



IMO SDC 9 Meeting Summary

February 7, 2023

The 9th session of the IMO's Sub-Committee on Ship Design and Construction (SDC 9) was held 23-27 January at the IMO Headquarters in London, supplemented by hybrid (online) participation.

Among others, Liberia participated in the following groups in addition to the plenary:

Group	Subject
WG 1	Review of the Guidelines for the Reduction of Underwater Noise (MEPC.1/Circ.833)
WG 2	Development of functional requirements for SOLAS chapter II-1
WG 3	Revision of the Interim explanatory notes for the assessment of passenger ship systems' capabilities after a fire or flooding casualty
EG	Application of emergency towing equipment requirements for tankers to other types of ships

Transfer of Industrial Personnel

Following the development of the draft SOLAS chapter XV and the associated draft International Code of Safety for Ships Carrying Industrial Personnel (IP Code) at SDC 8, MSC 105 agreed to launch the second phase of work related to the IP Code to address outstanding matters.

As the IP Code started its work based on SPS Code, "Transfer of the personal" (disembarkation at the offshore facility without mooring the ship to a fixed platform) was developed at a late stage and overlooked that the same issue exists for passenger ships, if used for transferring industrial personnel.

SDC 9 noted information on the industry guidance and the use of passenger ships for the transfer. SDC 9 invited members to submit a proposal for further development.

Underwater noise

SDC 9 agreed on a revision to MEPC.1/Circ.833 *Guidelines for the reduction of underwater noise from commercial shipping to address adverse impacts on marine life* for approval by the 80th session of the Marine Environment Protection Committee (MEPC 80) scheduled for July 2023. The revised Guidelines provide new information on operational and technical measures that can reduce the level of noise produced by ships and thus reduce the ship's impact on marine wildlife. The draft Guidelines also

include two sample Underwater Radiated Noise Management Plans that can be considered by shipowners should they wish to improve the noise profile of their ships.

A correspondence group was established to consider ways to implement and encourage the uptake of the Guidelines. This includes a planned 3-year trial period for the measures.

Amendments to the ESP Code

A Member State proposed modification to the procedures for approval and certification of a firm engaged in thickness measurement of hull structures in the annexes of the International Code on the Enhanced Programme of Inspections during Surveys of Bulk Carriers and Oil Tankers (ESP Code).

SDC 9 agreed on the proposal, which will allow the flag Administration to be directly involved in approval and certification of a firm engaged in thickness measurement if they wish to do so.

The proposal will be approved by the 107th session of the Maritime Safety Committee (MSC 107) scheduled for June 2023 for subsequent adoption.

Guidelines on alternative design and arrangements

The guidelines will be applicable to safety systems, machinery and system design or arrangements, and

unattended machinery space deviating from the current requirements of SOLAS for which the approval will be considered under the alternative design procedure as set up by SOLAS Chapter II-1 regulation II-1/55 (Alternative design and arrangements).

At SDC 9, the goals for SOLAS chapter II-1, part C were agreed, in principle. It was also discussed to have a gender-neutral language for the goal of SOLAS chapter II-1, part E as some delegations were of the view that “manned” is not gender neutral. This has been requested to the Correspondence Group (CG) to review.

Due to time limitations, the work to develop the Functional requirements was not completed, hence it was requested of the CG to review and further develop the Functional Requirements and Expected Performance based on the failure modes and the hazards.

Asbestos ban on MODU

While using asbestos is prohibited under the SOLAS Convention, this has not been done for Mobile Offshore Drilling Units (MODUs).

SDC 9 developed the following for approval by the MSC 107 for implementation on 1 January 2024:

- Draft amendments to the 1979, 1989 and 2009 MODU Codes to prohibit materials which contain asbestos;
- Draft unified interpretation on the terminology “new installation of materials which contain asbestos should be prohibited” for the above draft amendments to the MODU Codes; and
- Draft new guidelines for maintenance and monitoring of materials containing asbestos on board MODUs.

Emergency towing for non-tankers

MSC 103 considered a new work proposal for extending the requirements for emergency towing arrangements in SOLAS regulation II-1/3-4, applicable to tankers of not less than 20,000 tonnes deadweight, to all types of large new ships.

SDC 8 prepared draft amendments to the SOLAS Convention for approval by MSC 107 and subsequent adoption by MSC 108. Key elements were:

- Applies to ships other than tankers of 20,000 GT or above, constructed on or after 1 January 2028;
- Technical specifications for the towing equipment will be different from those for tankers. The SDC will work on the technical guidelines for non-tankers for

the next two sessions;

- Technical descriptions, such as “both end (bow and Aft)” and “pre-rigged”, were removed from SOLAS requirements for non-tankers and left to the guidelines.

Unified interpretations

SDC 9 agreed on the following interpretations for approval by MSC 107.

Towing and Mooring arrangement

There was a proposal to clarify the necessary documentation to support the Administration or its Recognized Organization (RO) in verifying compliance with SOLAS regulation II-1/3-8 (Towing and mooring equipment).

SDC 9 agreed on the interpretation, which gives details of documents to be submitted for the approval of the equipment and arrangements.

Pressure testing after a fire test

SDC 9 agreed on the following interpretations:

- Any penetration used for the passage of heat sensitive piping systems through a watertight bulkhead or deck on a passenger ship under SOLAS regulation II-1/13.2.3 should be tested with the heat-sensitive piping and should be type approved for watertight integrity as per paragraphs 4 and 5 of the explanatory notes to regulation II-1/13.2.3 contained in the annex of resolutions MSC.429(98)/Rev.1 and Rev.2, as applicable, after the fire test; and
- SOLAS regulation II-1/13.2.3 should be applicable to heat-sensitive piping systems and should not be applied to cable penetrations in watertight bulkheads and decks.

SOLAS Chapter II-1 amendments entering into force on 1 January 2024

While MSC.474(102) and MSC 482 (103) use three criteria (contract, keel lay and delivery) for the application criteria, historically, “ship constructed” refers to keel lay only.

SDC 9 agreed on the interpretations (explanation) about the meaning of “ship constructed” in these resolutions, which align with the intention of the SOLAS amendments.

Down flooding point

SDC 9 agreed on the proposed revision of the Unified Interpretations of the 2008 Intact Stability Code (MSC.1/Circ.1537/Rev.1) on down-flooding point to be realigned in its scope of application to all criteria addressed by the 2008 Intact Stability Code. The revision provides additional interpretation that ventilations have to remain

open to supply air to the engine-room, emergency generator room or closed ro-ro and vehicle spaces for the effective operation of the ship.

Passenger ship Safety (Safe Return to Port)

“Safe Return to Port (SRtP)” requirements were introduced by the amendments to the SOLAS Convention (resolution MSC.216(82), which revised SOLAS regulations II-1/8-1, II-2/21 and II-2/22 and entered into force on 1 July 2010.

There are several MSC Circulars providing guidance for the implementation of the requirements.

MSC 103 had agreed to include in its post-biennial agenda an output on “Revision of the Interim explanatory notes for the assessment of passenger ship systems' capabilities after a fire or flooding casualty (MSC.1/Circ.1369) and related circulars”.

SDC 9 identified the relevant circulars that require updating, taking into account the experience gained and the guidance made available by the industry bodies.

Key discussions at SDC 9 were:

- Clarification of the term “remain operational”;
- Whether passengers are allowed to stay onboard when an exemption is granted;
- Harmonization of operational manuals;
- Avoidance of duplication with SMS documents under the ISM Code;
- Consideration of the use of new (alternative fuel) and their impact on the SRtP concept.

The matter will be further discussed by the CG.

Water level detectors

SDC 9 agree on the proposed change to *the Revised performance standards for water level detectors on ships subject to SOLAS regulations II-1/25, II-1/25-1 and XII/12* (resolution MSC.188(79)/Rev.1 for adoption by MSC 107 as follows:

- the installation heights of sensors at pre-alarm and main-alarm levels, as required by SOLAS regulations II-1/25.3, II-1/25-1.2 and XII/12.1, should be measured from the upper surface of the inner bottom; and
- the installation heights of bilge level sensors (an alternative permitted by SOLAS regulation II-1/25-1.3) should be measured from the bottom of the bilge well if the bottom of the bilge well is below the upper surface of the inner bottom.

Any other business

Safety of double-skin bulk carriers

At MSC 102 there was a proposal to amend SOLAS Chapter XII and unified interpretation to ensure the safety of double hull bulk carriers following the casualty investigation of the converted Ore Carrier (from VLCC). MSC 102 instructed the SDC Sub-Committee to review the justification under any other business.

At SDC 9, there was a submission paper stating that the submitter could not find technical justification for the proposed amendments and point out the implication on the performance standards for the water level detectors.

SDC 9 agreed that there was no justification for the new work and recommended MSC accordingly.

FRP construction

The Interim guidelines for use of Fibre Reinforced Plastic (FRP) elements within ship structures: Fire safety issues (MSC.1/Circ.1574), which was approved by MSC 98 in 2017, stated that the Interim Guidelines should be reviewed four years after their approval. MSC 105 agreed to keep this output as a “post-biennium” output for SDC.

An industry NGO provided information on larger FRP structures provided by a research project. The project deliverables also contain recommendations regarding the review of and potential amendments to MSC.1/Circ.1574 with a view to overcoming the current limitation to smaller FRP elements. It was recommended to start the review process now in order to expand the regulatory basis for the utilization of lightweight structures as soon as possible, to significantly increase the energy efficiency and climate-friendliness of shipping.

While SDC 9 supported the proposal in general, many delegations expressed concerns regarding the potential challenges in using FRP, in particular on its recycling or its combustibility with respect to fire safety.

After consideration, SDC 9 agreed to invite MSC 107 to lift the output "*Guidelines for use of Fibre Reinforced Plastics (FRP) within ship structures*" from its post-biennial agenda to the 2024-2025 biennial agenda, as well as to place it on the provisional agenda of SDC 10.

FURTHER INFORMATION

For further information please contact: imo@liscr.com

SDC 9 – Summary of Major Decisions

PROVISIONAL LIST OF DRAFT RESOLUTIONS AND CIRCULARS

For approval/adoption by MSC 107 (June 2023)

- Draft amendments to *the International Code on the Enhanced Programme of Inspections during Surveys of Bulk Carriers and Oil Tankers* (ESP Code);
- Draft amendments to the 1979, 1989 and 2009 MODU Codes;
- Draft amendments to SOLAS regulation II-1/3-4 on *Emergency Towing Arrangements ships other than tankers*;
- Draft MSC Circular on unified interpretation on mooring arrangement and equipment (SOLAS regulation II-1/3-8);
- Draft MSC Circular on unified interpretation on SOLAS regulation II-1/13;
- Draft MSC Circular on new unified interpretation of SOLAS regulation II-1/1.1.3;
- Draft MSC Circular on the revised unified interpretations of the 2008 IS Code (MSC.1/Circ.1537/Rev.1); and
- Further revision to *the Revised performance standards for water level detectors on ships subject to SOLAS regulations II-1/25, II-1/25-1 and XII/12*.

For approval by MEPC 80 (July 2023)

- Draft revision to MEPC.1/Circ.833 *Guidelines for the reduction of underwater noise from commercial shipping to address adverse impacts on marine life*