Input paper: [[1]](#footnote-1) ENAV20-5.3

Input paper for the following Committee(s): check as appropriate Purpose of paper:

**□** ARM **□** ENG **□** PAP **□** Input

☑ ENAV **□** VTS ☑ Information

Agenda item [[2]](#footnote-2)

Technical Domain / Task Number 2 COMMUNICATIONS

Author(s) / Submitter(s) Capt. Jean-Charles CORNILLOU

Report from rapporteur on GMDSS

# Summary

The present report provides the outcomes on the modernization of GMDSS after 4th  IMO sub-committee on Navigation, Communication, Search and Rescue (NCSR 4) from 6th to 10th March 2017 hold at IMO headquarter.

## Purpose of the document

This document reports the latest update on the modernization of GMDSS discussion at IMO.

## Related documents

NCSR 4/12 report of the correspondence group on the draft of the modernization plan of GMDSS (USA)

NCSR 4/12/1 supplementary views on the modernization plan (Denmark)

NCSR 4/12/2 recognition of Iridium Mobile Satellite Systems as GMDSS service provider (Islamic Republic of Iran)

NCSR 4/12/3 review of the radar SART versus the AIS SART (USA)

NCSR 4/12/4 comments on the draft of the modernization plan (France)

NCSR 4/12/5 comments on the draft of the modernization plan (IHO)

NCSR 4/12/6 liaison statement from Cospas-Sarsat to IMO concerning the distribution of GMDSS digital distress alerts in addition to the current 406 MHz beacon alerts (IMO secretariat)

NCSR 4/12/7 outcome of HTW 4 (IMO secretariat)

# Background

# 2.1 Report of ncsr 4 on gmdss

Report from 12th IMO/ITU EG, 23rd IMO/ICAO JWG and HTW 4 were presented under the scope of GMDSS modernization.

The aim was to complete the draft Modernization Plan (NCSR 4/12) and to endorse it by NCSR 4 with the view to approval by MSC 98 in June 2017 to allow the Maritime Safety Committee to take the need for new outputs into consideration when identifying the products to be included as outputs for the 2018-2019 biennium. This task was performed by a drafting group during NCSR 4.

There was concern on the heavy workload of NCSR and agreement that requests for new outputs by the Sub-Committee should be carefully considered. In this context, it was recognized that this contained follow-up work within the project on the revision and modernization of the GMDSS, which had come to the stage of a revision of the relevant chapters of the SOLAS Convention and related instruments.

***2.1.1 GMDSS Functional requirements***

The Sub-Committee noted that Denmark (NCSR 4/12/1) was of the view that the proposed revision of the functional requirements (SOLAS regulation IV/4) should be a dedicated component of the Modernization Plan, meaning that the discussion on the revision of these functional requirements should be completed at this stage, while France (NCSR 4/12/4) provided several comments on the proposed revision of the functional requirements. Outcome of HTW 4 (NCSR 4/12/7) indicates the discussions have considered the human element and the consistency of the functional requirements for the training of operators on board ships and ashore.

After the discussion, the Sub-Committee NCSR noted that the proposed revision of the functional requirements, as set out in the High-level review of the GMDSS (NCSR 1/28, annex 10), contained the intended set of new requirements. It was agreed that when there were good reasons, and there was substantial support to reconsider certain elements of the proposed set of new requirements, careful reconsideration should be undertaken when developing the amendments to SOLAS chapter IV under the proposed new output.

***2.1.2 NAVDAT & VDES***

There is no planning action for NAVDAT and VDES, but these two systems are still in the GMDSS modernization. We have to be patient and be ready to propose an unplanned output on these two digital systems.

Majority of NCSR members considered that more technical information and test beds are needed for NAVDAT and VDES before considering a new output on IMO performance standards on NAVDAT and VDES.

By the way, VDES was better highlighted in the modernization plan after NCSR 4 drafting group.

# 2.2 GMDSS modernization overarching considerations

**2.2.1** The GMDSS modernization process, including new and revised instruments, should not exclude non-SOLAS vessels from participating in the GMDSS for technical or economic reasons. Such instruments as affect non-SOLAS vessels should be compatible with the GMDSS

**2.2.2** IMO liaison statements to ITU-R must be guided by the principle that non-SOLAS vessels can make use of the GMDSS, and that the integrity of the GMDSS should be preserved, including if necessary, that ITU-R recommendations on GMDSS systems and frequency use are prescriptive

**2.2.3** The GMDSS modernization project needs to continue to support the needs of the e-navigation strategy.

**2.2.4** The Human Element will be embodied both on board and ashore in the process to ensure that both the implementation of GMDSS Modernization and technology are fit for purpose.

**2.2.5** In connection with the deliberations on the GMDSS Modernization process, the results and conclusions of the High Level Review, and the Detailed Review with related documents, will continue to guide the work.

# 2.3 GMDSS modernization AND E-NAVIGATION

Despite the needs of the e-navigation strategy has been referred in the overarching considerations for the modernization of GMDSS, there are still few member States at IMO who are supporting the idea of combining e-navigation with GMDSS modernization. It is also surprising to note that many members States working on e-navigation do not support this idea and some of them, I may say, are against this idea. This situation reveals a lack of internal communication within some member States. In order to help to clarify the relationship between GMDSS modernization and e-navigation, the 9 points of interest common to GMDSS and e-navigation have been identified:

1. A rational use of frequencies for all applications (radio-communications and radio-navigation) in order to clarify the IMO agenda to WRC.
2. Functional requirements covering all user needs including ship-to-shore, shore-to-ship, ship-to-ship and shore-to-shore communications.
3. Use of digital communications.
4. Use of GMDSS oceanic areas to implement MSPs.
5. Enhance shore services with the concept of Common Shored-based Service Architecture (CSSA).
6. Implement an international shore-based service for the management of long distance communications either by satellite services and HF.
7. Implement Software Quality Assurance (SQA) and Cybersecurity.
8. Implement a better usability of equipment.
9. Implement scalability in order GMDSS and e-navigation could be used by all ships.

# References

Report to related documents in paragraph 1.2

# Action requested of the Committee

The ENAV Committee is requested to take note of the above information and take action accordingly, in particular:

1. to consider GMDSS as a framework for the development of e-navigation, and
2. to consider CSSA for shore-to-shore communication in order to support the modernization of GMDSS

1. Input document number, to be assigned by the Committee Secretary [↑](#footnote-ref-1)
2. Leave open if uncertain [↑](#footnote-ref-2)