|  |  |  |
| --- | --- | --- |
| A close up of a sign  Description automatically generated | **World Radiocommunication Conference (WRC-23)Dubai, 20 November - 15 December 2023** |  |
|  |  |
|  |  |
| PLENARY MEETING | **Addendum 11 toDocument 62-E** |
|  | **26 September 2023** |
|  | **Original: English** |
|  |
| Asia-Pacific Telecommunity Common Proposals |
| PROPOSALS FOR THE WORK OF THE CONFERENCE |
|  |
| Agenda item 1.11 |

1.11to consider possible regulatory actions to support the modernization of the Global Maritime Distress and Safety System (GMDSS) and the implementation of e‑navigation, in accordance with Resolution **361 (Rev.WRC‑19)**;

Introduction

APT Members considered the following issues under agenda item 1.11 :

– **Issue A (*resolves 1*)*:* GMDSS modernization**

 APT Members support Method A of the CPM Report to address this agenda item and submitted APT Common Proposals (proposal numbers ACP/62A11/1 to 95).

– **Issue B (*resolves 2*)*:* E-navigation**

 APT Members support Method B to address this agenda item, and submitted APT Common Proposals (proposal numbers ACP/62A11/94 and 96).

– **Issue C (*resolves 3*)*:* Introduction of additional satellite systems into the GMDSS**

 The APT has considered AI 1.11 Issue C but has not developed any APT Common Proposal on the matter.

Proposals

Issue A (*resolves 1*)*:* GMDSS Modernization

ARTICLE 5

Frequency allocations

Section IV – Table of Frequency Allocations
(See No. 2.1)

MOD ACP/62A11/1#1671

495-1 800 kHz

|  |
| --- |
| Allocation to services |
| Region 1 | Region 2 | Region 3 |
| 495-505 MARITIME MOBILE 5.82C ADD 5.A111 |

MOD ACP/62A11/2#1678

5.110 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 used for the automatic connection system as described in the most recent version of Recommendation ITU‑R M.541.     (WRC‑23)

**Reasons:** NBDP has been deleted from the GMDSS, with the exception of MSI on certain frequencies which are contained in RR Appendix **15**. The distress frequencies for NBDP are reused for the ACS described in Recommendation ITU-R M.541 (under revision) and the new Report ITU‑R M.[ACS].

ADD ACP/62A11/3#1677

5.A111 When establishing coast stations in the NAVDAT service on the frequencies 500 kHz and 4 226 kHz, the conditions for the use of the frequencies 500 kHz and 4 226 kHz are prescribed in Articles **31** and **52**. Administrations are strongly recommended to coordinate the operating characteristics in accordance with the procedures of the International Maritime Organization (IMO) (see Resolution**[ACP-A111] (WRC‑23)**).     (WRC‑23)

**Reasons:** Coordination of the NAVDAT services should be done through the procedures established by IMO, in the same way as it is done for the NAVTEX services, see Resolution **339 (Rev.WRC‑07)**.

MOD ACP/62A11/4#1672

3 230-5 003 kHz

|  |
| --- |
| Allocation to services |
| Region 1 | Region 2 | Region 3 |
| 4 063-4 438 MARITIME MOBILE 5.79A ADD 5.A111 5.109 MOD 5.110 5.130 5.131 MOD 5.132 5.128 |

ADD ACP/62A11/5#1679

5.B111The frequencies 6 337.5 kHz, 8 443 kHz, 12 663.5 kHz, 16 909.5 kHz and 22 450.5 kHz are the regional frequencies for the transmission of maritime safety information (MSI) by means of the NAVDAT system (see Appendices **15** and **17**).     (WRC‑23)

**Reasons:** Introduction of the regional NAVDAT frequencies.

MOD ACP/62A11/6#1680

5.132 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 Appendices **15** and **17**).     (WRC‑23)

**Reasons:** First to correct the omission of RR Appendix **15** and second to be aligned with RR No. **5.B111**.

MOD ACP/62A11/7#1673

5 003-7 000 kHz

|  |
| --- |
| Allocation to services |
| Region 1 | Region 2 | Region 3 |
| 6 200-6 525 MARITIME MOBILE 5.109 5.110 5.130 MOD 5.132 ADD 5.B111 5.137 |

MOD ACP/62A11/8#1674

7 450-13 360 kHz

|  |
| --- |
| Allocation to services |
| Region 1 | Region 2 | Region 3 |
| 8 195-8 815 MARITIME MOBILE 5.109 5.110 MOD 5.132 5.145 ADD 5.B111 5.111 |
| … |
| 12 230-13 200 MARITIME MOBILE 5.109 5.110 MOD 5.132 5.145 ADD 5.B111 |

MOD ACP/62A11/9#1675

13 360-18 030 kHz

|  |
| --- |
| Allocation to services |
| Region 1 | Region 2 | Region 3 |
| 16 360-17 410 MARITIME MOBILE 5.109 5.110 MOD 5.132 5.145 ADD 5.B111 |

MOD ACP/62A11/10#1676

18 030-23 350 kHz

|  |
| --- |
| Allocation to services |
| Region 1 | Region 2 | Region 3 |
| 22 000-22 855 MARITIME MOBILE MOD 5.132 ADD 5.B111 5.156 |

MOD ACP/62A11/11#1681

5.228C The use of the frequency bands 161.9625-161.9875 MHz and 162.0125-162.0375 MHz by the maritime mobile service and the mobile-satellite (Earth-to-space) service is limited to the automatic identification system (AIS), including the AIS search and rescue transmitter (AIS-SART). The use of these frequency bands by the aeronautical mobile (OR) service is limited to AIS emissions from search and rescue aircraft operations. The AIS and AIS-SART operations in these frequency bands shall not constrain the development and use of the fixed and mobile services operating in the adjacent frequency bands.     (WRC‑23)

**Reasons:** The AIS-SART also use AIS frequencies for locating signal.

ARTICLE 31

Frequencies for the global maritime distress and safety system (GMDSS)

Section II − Survival craft stations

MOD ACP/62A11/12#1687

31.7 2) Equipment for transmitting locating signals from survival craft stations shall be capable of operating in the frequency band 9 200-9 500 MHz or on 161.975 MHz (AIS 1 of Appendix **18**) and 162.025 MHz (AIS 2 of Appendix **18**).     (WRC‑23)

**Reasons:** The frequencies for AIS-SART homing signal need to be included.

ARTICLE 32

Operational procedures for distress communications in the
global maritime distress and safety system (GMDSS)     (WRC‑07)

Section I − General

MOD ACP/62A11/13#1688

32.7 § 6 The phonetic alphabet and figure code in Appendix 14 and the abbreviations and signals in accordance with the most recent version of Recommendation ITU‑R M.1172 should be used where applicableMOD 1.     (WRC‑23)

MOD ACP/62A11/14#1689

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1 32.7.1The use of the Standard Marine Communication Phrases (SMCP) and, where language difficulties exist, the International Code of Signals, both published by the International Maritime Organization (IMO), is also recommended. It should be noted that the pronunciations for figures in Appendix**14** and IMO SMCP are different.     (WRC‑23)

**Reasons:** In order to avoid potential confusion, it is necessary to remind the mariners and administrations of the difference in pronunciations of figures between RR Appendix **14** and IMO SMCP.

Section II − Distress alerting and distress calling     (WRC‑07)

32.11 B − Transmission of a distress alert or a distress call     (WRC‑07)

B1 − Transmission of a distress alert or a distress call by a ship station
or a ship earth station     (WRC‑07)

MOD ACP/62A11/15#1690

32.12 § 8 Ship-to-shore distress alerts or calls 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).     (WRC‑23)

**Reasons:** Terrestrial VHF EPRIRB is no longer in operation.

32.20 C − Receipt and acknowledgement of distress alerts and distress calls     (WRC‑07)

C1 − Procedure for acknowledgement of receipt of distress alerts or a distress call     (WRC‑07)

MOD ACP/62A11/16#1691

32.21A 2) When acknowledging receipt of a distress alert sent by DSC8, the acknowledgement in the terrestrial services shall be made by DSC or radiotelephony on the associated distress and safety frequency in the same band in which the distress alert was received, taking due account of the directions given in the most recent versions of Recommendations ITU‑R M.493 and ITU‑R M.541.     (WRC‑23)

**Reasons:** NBDP has been deleted by the IMO from the GMDSS, with the exception of MSI on certain frequencies which are contained in RR Appendix **15**. Therefore, acknowledging receipt of a distress alert by NBDP should be excluded. However, acknowledge receipt by DSC or radiotelephony should be retained.

MOD ACP/62A11/17#1692

32.23 § 15 When acknowledging by radiotelephony the receipt of a distress alert or a distress call from a ship station or a ship earth station, the acknowledgement should be given in the following form, taking into account Nos. **32.6** and **32.7**:

– the distress signal “MAYDAY”;

– the name followed by the call sign, or the MMSI or other identification of the station sending the distress message;

– the words “THIS IS”;

– the name and call sign or other identification of the station acknowledging receipt;

– the word “RECEIVED”;

– the distress signal “MAYDAY”.     (WRC‑23)

**Reasons:** Editorial changes of numbering due to the suppression of RR No. **32.24**.

SUP ACP/62A11/18#1693

32.24

**Reasons:** NBDP has been deleted from the GMDSS, with the exception of MSI on certain frequencies which are contained in RR Appendix **15**. Therefore, the acknowledging receipt of a distress alert by NBDP is not effective.

C3 − Receipt and acknowledgement by a ship station or
ship earth station    (WRC‑07)

MOD ACP/62A11/19#1694

32.31 2) However, in order to avoid making unnecessary or confusing transmissions in response, a ship station, which may be at a considerable distance from the incident, receiving an HF distress alert, shall not acknowledge it but shall observe the provisions of Nos. 32.36 to 32.37, and shall, if the distress alert is not acknowledged by a coast station within five minutes, relay the distress alert, but only to an appropriate coast station or coast earth station (see also Nos. 32.16 to **32.19H**).     (WRC‑23)

**Reasons:** NBDP has been deleted from the GMDSS with the exception of MSI on certain frequencies which are contained in RR Appendix **15**. If the provision of RR No. **32.38** is deleted, this provision number should be amended.

MOD ACP/62A11/20#1695

32.34A § 21A However, unless instructed to do so by a coast station or a rescue coordination centre, a ship station may only send an acknowledgement by DSC in the event that:

*a)* no acknowledgement by DSC from a coast station has been observed; and

*b)* no other communication by radiotelephony to or from the vessel in distress has been observed; and

*c)* at least five minutes have elapsed and the distress alert by DSC has been repeated (see No. 32.21A.1).     (WRC‑23)

**Reasons:** NBDP has been deleted from the GMDSS, with the exception of MSI on certain frequencies which are contained in RR Appendix **15**. Therefore, distress communication by NBDP is not effective.

32.36 D − Preparations for handling of distress traffic

SUP ACP/62A11/21#1696

32.38

**Reasons:** NBDP has been deleted from the GMDSS, with the exception of MSI on certain frequencies which are contained in RR Appendix **15**. Therefore, coast stations and ship stations need not set watch on the NBDP frequencies for GMDSS. Radio watch on the associated frequency by radiotelephony is regulated by RR No. **32.37**.

Section III − Distress traffic

32.39 A − General and search and rescue coordinating communications

SUP ACP/62A11/22#1697

32.43

**Reasons:** NBDP has been deleted from the GMDSS, with the exception of MSI on certain frequencies which are contained in RR Appendix **15**. Therefore, distress traffic by NBDP is not appropriate.

SUP ACP/62A11/23#1698

32.44

**Reasons:** NBDP has been deleted from the GMDSS, with the exception of MSI on certain frequencies which are contained in RR Appendix **15**. Therefore, distress traffic by NBDP is not effective.

MOD ACP/62A11/24#1699

32.47 in radiotelephony, the signal SEELONCE MAYDAY, pronounced as the French expression “silence, m’aider”;     (WRC‑23)

**Reasons:** Editorial changes of numbering due to the suppression of RR No. **32.48**.

SUP ACP/62A11/25#1700

32.48

**Reasons:** NBDP has been deleted from the GMDSS, with the exception of MSI on certain frequencies which are contained in RR Appendix **15**. Therefore, distress related traffic by NBDP is not effective.

MOD ACP/62A11/26#1701

32.52 § 32 In radiotelephony, the message referred to in No. 32.51 should consist of the following taking into account Nos. **32.6** and **32.7**:

– the distress signal “MAYDAY”;

– the words “ALL STATIONS”, spoken three times;

– the words “THIS IS”;

– the name of the station sending that message, spoken three times;

– the call sign or other identification of the station sending the message;

– the time of handing in of the message;

– the MMSI (if the initial alert has been sent by DSC), the name and the call sign of the mobile station which was in distress;

– the words “SEELONCE FEENEE” pronounced as the French words “silence fini”.     (WRC‑23)

**Reasons:** Editorial changes of numbering due to the suppression of RR No. **32.53**.

SUP ACP/62A11/27#1702

32.53

**Reasons:** NBDP has been deleted from the GMDSS, with the exception of MSI on certain frequencies which are contained in RR Appendix **15**. Therefore, there is no need to announce by NBDP that the distress traffic has been finished.

32.54 B − On-scene communications

MOD ACP/62A11/28#1703

32.56 2) Control of on-scene communications is the responsibility of the unit coordinating search and rescue operations10. Simplex communications shall be used so that all on-scene mobile stations may share relevant information concerning the distress incident.     (WRC‑23)

**Reasons:** NBDP has been deleted from the GMDSS, with the exception of MSI on certain frequencies which are contained in RR Appendix **15**. On-scene communications are distress traffic between the mobile unit in distress and assisting mobile units. Therefore, on-scene communications using NBDP is not appropriate.

MOD ACP/62A11/29#1704

32.57 § 34 1) The preferred frequencies in radiotelephony for on-scene communications are 156.8 MHz and 2 182 kHz.     (WRC‑23)

**Reasons:** NBDP has been deleted from the GMDSS, with the exception of MSI on certain frequencies which are contained in RR Appendix **15**. Therefore, ship-to-ship on-scene communications using NBDP is not appropriate.

MOD ACP/62A11/30#1705

32.59 § 35 The selection or designation of on-scene frequencies is the responsibility of the unit coordinating search and rescue operations10. Normally, once an on-scene frequency is established, a continuous aural watch is maintained by all participating on-scene mobile units on the selected frequency.     (WRC-23)

**Reasons:** Except NBDP, all the frequencies for on-scene communications identified in the RR Nos. **32.57** and **32.58** are the frequencies for radiotelephony. Therefore, teleprinter watch is not required to maintain.

32.60 C − Locating and homing signals

MOD ACP/62A11/31#1706

32.61 § 36 1) 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 satellite EPIRBs, by radar SARTs and by AIS-SARTs to assist the searching units.     (WRC-23)

**Reasons:** Editorial changes to the name of EPIRB and SART. AIS-SART is also GMDSS equipment and transmit locating signal.

ARTICLE 33

Operational procedures for urgency and safety communications in
the global maritime distress and safety system (GMDSS)

Section II − Urgency communications

MOD ACP/62A11/32#1707

33.8 § 2 1) In a terrestrial system, urgency communications consist of an announcement, transmitted using digital selective calling, followed by the urgency call and message transmitted using radiotelephony or data. 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 31 using either digital selective calling and the urgency call format, or if not available, radio telephony procedures and the urgency signal. Announcements using digital selective calling should use the technical structure and content set forth in the most recent version of Recommendations ITU‑R M.493 and ITU‑R M.541. A separate announcement need not be made if the urgency message is to be transmitted through the maritime mobile-satellite service.     (WRC‑23)

**Reasons:** NBDP has been deleted from the GMDSS, with the exception of MSI on certain frequencies which are contained in RR Appendix **15**. Therefore, urgency communications by NBDP are not appropriate.

MOD ACP/62A11/33#1708

33.12 § 6 The urgency call should consist of the following, taking into account Nos. **32.6** and **32.7**:

– the urgency signal “PAN PAN”, spoken three times;

– the name of the called station or “ALL STATIONS”, spoken three times;

– the words “THIS IS”;

– the name of the station transmitting the urgency message, spoken three times;

– the call sign or any other identification;

– the MMSI (if the initial announcement has been sent by DSC),

followed by the urgency message or followed by the details of the channel to be used for the message in the case where a working channel is to be used.

In radiotelephony, on the selected working frequency, the urgency call and message consist of the following, taking into account Nos. **32.6** and **32.7**:

– the urgency signal “PAN PAN”, spoken three times;

– the name of the called station or “ALL STATIONS”, spoken three times;

– the words “THIS IS”;

– the name of the station transmitting the urgency message, spoken three times;

– the call sign or any other identification;

– the MMSI (if the initial announcement has been sent by DSC);

– the text of the urgency message.     (WRC‑23)

**Reasons:** Editorial change to the number of provision.

SUP ACP/62A11/34#1709

33.13

**Reasons:** NBDP has been deleted from the GMDSS, with the exception of MSI on certain frequencies which are contained in RR Appendix **15**. Therefore, urgency communications by NBDP are not appropriate.

SUP ACP/62A11/35#1710

33.17

**Reasons:** NBDP has been deleted from the GMDSS, with the exception of MSI on certain frequencies which are contained in RR Appendix **15**. Therefore, urgency communications by NBDP are not appropriate.

SUP ACP/62A11/36#1711

33.18

**Reasons:** NBDP has been deleted from the GMDSS, with the exception of MSI on certain frequencies which are contained in RR Appendix **15**. Therefore urgency communications by NBDP are not appropriate.

Section III − Medical transports

MOD ACP/62A11/37#1712

33.20 § 11 1) 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 call shall be followed by the addition of the single word MAY-DEE-CAL pronounced as in French “médical”, in radiotelephony.     (WRC‑23)

**Reasons:** NBDP has been deleted from the GMDSS, with the exception of MSI on certain frequencies which are contained in RR Appendix **15**. Medical advice communication belongs to GMDSS in RR Article **33**. Therefore, urgency communications for medical advice by NBDP are not appropriate.

Section IV − Safety communications

MOD ACP/62A11/38#1713

33.31 § 15 1) In a terrestrial system, safety communications consist of a safety announcement, transmitted using digital selective calling, followed by the safety call and message transmitted using radiotelephony or data. 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 31 using either digital selective calling techniques and the safety call format, or radiotelephony procedures and the safety signal.     (WRC-23)

**Reasons:** NBDP has been deleted from the GMDSS., with the exception of MSI on certain frequencies which are contained in RR Appendix **15**. Therefore, safety communications by NBDP are not appropriate.

MOD ACP/62A11/39#1714

33.35 § 19 The complete safety call should consist of the following, taking into account Nos. **32.6** and **32.7**:

– the safety signal “SECURITE”, spoken three times;

– the name of the called station or “ALL STATIONS”, spoken three times;

– the words “THIS IS”;

– the name of the station transmitting the safety message, spoken three times;

– the call sign or any other identification;

– the MMSI (if the initial announcement has been sent by DSC),

followed by the safety message or followed by the details of the channel to be used for the message in the case where a working channel is to be used.

In radiotelephony, on the selected working frequency, the safety call and message should consist of the following, taking into account Nos. **32.6** and **32.7**:

– the safety signal “SECURITE”, spoken three times;

– the name of the called station or “ALL STATIONS”, spoken three times;

– the words “THIS IS”;

– the name of the station transmitting the safety message, spoken three times;

– the call sign or any other identification;

– the MMSI (if the initial alert has been sent by DSC);

– the text of the safety message.     (WRC‑23)

**Reasons:** Editorial changes of numbering due to the suppression of RR No. **33.36**.

SUP ACP/62A11/40#1715

33.36

**Reasons:** NBDP has been deleted from the GMDSS, with the exception of MSI on certain frequencies which are contained in RR Appendix **15**. Therefore, safety communications by NBDP are not appropriate.

SUP ACP/62A11/41#1716

33.37

**Reasons:** NBDP has been deleted from the GMDSS, with the exception of MSI on certain frequencies which are contained in RR Appendix **15**. Therefore, safety communications by NBDP are not appropriate.

SUP ACP/62A11/42#1717

33.38

**Reasons:** NBDP has been deleted from the GMDSS, with the exception of MSI on certain frequencies which are contained in RR Appendix **15**. Therefore, safety communications by NBDP are not appropriate.

Section V − Transmission of maritime safety information2

33.39 A − General

ADD ACP/62A11/43#1718

33.40*bis* The transmission of maritime safety information using either the NAVTEX system and/or the NAVDAT system is the responsibility of the administration which shall inform the IMO in order to update the IMO Master Plan of shore-based facilities for the GMDSS (GMDSS Master Plan).     (WRC‑23)

**Reasons:** The administrations could broadcast MSI using either the NAVTEX or NAVDAT system but shall inform the IMO in order to update the GMDSS Master Plan, this can be made by updating the GMDSS Master Plan module for the IMO GISIS (Global Integrated Ship Information System) an online system accessed via the IMO website, this is a means for mariners to know how MSI is broadcast.

MOD ACP/62A11/44#1719

33.41 § 22 The mode and format of the transmissions mentioned in Nos. 33.43, 33.45, 33.46, **33.46A2** and 33.48 shall be in accordance with the relevant ITU‑R Recommendations.     (WRC‑23)

**Reasons:** Reference to the new NAVDAT section in RR No. **33.46A2**.

33.42 B − International NAVTEX system

MOD ACP/62A11/45#1720

33.43 § 23 Where maritime safety information is transmitted using the international NAVTEX system, taking into account No. **33.40*bis***, by means of narrow‑band direct-printing telegraphy with forward error correction, the frequency 518 kHz shall be used (see Appendix 15).     (WRC‑23)

**Reasons:** Rewording of this provision taking into account RR No. **33.40*bis***.

ADD ACP/62A11/46#1721

33.46A1 D − International NAVDAT system

ADD ACP/62A11/47#1722

33.46A2 § 25 Where maritime safety information is transmitted using the international NAVDAT system, taking into account No. 33.40*bis*, the frequency 500 kHz and/or 4 226 kHz shall be used (see Appendix 15).     (WRC‑23)

**Reasons:** Introduction of a new section for the NAVDAT.

MOD ACP/62A11/48#1723

33.47E − High seas maritime safety information

**Reasons:** Editorial renumbering due to the introduction of the new NAVDAT section.

MOD ACP/62A11/49#1724

33.48 § 26 Maritime safety information which is transmitted by means of narrow-band direct-printing telegraphy with forward error correction uses 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. Maritime safety information which is transmitted by means of the NAVDAT system uses the frequencies 6 337.5 kHz, 8 443 kHz, 12 663.5 kHz, 16 909.5 kHz and 22 450.5 kHz.     (WRC‑23)

**Reasons:** Introduction of the HF frequencies used for the NAVDAT, see RR Appendix **17** and Recommendation ITU-R M.2058.

MOD ACP/62A11/50#1725

33.49 F − Maritime safety information via satellite

**Reasons:** Editorial renumbering due to the introduction of the new NAVDAT section.

MOD ACP/62A11/51#1726

33.50 § 27 Maritime safety information may be transmitted via satellite in the maritime mobile-satellite service using the frequency bands 1 530-1 545 MHz and 1 621.35-1 626.5 MHz (see Appendix 15).     (WRC‑23)

**Reasons:** Editorial renumbering due to the introduction of the new NAVDAT section. Paragraphs Nos. **33.51** to **33.53** to be renumbered.

ARTICLE 34

Alerting signals in the global maritime distress and safety system (GMDSS)

MOD ACP/62A11/52#1727

Section I − Satellite emergency position-indicating radiobeacon (EPIRB) signals     (WRC-23)

**Reasons:** Editorial changes to the name of EPIRB.

ARTICLE 47

Operator’s certificates

Section III − Conditions for the issuing of certificates

MOD ACP/62A11/53#1728

TABLE **47-1**     (WRC‑23)

Requirements for radio electronic and operator’s certificates

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| The relevant certificate is issued to a candidate who has given proof of the technical and professional knowledge and qualifications enumerated below, as indicated by anasterisk in the appropriate box | 1st-classradio electronic certificate | 2nd-class radio electronic certificate | General operator’s certificate | Restricted operator’s certificate |
| Knowledge of the principles of electricity and the theory of radio and of electronics sufficient to meet the requirements specified below: | \* | \* |  |  |
| Theoretical knowledge of GMDSS radiocommunication equipment, including narrow-band direct-printing telegraph and radiotelephone transmitters and receivers, digital selective calling equipment, ship earth stations, satellite emergency position-indicating radiobeacons, marine antenna systems, radio equipment for 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 equipment in service. | \* |  |  |  |
| 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 (including telegraphy), satellite emergency position-indicating radio beacons, marine antenna systems, radio equipment for 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 equipment in service. |  | \* |  |  |
| Practical knowledge of the operation and knowledge of the preventive maintenance of the equipment indicated above. | \* | \* |  |  |
| Practical knowledge necessary for the location and repair (using appropriate testing equipment and tools) of faults in the equipment mentioned above which may occur during a voyage. | \* |  |  |  |
| Practical knowledge necessary for effecting repairs in the case of faults in the equipment indicated above, using the means available on board and, if necessary, replacing modular units. |  | \* |  |  |

TABLE 47-1 (*end*)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| The relevant certificate is issued to a candidate who has given proof of the technical and professional knowledge and qualifications enumerated below, as indicated by anasterisk in the appropriate box | 1st-classradio electronic certificate | 2nd-class radio electronic certificate | General operator’s certificate | Restricted operator’s certificate |
| Detailed practical knowledge of the operation of all the GMDSS sub-systems and equipment. | \* | \* | \* |  |
| Practical knowledge of the operation of all the GMDSS sub-systems and equipment which is required while the ship is within the range of VHF coast stations (see NOTE 1). |  |  |  | \* |
| Ability to send and to receive correctly by radiotelephony and telegraphy with ship earth station. | \* | \* | \* |  |
| Ability to send and to receive correctly by radiotelephone. | \* | \* | \* | \* |
| Detailed knowledge of the regulations applying to radiocommunications, knowledge of the documents relating to charges for radiocommuni-cations and knowledge of those provisions of the International Convention for the Safety of Life at Sea (SOLAS), 1974, as amended which relate to radio. | \* | \* | \* |  |
| Knowledge of the regulations applying to radiotelephone communications and specifically of that part of those regulations relating to the safety of life. |  |  |  | \* |
| 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. | \* | \* | \* |  |
| 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 operator’s 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. |  |  |  | \* |
| NOTE 1 − A restricted operator’s certificate covers only the operation of GMDSS equipment required for GMDSS sea areas A1, and does not cover the operation of GMDSS A2/A3/A4 equipment fitted on a ship over and above the basic A1 requirements, even if the ship is in a sea area A1. GMDSS sea areas A1, A2, A3 and A4 are identified in the International Convention for the Safety of Life at Sea, (SOLAS), 1974, as amended.NOTE 2 − (SUP - WRC-12) |

**Reasons:** NBDP has been deleted from the GMDSS, with the exception of MSI on certain frequencies which are contained in RR Appendix **15**. Therefore, knowledge on NBDP operation is not required by GMDSS operators. Ability to send and receive correctly by radiotelephone is essential for all GMDSS operators.

ARTICLE 51

Conditions to be observed in the maritime services

Section I − Maritime mobile service

51.39 CA − Ship stations using narrow-band direct-printing telegraphy

MOD ACP/62A11/54#1729

51.40 § 17 1) All ship stations using narrow-band direct-printing telegraphy equipment for general traffic should be able to send and receive on frequencies designated for narrow-band direct-printing telegraphy in the frequency bands in which they are operating.     (WRC‑23)

**Reasons:** NBDP has been deleted from the GMDSS, with the exception of MSI on certain frequencies which are contained in RR Appendix **15**. Voluntary carriage of sending and receiving equipment for general traffic is still possible.

MOD ACP/62A11/55#1730

51.41 2) The characteristics of the narrow-band direct-printing equipment should be in accordance with the most recent versions of Recommendations ITU‑R M.476, ITU‑R M.625 and ITU‑R M.627.     (WRC‑23)

**Reasons:** NBDP has been deleted from the GMDSS. with the exception of MSI on certain frequencies which are contained in RR Appendix **15**.

51.42 CA1 − Bands between 415 kHz and 535 kHz

MOD ACP/62A11/56#1731

51.44 *a)* send and receive class F1B or J2B emissions for general traffic on the working frequencies necessary to carry out their service;     (WRC‑23)

**Reasons:** Since NBDP is not use anymore for distress, for MSI solely the reception is needed.

51.48 CA3 − Bands between 4 000 kHz and 27 500 kHz

MOD ACP/62A11/57#1732

51.49 § 20 All ship stations equipped with narrow-band direct-printing telegraphy apparatus for general traffic to work in the authorized bands between 4 000 kHz and 27 500 kHz should 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.

All ship stations equipped with narrow-band direct-printing telegraphy apparatus for MSI reception to work in the authorized bands between 4 000 kHz and 27 500 kHz shall be able to receive class F1B or J2B emissions on working frequencies in each of the HF maritime mobile bands necessary to carry out their service.     (WRC‑23)

**Reasons:** NBDP receiving only is still required for MSI reception.

ADD ACP/62A11/58#1733

51.49bis Cbis – Ship stations using the automatic connection system     (WRC‑23)

ADD ACP/62A11/59#1734

51.49*ter*The characteristics of the automatic connection system should be in accordance with the most recent versions of Recommendation ITU‑R M.493 and Recommendation ITU‑R M.541.     (WRC‑23)

**Reasons:** Introduction of the ACS.

ADD ACP/62A11/60#1735

51.64A1 E − Ship stations receiving data transmissions     (WRC‑23)

ADD ACP/62A11/61#1736

51.64A2 E1 − Bands between 415 kHz and 526.5 kHz     (WRC‑23)

ADD ACP/62A11/62#1737

51.64A3 § 24*bis* All ship stations equipped with NAVDAT apparatus for receiving digital data transmissions in the authorized bands between 415 kHz and 535 kHz shall be capable of receiving class W7D emission on 500 kHz, if complying with the provisions of Chapter VII.     (WRC‑23)

ADD ACP/62A11/63#1738

51.64A4 E2 − Bands between 4 000 kHz and 27 500 kHz     (WRC‑23)

ADD ACP/62A11/64#1739

51.64A5 § 24*ter* All ship stations equipped with NAVDAT apparatus for receiving digital data transmissions in the authorized bands between 4 000 kHz and 27 500 kHz shall be capable of receiving class W7D emission, if complying with the provisions of Chapter VII.     (WRC‑23)

**Reasons:** These provisions are added in order to stipulate the required class of emissions for NAVDAT in accordance with Recommendations ITU-R M.2010 and ITU-R M.2058.

ARTICLE 52

Special rules relating to the use of frequencies

Section I − General provisions

52.4 B − Bands between 415 kHz and 535 kHz

MOD ACP/62A11/65#1740

52.6 § 3 1) 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). In the maritime mobile service, no assignments shall be made on the frequency 500 kHz other than for transmission by coast stations of meteorological and navigational warnings and urgent information to ships by means of the International NAVDAT System.     (WRC‑23)

**Reasons:** Protection of the frequency for the international NAVDAT system.

52.12 D − Bands between 4 000 kHz and 27 500 kHz

ADD ACP/62A11/66#1741

52.13A§ 6*bis* In the maritime mobile service, no assignments shall be made on the frequency 4 226 kHz other than for transmission by coast stations of meteorological and navigational warnings and urgent information to ships by means of the International NAVDAT System.     (WRC‑23)

**Reasons:** Protection of the frequency for the international NAVDAT system.

Section III − Use of frequencies for narrow-band direct-printing telegraphy

52.96 B − Bands between 415 kHz and 535 kHz

MOD ACP/62A11/67#1742

52.97 § 45 All ship stations equipped with narrow-band direct-printing apparatus for general traffic to work in the authorized bands between 415 kHz and 535 kHz should be able to send and receive class F1B emissions as specified in No. 51.44. Additionally, ship stations complying with the provisions of Chapter **VII** shall be able to receive class F1B emissions on 518 kHz (see No. 51.45).     (WRC-23)

**Reasons:** NBDP receiving only is still required for NAVTEX reception.

52.102 D − Bands between 4 000 kHz and 27 500 kHz

MOD ACP/62A11/68#1743

52.103 § 47 All ship stations equipped with narrow-band direct-printing telegraph apparatus for general traffic to work in the authorized bands between 4 000 kHz and 27 500 kHz should be able to send and receive class F1B emissions as specified in No. **51.49**.

All ship stations equipped with narrow-band direct-printing telegraph apparatus for MSI reception to work in the authorized bands between 4 000 kHz and 27 500 kHz shall be able to receive class F1B emissions as specified in No. **51.49**.

The assignable frequencies are indicated in Appendices **15** and **17**.     (WRC‑23)

Section IV − Use of frequencies for digital selective-calling

52.110 A − General

MOD ACP/62A11/69#1744

52.111 § 50 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 **VII** apply. When the automatic connection system is used, the provisions of Section IV*bis* should apply.     (WRC‑23)

**Reasons:** Introduction of the ACS.

ADD ACP/62A11/70#1745

Section IV*bis* − Use of frequencies for the automatic connection system     (WRC‑23)

ADD ACP/62A11/71#1746

52.xx0 A – General     (WRC‑23)

ADD ACP/62A11/72#1747

52.xx1 § y0 The automatic connection system (ACS) means automatic connection function using DSC for shore-to-ship, ship-to-shore or ship-to-ship communication with the most appropriate working frequency (or channel) in the MF and HF bands of the maritime mobile service.

The procedure for ACS shall not interrupt a reliable watch on a 24-hour basis on appropriate DSC distress alerting frequencies unless the equipment is transmitting.

When an ACS is utilized, it should be in accordance with the most recent versions of Recommendation ITU‑R M.493 and Recommendation ITU‑R M.541.     (WRC‑23)

ADD ACP/62A11/73#1748

52.xx2 B – Bands between 1 606.5 kHz and 4 000 kHz      (WRC‑23)

ADD ACP/62A11/74#1749

52.xx3 § y1 The ACS frequency used for transmitting and receiving for both ship stations and coast stations is 2 174.5 kHz.     (WRC‑23)

ADD ACP/62A11/75#1750

52.xx4 C – Bands between 4 000 kHz and 27 500 kHz     (WRC‑23)

ADD ACP/62A11/76#1751

52.xx5 § y2 The ACS frequencies used for transmitting and receiving for both ship stations and coast stations are 4 177.5 kHz, 6 268 kHz, 8 376.5 kHz, 12 520 kHz and 16 695 kHz.     (WRC‑23)

**Reasons:** Introduction of the ACS.

Section VII – Use of frequencies for data transmissions    (WRC‑12)

ADD ACP/62A11/77#1752

52.262A1 B − Bands between 415 kHz and 526.5 kHz     (WRC‑23)

ADD ACP/62A11/78#1753

B1 − Mode of operation of stations     (WRC‑23)

ADD ACP/62A11/79#1754

52.262A2 The class of emissions to be used for data transmissions in the bands between 415 kHz and 526.5 kHz should be in accordance with the most recent version of Recommendation ITU‑R M.2010. Coast stations as well as ship stations should use radio systems specified in the most recent version of Recommendation ITU‑R M.2010.     (WRC‑23)

**Reasons:** The frequency usages for MF NAVDAT system need to be included.

MOD ACP/62A11/80#1755

52.263 C – Bands between 4 000 kHz and 27 500 kHz    (WRC‑23)

MOD ACP/62A11/81#1756

C1 – Mode of operation of stations     (WRC‑23)

MOD ACP/62A11/82#1757

52.264 The class of emissions to be used for data transmissions in the bands between 4 000 kHz and 27 500 kHz should be in accordance with the most recent version of Recommendation ITU‑R M.1798 or the most recent version of Recommendation ITU‑R M.2058. Coast stations as well as ship stations should use radio systems specified in the most recent version of Recommendation ITU‑R M.1798 or the most recent version of Recommendation ITU‑R M.2058.    (WRC‑23)

**Reasons:** The frequency usages for HF NAVDAT system need to be included.

ADD ACP/62A11/83#1758

52.265A1 Coast stations employing the class of emissions in accordance with the most recent version of Recommendation ITU‑R M.2058 in the frequency bands between 4 000 kHz and 27 500 kHz shall not exceed a mean power in the following values:

|  |  |
| --- | --- |
| *Band* | *Maximummean power* |
|  4 MHz |  5 kW |
|  6 MHz |  5 kW |
|  8 MHz |  10 kW |
|  12 MHz |  10 kW |
|  16 MHz |  10 kW |
|  18/19 MHz |  10 kW |
|  22 MHz |  10 kW | (WRC‑23) |

**Reasons:** Introduction of the maximum mean power for the NAVDAT system by the coast station in the HF bands.

ADD ACP/62A11/84#1759

ARTICLE 54*bis*

Automatic Connection System

ADD ACP/62A11/85#1760

54*bis.*1 § 1 1) The automatic connection system (ACS) using digital selective calling in MF and HF bands is designed to ensure reliable access to the required radio links for the mariner.     (WRC‑23)

ADD ACP/62A11/86#1761

54*bis.*2 2) The ACS should be in accordance with the most recent versions of Recommendation ITU‑R M.541 and Recommendation ITU‑R M.493.     (WRC‑23)

**Reasons:** Introduction of the ACS.

MOD ACP/62A11/87#1762

APPENDIX 14 (REV.WRC‑23)

Phonetic alphabet and figure code

(See Articles **32** and **57**)     (WRC‑23)

**Reasons:** This is an editorial mistake. Articles referring to RR Appendix **14** are RR Articles **32** (No. **32.7**) and **57**(No. **57.7**) instead of RR Articles **30** and **57**.

APPENDIX 15 (REV.WRC‑19)

Frequencies for distress and safety communications for the Global
Maritime Distress and Safety System

MOD ACP/62A11/88#1763

TABLE 15-1     (WRC‑23)

Frequencies below 30 MHz

|  |  |  |
| --- | --- | --- |
| Frequency(kHz) | Descriptionof usage | Notes |
| 490 | MSI | The frequency 490 kHz is used exclusively for maritime safety information (MSI).     (WRC‑03) |
| 500 | MSI | The frequency 500 kHz is used exclusively by the international NAVDAT system (see Resolution [**A111] (WRC‑23)**). |
| 518 | MSI | The frequency 518 kHz is used exclusively by the international NAVTEX system. |
|  |  |  |
| \*2 182 | RTP-COM | The frequency 2 182 kHz uses class of emission J3E. See also No. **52.190**. |
| \*2 187.5 | DSC |  |
| 3 023 | AERO-SAR | The aeronautical carrier (reference) frequencies 3 023 kHz and 5 680 kHz may be used for intercommunication between mobile stations 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** (see Nos. **5.111** and **5.115**). |
| \*4 125 | RTP-COM | See also No. **52.221**. 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. **30.11**). |
|  |  |  |
| \*4 207.5 | DSC |  |
| 4 209.5 | MSI | The frequency 4 209.5 kHz is exclusively used for NAVTEX-type transmissions (see Resolution **339 (Rev.WRC‑07)**). |
| 4 210 | MSI-HF | By means of narrow-band direct-printing telegraphy |
| 4 226 | MSI | The frequency 4 226 kHz is exclusively used for the international NAVDAT system (see Resolution [**A111] (WRC‑23)**). |
| 5 680 | AERO-SAR | See note under 3 023 kHz above. |
| \*6 215 | RTP-COM | See also No. **52.221**. |
|  |  |  |
| \*6 312 | DSC |  |

TABLE 15-1 (*end*)     (WRC‑23)

|  |  |  |
| --- | --- | --- |
| Frequency(kHz) | Descriptionof usage | Notes |
| 6 314 | MSI-HF | By means of narrow-band direct-printing telegraphy. |
| 6 337.5 | MSI-HF | By means of the NAVDAT system. |
| \*8 291 | RTP-COM |  |
|  |  |  |
| \*8 414.5 | DSC |  |
| 8 416.5 | MSI-HF | By means of narrow-band direct-printing telegraphy. |
| 8 443  | MSI-HF | By means of the NAVDAT system. |
| \*12 290 | RTP-COM |  |
|  |  |  |
| \*12 577 | DSC |  |
| 12 579 | MSI-HF | By means of narrow-band direct-printing telegraphy. |
| 12 663.5 | MSI-HF | By means of the NAVDAT system. |
| \*16 420 | RTP-COM |  |
|  |  |  |
| \*16 804.5 | DSC |  |
| 16 806.5 | MSI-HF | By means of narrow-band direct-printing telegraphy. |
| 16 909.5 | MSI-HF | By means of the NAVDAT system. |
| 19 680.5 | MSI-HF | By means of narrow-band direct-printing telegraphy. |
| 22 376 | MSI-HF | By means of narrow-band direct-printing telegraphy. |
| 22 450.5 | MSI-HF | By means of the NAVDAT system. |
| 26 100.5 | MSI-HF | By means of narrow-band direct-printing telegraphy. |
| **Legend**:**AERO-SAR**     These aeronautical carrier (reference) frequencies may be used for distress and safety purposes by mobile stations engaged in coordinated search and rescue operations.**DSC**    These frequencies are used exclusively for distress and safety calls using digital selective calling in accordance with No. **32.5** (see Nos. **33.8** and **33.32**).     (WRC‑07)**MSI**   In the maritime mobile service, these frequencies are used exclusively for the transmission of maritime safety information (MSI) (including meteorological and navigational warnings and urgent information) by coast stations to ships, by means of narrow-band direct-printing telegraphy or the NAVDAT system.     (WRC-23)**MSI-HF**     In the maritime mobile service, these frequencies are used exclusively for the transmission of high seas MSI by coast stations to ships, by means of narrow-band direct-printing telegraphy or the NAVDAT system.     (WRC-23)**RTP-COM**     These carrier frequencies are used for distress and safety communications (traffic) by radiotelephony.\* Except as provided in these Regulations, any emission capable of causing harmful interference to distress, alarm, urgency or safety communications on the frequencies denoted by an asterisk (\*) is prohibited. Any emission causing harmful interference to distress and safety communications on any of the discrete frequencies identified in this Appendix is prohibited.    (WRC‑07) |

**Reasons:** NBDP has been deleted from the GMDSS, with the exception of MSI on certain frequencies which are contained in RR Appendix **15** and NAVDAT has been introduced in the GMDSS.

APPENDIX 17 (REV.WRC‑19)

Frequencies and channelling arrangements in the
high-frequency bands for the maritime mobile service

MOD ACP/62A11/89#1767

PART A  –  Table of subdivided bands     (WRC‑23)

*In the Table,* where appropriate[[1]](#footnote-1)1, the assignable frequencies in a given band for each usage are:

– indicated by the lowest and highest frequency, in heavy type, assigned in that band;

– regularly spaced, the number of assignable frequencies (*f.*) and the spacing in kHz being indicated in italics.

Table of frequencies (kHz) to be used in the band between 4 000 kHz and 27 500 kHz
allocated exclusively to the maritime mobile service

...

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Band (MHz) | 4 | 6 | 8 | 12 | 16 | 18/19 | 22 | 25/26 |
| Limits (kHz) | 4 221 | 6 332.5 | 8 438 | 12 658.5 | 16 904.5 | 19 705 | 22 445.5 | 26 122.5 |
| Frequencies assignable for wide‑band systems, facsimile, special and data transmission systems and direct-printing telegraphy systems*m) p) s) pp) ppp)* |  |  |  |  |  |  |  |  |
| Limits (kHz) | 4 351 | 6 501 | 8 707 | 13 077 | 17 242 | 19 755 | 22 696 | 26 145 |
| Frequencies assignable to coast stations for telephony, duplex operation*a) t)* | **4 352.4**to**4 436.4***29 f.3 kHz* | **6 502.4**to**6 523.4***8 f.3 kHz* | **8 708.4**to**8 813.4***36 f.3 kHz* | **13 078.4**to**13 198.4***41 f.3 kHz* | **17 243.4**to**17 408.4***56 f.3 kHz* | **19 756.4**to**19 798.4***15 f.3 kHz* | **22 697.4**to**22 853.4***53 f.3 kHz* | **26 146.4**to**26 173.4***10 f.3 kHz* |
| Limits (kHz) | 4 438 | 6 525 | 8 815 | 13 200 | 17 410 | 19 800 | 22 855 | 26 175 |

*a)* See Part B, Section I.

*b)* See Part B, Section III.

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

*d)* See Part B, Section II.

*e)* See Part B, Section IV.

*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 Article **31**.

*j)* For the use of the assigned 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 the automatic connection system (ACS).     (WRC‑23)

*k)* For the use of the assigned 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 **31**.

*l)* The following paired assigned 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, 22 374.5/22 444 kHz and 25 208.5/26 121 kHz are the first choice international frequencies for digital selective calling (see Article **54**).

*m)* Frequencies from these frequency bands may also be used for A1A or A1B Morse telegraphy subject to not claiming protection from other stations in the maritime mobile service using digitally modulated emissions. Any frequencies so assigned shall be multiples of 100 Hz. Administrations shall ensure a uniform distribution of such assignments within the bands.

*n)* The assigned 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 exclusive international frequencies for the transmission of maritime safety information (MSI) (see Articles **31** and **33**).

*o)* The frequency 4 209.5 kHz is an exclusive international frequency for the transmission of NAVTEX type information (see Articles **31** and **33**).

*p)* These sub-bands, except the frequencies referred to in Notes *i), j)*, *n)* and *o)*, are designated for digitally modulated emissions in the maritime mobile service (e.g. as described in the most recent version of Recommendation ITU‑R M.1798). The provisions of No. **15.8** apply.     (WRC-15)

*pp)* The frequency bands 4 221-4 231 kHz, 6 332.5-6 342.5 kHz, 8 438-8 448 kHz, 12 658.5-12 668.5 kHz, 16 904.5-16 914.5 kHz and 22 445.5-22 455.5 kHz may also be used by the NAVDAT system, on condition that the use of NAVDAT system transmitting stations is limited to coast stations operating in accordance with the most recent version of Recommendation ITU‑R M.2058.     (WRC‑19)

*ppp)* The frequency 4 226 kHz is an exclusive frequency for the International NAVDAT system (see Articles **33** and **52**).     (WRC‑23)

*q)* These frequency bands may be used by narrow-band direct-printing applications by administrations, subject to not claiming protection from other stations in the maritime mobile service using digitally modulated emissions.

*…*

**Reasons:** NBDP has been deleted from the GMDSS, with the exception of MSI on certain frequencies which are contained in RR Appendix **15** and the new ACS system will utilize the frequencies previously used by NBDP for distress and safety communications. Similar footnote with *o)* for NAVTEX is added for the NAVDAT.

PART B – Channelling arrangements     (WRC‑15)

MOD ACP/62A11/90#1768

Section II – Narrow-band direct-printing telegraphy (paired frequencies)

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.

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

Table of frequencies for two-frequency operation by coast stations (kHz)

|  |  |  |  |
| --- | --- | --- | --- |
| Channel No. | 4 MHz band | 6 MHz band | 8 MHz band |
| Transmit | Receive | Transmit | Receive | Transmit | Receive |
|  1 2 3 4 5 | 4 210.54 2114 211.54 2124 212.5 | 4 172.54 1734 173.54 1744 174.5 | 6 314.56 3156 315.56 3166 316.5 | 6 2636 263.56 2646 264.56 265 | 8 4178 417.58 4188 418.5 | 8 3778 377.58 3788 378.5 |
|  6 7 8 910 | 4 2134 213.54 2144 214.54 215 | 4 1754 175.54 1764 176.54 177 | 6 3176 317.56 3186 318.56 319 | 6 265.56 2666 266.56 2676 267.5 | 8 4198 419.58 4208 420.58 421 | 8 3798 379.58 3808 380.58 381 |
| 1112131415 | 4 215.54 216 | 4 1784 178.5 | 6 319.56 3206 320.5 | 6 268.56 2696 269.5 | 8 421.58 4228 422.58 4238 423.5 | 8 381.58 3828 382.58 3838 383.5 |

Table of frequencies for two-frequency operation by coast stations (kHz)

| Channel No. | 12 MHz band | 16 MHz band  | 18/19 MHz band  |
| --- | --- | --- | --- |
| Transmit | Receive | Transmit | Receive | Transmit | Receive |
|  1 2 3 4 5 | 12 579.512 58012 580.512 58112 581.5 | 12 47712 477.512 47812 478.512 479 | 16 80716 807.516 80816 808.516 809 | 16 683.516 68416 684.516 68516 685.5 |  |  |
|  6 7 8 910 | 12 58212 582.512 58312 583.512 584 | 12 479.512 48012 480.512 48112 481.5 | 16 809.516 81016 810.516 81116 811.5 | 16 68616 686.516 68716 687.516 688 | 19 68419 684.519 68519 685.5 | 18 873.518 87418 874.518 875 |
| 1112131415 | 12 584.512 58512 585.512 58612 586.5 | 12 48212 482.512 48312 483.512 484 | 16 81216 812.516 81316 813.516 814 | 16 688.516 68916 689.516 69016 690.5 | 19 68619 686.519 68719 687.519 688 | 18 875.518 87618 876.518 87718 877.5 |
| 1617181920 | 12 58712 587.512 58812 588.512 589 | 12 484.512 48512 485.512 48612 486.5 | 16 814.516 81516 815.516 81616 816.5 | 16 69116 691.516 69216 692.516 693 | 19 688.519 68919 689.519 69019 690.5 | 18 87818 878.518 87918 879.518 880 |
| 2122232425 | 12 589.512 59012 590.512 59112 591.5 | 12 48712 487.512 48812 488.512 489 | 16 81716 817.516 81816 818.5 | 16 693.516 69416 694.516 695.5 |  |  |
| 2627282930 | 12 59212 592.512 59312 593.512 594 | 12 489.512 49012 490.512 49112 491.5 | 16 81916 819.516 82016 820.516 821 | 16 69616 696.516 69716 697.516 698 |  |  |
| 3132333435 | 12 594.512 59512 595.512 59612 596.5 | 12 49212 492.512 49312 493.512 494 | 16 821.5 | 16 698.5 |  |  |
| 3637383940 | 12 59712 597.512 59812 598.512 599 | 12 494.512 49512 495.512 49612 496.5 |  |  |  |  |
| 4142434445 | 12 599.512 60012 600.512 60112 601.5 | 12 49712 497.512 49812 498.512 499 |  |  |  |  |

Table of frequencies for two-frequency operation by coast stations (kHz)

|  |  |
| --- | --- |
| Channel No. | 12 MHz band (*end*) |
| Transmit | Receive |
| 4647484950 | 12 60212 602.512 60312 603.512 604 | 12 499.512 50012 500.512 50112 501.5 |
| 5152535455 | 12 604.512 60512 605.512 60612 606.5 | 12 50212 502.512 50312 503.512 504 |
| 5657585960 | 12 60712 607.512 60812 608.512 609 | 12 504.512 50512 505.512 50612 506.5 |
| 6162636465 | 12 609.512 61012 610.512 61112 611.5 | 12 50712 507.512 50812 508.512 509 |
| 6667686970 | 12 61212 612.512 61312 613.512 614 | 12 509.512 51012 510.512 51112 511.5 |
| 7172737475 | 12 614.512 61512 615.512 61612 616.5 | 12 51212 512.512 51312 513.512 514 |
| 7677787980 | 12 61712 617.512 61812 618.512 619 | 12 514.512 51512 515.512 51612 516.5 |
| 8182838485 | 12 619.512 62012 620.512 62112 621.5 | 12 51712 517.512 51812 518.512 519 |
| 8687888990 | 12 62212 622.512 62312 623.5 | 12 519.512 520.512 52112 521.5 |
| 9192 | 12 62412 624.5 | 12 52212 522.5 |

…

**Reasons:** Introduction of the ACS in RR Appendix **17** using the frequencies of NBDP previously used for distress.

MOD ACP/62A11/91#1769

RESOLUTION 18 (Rev.WRC‑23)

Relating to the procedure for identifying and announcing the position of
ships and aircraft of States not parties to an armed conflict

The World Radiocommunication Conference (Dubai, 2023),

…

resolves

1 that the frequencies for urgency signal and messages specified in the Radio Regulations may be used by ships and aircraft of States not parties to an armed conflict for self-identification and establishing communications; the transmission will consist of the urgency or safety signals, as appropriate, described in Article **33** followed by the addition of the single word “NEUTRAL” pronounced as in French “neutral” in radiotelephony; as soon as practicable, communications shall be transferred to an appropriate working frequency;

2 that the use of the signal as described in the preceding paragraph indicates that the message which follows concerns a ship or aircraft of a State not party to an armed conflict. The message shall convey at least the following data:

*a)* call sign or other recognized means of identification of such ship or aircraft;

*b)* position of such ship or aircraft;

*c)* number and type of such ships or aircraft;

*d)* intended route;

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

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

3 that the provisions of Article **33** relating to urgency and safety transmissions, and medical transports shall apply as appropriate to the use of the urgency and safety signals, respectively, by such ship or aircraft;

4 that the identification and location of ships of a State not party to an armed conflict may be effected by means of appropriate standard maritime radio equipment (for example automatic identification system (AIS) or long-range identification and tracking (LRIT)); the identification and location of aircraft of a State not party to an armed conflict may be effected by the use of the secondary surveillance radar (SSR) system in accordance with procedures to be recommended by the International Civil Aviation Organization (ICAO);

5 that the use of the signals described above would not confer or imply recognition of any rights or duties of a State not party to an armed conflict or a party to the conflict, except as may be recognized by common agreement between the parties to the conflict and a non-party;

6 to encourage parties to a conflict to enter into such agreements,

**Reasons:** NBDP has been deleted from the GMDSS, with the exception of MSI reception on certain frequencies which are contained in RR Appendix **15**. The frequencies for NBDP-COM in RR Appendix **15** are withdrawn.

MOD ACP/62A11/92#1770

RESOLUTION 349 (REV.WRC‑23)

Operational procedures for cancelling false distress alerts in
the Global Maritime Distress and Safety System

The World Radiocommunication Conference (Dubai, 2023),

…

noting

that the International Maritime Organization (IMO) is referring to this operational procedure to cancel false distress alerts in their documentation,

…

ANNEX TO RESOLUTION 349 (Rev.WRC‑23)

Cancelling of false distress alerts

If a distress alert is inadvertently transmitted, the following steps shall be taken to cancel the distress alert.

# 1 VHF digital selective calling

1) Follow the instructions on the radio screen, if applicable, or

 Switch off and switch on after 10 seconds, and follow the instructions on the radio screen, if applicable;

2) If the DSC equipment is capable of cancellation, start the distress self-cancel operation in accordance with the most recent version of Recommendation ITU‑R M.493;

3) Set to channel 16; and

4) Transmit a broadcast message to “All Stations” giving the ship’s name, call sign and maritime mobile service identity (MMSI), and cancel the false distress alert;

 Example of message:

– the words “ALL STATIONS”, spoken three times;

– the words “THIS IS”;

– the name of the vessel, spoken three times;

– the call sign or other identification;

– the MMSI;

– the words “PLEASE CANCEL MY DISTRESS ALERT OF” followed by the time in UTC.

# 2 MF digital selective calling

1) Follow the instructions on the radio screen, if applicable, or

 Switch off and switch on after 10 seconds, and follow the instructions on the radio screen, if applicable;

2) If the DSC equipment is capable of cancellation, start the distress self-cancel operation in accordance with the most recent version of Recommendation ITU‑R M.493;

3) Tune for radiotelephony transmission on 2 182 kHz; and

4) Transmit a broadcast message to “All Stations” giving the ship’s name, call sign and MMSI, and cancel the false alert;

 For example of message see section 1.

# 3 HF digital selective calling

1) Follow the instructions on the radio screen, if applicable, or

 Switch off and switch on after 10 seconds, and follow the instructions on the radio screen, if applicable;

2) If the DSC equipment is capable of cancellation, start the distress self-cancel operation in accordance with the most recent version of Recommendation ITU‑R M.493;

3) Tune for radiotelephony on the distress and safety frequency in each frequency band in which a false distress alert was transmitted (see Appendix **15**); and

4) Transmit a broadcast message to “All Stations” giving the ship’s name, call sign and MMSI, and cancel the false alert on the distress and safety frequency in each frequency band in which the false distress alert was transmitted;

 For example of message see section 1.

**Reasons:** Expression of “implement distress self-cancel operation” is more explicit and specific than the expression of “cancel the alert”.

# 4 Ship earth station

Notify the appropriate rescue coordination centre that the alert is cancelled by sending a distress priority message. Provide ship name, call sign and ship earth station identity with the cancelled alert message.

Example of message by telegraphy:

– NAME, CALL SIGN, IDENTITY NUMBER, POSITION;

– Cancel my distress;

– Alert of DATE, TIME UTC;

– =Master+

Example of message by radiotelephony:

– the words “ALL STATIONS”, spoken three times;

– the words “THIS IS”;

– the name of the vessel, spoken three times;

– the call sign or other identification;

– the identity number/MMSI;

– the words “PLEASE CANCEL MY DISTRESS ALERT OF” followed by the time in UTC.

# 5 Satellite emergency position indicating radiobeacon (EPIRB)

If for any reason an EPIRB is activated inadvertently or accidentally, immediately stop the inadvertent transmission and contact the appropriate rescue coordination centre through a coast station or land earth station and cancel the distress alert.

# 6 General

Notwithstanding the above, ships may use additional appropriate means available to them to inform the appropriate authorities that a false distress alert has been transmitted and should be cancelled.

No action will normally be taken against any ship or mariner for reporting and cancelling a false distress alert. However, in view of the serious consequences of false alerts, and the strict ban on their transmission, authorities may take actions in cases of repeated violation.

**Reasons:** This addendum is intended as guidance to the mariner. The upcoming IMO Resolution MSC.514(105) on avoidance of false distress alerts refers directly to Resolution **349 (Rev.WRC‑19)**, which is included in the ITU-R Manual for Use by the Maritime Mobile and Maritime Mobile-Satellite Services (Maritime Manual).

MOD ACP/62A11/93

RESOLUTION 354 (REV.WRC‑23)

Distress and safety radiotelephony procedures for 2 182 kHz

The World Radiocommunication Conference (Dubai, 2023),

…

ANNEX TO RESOLUTION 354 (REV.WRC‑23)

Distress and safety radiotelephony procedures for 2 182 kHz[[2]](#footnote-2)\*

PART A1 − GENERAL

§ 1 The frequencies and techniques specified in this Resolution may be used in the maritime mobile service for stations[[3]](#footnote-3)1not required by national or international regulation to fit GMDSS equipment and for communications between those stations and aircraft. However, stations of the maritime mobile service, when additionally fitted with any of the equipment used by stations operating in conformity with the provisions specified in Chapter **VII**, should, when using that equipment, comply with the appropriate provisions of that Chapter.

§ 2 1) No provision of this Resolution prevents the use by a mobile station or mobile earth station in distress of any means at its disposal to attract attention, make known its position, and obtain help.

 2) No provision of this Resolution prevents the use by stations on board aircraft or ships engaged in search and rescue operations, in exceptional circumstances, of any means at their disposal to assist a mobile station or mobile earth station in distress.

 3) No provision of this Resolution prevents the use by a land station or coast earth station, in exceptional circumstances, of any means at its disposal to assist a mobile station or mobile earth station in distress (see also No. **4.16**).

§ 3 In cases of distress, urgency or safety, communications by radiotelephony should be made slowly and distinctly, each word being clearly pronounced to facilitate transcription.

§ 4 The abbreviations and signals of Recommendation ITU‑R M.1172 and the Phonetic Alphabet and Figure Code in Appendix **14** should be used where applicable[[4]](#footnote-4)2.

§ 5 Distress, urgency and safety communications may also be made using digital selective calling and satellite techniques, in accordance with the provisions specified in Chapter **VII** and relevant ITU‑R Recommendations.     (WRC‑23)

...

**Reasons:** NBDP has been deleted from the GMDSS. In order to avoid potential confusion, it is necessary to remind the mariners and administrations of the difference in pronunciations of figures in RR Appendix **14** and IMO SMCP.

PART A2 − FREQUENCIES FOR DISTRESS AND SAFETY

Section II − Protection of distress and safety frequencies

A − General

§ 4 Test transmissions on any of the distress and safety frequencies described above shall be kept to a minimum and, wherever practicable, be carried out on artificial antennas or with reduced power.

§ 5 Before transmitting on any of the frequencies identified for distress and safety communications, a station shall listen on the frequency concerned to make sure that no distress transmission is being sent (see Recommendation ITU‑R M.1171). This does not apply to stations in distress.

B − 2 182 kHz

§ 6 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 No.**5.110** for 2 174.5 kHz, Nos.**52.130** to **52.136** for 2 177 kHz and 2 189.5 kHz and also Appendix **15** for 2 182 kHz and 2 187.5 kHz).

 2) To facilitate the reception of distress calls, all transmissions on 2 182 kHz should be kept to a minimum.

**Reasons:** NBDP distress and safety communication has been deleted from the GMDSS. References to related footnotes in RR are also added to clearly indicate the usage of concerned frequencies to avoid any confusion.

SUP ACP/62A11/94#1800

RESOLUTION 361 (REV.WRC‑19)

Consideration of possible regulatory actions to support modernization of the Global Maritime Distress and Safety System and
the implementation of e‑navigation

**Reasons:** This Resolution is proposed to be suppressed considering the finalization of the studies on WRC-23 agenda item 1.11 covered by *resolves* 1 (modernization of the GMDSS). Also, the studies on WRC-23 agenda item 1.11 covered by *resolves* 2 (e-navigation) have been finalized.

ADD ACP/62A11/95#1772

DRAFT NEW RESOLUTION [ACP-A111] (WRC‑23)

Coordination of NAVDAT services

The World Radiocommunication Conference (Dubai, 2023),

considering

*a)* that the International Maritime Organization (IMO) has established procedures to coordinate the operational aspects of NAVDAT services, such as allocation of transmitter identification and time schedules, in the planning stages for transmissions on the international frequencies 500 kHz and/or 4 226 kHz and also on the other frequencies which are defined in No. **5.79** and Appendix **15**;

*b)* that coordination in the frequencies 500 kHz and/or 4 226 kHz and other frequencies which are defined in No. **5.79** and Appendix **15**, is essentially operational,

resolves

to invite administrations to apply the procedures established by IMO, taking into account the IMO NAVDAT Manual, for coordinating the use of the international frequencies 500 kHz and/or 4 226 kHz and also of the other frequencies which are defined in No. **5.79** and Appendix **15**,

instructs the Secretary-General

to invite IMO to provide ITU with information on a regular basis on operational coordination for NAVDAT services on the international frequencies 500 kHz and/or 4 226 kHz and also on the other frequencies which are defined in No. **5.79** and Appendix **15**,

instructs the Director of the Radiocommunication Bureau

to publish this information in the *List of Coast Stations and Special Service Stations* (List IV) (see No. **20.7**).

**Reasons:** New Resolution for the coordination of the NAVDAT services identical to the one for the NAVTEX (Resolution **339** **(Rev.WRC-07)**).

Issue B (*resolves 2*)*:* E-navigation

NOC ACP/62A11/96#1774

ARTICLE 5

Frequency allocations

**Reasons:** E-navigation does not need additional frequency allocations to operate.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. 1 Within the non-shaded boxes. [↑](#footnote-ref-1)
2. \* Distress and safety communications include distress, urgency and safety calls and messages. [↑](#footnote-ref-2)
3. 1 These stations may include rescue coordination centres. The term “Rescue Coordination Centre” as defined in the International Convention on Maritime Search and Rescue (1979) refers to a unit responsible for promoting the efficient organization of search and rescue services and for coordinating the conduct of search and rescue operations within a search and rescue region. [↑](#footnote-ref-3)
4. 2 The use of the Standard Marine Communication Phrases (SMCP) and, where language difficulties exist, the International Code of Signals, both published by the International Maritime Organization, is also recommended. It needs to be noted that the pronunciations for figures in Appendix **14** and IMO SMCP are different.     (WRC‑23) [↑](#footnote-ref-4)