



**The 10<sup>th</sup> session of Sub-committee on Navigation, Communications and Search and Rescue (hereinafter referred to as NCSR) was convened at IMO Headquarters from 10<sup>th</sup> to 19<sup>th</sup> May 2023. This news flash briefs on the outcomes of NCSR 10 on major technical issues.**

### **1. Development of generic performance standards for shipborne satellite navigation system receiver equipment (Agenda 5)**

MSC 104 (October 2021) agreed to develop generic performance standards, considering the increasing number of performance standards for each global and regional satellite system.

These performance standards will be able to use for the development of standards for new shipborne satellite navigation system receiver equipment and when suggesting amendments of standards of existing GNSS or RNSS systems.

The draft of generic performance standards for shipborne satellite navigation system was developed by intersessional correspondence group. However, due to the time constraints, NCSR 10 was not able to review the draft performance standards and address all concerns at this session. The work will be continued through an intersessional correspondence group again, and it is expected to be finalized at NCSR 11 (June 2024).

### **2. Development of amendments to SOLAS chapters IV and V and performance standards and guidelines to introduce VHF data exchange system (VDES) (Agenda 6)**

The Very High Frequency (VHF) Data Exchange System (VDES) integrates the function of the Automatic Identification System (AIS), Application Specific Message (ASM), Terrestrial component of VHF Data Exchange (VDE-TER) and Satellite component of VHF Data Exchange (VDE-SAT) to enable the exchange of digital data.

MSC 103 (May 2021) agreed to develop amendments to SOLAS chapter IV(radiocommunications) and V(safety of navigation) to introduce the use of VDES and to develop performance standards and guidelines.

NCSR 10 agreed the development of SOLAS amendments to introduce VDES as the alternative to AIS should be prioritized while taking a more careful approach before introducing the new communication tool under the GMDSS to disseminate Maritime Safety Information. And also, it was agreed that a technical, regulatory and operational analysis of VDES should be undertaken including its communication component which includes AIS, ASM, VDE-TER and VDES-VDE-SAT elements.

The discussion and relevant work will be continued through an intersessional correspondence group, and development of amendments to SOLAS and related IMO instruments are expected to be finalized at NCSR 11(June 2024). For the reference, MSC 103 agreed to exempt SOLAS amendments for this agenda from the four-year amendment cycle.

### 3. Development of performance standards for a digital navigational data system (NAVDAT) (Agenda 8)

The Digital Navigational Data System (NAVDAT) is the equipment receives maritime safety information (MSI) and search and rescue (SAR) related information transmitted by MF and HF. Compared with NAVTEX, it offers the prospect of more comprehensive information delivered quicker to ships in a flexible way and a more user-friendly display. (Data rates NAVDAT: 18 kbit/s, NAVTEX: 50 bits/s)

MSC 103 (May 2021) agreed the development of performance standards for NAVDAT. And the draft of the performance standards prepared and submitted to NCSR 10 by an informal group of experts.

NCSR 10 noted that the frequencies referred to in the draft performance standards for NAVDAT had not yet been included in appendix 15 of the Radio Regulations and that they were to be considered by WRC-23. So, NCSR 10 was of the view that the draft performance standards on NAVDAT should be re-considered at NCSR 11 (June 2024) based on the outcome of WRC-23.

In this regard, NCSR 10 instruct the nineteenth meeting of the Joint IMO/ITU Experts Group on Maritime Radiocommunication Matters (EG 19) to further review the draft performance standards, and advise NCSR 11, as appropriate.

### 4. Amendments to ECDIS Performance Standards (resolution MSC.530(106)) to facilitate a standardized digital exchange of ships' route plans (Agenda 9)

NCSR 10 continued the discussions to consider a proposal to develop a standardized and cyber-secure method for route exchange from ship-to-shore and from shore-to-ship to be added as an additional functionality in ECDIS. This does not mean that it will be mandated for the master of the ship to use this additional functionality, but given that masters already today use external input when they do their route planning, a standardized method would reduce workload and make it easier to evaluate and make use of external input.

NCSR 9 (June 2022) agreed that the scope should be limited to amendments necessary to facilitate a standardized digital exchange of ships' route plans and that the work should be based on the ECDIS performance standards to be adopted by MSC 106 (Res.MSC.530(106)).

NCSR 10 finalized the draft amendments to Res.MSC.530(106), and it is expected to be adopted at MSC 108 (May 2024). Also, NCSR 10 noted that the application date of the original resolution(Res.MSC.530(106)) has a phased introduction from 1 January 2026, and agreed that there was no need to amend the application date.

## 5. Revision of SOLAS regulation V/23 and associated instruments to improve the safety of pilot transfer arrangements (Agenda 16)

Despite great efforts having been made by the IMO to improve the safety of pilots by adopting amendments to SOLAS regulation V/23 (resolution MSC.308(88)) and standards for pilot transfers (resolution A.1045(27)), it is regrettable to see accidents involving the tragic loss of pilots continue to happen worldwide and statistics by IMPA over the past years suggest an unacceptable high rate of non-compliant pilot transfer arrangements installed on all ship types.

In this regard, MSC 106 (November 2022) agreed to develop amendments to SOLAS regulation V/23 (pilot transfer arrangements) and associated instruments to improve the safety of pilot transfer arrangements.

After an extensive discussion, NCSR 10 agreed that a separate resolution containing performance standards in a single instrument being directly referenced in the main text of revised regulation 23, be adopted. And NCSR 10 agreed that resolution A.1045(27) setting out recommendatory measures should be replaced by a new mandatory instrument and should be revoked by the Assembly, together with resolution A.1108(29). Also, it is agreed that the footnote to regulation V/23 which references the ISO standard will be considered in the revision to the regulation.

The relevant discussion and work will be continued through an intersessional correspondence group, and it is expected to be finalized at NCSR 11 (June 2024). If the amendments approved and adopted by 1 July 2026, that are expected to enter into force 1 January 2028 and will be applicable to new ships from that date. Application to existing ships is yet to be decided.

## 6. Any other business (Agenda 21)

### 6.1 Amendment to COMSAR.1/Circ.32/Rev.1

As part of the longstanding project for the modernization of the GMDSS, NCSR 9 (June 2022) approved revisions to COMSAR.1/Circ.32 *Harmonization of GMDSS Requirement for Radio installations on board SOLAS Ships* which was endorsed by MSC 106 (November 2022) as COMSAR.1/Circ.32/Rev.1. NCSR 10 considered several gaps and inconsistencies with SOLAS chapter IV that have been identified in the text and agreed to amendments as follows:

- Addition of requirements on duplication of equipment for sea areas A1 or A2 (For sea area A1 : a VHF radio installation, For sea area A2 : a VHF radio installation and a MF radio installation).
- Duplication of radio watch receiver for VHF radio installation is not required, in line with previous GMDSS requirements.
- An RMSS-SES with lesser coverage installed on board should determine the coverage of sea area A3 as a primary system for a ship.

- An MF/HF radio installation as primary or duplicated means may substitute an MF radio installation that should be installed as primary or duplicated means.
- Section 6.1.2 of the circular (i.e. "Interference from LED lighting and other unintentional emitters"), is identified a solution by re-organizing the section to clarify the process recommended for identifying the source of electromagnetic interference, such as LED lighting systems, and by removing the reference to safety radio certificate.

NCSR 10 approved the revised circular which will be disseminated as COMSAR.1/Circ.32/Rev.2 with an effective date of 1 January 2024. MSC 107 (May 2023) will be endorsed the amendments.

## 6.2 Delays affecting the availability of new GMDSS radio equipment from 1 January 2024

NCSR 10 considered the information provided in submitted document NCSR 10/21/5 concerning the expected delays in the availability of radio equipment in compliance with the revised performance standards set out in resolutions MSC.511(105) and MSC.512(105), which are performance standards for VHF, MF and MF/HF radio installations having effectiveness when the equipment installed on or after 1 January 2024.

NCSR 10 noted the following views expressed:

- IEC was expected to complete development of the relevant testing standards by 1 January 2026, at the earliest.
- An additional two years would be required for mass production of the relevant equipment and to bring them into the market.
- Performance standards for Inmarsat-C ship earth stations capable of transmitting and receiving direct-printing communications (resolution MSC.513(105)) should be incorporated into the proposed draft MSC circular.
- Shore-based infrastructure, which may have already been modernized based on the latest ITU channeling arrangements, may be incompatible with the existing radiocommunication equipment onboard vessels.

After consideration, NCSR 10 updated the draft MSC circular contained in the annex to document NCSR 10/21/5 with the delay of application date of such performance standards to 1 January 2028. It will be advised to MSC 107 (May 2023) as an urgent matter.

## 6.3 Amendments to MSC.1/Circ.1460/Rev.3

NCSR 10 noted that MSC 107 (May 2023) was expected to consider a proposal (MSC 107/15/1) for the revision of *Guidance on the validity of radiocommunications equipment installed and used on ships* (MSC.1/Circ.1460/Rev.3), in order to extend the deadline for updating VHF radiocommunication equipment from 1 January 2024 to a later date, due to unavailability of equipment in the market meeting the latest ITU frequency and channeling requirements.

Having acknowledged the connection between this matter and the issue concerning availability of VHF equipment compliant with resolution MSC.511(105), NCSR 10 supported the proposal in general and was of the view that the new deadline should be aligned with the date specified in the draft MSC circular regarding “Delays affecting the availability of new GMDSS” for consistency. These views will be delivered to MSC 107 (May 2023) as an urgent matter.

Should you have inquiries, please contact P.I.C. Thank you.

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