

Merchant Marine Circular

Panama Maritime Authority
General Directorate of Merchant Marine
Control and Compliance Department

MERCHANT MARINE CIRCULAR MMC-334

To: Ship-owners/Operators, of Panamanian Flagged Vessels, Class Societies and Recognized Organizations.

Subject: GMDSS equipment requirements

Reference:

- a) Resolution MSC.496(105) of April 28, 2022 adopted by Resolution No. 107-OMI-275-DGMM of November 13, 2023.
- b) Resolution MSC.497(105) of April 28, 2022 adopted by Resolution No. 107-OMI-274-DGMM of November 13, 2023
- c) Resolution A.801(19) adopted on 23 November 1995 Provision of Radio Services for the Global Maritime Distress and Safety System (GMDSS) (as recommendation only).
- d) Resolution A.803(19) adopted on 23 November 1995 Recommendation on Performance Standards for Shipborne VHF Radio Installations Capable of Voice Communication and Digital Selective Calling (as recommendation only).
- e) MSC.1/Circ.1460/Rev.4 dated 30 June 2023 Guidance on the Validity of Radiocommunications Equipment Installed and used on Ships (as recommendation only).
- f) MSC.1/Circ.1676, Delays Affecting the Availability of New GMDSS equipment Compliance with the Revised Performance Standards in IMO Resolutions MSC.511(105), MSC.512(105), and MSC.513(105) (as recommendation only).
- g) Guidelines for the harmonization of GMDSS requirements for radio installations on board SOLAS ships - COMSAR.1/Circ.32/Rev.2 adopted by IMO on 3 July 2023 (as recommendation only).

1. This Merchant Marine Circular supersedes **MMC-103**.

2. **Purpose**

Merchant Marine Circular

2.1. The Purpose of this Circular is to remind interested parties of the radiocommunication performance and functionality due to the Global Maritime Distress and Safety System (GMDSS) modernization.

3. Applicability / Scope

3.1. All vessels to which Radio equipment installations are required by SOLAS Chapter IV apply.

4. Background

4.1. The *Guidance on procedures for updating shipborne navigation and communication equipment (MSC.1/Circ.1389)* dated 7 December 2010 notes that updates to application software and firmware to meet changes in IMO and ITU regulatory requirements are needed.

4.2. The World Radio Communication Conference 2012 made extensive changes to appendices 17 and 18 of the Radio Regulations (RR). Sections II and III of Part B in Appendix 17 revised frequencies and channeling arrangements for the maritime HF and VHF bands. The IMO Maritime Safety Committee, at its 92nd session, has approved the Guidance on the validity of Radio Communication equipment installed and used on ships (MSC.1/ Circ. 1460).

4.3. As per the agreement reached during the 97th session & 98th session of the IMO Maritime Safety Committee (MSC) respectively that MSC.1/Circ.1460/Rev. 2 was issued amending the schedule of new NBDP requirement to be postponed to 1st January 2024. Later on, the Maritime Safety Committee, at its 104th session (4 to 8 October 2021), approved the MSC.1/Circ.1460/Rev.3 of 18 October 2021 indicating the need for updating existing VHF radiocommunication equipment following the first radio survey after 1 January 2024.

4.4. Furthermore, Resolutions MSC.496(105) and MSC.497(105) dated 28 April 2022 adopt the amendments to the International Convention for the Safety of Life at Sea, 1974 and its Protocol of 1988 (1988 SOLAS Protocol) where Chapter IV “Radiocommunications” was revised due to “GMDSS modernization” for its implementation on 1st January 2024.

4.5. Taking into account concerns over the availability of VHF radiocommunication equipment compatible with the frequencies and channeling arrangements set out in Appendix 18 of the ITU Radio Regulations (RR) – Edition 2020; the IMO Maritime Safety Committee (MSC) approved a new revised guidance through



Merchant Marine Circular

MSC.1/Circ.1460/Rev.4 of 30 June 2023 for VHF radiocommunication equipment update at first radio survey after 1 January 2028.

- 4.6. In addition, the MSC.1/Circ.1676 dated 30 June 2023 concluded that it was unrealistic for new shipborne VHF radio installations, shipborne MF and MF/HF radio installations, or Inmarsat-C ship earth stations to conform to performance standards specified in the annex to resolutions MSC.511(105), MSC.512(105) and MSC.513(105), respectively, to be available for installation from 1 January 2024. In this regard, the Committee invited Member States to consider permitting the continued installation of VHF radio installations, shipborne MF and MF/HF radio installations, or Inmarsat-C ship earth stations to conform to the existing performance standards until 1 January 2028.

5. GMDSS equipment installation

- 5.1. Vessels (including Mobile Offshore Units (MOUs)) registered under the Panama flag are recommended taking note that the Sea Areas are determined by the Contracting governments on land that can provide the Sea Area services; therefore:
- 5.1.1. Any vessel or unit that operates solely within the territorial waters of any given coastal state shall comply with the Coastal State requirements for the GMDSS equipment. In the case of MOUs, they will comply with the minimum provisions for Distress and Safety Radiocommunications contained in Chapter 11 of the 2009 IMO MODU Code.
- 5.1.2. In the case of vessels engaged in international trade along the coast, they shall determine the Sea Areas Services provided within their navigation area to comply with the GMDSS equipment required.
- 5.2. In the case that a vessel trades along the coast and no Sea Area A1 or A2 services are provided, the vessel shall be fitted for Sea Area A3 equipment.

6. Exemptions

- 6.1. According to SOLAS IV Regulation 3 (Exemptions) the Administration may grant partial or conditional exemptions to individual ships from the requirements of regulations 7 (Radio equipment: General) to 11 (Radio equipment: Sea area A4) provided:
- 6.1.1. such ships comply with the functional requirements of Regulation 4 (Functional requirements); and



Merchant Marine Circular

6.1.2. the Administration has taken into account the effect such exemptions may have upon the general efficiency of the service for the safety of all ships.

6.2. Therefore, an exemption may be granted under paragraph 6.1 only:

6.2.1. if the conditions affecting safety are such as to render the full application of regulations 7 to 11 unreasonable or unnecessary; or

6.2.2. in exceptional circumstances, for a single voyage outside the sea area or sea areas for which the ship is equipped.

6.3. All exemptions granted under paragraphs 6.1 and 6.2 shall be reported to the IMO along with the reasons for granting such exemptions.

6.4. For further information regarding Exemption Certificates, please refer to our MMC #156. In these cases, provide the following additional information:

6.4.1. Area of navigation,

6.4.2. Sea Area services provided within the area of navigation (where the ship is operating),

6.4.3. Class Society/Recognized Organization assessment taking into account the effect such exemptions may have upon the general efficiency of the service for the safety of all ships.

6.4.4. Any special conditions imposed by the coastal state within the intended navigation area.

7. Performance Standards (SOLAS IV Regulation 14)

7.1. Radio equipment installations on SOLAS ships should meet the relevant IMO requirements and ITU recommendations and should be of a type approved by the Administration. Please refer to MMC-192 on Guidance for Type-Approved Equipment or Systems Acceptance.

7.2. Therefore, according to SOLAS IV/14 all the radio equipment installed onboard shall comply with performance standards not inferior to those adopted by the Organization.

8. GMDSS Guidelines to consider:

Merchant Marine Circular

8.1. Guidance on the validity of radiocommunications equipment installed and used on ships - MSC.1/Circ.1460/Rev.4, 30 June 2023

8.1.1. To ensure GMDSS communication capability and the availability of appropriate GMDSS radiocommunication equipment, and without prejudice to the arrangements contained in Appendix 18 of the RR, **VHF radiocommunication equipment should be updated following the first radio survey after 1 January 2028, at the earliest**, so that it meets the arrangements that will be in force by then.

8.1.2. Therefore, by the time indicated above the equipment that is not capable of complying with RR should be upgraded or replaced.

8.2. Delays affecting the availability of new GMDSS equipment compliant with the revised performance standards set out in resolutions MSC.511(105), MSC.512(105), and MSC.513(105) - MSC.1/Circ.1676, 30 June 2023

8.2.1. The MSC Committee, at its 107th session, considered information provided by IEC and CIRM on the availability of GMDSS equipment after 1 January 2024 and noted that considerable work had been carried out by the radio manufacturing industry and the standards organizations to develop the new equipment required. However, some of the performance standards incorporate new features that still require specification from other organizations. Therefore, concluded that it was unrealistic for new shipborne VHF radio installations, shipborne MF and MF/HF radio installations, or Inmarsat-C ship earth stations conforming to performance standards specified in the annex to resolutions MSC.511(105), MSC.512(105) and MSC.513(105), respectively, to be available for installation from 1 January 2024.

8.2.2. In consequence this Administration responds positively to the invitation by the MSC Committee to consider **permitting until 1 January 2028 the continued installation of:**

- a) **shipborne VHF radio installations** conforming to performance standards not inferior to those specified in the annex to resolution A.803(19), as amended;
- b) **shipborne MF and MF/HF radio installations** conforming to performance standards not inferior to those specified in the annex to resolutions A.804(19), as amended, and A.806(19), as amended; and



Merchant Marine Circular

- c) **Inmarsat-C ship earth stations** conforming to performance standards not inferior to those specified in the annex to resolution A.807(19), as amended.

8.3. Guidelines for the harmonization of GMDSS requirements for radio installations on board SOLAS ships - COMSAR.1/Circ.32/Rev.2 (3 July 2023)

8.3.1. Taking into account the amendments to SOLAS chapter IV adopted by resolution MSC.496(105) and other related instruments emanating from the modernization of the Global Maritime Distress and Safety System (GMDSS), this Administration recommends applying this guideline:

- a) To Radio equipment installations on SOLAS ships which should meet the relevant IMO requirements and ITU recommendations and should be of a type approved by the Administration. Please refer to MMC-192 on Guidance for Type-Approved Equipment or Systems Acceptance.
- b) When installing GMDSS radio equipment on board SOLAS ships.
- c) Also, the rules in these Guidelines apply to radio installations on high-speed craft as prescribed in the HSC Codes. (See Chapter 14 regarding Radiocommunications)
- d) The rules in these Guidelines also apply to radio installations on mobile offshore drilling units as prescribed in the MODU Codes. (See Chapter 11 regarding Radiocommunication and Navigation).

9. Radio Licenses requirement

9.1. The Ship's Radio License requires amending if the equipment on board is replaced. There is no need to upgrade the Radio License if the equipment on board may be upgraded using software or firmware. The same applies to already compliant equipment.

10. Instructions to the Recognized Organizations/Class Societies

10.1. Recognized Organizations/Class Societies are instructed to implement the amendments to SOLAS Chapter IV and in consequence, replace the forms of relevant statutory certificates after the first radio survey (periodical or renewal) after 1 January 2024.



Merchant Marine Circular

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Inquiries concerning the subject of this Merchant Marine Circular or any other request should be forward to:

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