World Radiocommunication Conference (WRC-23)
Dubai, 20 November - 15 December 2023

PLENARY MEETING

Addendum 11 to
Document 6064-E
18 October 2023
Original: English

African Common Proposals

PROPOSALS FOR THE WORK OF THE CONFERENCE

Agenda item 1.11

1.11 to 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)**;

For Issue A – Resolves 1 of Resolution 361 (Rev.WRC-19), Global maritime distress and safety system modernization

ARTICLE 5

Frequency allocations

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

MOD AFCP/6064A11/1

495-1 800 kHz

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

MOD AFCP/6064A11/2

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	

MOD AFCP/6064A11/3

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 AFCP/6064A11/4

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 AFCP/6064A11/5

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 AFCP/6064A11/6

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	

ADD AFCP/6064A11/7

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 **[A111] (WRC-23)**). (WRC-23)

MOD AFCP/6064A11/8

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 ~~international distress frequencies for narrow-band direct-printing telegraphy. The conditions for the use of these frequencies are prescribed in Article **31**.~~used for the automatic connection system as described in the most recent version of Recommendation ITU-R M.541. (WRC-23)

ADD AFCP/6064A11/9

5.B111 The 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)

MOD AFCP/6064A11/10

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 ~~Appendix~~ Appendices **15** and **17**). (WRC-23)

MOD AFCP/6064A11/11

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-~~12~~23)

MOD AFCP/6064A11/12

5.375 The ~~use of the~~frequency band 1 645.5-1 646.5 MHz is used by the mobile-satellite service (Earth-to-space) and ~~for~~by inter-satellite links ~~is limited to~~for distress, urgency and safety communications (see Article **31**). Additionally, for the mobile-satellite service, use of this band from earth stations operating in the GMDSS for other than distress purposes is also permitted. (WRC-23)

ARTICLE 19

Identification of stations

Section I − General provisions

MOD AFCP/6064A11/13

19.11 5) 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. (WRC-23)

ARTICLE 31

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

Section II − Survival craft stations

MOD AFCP/6064A11/14

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 ~~band.~~or on 161.975 MHz (AIS 1 of Appendix **18**) and 162.025 MHz (AIS 2 of Appendix **18**). (WRC-23)

ARTICLE 32

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

Section I − General

MOD AFCP/6064A11/15

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-~~03~~23)

MOD AFCP/6064A11/16

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[1] **32.7.1** The use of the Standard Marine Communication Phrases (SMCP) and, where language difficulties exist~~s~~, 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)

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 AFCP/6064A11/17

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 ~~and EPIRBs~~). (WRC-~~07~~23)

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 AFCP/6064A11/18

32.21A 2) When acknowledging receipt of a distress alert sent by DSC[8], the acknowledgement in the terrestrial services shall be made by DSC~~,~~ or radiotelephony ~~or narrow-band direct-printing telegraphy as appropriate to the circumstances,~~ 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-~~07~~23)

MOD AFCP/6064A11/19

32.23 § 15 ~~1)~~ 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-~~12~~23)

SUP AFCP/6064A11/20

32.24

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

MOD AFCP/6064A11/21

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 ~~**32.38**~~ **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-~~07~~23)

MOD **AFCP/6064A11/22**

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 ~~or narrow-band direct-printing telegraphy~~ 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-~~07~~23)

32.36 *D − Preparations for handling of distress traffic*

SUP **AFCP/6064A11/23**

32.38

Section III − Distress traffic

32.39 *A − General and search and rescue coordinating communications*

SUP **AFCP/6064A11/24**

32.43

SUP **AFCP/6064A11/25**

32.44

MOD **AFCP/6064A11/26**

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

SUP **AFCP/6064A11/27**

32.48

MOD **AFCP/6064A11/28**

32.52 § 32 ~~1)~~ 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-~~12~~23)

SUP AFCP/6064A11/29

32.53

32.54 *B – On-scene communications*

MOD AFCP/6064A11/30

32.56 2) Control of on-scene communications is the responsibility of the unit coordinating search and rescue operations[10]. 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.~~ (WRC-23)

MOD AFCP/6064A11/31

32.57 § 34 1) 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.~~ (WRC-23)

MOD AFCP/6064A11/32

32.59 § 35 The selection or designation of on-scene frequencies is the responsibility of the unit coordinating search and rescue operations[10]. 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. (WRC-23)

32.60 *C – Locating and homing signals*

MOD AFCP/6064A11/33

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 ~~float-free EPIRBs, by~~ satellite EPIRBs, by radar SARTs and by ~~search and rescue radar transponders~~AIS-SARTs to assist the searching units. (WRC-23)

ARTICLE 33

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

Section II − Urgency communications

MOD AFCP/6064A11/34

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~~, narrow-band direct-printing~~, 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-~~07~~23)

MOD AFCP/6064A11/35

33.12 § 6 ~~1)~~ 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-~~12~~23)

SUP AFCP/6064A11/36

33.13

SUP AFCP/6064A11/37

33.17

SUP AFCP/6064A11/38

33.18

Section III − Medical transports

MOD AFCP/6064A11/39

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 MEDICAL in narrow-band direct printing and~~ by the addition of the single word MAY-DEE-CAL pronounced as in French “médical”, in radiotelephony. (WRC-~~07~~23)

Section IV − Safety communications

MOD AFCP/6064A11/40

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 ~~narrow-band direct printing~~ 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-~~07~~23)

MOD AFCP/6064A11/41

33.35 § 19 ~~1)~~ 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-~~12~~23)

SUP AFCP/6064A11/42

33.36

SUP AFCP/6064A11/43

33.37

SUP AFCP/6064A11/44

33.38

Section V − Transmission of maritime safety information[2]

ADD AFCP/6064A11/45

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)

MOD AFCP/6064A11/46

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)

33.42 *B – International NAVTEX system*

MOD **AFCP/6064A11/47**

33.43 § 23 Where ~~Maritime~~ maritime safety information ~~shall be~~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, ~~using~~ the frequency 518 kHz ~~in accordance with the international NAVTEX system~~shall be used (see Appendix **15**). (WRC-23)

ADD **AFCP/6064A11/48**

33.46A1 *D – International NAVDAT system*

ADD **AFCP/6064A11/49**

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)

MOD **AFCP/6064A11/50**

33.47 ~~*D*~~*E – High seas maritime safety information*

MOD **AFCP/6064A11/51**

33.48 § ~~25~~26 Maritime safety information which is transmitted by means of narrow-band direct-printing telegraphy with forward error correction ~~using~~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)

MOD **AFCP/6064A11/52**

33.49 ~~*E*~~*F – Maritime safety information via satellite*

MOD **AFCP/6064A11/53**

33.50 § ~~26~~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-~~19~~23)

ARTICLE 34

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

MOD AFCP/6064A11/54

Section I – ~~Emergency~~ Satellite emergency position-indicating radiobeacon (EPIRB) ~~and satellite EPIRB~~ signals (WRC-23)

ARTICLE 47

Operator's certificates

Section III – Conditions for the issuing of certificates

MOD AFCP/6064A11/55

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 an asterisk in the appropriate box	1st-class radio 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 radiocommuni-cation equipment, including narrow-band direct-printing telegraph and radiotelephone transmitters and receivers, digital selective calling equipment, ship earth stations, 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.	*			
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.		*		

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 an asterisk in the appropriate box	**1st-class radio electronic certificate**	**2nd-class radio electronic certificate**	**General operator's certificate**	**Restricted operator's certificate**
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 an asterisk in the appropriate box	**1st-class radio electronic certificate**	**2nd-class radio electronic certificate**	**General operator's certificate**	**Restricted operator's certificate**
…				
Ability to send and to receive correctly by radiotelephone~~y~~ and ~~direct printing~~ telegraphy with ship earth station.	*	*	*	
Ability to send and to receive correctly by radiotelephone.	*	*	*	*
…				

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 AFCP/6064A11/56

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

MOD AFCP/6064A11/57

51.41 2) The characteristics of the narrow-band direct-printing equipment ~~shall~~ should be in accordance with the most recent versions of Recommendations ITU-R M.476, ~~-5 and~~ ITU-R M.625 ~~-4. The characteristics should also be in accordance with the most recent version of Recommendation~~ and ITU-R M.627. (WRC-~~15~~23)

51.42 CA1 − Bands between 415 kHz and 535 kHz

MOD AFCP/6064A11/58

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)

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

MOD AFCP/6064A11/59

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 ~~shall~~ 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)

ADD AFCP/6064A11/60

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

ADD AFCP/6064A11/61

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)

ADD AFCP/6064A11/62

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

ADD AFCP/6064A11/63

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

ADD AFCP/6064A11/64

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 AFCP/6064A11/65

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

ADD AFCP/6064A11/66

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)

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 AFCP/6064A11/67

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)

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

ADD AFCP/6064A11/68

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)

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

52.96 *B − Bands between 415 kHz and 535 kHz*

MOD AFCP/6064A11/69

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 ~~shall~~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)

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

MOD AFCP/6064A11/70

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 ~~shall~~ 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 Appendi~~x~~ces **15** and **17**. (WRC-23)

Section IV − Use of frequencies for digital selective-calling

52.110 *A − General*

MOD AFCP/6064A11/71

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)

ADD AFCP/6064A11/72

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

ADD AFCP/6064A11/73

52.xx0 *A – General* (WRC-23)

ADD AFCP/6064A11/74

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 AFCP/6064A11/75

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

ADD AFCP/6064A11/76

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 AFCP/6064A11/77

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

ADD AFCP/6064A11/78

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)

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

ADD AFCP/6064A11/79

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

ADD AFCP/6064A11/80

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

ADD AFCP/6064A11/81

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)

MOD AFCP/6064A11/82

52.263 *~~B~~C – Bands between 4 000 kHz and 27 500 kHz* (WRC-~~12~~23)

MOD AFCP/6064A11/83

~~B~~C1 – Mode of operation of stations (WRC-~~12~~23)

MOD AFCP/6064A11/84

52.264 The class of emissions to be used for data transmissions in ~~this section~~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-~~15~~23)

ADD AFCP/6064A11/85

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	*Maximum mean 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)

ADD AFCP/6064A11/86

ARTICLE 54*bis*

Automatic Connection System

ADD AFCP/6064A11/87

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 AFCP/6064A11/88

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)

MOD AFCP/6064A11/89

APPENDIX 14 (REV.WRC-~~07~~23)

Phonetic alphabet and figure code

(See Articles ~~30~~32 and 57) (WRC-~~07~~23)

APPENDIX 15 (REV.WRC-19)

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

MOD AFCP/6064A11/90

TABLE 15-1 (WRC-~~07~~23)

Frequencies below 30 MHz

Frequency (kHz)	Description of 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.
~~*2 174.5~~	~~NBDP COM~~	
*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**).
~~*4 177.5~~	~~NBDP COM~~	
*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**.
~~*6 268~~	~~NBDP COM~~	
*6 312	DSC	

TABLE 15-1 (*end*) (WRC-~~07~~23)

Frequency (kHz)	Description of 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	
~~*8 376.5~~	~~NBDP 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	
~~*12 520~~	~~NBDP-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	
~~*16 695~~	~~NBDP-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)

~~**NBDP-COM** These frequencies are used exclusively for distress and safety communications (traffic) using narrow-band direct-printing telegraphy.~~

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)

MOD AFCP/6064A11/91

TABLE 15-2 (WRC-~~19~~23)

Frequencies above 30 MHz (VHF/UHF)

TABLE 15-2 (*end*) (WRC-~~19~~23)

Frequency (MHz)	Description of usage	Notes
…		
*1 645.5-1 646.5	SAT-COM~~D&S-OPS~~	Use of the band 1 645.5-1 646.5 MHz (Earth-to-space) is limited to transmission of distress, urgency and safety ~~operations~~communications, and for non-distress communication purposes, from earth stations operating in the GMDSS (see No. **5.375**). (WRC-23)

…		

APPENDIX 17 (REV.WRC-19)

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

MOD AFCP/6064A11/92

PART A – Table of subdivided bands (WRC-~~19~~23)

…

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

…

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)~~distress and safety purposes, by NBDP telegraphy, see Article **31**~~. (WRC-23)

…

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.

…

PART B – Channelling arrangements (WRC-15)

MOD AFCP/6064A11/93

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	4 210.5	4 172.5	6 314.5	6 263	~~8 376.5~~	~~8 376.5~~
2	4 211	4 173	6 315	6 263.5	8 417	8 377
3	4 211.5	4 173.5	6 315.5	6 264	8 417.5	8 377.5
4	4 212	4 174	6 316	6 264.5	8 418	8 378
5	4 212.5	4 174.5	6 316.5	6 265	8 418.5	8 378.5
6	4 213	4 175	6 317	6 265.5	8 419	8 379
7	4 213.5	4 175.5	6 317.5	6 266	8 419.5	8 379.5
8	4 214	4 176	6 318	6 266.5	8 420	8 380
9	4 214.5	4 176.5	6 318.5	6 267	8 420.5	8 380.5
10	4 215	4 177	6 319	6 267.5	8 421	8 381
11	~~4 177.5~~	~~4 177.5~~	~~6 268~~	~~6 268~~	8 421.5	8 381.5
12	4 215.5	4 178	6 319.5	6 268.5	8 422	8 382
13	4 216	4 178.5	6 320	6 269	8 422.5	8 382.5
14			6 320.5	6 269.5	8 423	8 383
15					8 423.5	8 383.5

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	12 579.5	12 477	16 807	16 683.5		
2	12 580	12 477.5	16 807.5	16 684		
3	12 580.5	12 478	16 808	16 684.5		
4	12 581	12 478.5	16 808.5	16 685		
5	12 581.5	12 479	16 809	16 685.5		
6	12 582	12 479.5	16 809.5	16 686		
7	12 582.5	12 480	16 810	16 686.5	19 684	18 873.5
8	12 583	12 480.5	16 810.5	16 687	19 684.5	18 874
9	12 583.5	12 481	16 811	16 687.5	19 685	18 874.5
10	12 584	12 481.5	16 811.5	16 688	19 685.5	18 875
11	12 584.5	12 482	16 812	16 688.5	19 686	18 875.5
12	12 585	12 482.5	16 812.5	16 689	19 686.5	18 876
13	12 585.5	12 483	16 813	16 689.5	19 687	18 876.5
14	12 586	12 483.5	16 813.5	16 690	19 687.5	18 877
15	12 586.5	12 484	16 814	16 690.5	19 688	18 877.5

Channel No.	12 MHz band		16 MHz band		18/19 MHz band	
	Transmit	Receive	Transmit	Receive	Transmit	Receive
16	12 587	12 484.5	16 814.5	16 691	19 688.5	18 878
17	12 587.5	12 485	16 815	16 691.5	19 689	18 878.5
18	12 588	12 485.5	16 815.5	16 692	19 689.5	18 879
19	12 588.5	12 486	16 816	16 692.5	19 690	18 879.5
20	12 589	12 486.5	16 816.5	16 693	19 690.5	18 880
21	12 589.5	12 487	16 817	16 693.5		
22	12 590	12 487.5	16 817.5	16 694		
23	12 590.5	12 488	16 818	16 694.5		
24	12 591	12 488.5	~~16 695~~	~~16 695~~		
25	12 591.5	12 489	16 818.5	16 695.5		
26	12 592	12 489.5	16 819	16 696		
27	12 592.5	12 490	16 819.5	16 696.5		
28	12 593	12 490.5	16 820	16 697		
29	12 593.5	12 491	16 820.5	16 697.5		
30	12 594	12 491.5	16 821	16 698		
31	12 594.5	12 492	16 821.5	16 698.5		
32	12 595	12 492.5				
33	12 595.5	12 493				
34	12 596	12 493.5				
35	12 596.5	12 494				
36	12 597	12 494.5				
37	12 597.5	12 495				
38	12 598	12 495.5				
39	12 598.5	12 496				
40	12 599	12 496.5				
41	12 599.5	12 497				
42	12 600	12 497.5				
43	12 600.5	12 498				
44	12 601	12 498.5				
45	12 601.5	12 499				

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

Channel No.	12 MHz band (*end*)	
	Transmit	Receive
46	12 602	12 499.5
47	12 602.5	12 500
48	12 603	12 500.5
49	12 603.5	12 501
50	12 604	12 501.5
51	12 604.5	12 502
52	12 605	12 502.5
53	12 605.5	12 503
54	12 606	12 503.5
55	12 606.5	12 504
56	12 607	12 504.5
57	12 607.5	12 505
58	12 608	12 505.5
59	12 608.5	12 506
60	12 609	12 506.5

61	12 609.5	12 507
62	12 610	12 507.5
63	12 610.5	12 508
64	12 611	12 508.5
65	12 611.5	12 509
66	12 612	12 509.5
67	12 612.5	12 510
68	12 613	12 510.5
69	12 613.5	12 511
70	12 614	12 511.5
71	12 614.5	12 512
72	12 615	12 512.5
73	12 615.5	12 513
74	12 616	12 513.5
75	12 616.5	12 514
76	12 617	12 514.5
77	12 617.5	12 515
78	12 618	12 515.5
79	12 618.5	12 516
80	12 619	12 516.5
81	12 619.5	12 517
82	12 620	12 517.5
83	12 620.5	12 518
84	12 621	12 518.5
85	12 621.5	12 519
86	12 622	12 519.5
87	~~12 520~~	~~12 520~~
88	12 622.5	12 520.5
89	12 623	12 521
90	12 623.5	12 521.5
91	12 624	12 522
92	12 624.5	12 522.5

…

MOD AFCP/6064A11/94

RESOLUTION 18 (REV.WRC-~~15~~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 (~~Geneva, 2015~~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 ~~and, if available on board ships and aircraft, by the addition of the single group “NNN” in radiotelegraphy~~; as soon as practicable, communications shall be transferred to an appropriate working frequency;

…

MOD AFCP/6064A11/95

RESOLUTION 349 (REV.WRC-~~19~~23)

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

The World Radiocommunication Conference (~~Sharm el-Sheikh, 2019~~Dubai, 2023),

…

noting

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

…

ANNEX TO RESOLUTION 349 (REV.WRC-~~19~~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) ~~Reset the equipment immediately;~~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 ~~cancel the alert~~ 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) ~~Reset the equipment immediately;~~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 ~~cancel the alert~~ 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) ~~Reset the equipment immediately;~~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 ~~cancel the alert~~ 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~~ 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.

MOD AFCP/6064A11/96

RESOLUTION 354 (REV.WRC-~~07~~23)

Distress and safety radiotelephony procedures for 2 182 kHz

The World Radiocommunication Conference (~~Geneva, 2007~~Dubai, 2023),

…

ANNEX TO RESOLUTION 354 (REV.WRC-~~07~~23)

Distress and safety radiotelephony procedures for 2 182 kHz*

PART A1 − GENERAL

…

* Distress and safety communications include distress, urgency and safety calls and messages.

§ 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[2].

§ 5 Distress, urgency and safety communications may also be made using digital selective calling and satellite techniques ~~and/or direct-printing telegraphy~~, 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

…

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.

ADD AFCP/6064A11/97

DRAFT NEW RESOLUTION [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

[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)

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**).

For Issue B – Resolves 2 of Resolution 361 (Rev.WRC-19)
E-Navigation

NOC **AFCP/6064A11/98**

ARTICLE 5

Frequency allocations

For Issue C – Resolves 3 of Resolution 361 (Rev.WRC-19)
Introduction of additional satellite systems into the GMDSS

ARTICLE 5

Frequency allocations

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

MOD **AFCP/6064A11/99**

5.364 The use of the band 1 610-1 626.5 MHz by the mobile-satellite service (Earth-to-space) and by the radiodetermination-satellite service (Earth-to-space) is subject to coordination under No. **9.11A**. A mobile earth station operating in either of the services in this band shall not produce a

peak e.i.r.p. density in excess of −15 dB(W/4 kHz) in the part of the band used by systems operating in accordance with the provisions of No. **5.366** (to which No. **4.10** applies), unless otherwise agreed by the affected administrations. In the part of the band where such systems are not operating, the mean e.i.r.p. density of a mobile earth station shall not exceed −3 dB(W/4 kHz). Stations of the mobile-satellite service shall not claim protection from stations in the aeronautical radionavigation service, stations operating in accordance with the provisions of No. **5.366** and stations in the fixed service operating in accordance with the provisions of No. **5.359**. GMDSS stations operating in the maritime mobile-satellite services in the frequency band 1 610.18-1 621.35 MHz shall not claim protection from stations operating in accordance with the provisions of No. **5.367**. Administrations responsible for the coordination of mobile-satellite networks shall make all practicable efforts to ensure protection of stations operating in accordance with the provisions of No. **5.366**. (WRC-23)

MOD **AFCP/6064A11/100**

5.368 The provisions of No. **4.10** do not apply with respect to the radiodetermination-satellite and mobile-satellite services in the frequency band 1 610-1 626.5 MHz. However, No. **4.10** applies in the frequency band 1 610-1 626.5 MHz with respect to the aeronautical radionavigation-satellite service when operating in accordance with No. **5.366**, the aeronautical mobile satellite (R) service when operating in accordance with No. **5.367**, and in the frequency bands 1 610.18-1 621.35 MHz (Earth-to-space) and 1 621.35-1 626.5 MHz with respect to the maritime mobile-satellite service when used for GMDSS. (WRC-~~19~~23)

ARTICLE 33

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

Section V − Transmission of maritime safety information[2]

33.49 *E − Maritime safety information via satellite*

MOD **AFCP/6064A11/101**

33.50 § 26 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 and 2 483.59-2 499.91 MHz (see Appendix **15**). (WRC-~~19~~23)

Section VII − Use of other frequencies for safety (WRC-07)

MOD **AFCP/6064A11/102**

33.53 § 28 Radiocommunications for safety purposes concerning ship reporting communications, communications relating to the navigation, movements and needs of ships and weather observation messages may be conducted on any appropriate communications frequency, including those used for public correspondence. In terrestrial systems, the frequency bands 415-535 kHz (see Article **52**), 1 606.5-4 000 kHz (see Article **52**), 4 000-27 500 kHz (see

Appendix **17**) and 156-174 MHz (see Appendix **18**) are used for this function. In the maritime mobile-satellite service, frequencies in the frequency bands 1 530-1 544 MHz, 1 610.18-1 621.35 MHz (Earth-to-space), 1 621.35-1 626.5 MHz, ~~and~~ 1 626.5-1 645.5 MHz and 2 483.59-2 499.91 MHz are used for this function as well as for distress alerting purposes (see No. **32.2**). (WRC-~~19~~23)

APPENDIX 15 (REV.WRC-19)

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

MOD AFCP/6064A11/103

TABLE 15-2 (*end*) (WRC-~~19~~23)

Frequency (MHz)	Description of usage	Notes
...	...	...
1 610.18-1 621.35	SAT-COM	In addition to its availability for routine non-safety purposes, the frequency band 1 610.18-1 621.35 MHz is used for distress and safety purposes in the Earth-to-space direction in the maritime mobile-satellite service. GMDSS distress, urgency and safety communications have priority in this band over non-safety communication within the same satellite system.
...	...	...
2 483.59-2 499.91	SAT-COM	In addition to its availability for routine non-safety purposes, the frequency band 2 483.59-2 499.91 MHz is used for distress and safety purposes in the space-to-Earth direction in the maritime mobile-satellite service. GMDSS distress, urgency and safety communications have priority in this band over non-safety communication within the same satellite system.
...	...	...

...

ADD AFCP/6064A11/104

DRAFT NEW RESOLUTION [B111-METHOD C3] (WRC-23)

The mitigation and elimination for the harmful interference between GSO MSS system for GMDSS and non-GSO MSS system in the frequency bands 1 610.18-1 621.35 MHz and 2 483.59-2 499.91 MHz

The World Radiocommunication Conference (Dubai, 2023),

considering

a) that WRC-19 decided that WRC-23 consider regulatory provisions to support the introduction of additional satellite systems for the global maritime distress and safety system (GMDSS), taking into consideration the activities of the International Maritime Organization (IMO), based on the results of ITU-R studies;

b) that it is necessary to ensure the availability and protection of the assignment of the existing and new GMDSS systems;

c) that the geostationary-satellite orbit (GSO) mobile-satellite service (MSS) system, operating in the frequency bands 1 610.18-1 621.35 MHz in the Earth-to-space direction and 2 483.59-2 499.91 MHz in the space-to-Earth direction, is being considered to provide distress and safety communications for GMDSS;

d) that the MSS (Earth-to-space) is allocated in the frequency band 1 610.0-1 626.5 MHz on a primary basis, subject to coordination under No. **9.11A**;

e) that the MSS (space-to-Earth) is allocated in the frequency band 2 483.5-2 500 MHz on a primary basis, subject to coordination under No. **9.11A**,

recognizing

a) that, based on the Rules of Procedure relating to No. **9.6**, coordination is a two-way process. This fact was confirmed by the World Administrative Radio Conference on the use of the geostationary-satellite orbit (WARC-ORB), and confirmed by WRC-97 to be included in the Radio Regulations;

b) that it is a usual practice that, at the stage of coordination, the level of interference and the condition thereof for the assignments recorded in the Master International Frequency Register (MIFR) are used as a basis to require protection from the subsequent assignment;

c) that a mitigation technique and its associated details are useful tools to be mutually agreed by the concerned parties in order to avoid harmful interference,

resolves

1 that the incoming assignment pertaining to satellite network(s)/system(s) shall take into account the criteria and conditions based on which the assignment pertaining to existing/incumbent satellite network(s)/system(s) have been coordinated;

2 that, for the implementation of *resolves* 1, the level of interference referred to in *recognizing b)* above shall be taken into account in the process of coordination;

3 that, during the process of coordination, the mitigation technique and its associated details shall be mutually agreed by the concerned administration;

4 that No. **4.10** shall be applied where required.

For Issues A, B and C

SUP AFCP/6064A11/105

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