

IMO SDC 11 Meeting Summary

31 January 2025



The 11th session of the IMO Sub-Committee on Ship Design and Construction (SDC) was held 13 – 17 January 2025 at the IMO Headquarters in London. The meeting was supplemented by the hybrid (remote) participation. LISCR participated in the following groups in addition to the plenary.

Group	Agenda
WG 1	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)
WG 2	Working group on amendments to the 2011 ESP Code
WG 3	Working group on review of the 2009 Code on Alerts and Indicators
EG 1	Experts group on revision of SOLAS chapters II-1 and V requirements to address both traditional and non-traditional propulsion and steering systems
DG 1	Drafting Group on Development of Guidelines for emergency towing arrangements for ships other than tankers, and Further development of the IP Code and associated guidance

Emergency towing guidelines for ships other than tankers

MSC 108 adopted resolution MSC.549(108), which introduces amendments to SOLAS regulation II-1/3-4. These amendments require new ships, other than tankers, with a gross tonnage (GT) of 20,000 or more to be fitted with emergency towing arrangements (ETAs). The amendments are expected to enter into force on 1 January 2028.

Draft guidelines for emergency towing arrangements for ships other than tankers

SDC 11 developed the draft guidelines for review by the Maritime Safety Committee (MSC). The strength of the towing component was one of the key discussions at SDC 11. SDC 11 agreed on:

- to require 2,000 kN for ships having EN of 3,000 to 10,000;
- not to limit towing strength requirement of larger ships to 2,000 kN;
- to require the towing load (kN) of 0.2 tonnes multiplied by the equipment number for ships having equipment number of 10,000 and upwards;
- to set the safety factor at 2.0;
- to keep the guidelines as "interim", with a view to allowing experience gained in their application to be incorporated into further revision; and
- To insert new section on "Time for deployment".

Towing procedures guidelines

SDC 11 also reviewed potential changes needed for the *Guidelines for owners/operators on preparing emergency towing procedures* (MSC.1/Circ.1255), and revised Guidelines in order to require record of Equipment Number (EN).

Technical Guidelines

SDC 11 also reviewed MSC.1/Circ.1175/Rev.1 on *Guidance on Shipboard Towing and Mooring Equipment*, to align with to align the revised circular with existing IACS unified requirements (URs) A1 and A2 and Recommendation No.10. The revised circular will apply to ships constructed on or after 1 January 2028 that are:

- "tankers of less than 20,000 tonnes deadweight"; or
- "ships other than tankers of less than 20,000 gross tonnage".

Transportation of industrial personnel

Amendments to the International Code of Safety for Ships Carrying Industrial Personnel (IP Code)

SDC 11 reviewed the submission on IP Code (resolution MSC.527(106)), proposing amendments to regulation IV/1, to clarify that weight of Industrial personnel shall be 90 kg, not 75 kg for the stability calculation of the IP ships.

These changes will be expected to be approved at MSC 110 and be applicable to new IP code ships (cargo ships and high-speed cargo craft, of 500GT and upwards, operating on international voyages):

- .1 for which the building contract is placed on or after [date of entry into force]; or
- .2 in the absence of a building contract, the keel of which is laid or which is at a similar stage of construction on or after [date of entry into force + 6 months]; or
- .3 the delivery of which is on or after [date of entry into force + 4 years].

The expected entry into force date is 1 January 2028.

Guidelines for the IP Code

There was a submission proposing the development of guidance on the IP Code, taking into account industries and flag Administrations/classification societies' experience in implementing the IP Code. However, SDC 11 agreed not to develop related guidance to accompany the implementation of the IP Code until more experiences are gained in implementing the Code.

Safe return to the port of passenger ship after a fire or flooding casualty

Interim Explanatory Notes for the Assessment of Passenger Ship Systems' Capabilities After a Fire or Flooding Casualty (MSC.1/Circ.1369)

SDC 11 continued its work on the Explanatory Note. However, it could not conclude the matter and tasked the correspondence group (CG) to continue the work. Key discussions at SDC 11 were:

- Application: New ships only
- Surveys: Relevant sections will be consulted by the Sub-Committee on Implementation of IMO Instruments (III);
- “Remain operational”: A set of issues were identified for further consideration; and
- Interpretations to SOLAS regulation II-2/21: Due to time constraints, the development of Appendix 1 is still a work in progress.

Instructions to the HTW Sub-Committee

SDC 11, noting the current work of the comprehensive revision of the STCW Convention, agreed to instruct the Sub-Committee on Human element, Training and Watchkeeping, once the work at SDC is completed.

Enhance survey programme (ESP) for tankers and bulk carriers

ESP Code

SDC 11 addressed the introduction of the Remote Inspection Techniques (RIT) for close-up surveys. Key points are:

- **Definition of RIT:** The discussion at SDC 8 started based on the assumption that the responsible surveyor would be onboard and use RIT as a tool to undertake a close-up survey to negate the need for setting staging (scaffolding) or cherry pickers of the location where the permanent means of access was not arranged, SDC 11 decided not to specifically define that details and leaving a room for surveyor remain in the office and make use of the technology remotely. However, the technical details of the draft revised ESP Code are written based on the assumption of the presence of the surveyor onboard;
- **Scope and limitation:** For a survey after the third renewal survey (ship age 15-year anniversary), the use of RIT is subject to the agreement of the flag State Administration;
- **Thickness measurement:** While the current ESP Code requires thickness measurements to be undertaken when a need is identified during the close-up survey, SDC 11 decided not to address this issue;
- **Approval of a firm engaged in RIT:** SDC 11 included the Procedures for certification of a firm engaged in a close-up survey of hull structures using RIT in the ESP Code;
- **Change over to traditional close-up survey:** If damage is found, RIT must be changed to a traditional close-up survey;
- **Unsuitable ship structure:** RIT must not be used for ship structures that have a recorded significant history of structural failures (corrosion, cracks and buckling);
- **Random confirmatory survey:** Random confirmatory surveys/close-up surveys must be carried out at locations selected by the surveyor; and
- **Liability issues:** SDC 11 agreed not to address liability associated with the use of RIT.

Impact on the Survey Scene

It should be noted that although RIT was introduced as part of the ESP Code, the technology has limited use. Ships must still prepare for traditional ESP surveys by arranging scaffolding or cherry pickers where close-up surveys cannot be undertaken from the permanent means of access, due to the following shortcomings of RIT:

- It may not be able to clean the surface of ship structures subject to close-up surveys.

- It may not be able to take thickness measurements when excessive corrosion is found on the surface.

Additionally, Additionally, it should be noted that a random conformity survey will require staging (scaffolding), a cherry picker, or a raft survey.

Guidelines on the use of RIT for 2011 ESP Code surveys

While the work on the ESP Code was completed for approval and subsequent adoption by MSC, SDC 11 agreed to continue work on the Guidelines on the use of RIT for 2011 ESP Code surveys, which should be completed before the entry into force of the above-mentioned amendments to the Code.

Pressure testing of boundaries of cargo oil tanks

A paper proposed revision of MSC.1/Circ.1502 on the *Guidance on pressure testing of boundaries of cargo oil tanks under direction of the master to keep consistency with the latest 2011 ESP Code* (amended by resolution MSC.525(106)).

SDC 11 agreed on the following amendments to the circular:

- Tank testing shall be carried out prior to the overall survey or close-up survey; and
- Tank testing shall be satisfactorily completed, with no record of leakage, distortion, or substantial corrosion that could affect the structural integrity of the tank.

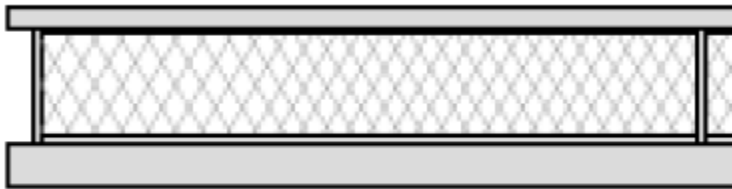
Rigging of safety netting on accommodation ladders and gangways

The IMO has been addressing crew safety during the rigging of the safety net, which is a net which is rigged between the ship's side and the means of embarkation/disembarkation to prevent a person from falling into the water or onto the quayside from a means of embarkation/disembarkation.

Guidelines for construction, installation, maintenance and inspection/survey of means of embarkation and disembarkation (MSC.1/Circ.1331)

SDC 11 revised the guidelines for approval by MSC 110. Key elements of the revised guidelines are:

- Crew engaged in rigging the accommodation ladder, gangways or the safety net should have sufficient personal safety protection such as lifejackets and safety harnesses;
- The safety net will not be required if adequate mitigation measures are in place, such as;
 - The hazard of a person falling through the sides of the means of embarkation/disembarkation is adequately mitigated if the top railing is of rigid construction and a side net² has been rigged between this railing and the base of the accommodation ladder, including its upper and lower platforms, or the gangway; or



(Figure 1 from IMO's draft guidelines)

- The hazard of falling over the rigid top railing is adequately mitigated if this railing is installed in accordance with relevant international standards, at a height of not less than 1,000 mm.
- The safety net and/or side net should be properly stored in ventilated places, avoiding sunlight and chemical contamination. It should be checked and maintained regularly and replaced as necessary;
- Safety pins, side nets and their securing points for accommodation ladders and for gangways are added to the list of items that should be thoroughly examined during the annual safety equipment surveys;
- Winches, at every five-yearly survey, should be operationally tested by raising and lowering the unloaded accommodation ladder; and
- The load testing position for the accommodation ladder or gangway was revised to be horizontal position from the angle of the inclination.

The revised guidelines are intended for the following application:

- for ships for which the building contract is placed on or after 1 July 2026, or in the absence of the contract, the keels of which are laid or which are at a similar stage of construction on or after 1 July 2026, any installation date on the ship; or
- for ships other than those ships prescribed in (a) above, a contractual delivery date for the equipment or, in the absence of a contractual delivery date, the actual delivery date of the equipment to the ship on or after 1 July 2026.

Propulsion & steering system

SDC 11 continued work on traditional and new propulsion and steering systems under SOLAS Chapter II-1 and V, as well as associated guidelines (MSC 137(76) on *Standards for Ship Manoeuvrability*).

The discussion included redundancy of the system and the imposition of minimum manoeuvrability requirements, which raised many questions. Opinions expressed during the meeting included:

- Amendments to SOLAS regulation II-1/28 and regulation II-1/29 should take into account the unique arrangements and manoeuvrability characteristics of ships with podded propulsion. In particular, for cruise passenger ships having two or more podded propulsion systems, there was a high level of redundancy provided by the duplication of the steering gear power unit. Requiring ships to meet the manoeuvrability standards in resolution MSC.137(76) with one pod fully out of service was considered well beyond existing requirements for safe return to port;
- While new rules for modern propulsion systems were under development, it was equally important to address the regulations related to existing systems. However, the subject needed to be further discussed and evaluated based on concrete data, including accident reports, industry demands and reported operational experiences.

SDC 11 decided to continue to work toward SDC 14 (1Q 2028) for developing mandatory instruments, which will enter into force on 1 January 2032:

- Draft amendments to SOLAS regulations II-1/28 (Means of going astern), 29 (Steering gear) and 30 (Additional requirements for electric and electrohydraulic steering gear);

- Draft amendments to SOLAS regulations II-1/3 (Definitions relating to parts C, D and E), 42 (Emergency source of electrical power in passenger ships) and 43 (Emergency source of electrical power in cargo ships); and V/25 (Operation of steering gear) and 26 (Steering gear: Testing and drills); and
- Expected performances of new draft SOLAS regulations II-1/28-1 (Means of going astern and stopping) and 29-1 (Steering) for new ships.
- New (mandatory) standards for ship manoeuvrability

Other instruments that require review, depending on the development of the above-mentioned SOLAS regulations, are:

- Resolution A.467 (XII) on *Guidelines for acceptance of non-duplicated rudder actuators for tankers, chemical tankers and gas carriers of 10,000 GT and above but less than 100,000 DWT*;
- Resolution A.601 (15) on *Provision and display of manoeuvring information on board ship*;
- Resolution MSC.64 (67) on *Amendment to resolution A 342(IX) on Performance Standards for Heading Control Systems*;
- MSC.1/Circ.1053 on *Explanatory Notes to the Standard for Ship Manoeuvrability*; and
- MSC.1/Circ.1536 on *Unified Interpretations of SOLAS regulations II-1/29.3 and 29.4*.

The discussion will continue at SDC 12. Meanwhile, no correspondence group was established for this task.

Guard rails on deck structures

Regulation 25 of the Load Line Convention stipulates guard rail requirements for crew protection only on 'superstructures' (i.e., those extending to the full breadth of the ship or 96% of the breadth). Over the last couple of years, the SDC Sub-Committee was tasked to address crew protection on structures not classified as 'superstructures,' such as deckhouses, including the potential use of chains instead of handrails.

SDC 11 developed the draft amendments to regulation 25 of the 1988 Load Line Protocol and the associated draft MSC resolution for approval at MSC 110 and subsequent adoption at MSC 111, with the expected entry into force on 1 January 2028.

Unified interpretations

Remotely operated valve

SDC 11 approved the proposal for a unified interpretation of SOLAS regulation II-1/12.6.2 to clarify the term 'remotely operated valve,' aiming to ensure uniform and universal implementation.

Escape route

A paper proposed a revision of MSC.1/Circ.1511/Rev.1 on the Unified interpretations of SOLAS regulations II-2/9 and 13 in relation to regulations SOLAS II-2/13.4.1 and 13.4.2 to clarify the term "lower part" used in connection with the means of escape from machinery space.

Following an intense discussion, SDC 11 could not approve the proposed revision to the Unified Interpretation but agreed on the following:

- MSC.1/Circ.1511/Rev.1 specifies that the lower part of the space should be regarded as either:
 - The lowest deck level,
 - A platform, or
 - A passageway.
- No decision has been made on which of these three options should be adopted.
- Whether a port State challenges the flag State's decision or not will be discussed at the Sub-Committee on the Implementation of IMO Instruments (III) during its 11th session scheduled for July 2025 under the agenda item on port State control.

Use of FRP in ship structure

SDC 11 reviewed the work of the correspondence group on the Revision of the Interim Guidelines for the Use of Fibre-Reinforced Plastic (FRP) (MSC.1/Circ.1574). Key discussions at SDC 11 were:

- Recyclability of the FRP materials;
- Use of FRP for global load-bearing structure; and
- Temperature measurement methods during the test.

SDC 11 instructed the correspondence group to address these issues further.

The Sub-Committee on Ship Systems and Equipment (SSE) will address the matter associated with the FTP Code

Code for Alerts and Indicator

SDC 11 revised the 2009 Code on Alerts and Indicators (resolution A.1021(26)), taking into account the recent developments of the IMO instruments, including non-mandatory instruments that include alerts and indicators for clarifying their priority, alert and monitoring locations, etc.

The revised text will be approved by 83rd session of the Marine Environment Protection Committee (MEPC 83) and MSC 110 before the final adoption by the 34th session of the Assembly (A 34).

Underwater radiated noise (URN)

IMO's follow up actions

MEPC 82, following the conclusion of the Revised URN Guidelines (MEPC.1/Circ.906/Rev.1), tasked the SDC Sub-Committee with technical issues associated with the experience-building phase (EBP) work. While there was intense discussion on the future work, there was general acknowledgement that the reduction of the underwater radiated noise is complementary to the reduction of Greenhouse Gas emissions.

SDC 11 agreed to set up the correspondence group to work further, including:

- review the technical objectives of the URN Action Plan;

- develop a framework to assess the progress made on the application and uptake of the Revised URN Guidelines (MEPC.1/Circ.906/Rev.1);
- make a selection and evaluation of studies on URN emissions from the maritime sector; and
- draft terms of reference for a study, addressing the areas where knowledge gaps have been identified in the assessment of selected studies.

Development by other organization

SDC 11 noted IACS Recommendation No.181 on *the Measurement of Underwater Radiated Noise from Ships*.

Any other business

Second generation intact stability

While the matter was concluded as *the Interim guidelines on the second generation intact stability criteria* (MSC.1/Circ.1627) (Interim Guidelines) and *the associated Explanatory notes to the Interim guidelines on second generation intact stability criteria* (MSC.1/Circ.1652) (Explanatory Notes), there continued to be a flow of information under 'Any Other Business,' including the analysis of the container loss accident involving MV Maersk Essen.

SDC 11 agreed to:

- invite interested Member States and international organizations to submit a relevant new output proposal to the Committee to initiate the revision work;
- invite the Sub-Committee on Carriage of Cargoes and Containers (CCC) at its 11th session to consider under agenda item "Development of measures to prevent the loss of containers at sea"; and
- reiterate the request of SDC 10 to interested Member States and international organizations to submit reports and studies on the matter to future sessions, which would help in the revision work.

Further information

For further information please contact: imo@liscr.com

Annex

Provisional list of draft resolutions and circulars

- Draft new guidelines for emergency towing arrangements on new ships other than tankers
- Draft revision to the Guidelines for owners/operators on preparing emergency towing procedures (MSC.1/Circ.1255)
- Draft amendments to the “Revised Guidance on Shipboard Towing and Mooring Equipment” (MSC.1/Circ.1175/Rev.1)
- Draft amendments to the Industrial Personnel (IP) Code
- Draft amendments to the 2011 ESP Code to address the use of remote inspection techniques for close- up surveys
- Draft amendment to MSC.1/Circ.1502 on the Guidance on pressure testing of boundaries of cargo oil tanks under direction of the master to keep consistency with the latest 2011 ESP Code
- Draft revision of the “Guidelines for Construction, Installations, Maintenance and Inspection/Sur- vey of Means of Embarkation and Disembarkation” (MSC.1/ Circ.1331)
- Draft amendments to Regulation 25(3) of the 1988 Load Lines Protocol
- Draft unified interpretation of SOLAS regulation II-1/12.6.2
- Draft revision of the 2009 Code on Alerts and Indicators