

Report to GMDSS Task Force

IMO's 10th session of the Subcommittee on Navigation, Communications and Search and Rescue (S/C) met in London 10-19 May 2023. The following is a short summary of the meeting results for the topics of greatest interest to the GMDSS Task Force.

Availability of Equipment to meet revised SOLAS Chapter IV on 1 January 2024

Information provided by IEC and CIRM noted that considerable work has been carried out by the radio manufacturing industry and the standards organizations to develop the new equipment and test standards required to meet revised SOLAS Chapter IV which comes into force on 1 January 2024. However, some of the new performance standards incorporate new features which will not be ready on 1 January 2024. Therefore, the S/C recommended that MSC adopt a circular allowing new shipborne VHF radio installations, shipborne MF and MF/HF radio installations and ship earth stations to meet existing standards until 1 January 2028. MSC subsequently adopted MSC.1/Circ.1676 for this purpose. It also adopted a revision to MSC.1/Circ.1460 (MSC.1/Circ.1460/Rev.4) extending the deadline for modification of existing VHF radios to the new channel scheme until 1 January 2028.

IMO COMSAR Circ.32/Rev.1

This circular is under revision and provides guidance on how to equip ships with GMDSS equipment. Section 6.1.2 was added on dealing with EMI from LED lights. One item of discussion was the IACS proposal (NCSR 10/21/1) to delete sec. 6.1.2 on LEDs and other systems near antennas. IACS points out that the Circ is not mandatory, but that IACS members will treat it as such. Objections include that surveyors don't normally have spectrum analyzers or experience with them, and in any case, no acceptable EMI level is specified. They think in any case this will be expensive proposition for small operators and Administrations and that existing installations could be affected in an expensive way. Nevertheless, there was substantial support for 6.1.2 from Canada, Japan, and northern Europe with the exception of Norway. Norway considers it to be important, but not ready for adoption. France pointed out that it is already a matter which has been addressed by ITU in a report.

Chairman Schwartz acknowledged the difficulties that might be experienced, and that a ship surveyor may not have the required knowledge. U.S. delegation explained how destructive LED interference can be, based on our experience.

In the end, it was decided to move the second paragraph of 6.1.2 to the end of the section, so that it would indicate that the detailed technical analysis should be done if problems are noted. The wording was also revised to clarify that identifying the source of interference with a spectrum analyzer is needed only if the problem is not otherwise resolved. Another change was to recommend keeping a report of the interference analysis on the ship, but not necessarily annexed to the Radio Certificate. (It was noted that there is no legal basis for this.)

The revisions were adopted by MSC 107 and incorporated as COMSAR Circ.32/Rev.2.

Draft revision of resolution A.1001(25) - Criteria for the provision of mobile satellite communication systems in the GMDSS

The Communications Working Group considered a revision of the resolution prepared by a Correspondence Group led by France. Among other considerations, the revision is intended to fully account for various types of GMDSS satellite systems allowed for in the new revision of SOLAS Chapter IV, including global, regional, geostationary, or geosynchronous systems. In view of the limited opportunity for review of the present draft, the S/C reestablished the Correspondence Group tasked with reporting to the October meeting of the IMO/ITU Experts Group in October and NCSR 11 in 2024. It was noted that the coordinator of the Correspondence Group might convene virtual meetings in addition to Email consultation.

NAVDAT Performance Standard

The S/C considered a draft performance standard for the NAVDAT digital navigation data system, submitted by China, France and Ireland in paper NCSR 10/8. NAVDAT is intended as a digital alternative to NAVTEX providing Maritime Safety Information in digital format. NAVDAT should be able to be broadcast by existing NAVTEX transmitters, but with a much greater data capacity. It is expected that NAVDAT and NAVTEX would coexist for a long time during which NAVDAT shipborne receivers would come into general use. The proposed standard was partially reviewed and editorially revised. Further development of the performance standard and final approval by the S/C will be considered at NCSR 11 in 2024 after WRC-23 completes frequency allocations at 500 and 4 226 kHz.

VHF Data exchange System (VDES)

The S/C considered the implications of introducing VDES into SOLAS Chapters IV and V. Being interrelated with AIS, the S/C is considering VDES to be primarily a navigation system under Chapter V. However, it also has a potential place in the GMDSS under SOLAS Chapter IV in disseminating Maritime Safety Information and Search and Rescue related information. Noting the current four-year revision cycle for SOLAS, the S/C would need to complete its work on VDES at NCSR 11 in 2024 in order to have the work adopted by the MSC by 2026 for the 2028 SOLAS revisions. Failing this, the next opportunity for incorporation in SOLAS would be 2032.

Consequently, the S/C established a correspondence group coordinated by Japan to work intersessionally on a technical, regulatory and operational analysis of VDES and to draft amendments to SOLAS Chapter V, and Chapter IV if time permits. This assumes that WRC-23 will provide the remaining necessary frequency allocations.

Although not raised in the discussion, this writer notes that Chapter IV revisions to accommodate the GMDSS VDES functions should not be necessary. The 2024 Chapter IV revisions were written as generalized performance standards as far as possible, with detailed equipment performance standards listed in a footnote to regulation 14. Therefore, an IMO VDES performance standard could be added to the footnote in Chapter IV Regulation 14, without revising SOLAS text. Accordingly, SOLAS text would not be affected, and the four-year revision cycle would not apply. It is recommended that US participants in the Correspondence Group ensure that the group is aware of this.

Bridge Alert Management

A liaison statement from ITU raised the issue of whether or not distress and urgency alerts from other ships should be included in the BAM system. BAM deals with alerts and alarms generated on board. Some delegations opposed expansion of BAM functions for this purpose, but a statement from the

Netherlands clearly explained that BAM alerts and also distress alerts from other ships have to be dealt with by the officer of the watch. For that reason, it makes sense to include distress alerts in the BAM display, so that all urgent matters that the officer of the watch has to deal with are in the same place.

The issue remains unresolved. The S/C agreed that a new work item would be needed to require distress alerts from other ships to be included in the Bridge Alert Management (BAM) system. IEC was invited to study the technical issues, and member states and observers were invited to make proposals for a new output (work item).

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Representing GMDSS Task Force at IMO NCSR 10