of the eighth plenary meeting	PL
462	C6	Ninth series of texts submitted by Committee 6 to the Editorial Committee	C7
463	C7	R.5	PL
464	PL	Minutes of the ninth plenary meeting	PL

No.	Origin	Title	Destination
465	C7	B.21	PL
466	C7	B.22	PL
467	WG AdHoc2/PL	Report by Ad Hoc Group 2 of the Plenary to the Plenary Meeting	PL
468	C6	Tenth series of texts from the Chairman of Committee 6 to the Editorial Committee	C7
469	C7	R.6	PL
470	C3	Report of Committee 3 to the Plenary Meeting	PL
471	G/Ad Hoc PL-3	Report of Chairman of Ad Hoc Group PL-3 of the Plenary	
472	C7	B.23	PL
473	C7	R.7	PL
474	C7	B.24	PL
475	PL	Minutes of the tenth plenary meeting	PL
476	PL	Minutes of the eleventh plenary meeting	PL
477 (Rev. 1)	SG	Article 69 - Entry into force of the Radio Regulations	PL
478	PL	Minutes of the twelfth plenary meeting	PL
479	SG	Circular-telegram No. A687	-
480	C3	Summary Record of the fourth and last meeting of Committee 3	C3
481	PL	Minutes of the thirteenth plenary meeting	PL
482 +Corr. 1	SG	Final Protocol	PL
483	PL	Minutes of the fourteenth plenary meeting	PL
484 +Corr. 1	SG	Additional declarations	PL
485	PL	Minutes of the fifteenth and last plenary meeting	PL
486	SG	List of participants	-
487	SG	Final list of documents	-