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**WORKING PAPER**

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Agenda item 3



**ICAO/IMO JOINT WORKING GROUP  
ON HARMONIZATION OF AERONAUTICAL  
AND MARITIME SEARCH AND RESCUE (ICAO/IMO JWG-SAR)**

**TWENTY-FOURTH MEETING**

**Wellington, New Zealand, 2 to 6 October 2017**

**CONVENTIONS, PLANS, MANUALS AND OTHER DOCUMENTS AFFECTING SAR**

**Use of a generic term for mobile satellite systems recognized for use in the GMDSS**

**Presented by the United States**

**SUMMARY**

***Executive  
summary:***

This document contains at annex a limited number of proposed changes throughout the IAMSAR Manual to align it with IMO's ongoing effort to use a generic term for mobile satellite systems recognized for use in the GMDSS in lieu of specific system names.

***Action to be taken:*** Paragraph 3.1

**1 INTRODUCTION**

1.1 The Maritime Safety Committee at its ninety-eighth session (MSC 98) in 2017 approved the *Modernization Plan of the Global Maritime Distress and Safety System (GMDSS)* and also draft amendments to SOLAS chapter IV *Radiocommunications* with a view to adoption at MSC 99. This affects terminology in the IAMSAR Manual.

**2 DISCUSSION**

2.1 The MSC-approved *Modernization Plan of the GMDSS* notes that amendments to SOLAS chapter IV are required to provide for additional mobile satellite services recognized for use in the GMDSS. MSC 98 approved proposed consequential amendments to SOLAS chapter IV to accommodate additional mobile satellite services in the GMDSS for subsequent adoption at MSC 99 in May 2018. MSC 98 also agreed to define "recognized mobile satellite service" for inclusion in SOLAS chapter IV.

2.2 The United States submitted a working paper to the fourth session of the Sub-Committee on Navigation, Communications and Search and Rescue (NCSR 4) on the use in the IAMSAR Manual of a generic term for mobile satellite services. NCSR 4 forwarded the proposal for amendments to the next session of the ICAO/IMO Joint Working Group for further consideration and inclusion in the 2019 edition of the IAMSAR Manual. NCSR 5 in 2018 will finalize proposed amendments to the 2019 edition of its IAMSAR Manual. The 2019 edition will remain in effect until 2022. It is proposed that with a limited number of editorial changes to the IAMSAR Manual, all SAR services as well as SOLAS ships, will become familiar with the new terminology in step with SOLAS amendments.

2.3 Using the MSC-approved *Modernization Plan of the GMDSS* and the draft amendments to SOLAS chapter IV as guides, common terminology is proposed as amendments to the IAMSAR Manual. IMO has recognized that such a change is necessary and is looking at revising other IMO instruments. A valuable example is that of transitioning from the term *global positioning system* to the generic *global navigation satellite system*. At annex is the limited number of proposed amendments to all three volumes of the IAMSAR Manual.

2.4 In many places it is appropriate to retain the term Inmarsat but, there are places where it is appropriate to use a generic term when speaking specifically about GMDSS. A related issue is to avoid specifying use of a recognized mobile satellite service when it may be appropriate to use a mobile satellite service in general.

### **3 ACTION REQUESTED OF THE JWG**

3.1 The JWG is invited to decide on the proposed amendments for the 2019 edition of the IAMSAR Manual Volume I, II, and III as shown in the annex.

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**ANNEX**

**PROPOSED AMENDMENTS TO IAMSAR MANUAL VOLUME I, II AND III**

**IAMSAR MANUAL VOLUME I**

**1 Abbreviations and acronyms**

**Inmarsat** ..... recognized mobile satellite communication service provider for the GMDSS

**2 Glossary**

**Recognized mobile satellite service** communication service provided by a satellite system recognized by the Organization, for use in the GMDSS

**3 Chapter 6**

Amend section 6.5.5 as follows:

- 6.5.5 The following are some measures which SAR authorities can help implement to improve the land portion of distress alerting:
- use dedicated circuits for land connection to RCCs from land facilities such as LESs, DSC coast stations, and MCCs and use switching and software arrangements to preserve message priority;
  - in areas of unreliable landline operations, equip RCCs with **Inmarsat recognized mobile satellite service ground terminal stations** or other means of mobile satellite communications to facilitate emergency communications between RCCs or to enable direct communications with aircraft (which are now more and more being fitted with satellite communication (satcom) equipment linked to LESs);
  - upgrade circuits connecting RCCs with LESs and DSC coast stations using caller identification displays, where practicable, at the RCC for messages from vessels using **Inmarsat a recognized mobile satellite service** or DSC-initiated radiotelephone; and
  - provide appropriate computer software to automatically decode message contents not in plain language prior to delivery of distress alerts to the RCC and automatically retrieve supporting emergency data on distressed aircraft and vessels from available databases as soon as possible for delivery to the RCC.

**4 Appendix N**

Amend section 3.2.1 as follows:

- 3.2.1 Ships seeking medical advice will normally be put in contact with one of the maritime communications stations. Calls will then either be transferred or relayed to the TMAS.

Requests for advice may therefore come to the TMAS:

- .1 directly from a ship via a transferred telephone call;
- .2 via a maritime communications station which has received a request for assistance from a ship by:
  - .1 radiotelephony (RTF);
  - .2 radio telex;
  - .3 fax/phone;
  - .4 ~~Inmarsat~~ recognized mobile satellite service;
  - .5 email; or
  - .6 via the RCC.

## IAMSAR MANUAL VOLUME II

### 1 Abbreviations and acronyms

~~Inmarsat~~ ..... recognized mobile satellite communication service provider for the GMDSS

### 2 Glossary

**Recognized mobile-satellite service** communication service provided by a satellite system recognized by the Organization, for use in the GMDSS

### 3 Chapter 2

Amend the following two paragraphs:

2.5.8 SOLAS ships sailing beyond range of a VHF DSC coast radio station must also have an MF DSC (2,187.5 kHz) transmitter and watch receiver. If sailing beyond range of an MF DSC coast radio station, they must have an ~~Inmarsat~~ a recognized mobile satellite service Ship Earth Station (SES) or an MF/HF DSC transmitter and watch receiver including narrow-band direct printing (NBDP). If operating outside ~~Inmarsat~~ coverage of the recognized mobile satellite service fitted to a ship (e.g. i.e., in the polar areas), they must have the MF/HF DSC capability.

2.34.1 Various forms of communication can be used for vessel tracking. Ship reporting systems can use voice reporting over VHF and HF, DSC and ~~Inmarsat~~ mobile satellite services (recognized or other mobile service). Many ship reporting systems use Inmarsat-C polling or Inmarsat automated position reporting (APR). AIS uses a time-division multiple access (TDMA) scheme to share the VHF frequency, also known as the VHF Data Link (VDL). There are two dedicated frequencies used for AIS: AIS 1 (161.975 MHz) and AIS 2 (162.025 MHz). LRIT can employ any form of communication which meets the required functional specification, but most vessels use Inmarsat equipment to report every six hours to their data centre via a communications provider and application service provider. Vessel monitoring systems (VMS) can use various systems for tracking, including Inmarsat, Iridium and Argos.

**4 Appendix G**

Amend paragraph G.3.2 as follows:

G.3.2 Knowing the positions of merchant ships is often of considerable value in SAR operations. They are frequently the closest available means of search or rescue in a SAR incident on or over the high seas. It is very important that RCCs fully use ~~Inmarsat~~ appropriate voice/data satellite communications services, GMDSS, CRS, VTS and other means of communication described in chapter 2 of this volume ....

**IAMSAR MANUAL VOLUME III**

**1 Abbreviations and acronyms**

~~Inmarsat~~ ..... recognized mobile-satellite communication service provider for the GMDSS

**2 Glossary**

**Recognized mobile-satellite service** communication service provided by a satellite system recognized by the Organization, for use in the GMDSS

**3 Section 2**

Amend bullet point at top of page 2-2 as follows:

- ☐ SOLAS communications equipment is referred to as Global Maritime Distress and Safety System (GMDSS) equipment and includes:
  - ~~Inmarsat~~ recognized mobile satellite service ship earth stations
  - VHF, MF, and HF digital selective calling (DSC) radios
  - maritime safety information receivers like NAVTEX and SafetyNET
  - hand-held VHF equipment
  - emergency position-indicating radio beacons (EPIRBs)
  - search and rescue radar transponders (SARTs)
  - AIS search and rescue transmitters (AIS-SARTs).

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