

GUIDANCE NOTE 04/2024 Rev 01

IRIDIUM GMDSS: RECOGNIZED MOBILE SATELLITE SERVICE

To: SURVEYORS, CLASSIFICATION SOCIETIES, OWNERS, COMPANY'S, MASTER'S AND CHIEF ENGINEERS ON ALL CAYMAN ISLANDS SHIPS AND YACHTS

1. BACKGROUND

1.1 The International Maritime Organization (IMO) has revised the SOLAS Chapter IV requirements for the Global Maritime Distress and Safety System (GMDSS) to reflect advancements in technology and to streamline the requirements for certain areas of operation. These revised requirements entered into force on 1 January 2024.

1.2 Key amendments are the following: -

- The term "Recognized Mobile Satellite Service (RMSS)" has replaced references to INMARSAT coverage.
- The IMO has approved IRIDIUM as an RMSS.
- Sea Area A3 now means 'an area outside sea areas A1 and A2, where an RMSS supported by a ship earth station (SES) on board can provide continuous alerting'.
- The Cargo Ship Safety Radio Certificate or Passenger Ship Safety Certificate for a ship operating in sea area A3 must show the RMSS in brackets (i.e., INMARSAT or IRIDIUM) by the next annual survey.

1.3 [IMO MSC.1/Circ.1645](#) provides 'Guidance for the Reception of Marine Safety Information (MSI) and Search and Rescue Related Information As Required in the Global Maritime Distress and Safety System (GMDSS).'

1.4 Inmarsat SafetyNET service provides coordinated broadcast and automatic reception of MSI and SAR related information via the Inmarsat enhanced group call (EGC) system.

1.5 Iridium SafetyCast service provides coordinated broadcast and automatic reception of MSI and SAR related information via the Iridium enhanced group call (EGC) system.

1.6 The architecture of the MSI service is shown in figure 1. However, it should be noted that MSI broadcasts can still be received from some Administrations via High Frequency Narrow Band Direct Printing (HF-NBDP) in areas outside Inmarsat coverage (i.e., Inmarsat 'A4' Sea Areas).

1.7 The latest GMDSS equipment carriage requirements are summarized in [COMSAR.1/Circ.32/Rev.2](#); see extract in figure 2.

2. IRIDIUM GMDSS SATELLITE SERVICES – MARINE SAFETY INFORMATION (MSI)

- 2.1 The Iridium GMDSS Satellite Service is operating globally. However, the Iridium EGC service for MSI should only be relied upon in the areas where the MSI broadcaster declares themselves fully operational.
- 2.2 IMO publishes the SafetyCast implementation status in its Global Integrated Shipping Information System (GISIS), by NAVAREAs and METAREAs, and it is also available on the International Hydrographic Organization website under [Iridium SafetyCast implementation Status](#).
- 2.3 Vessels operating outside NAVTEX service areas and relying upon SafetyCast for MSI should mitigate the risks of operating in an area where an MSI provider has not declared itself fully operational. Failure to do so will be a contravention of SOLAS regulation IV/12.2 which states *"Every ship, while at sea, shall maintain a radio watch for broadcasts of maritime safety information on the appropriate frequency or frequencies on which such information is broadcast for the area in which the ship is navigating"*.
- 2.4 The risk mitigation methods should be specifically agreed with the organization that has issued the Cargo Ship Safety Radio Certificate or Passenger Ship Safety Certificate. For vessels operating within Inmarsat Sea Area A3 this is likely to be by maintaining at least one Inmarsat EGC receiver until the Iridium SafetyCast service is declared to be fully operational in the required trading areas. For those operating in Inmarsat Sea Area A4 this is likely to be via HF NBDP. Signing up to receive the latest MSI from a NAVAREA/METAREA coordinator that pushes out the latest regional information via email, such as [Australia's Joint Rescue Coordination Centre and Bureau of Meteorology](#) for NAVAREA X, should also be considered.

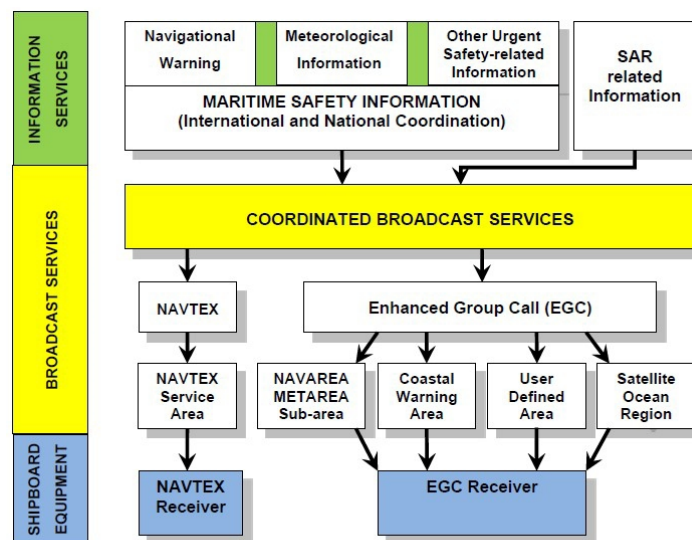


Figure 1 – The Maritime Safety Information service of the Global Maritime Distress and Safety System

Equipment	A1	A2	A3	A4
VHF telephony installation with DSC capable of:	x	x	x	x
DSC watch on channel 70	x	x	x	x
Radiotelephony watch on channel 16	x	x	x	x
Watch on other appropriate frequency or frequencies for urgency and safety communications for the area in which the ship is navigating	x	x	x	x
MF telephony ⁶ installation with MF DSC capable of:		x	x	
DSC watch on 2 187.5 kHz		x	x	
Watch on other appropriate frequency or frequencies for urgency and safety communications for the area in which the ship is navigating		x	x	
SES providing RMSS			x	
MF/HF telephony ⁶ installation with DSC capable of:				x
DSC watch on 2 187.5 kHz and 8 414.5 kHz				x
Depending on time of day and geographical position, DSC watch on at least one of the frequencies 4 207.5 kHz, 6 312 kHz, 12 577 kHz or 16 804.5 kHz				x
Watch on other appropriate frequency or frequencies for urgency and safety communications for the area in which the ship is navigating				x
Duplicated VHF with DSC	x ⁷	x ⁷	x	x
Duplicated MF ⁶ with DSC		x ⁷		
Duplicated SES providing RMSS			x ^{4, 5}	
Duplicated MF/HF telephony ⁶ with DSC			x ⁴	x
Receiver(s) for MSI and SAR-related information ³	x	x	x	x
Float-free EPIRB	x	x	x	x
Radar SART or AIS SART	x ¹	x ¹	x ¹	x ¹
Portable GMDSS VHF transceivers	x ²	x ²	x ²	x ²
Automatic updating of position to all relevant radiocommunication equipment	x	x	x	x
The following additional requirements apply to passenger ships				
"Distress panel" and "distress alarm panel" (SOLAS regulations IV/6.4 and 6.6)	x	x	x	x
Two-way-on-scene radiocommunication on 121.5 MHz and 123.1 MHz from the navigating bridge. (SOLAS regulation IV/7.6)	x	x	x	x

- ¹ Cargo ships between 300 and 500 gt.: 1 set. Cargo ships of 500 gt. and upwards and passenger ships: 2 sets.
- ² Cargo ships between 300 and 500 gt.: 2 sets. Cargo ships of 500 gt. and upwards and passenger ships: 3 sets.
- ³ This may be either a combined ship earth station and EGC receiver or separate pieces of equipment.
- ⁴ Ships in sea area A3 may choose between duplication with either complete MF/HF transceiver or SES providing an RMSS with coverage equal to or broader than the primary RMSS (See section 1.6.3).
- ⁵ See section 1.6.3.2.
- ⁶ An MF/HF radio installation may substitute an MF radio installation.
- ⁷ See section 1.6.3.1.

Figure 2. Equipment requirements (including duplication of equipment) for SOLAS ships.