**IMO Sub-Committee on Navigation, Communications, Search & Rescue**

The 8th session of the IMO’s Sub-Committee on Navigation, Communications and Search and Rescue (NCSR) was held remotely from 19 to 23 April 2021.

The session:

* Finalized draft amendments to SOLAS Chapters III and IV and the related IMO instruments to modernize the requirements for the global maritime distress and safety system.
* Agreed to develop mandatory navigation and voyage planning requirements for non-SOLAS ships operating in polar waters.
* Agreed to recommend recognition of the Japanese Quasi-Zenith Satellite System as a component of the worldwide radio navigation system.
* Agreed to develop generic performance standards for shipborne receivers for a global navigation satellite system.

***Modernization of the Global Maritime Distress and Safety System (GMDSS)***

The GMDSS, adopted in 1988, has been subject to review and modernization with the aim to adapt to modern communication systems and remove carriage requirements for obsolete systems.

NCSR 8 finalized draft amendments to SOLAS Chapters III and IV to modernize the GMDSS requirements, as well as consequential draft amendments to the High-Speed Craft (HSC), Special Purpose Ships (SPS) and Mobile Offshore Drilling Units (MODU) Codes.

The provisions for communication equipment currently in SOLAS Chapter III on life-saving appliances and arrangements have been moved to Chapter IV on radiocommunications.

The modernization implies inter alia:

More generic requirements, independent of specific service providers or technologies, for example:

* The reference to the sole service provider Inmarsat in the definition of sea area A3 have been replaced by a reference to a recognized mobile satellite service.
* Explicit references to providers of Maritime Safety Information (MSI), such as NAVTEX, EGC or HF-MSI, have been deleted and replaced by a general requirement to receive “MSI and search and rescue-related information throughout the entire voyage”.
* Specification of the type of EPIRB has been removed.

Amended equipment requirements for sea areas A1 to A4:

* The requirements in the draft SOLAS IV, regulation 8 applies to all ships operating in sea area A1, not only to those exclusively in A1 as currently required.
* The draft SOLAS IV, regulations 9 to 11 refers to the explicit sea areas only and do not include requirements to the “lower” sea areas, meaning that regulation 9 applies only to sea area A2, regulation 10 to sea area A3 and regulation 11 to sea area A4.
* NBDP radiotelex terminals are no longer required to be carried for ships operating in sea areas A3 and A4.

Maintenance criteria to ensure GMDSS availability will be at the discretion of the flag Administration:

* The footnote in SOLAS IV, regulation 15.7 refers to IMO resolution A.702(17), which is recommended to be revoked.
* The maintenance criteria are planned to be included in the “Guidelines for the harmonization of GMDSS requirements for radio installations onboard SOLAS ships” (COMSAR/Circ. 32), which is planned to be updated at a later session.
* The draft SOLAS amendments and the accompanying draft performance standards and guidelines will be submitted to MSC 104 (October 2021) for approval. The amended requirements are expected to enter into force on 1 January 2024, subject to subsequent adoption by MSC 105.

***Generic performance standards for GNSS***

NCSR 8 agreed to continue the work on generic performance standards for shipborne satellite navigation system receiver equipment in a correspondence group until NCSR 9 in 2022.

Such performance standards could combine the performance standards for the different GNSS receiver equipment into one document.

***The Quasi-Zenith Satellite System (QZSS)***

All ships shall carry a receiver for a global navigation satellite system (GNSS) or a terrestrial radio navigation system.

This requirement relies on recognition of systems provided and operated by governments or organizations, for example GPS (USA), Galileo (EU), GLONASS (Russia), BeiDou (China) and IRNSS (India).

NCSR 8 prepared a draft safety of navigation (SN) circular for recognizing the Japanese QZSS as a component of the Word Wide Radio Navigation System (WWRNS), which will be forwarded to MSC 104 (October 2021) for approval.

Performance standards for receivers for the QZSS were already approved by MSC 102.

***Non-SOLAS ships operating in polar waters***

Fishing vessels and yacht incidents in polar waters pose a risk to human life, to the polar environment and to search and rescue operations.

The IMO has initiated the 2nd phase of the Polar Code to consider safety measures for non-SOLAS ships operating in polar waters.

NCSR 8 agreed to develop amendments to the application provisions of SOLAS Chapter XIV and to the Polar Code, so that mandatory navigation and voyage planning requirements would also be applicable to the following non-SOLAS ships operating in the Arctic and the Antarctic:

* Fishing vessels of 24 m and above;
* Pleasure yachts of 300 GT and above not engaged in trade;
* Cargo ships of 300 GT and above, but below 500 GT.

The work will be carried out in a correspondence group until NCSR 9 in 2022.

***Developments in GMDSS satellite services***

The information communicated by member States to the IMO on the implementation of the Iridium SafetyCast service is available in IMO’s online database GISIS.

***Guidelines on places of refuge for ships***

The “Guidelines on Places of Refuge for Ships in Need of Assistance” (resolution A.949(23)) intends to assist flag States, masters, companies and salvors in responding effectively to marine incidents.

The guidelines are subject to review and updating to reflect the organizational, operational and technical developments in the maritime industry since the guidelines were first adopted in 2004.

NCSR 8 agreed to continue the consideration of a revision of the guidelines in a correspondence group until NCSR 9 in 2022.

***Performance standards for Voyage Data Recorders (VDR)***

NCSR 8 approved consequential amendments to the performance standards for simplified VDR (resolution MSC.163(78)) and VDR (resolution MSC.333(90)), following the updated guidelines on the annual testing of VDR and S-VDR (MSC.1/Circ.1222).

The performance standards will be submitted to MSC 104 in October 2022 for adoption.

***IEC standards***

NCSR 8 noted progress on the development of the following standards by the International Electrotechnical Commission (IEC) related to maritime navigation and communication equipment and systems:

* IEC 63154 on maritime cybersecurity;
* IEC 63173-1 on maritime data structure;
* IEC 63173-2 on maritime data structure;
* IEC PAS 61174-1 on maritime data structure;
* IEC PAS 63343 on automatic identification systems;
* IEC 63269 on automatic identification systems;
* IEC 61108-6 on IRNSS.

***NCSR 8 approved the following circulars:***

* Draft COMSAR circular on “Guidance on minimum communication needs of maritime rescue coordination centres (MRCCs)” (COMSAR.1/Circ.37/Rev.1);
* Draft COMSAR circular on “Distress priority communications for RCCs from shore-to-ship via Global Maritime Distress and Safety System (GMDSS) satellite service providers” (COMSAR.1/Circ.50/Rev.4).

The circulars will be submitted to MSC for endorsement.