



IMO SDC 10 Meeting Summary February 7, 2024

The 10th session of the IMO's Sub-Committee on Ship Design and Construction (SDC 10) was held 22-26 January in London, supplemented by hybrid (online) participation.

LISCR participated in the following groups, in addition to the plenary.

Group	Subject
Working Group 1	Working Group on Development of Functional Requirements for SOLAS Chapter II-1
Working Group 2	Working Group on the Revision of the Interim Explanatory Notes for the Assessment of Passenger Ship Systems' Capabilities After a Fire or Flooding Casualty (MSC.1/Circ.1369)
Working Group 3	Working Group on Development of Functional Requirements for SOLAS Chapter II-1
Expert Group	Experts' Group on the Development of Guidelines for Emergency Towing Arrangements for Ships Other Than Tankers
Drafting Group	Drafting Group on Amendments to the Guidelines for Construction, Installation, Maintenance and Inspection/Survey of Means of Embarkation and Disembarkation (MSC.1/Circ.1331)

Opening

At the opening of the meeting, several delegations expressed concerns over the safety of ships and their crew following attacks by Houthi rebels on commercial ships in the Red Sea and the Gulf of Aden and commended the Secretary-General's effort in bringing this to the attention of the United Nations Security Council at its special session on 3 January 2024.

Emergency towing arrangements (ETAs) for ships other than tankers

Currently, only tankers are required to be equipped with ETAs. SDC 9 in 2023 had prepared draft amendments to SOLAS that require ETA for non-tankers, which will be adopted at the 108th session of the Maritime Safety Committee (MSC 108) for entry into force on 1 January 2028.

MSC 107 agreed to an expansion of the output to develop a completely new guidelines for emergency towing arrangements for ships other than tankers, based on, or as a revision of, resolution MSC.35(63).

SDC 10 had an initial discussion for further development at SDC 11 scheduled for January 2025. Key discussions at SDC 10 were:

- **Strength:** to determine strength of ETAs, more data was needed;
- **Rapid deployment** (time threshold): it was agreed not to introduce the definition of "rapid deployment", however, agreed to retain the one-hour deployment threshold in harbour conditions;
- **Prototype testing:** it will be included in a similar manner done for the ETAs for tankers; and
- **Pre-rigging:** the requirements were considered optional.

SDC 11 scheduled for January 2025 will address these issues. No intersessional correspondence group was established.

Underwater noise

In 2014, MEPC 66 approved *the Guidelines for the reduction of underwater noise from commercial shipping to address adverse impacts on marine life* (MEPC.1/Circ.833) (*The Guidelines*). *The Guidelines* were intended to provide general advice on the reduction of underwater radiated noise (URN) to designers, shipbuilders and ship operators and include information on how to reduce a ship's underwater noise through design considerations and operational measures.

Following the approval of the further revision to *The Guidelines* approved and circulated as MEPC.1/Circ.906,

SDC 10 addressed the outstanding work.

Action plan

SDC 10 developed the draft action plan for approval by MEPC 81. Key points are:

- The action plan addresses barriers to the uptake of *the Guidelines* in order to further prevent and reduce URN from ships;
- The plan sets up a 3-year experience building phase (EBP) of implementing MEPC.1/Circ.906, starting from July 2023, with the possibility of extending it by two more years;
- It includes short (during EPB), mid (3-6 years) and long-term (beyond 6 years) actions;
- The Action Plan to further prevent and reduce URN from ships has been developed to guide the IMO's continued work on this issue and provides a mechanism to identify specific outcomes and indicative actions to achieve these outcomes in a way that is meaningful and measurable;
- As a part of the action plan, SDC 10 agreed to develop a roadmap after the Experience Building Phase for further reduction;
- Other elements included in the action plan are:
 - data gathering;
 - enhancement of public awareness;
 - standardization of noise measurement;
 - develop Underwater Radiated Noise Targets; and
 - encouraging study.

Guidance document for EBP

SDC 10 identified key areas for the EBP. They are:

- URN Management Planning, including URN baselining, management plan development and target setting;
- Design and technical noise reduction approaches;
- Maintenance and operational approaches;
- Energy efficiency and URN reduction;
- Evaluation and monitoring;
- Incentivization; and
- Training and raising awareness.

The guidance document states that any necessary changes to the revised guidelines (*MEPC.1/Circ.906*) may only occur after the completion of the EBP and after lessons learned and analysis of data have been considered by MEPC.

Further revision of MEPC.1/Circ.906

SDC 10 developed a further revision to MEPC.1/Circ.906 to include the reference chart that supports the preparation and implementation of URN management

planning for the various parties. The reference chart was developed to support the implementation of the existing guidelines and does not contain any new provisions or technical recommendations.

Amendments to the ESP Code

SDC 10 recalled that SDC 7 (February 2020) reviewed the proposal of amending the 2011 ESP Code in order to allow the use of the remote inspection techniques (RITs). The RIT is not a remote survey because the surveyor comes on board but uses special techniques/technologies to inspect inaccessible locations of the ship. While the proposal was generally supported, SDC 7 agreed that the matter required a broader consideration by the various IMO bodies, which might consider taking a holistic approach to regulating the RITs, including those that might be considered under other instruments. Consequently, SDC 7 invited interested Member States and international organizations to submit proposals to the Sub-Committee for consideration.

At SDC 10, there were further proposals of amending the 2011 ESP Code, with a view to allowing the use of the RIT for close-up surveys of existing ships.

Liberia, together with other co-sponsoring Member States, submitted a document addressing several supplementary issues concerning the draft amendments to the 2011 ESP Code. The document suggests further consideration of some technical details, including:

- Limitations/conditions for using the technology;
- Storage and record-keeping of the video images;
- Clarification on the relationship with SOLAS regulation II-1/3-6 on "access to and within spaces in, and forward of, the cargo area of oil tankers and bulk carriers;
- If the RIT enables thickness measurement;
- Implication to ships not subject to the ESP Code; and
- Need for the IMO's guidelines on technical details.

Following the discussion, SDC 10 established the correspondence group (CG) for further consideration.

Guidelines on alternative design and arrangements

The Sub-Committee on Ship Systems and Equipment (SSE Sub-Committee), then the SDC Sub-Committee, was invited to consider safety objectives and functional requirements for SOLAS chapter II-1.

SDC 10 prepared draft amendments to *Revised guidelines on alternative design and arrangements for SOLAS chapters II-1 and III* (MSC.1/Circ.1212/Rev.1) for approval by MSC

108.

Key points are:

- The revised guidelines clarify the goals, functional requirements and expected performances for SOLAS chapter II-1, parts C (Machinery installation), D (Electrical installations) and E (Additional requirements for periodically unattended machinery spaces);
- Avoid using prescriptive requirements in the current regulations, e.g., not to use "main and back up or auxiliary machinery", considering new design concepts.

Steering requirements for traditional and non-traditional systems

The current SOLAS regulations cover only "traditional" steering systems (propeller and rudder), and other systems, such as azimuth thrusters, podded propulsors, waterjets and cycloidal propellers, are dealt with by circulars.

SDC 10 reviewed proposals that cover both traditional and non-traditional propulsion and steering systems and testing standards.

Opinions at SDC 10 were divided as to whether to include traditional propulsion and steering systems in the scope of the work. After intense discussion, SDC 10 decided to address both traditional and non-traditional systems and addressed the following work areas:

- **Amendments to the SOLAS Convention:** Regulations II-1/3 and 28 to 30, and V/25 and 26 were reviewed but there were still differences in the opinions regarding the definition of "ship's directional control", angle limit, consideration of static component redundancy, manoeuvrability and testing, etc. Application provision was also not agreed;
- **Non-mandatory (recommendatory) instruments:** SDC 10 identified five instruments that support the above-mentioned SOLAS regulations to be reviewed;

SDC 10 set up the CG to continue the work.

Accommodation ladders and gangway

MSC 107 agreed to instruct the SDC Sub-Committee to review *the Guidelines for construction, installation, maintenance and inspection/survey of means of embarkation and disembarkation* (MSC.1/Circ.1331) concerning the rigging of safety netting on

accommodation ladders and gangways.

Key discussions at SCC 10 were:

- **Update reference to the relevant ISO Standards:** This matter was not agreed upon at SDC 10. There will be further discussion at SCC 11;
- **Needs for the rigging of a safety net around the embarkation ladder:** It was agreed that the side net may replace the safety net if that meets certain conditions (1,000 mm high of the handrail, etc.);
- **lifting appliances associated with the accommodation ladder:** An explicit exclusion clause was not inserted as it is clearly stated in the SOLAS Convention.
- **The application date of the revised guidelines:** decided to be 1 July 2026 regardless of the installation on existing or new ships.

SDC 11 will continue work on these guidelines.

Unified interpretations

Noise level and calibration

SDC 10 agreed on the following interpretation of the *Code on noise levels on board ships* (resolution MSC.337(91)), with a view to applying the interpretation at their next calibration due date after the approval of the interpretation by MSC, but not later than two years after the date of approval of this unified interpretation:

The calibration should be carried out in accordance with IEC 61672-3 for sound level meters and IEC 60942 Appendix B for field calibrators. The edition of the calibration standard should correspond with the edition of the manufacturing standard for the instruments. The measurement company should provide documentation about the standard which has been met if not clearly marked on the sound level meter or field calibrator. The documentation or marking should include a clear statement of the results of the periodic tests and which performance class the instrument meets after calibration.

Water level detector

A submission identified the need for the following changes to MSC.1/Circ.1572/Rev.1 on *Unified Interpretation of the Performance Standards for Water Level Detectors on Bulk Carriers and Single Hold Cargo Ships other than Bulk Carriers* (resolution MSC.188(79)):

- The headings of the annex to MSC.1/Circ.1572/Rev.1 should be amended to refer to all ships covered by the relevant SOLAS regulations;
- References to resolution MSC.188(79) in

interpretation 9.6 of the annex to MSC.1/Circ.1572/Rev.1 should be updated; and

- interpretation 9.2 of the annex to MSC.1/Circ.1572/Rev.1 should be amended to align with resolution MSC.188(79)/Rev.2 regarding requirements for safe type equipment.

SDC 10 agreed with the proposal for approval by MSC 108.

Industrial Personnel Safety Certificate

SDC 10 agreed with the proposed harmonization scheme between the SOLAS certificate and the International Code of Safety for Ships Carrying Industrial Personnel (IP Code) certificates for approval by MSC 108.

Means of escape

SDC 10, having examined the matter in detail, agreed with the interpretation, which accepts steering gear space as a "safe position".

Permanent means of access

SDC 10 agreed on the interpretation. Key points are:

- Excluding the interpretation of the wording "open deck"; and
- The annual inspections refer to inspections by crew or competent inspector, but not the regular survey.

The Interpretation was submitted to MSC 108 for approval and dissemination as MSC.1/Circ.1572/Rev.2.

Handrails

The SDC Sub-Committee was tasked by MSC 107 to review regulation 25 of the Load Line Convention on-guard rails (hand rails). However, SDC 10 found further work was needed on the use of chains and the sag of chains.

Use of FRP

SDC 10 confirmed that the current work scope was limited to the review of *the Interim Guidelines for use of fibre reinforced plastic (FRP) elements within ship structures: fire safety* (MSC.1/Circ.1574), and agreed to work on fire safety elements and recyclability of the FRP materials by the CG. The group will also address the need for amending the SOLAS Convention and the FTP Code.

Passenger ship Safety (Safe Return to Port)

The Safe Return to Port (SRtP) concept was introduced in the SOLAS Convention in 2010 with the intention of increasing the robustness and fault tolerance of passenger ships. Even in the event of a flooding or fire casualty, the ship shall be able to return to port with its own machinery and provide a safe area for all the persons on board. The SRtP regulations apply to passenger ships with a length of 120 metres or more or with three or more main vertical zones.

The key progress at SDC 10 was on the structure of *the revised Explanatory Notes for the assessment of passenger ship systems' capabilities after a fire or flooding casualty* (EN) (MSC.1/Circ.1369).

There was an initial discussion on the use of alternative fuels and new technologies. However, it was decided not to include it in the terms of reference of the correspondence group.

SDC 10 set up the CG to:

- Further develop a revision to MSC.1/Circ.1369;
- Review associated interpretations; and
- Consider the impact on other existing MSC Circulars.

FURTHER INFORMATION

For further information please contact: imo@liscr.com

SDC 10 – Summary of Major Decisions

PROVISIONAL LIST OF DRAFT RESOLUTIONS AND CIRCULARS

- Draft amendments to MEPC.1/Circ.906 on *the Guidelines for the Reduction of Underwater Radiated Noise from Shipping to Address Adverse Impacts on Marine Life*
- Draft action plan (on the IMO's action plan on Underwater Radiated Noise)
- Draft Guidance Document on the Experience-Building Phase (EBP) for *the Revised Guidelines for the Reduction of Underwater Radiated Noise from Shipping to Address Adverse Impacts on Marine Life* (Mepc.1/Circ.906)
- Draft amendments to MSC.1/Circ.1212/Rev.1 on *the Revised guidelines on alternative design and arrangements for SOLAS chapters II-1 and III*
- Draft amendments to MSC.1/Circ.1509 on *Unified interpretations of the Code on noise levels on board ships* (resolution MSC.337(91))
- Draft amendments to MSC.1/Circ.1572/Rev.1 on *Unified interpretation of the Performance standards for water level detectors on bulk carriers and single hold cargo ships other than bulk carriers* (resolution MSC.188(79))
- Draft *Unified interpretation on the harmonization of the Industrial Personnel Safety Certificate with SOLAS safety certificates*
- Draft amendments to MSC.1/Circ.1511 on *Unified interpretations of SOLAS regulations II-2/9 and II-2/13* (Steering gear spaces to be regarded as "safe position")
- Draft amendments to the MSC.1/Circ.1572/Rev.1 on *the unified interpretations of the provisions of SOLAS chapters II-1 and XII, of the Revised technical provisions for means of access for inspections* (resolution MSC.158(78)) and of the *Performance standards for water level detectors on bulk carriers and single hold cargo ships other than bulk carriers* (resolution MSC.188(79))