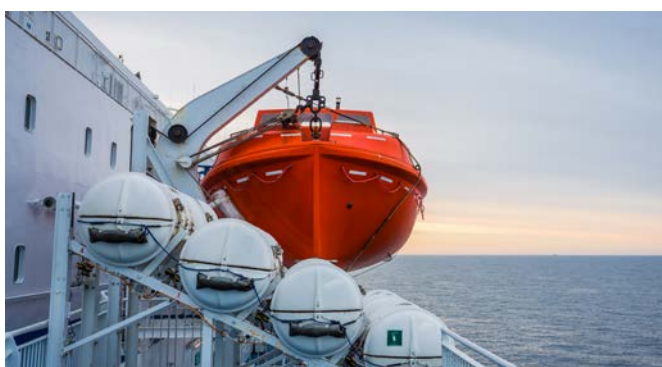


IMO SUB-COMMITTEE ON SHIPS SYSTEMS AND EQUIPMENT (SSE 9)

Relevant for shipowners, managers, seafarers, maritime training institutes and flag states.

March 2023

The 9th session of the IMO's Sub-Committee on Ship Systems and Equipment (SSE 9) was held from 27 February to 3 March 2023. SSE 9 finalized the draft of new SOLAS requirements to minimize the incidence and consequences of fires on Ro-Ro passenger ships, and to require ventilation of totally enclosed lifeboats. The revision of the Code of Safety for Diving Systems to enhance the safety of divers in fixed and portable diving systems was completed, and the draft of the new interim guidelines on safe operation of onshore power supply services in ports was agreed.



Meeting highlights

- Finalized draft amendments to SOLAS Chapter II-2 related to fire safety on Ro-Ro passenger ships
- Finalized draft amendments to the LSA Code and related IMO instruments to require ventilation of totally enclosed lifeboats
- Finalized the draft of the revised Code of Safety for Diving Systems
- Finalized the draft of interim guidelines on the safe operation of onshore power supply (OPS) service in ports
- Agreed on draft amendments to SOLAS Chapter II-2 to require fire detection and fire alarm systems for all control stations and cargo control rooms on cargo ships

Ventilation of survival craft

MSC 106 approved the draft amendments to the Life-Saving Appliances (LSA) Code to require ventilation of totally enclosed lifeboats.

The draft of the new regulations intends to provide a habitable environment and prevent high concentrations of CO₂ inside the craft and will require a ventilation rate of at least 5 m³/hr/person.

SSE 9 finalized consequential draft amendments for:

- The revised recommendations on the testing of life-saving appliances (Resolution MSC.81(70))
- The revised standardized life-saving appliance evaluation and test report forms (survival craft) (MSC.1/Circ.1630/Rev.1)
- The requirements for maintenance, thorough examination, and operational testing of LSA (Resolution MSC.402(96)).

SSE 9 considered any compelling need for ventilation requirements for partially enclosed lifeboats and life rafts but did not reach an agreement. SSE 10 in February 2024 will continue the consideration of any compelling need for such requirements.

The draft amendments are expected to enter into force on 1 January 2026 and to be applied to survival craft installed on or after 1 January 2029, subject to adoption by MSC 107 (June 2023).

Lowering speed of survival craft for cargo ships

SSE 9 considered safe lowering speeds of fully loaded survival craft and rescue boats. Noting that the minimum lowering speed is calculated as a function of the lowering height, the minimum lowering speed becomes higher and closer to the commonly accepted maximum lowering speed for large cargo ships.

SSE 9 agreed on draft amendments to paragraphs 6.1.2.8 and 6.1.2.10 of the LSA Code to include a minimum lowering speed calculated as a function of height, but of not higher than 1.0 m/s, and to define a maximum lowering speed of 1.3 m/s. The Administration may accept other maximum lowering speeds.

The draft amendments will be submitted to MSC 107 (June 2023) for approval and are expected to enter into force on 1 January 2026.

Revision of SOLAS Chapter III and the LSA Code

The IMO has embarked on a revision of SOLAS Chapter III and the LSA Code to remove gaps, inconsistencies and ambiguities and to restructure the requirements to a goal-based format.

SSE 9 agreed to hold an in-person intersessional experts' group meeting to identify the hazards that should be addressed by the new functional requirements.

Fire protection of Ro-Ro passenger ships

The number of fire incidents on vehicle decks of Ro-Ro passenger ships has grown over the past decade. The physical extent of Ro-Ro ships' vehicle decks could potentially allow a fire to spread over the full length of a ship. Hence, for Ro-Ro ships carrying passengers, extinguishing and containing a fire is particularly critical.

SSE 9 finalized several draft amendments to SOLAS Chapter II-2, the FSS Code and MSC.1/Circ.1430 to reduce the risk of fire in Ro-Ro and special category spaces on new and existing Ro-Ro passenger ships, considering the:

- arrangement of Ro-Ro spaces for new ships,
- arrangement of weather decks for new ships,
- water monitors on weather decks of existing ships.

In addition, SSE 9 agreed on draft amendments to the FFS Code regarding specifications for linear heat detection systems, as well as a clarification of the term “free height” of a protected space in the revised guidelines for the design and approval of fixed water-based fire-fighting systems for Ro-Ro spaces and special category spaces (MSC./Circ.1430/Rev.1).

The draft amendments will be submitted to MSC 107 (June 2023) for approval and are expected to enter into force on 1 January 2026.

Thermal performance of immersion suits

SSE 9 considered the performance tests of immersion suits with a view to increase uniform implementation of the requirements, noting that the use of humans for product approval is becoming increasingly challenging and that more research is being conducted on the use of test manikins.

SSE 9 agreed on draft amendments to paragraph 3.2.3 of the revised recommendation for the testing of life-saving appliances (Resolution MSC.81(70)) to add a 15-minute time threshold for thermal protective tests carried out with human test subjects. One of the criteria for stopping a test would then be the skin temperature of the hand, foot or lumbar region falling below 10 degrees Celsius for more than 15 minutes.

The draft amendments will be submitted to MSC 107 (June 2023) for approval.

In-water performance of SOLAS life jackets

SSE 9 finalized amendments to the LSA Code and the revised recommendation on the testing of life-saving appliances (Resolution MSC.81(70)) to address in-water performance of SOLAS life jackets, i.e. to specify the criteria for recognizing a successful turn of a test subject.

Consequential draft amendments to the revised standardized life-saving appliance evaluation and test report forms (MSC.1/Circ.1628) were agreed accordingly.

The draft amendments will be submitted to MSC 107 (June 2023) for approval.

Containership fire safety

MSC 106 (November 2022) agreed to establish a Formal Safety Assessment (FSA) expert group to review the outcome of any relevant studies relating to the detection and control of fires on containerships. Accordingly, SSE 9 decided to postpone discussions related to containership fire safety until such studies are available.

Fire protection of control stations in cargo ships

SSE 9 agreed on draft amendments to SOLAS Regulation II-2/7.5.5 and the Unified Interpretations in MSC.1/Circ.1456 to extend the fire detection requirements to include control stations and cargo control rooms on cargo ships.

Consequential draft amendments to the Unified Interpretations of SOLAS Chapter II-2 and the FSS and FTP Codes (MSC.1/Circ.1456) were agreed accordingly.

The draft amendments are expected to enter into force on 1 January 2026, subject to approval and adoption by the MSC.

Diving systems safety

The Code of Safety for Diving Systems, 1995 (1995 Diving Code) provides international standards for the design, construction and survey of commercial diving systems. The purpose is to enhance the safety of divers/personnel, but also to facilitate the international movement and operation of diving systems.

SSE 9 finalized a draft of a new International Code of Safety for Diving Operations, 2023 (2023 Diving Code). The 1995 Diving Code will continue to exist for existing diving systems.

The significant updates include:

- provisions for portable diving systems and surface supplied diving systems;
- provisions for ships with diving systems installed;
- provisions for integration between the diving systems and the ships carrying them, including integration of the ships’ ISM system with the diving contractors’ safety management system;
- and measures to ensure evacuation of divers all the way to a place of safety.

The draft of the new code will be submitted to MSC 107 (June 2023) for approval.

Validated model training courses

IMO model courses are intended to assist instructors in developing training programmes for seafarers as per the International Convention of Standards of Training, Certification and Watchkeeping for Seafarers (STCW), 1978. The model courses are subject to regular review to ensure that they are consistent with the current IMO instruments and reflect best practices and modern technologies.

SSE 9 validated the revised model course 3.03, on the survey of machinery installations, and the associated compendium.

Prohibition of PFOS in fire-fighting foams

MSC 106 approved draft amendments to SOLAS Chapter II-2 and the HSC Codes (1994 and 2000) to prohibit the use of firefighting foams containing perfluorooctane sulfonic acid (PFOS) from 1 January 2026.

SSE 9 agreed to propose to MSC 107 (June 2023) that the scope of work be expanded to consider prohibiting the use of fire-fighting foams containing fluorinated substances, in addition to PFOS.

Single fall and hook systems with on-load release capabilities

The Life-Saving Appliances (LSA) Code, paragraph 4.4.7.6.8, provides measures to prevent the accidental release of the fall and hook system during the recovery of lifeboats and rescue boats. Lifeboats and rescue boats with single fall and hook systems are currently exempted from such measures.

SSE9 finalized draft amendments to paragraphs 4.4.7.6.8 and 4.4.7.6.17 of the LSA Code in order to ensure adequate safety standards for lifeboats and rescue boats fitted with single fall and hook systems.

The draft amendments will be submitted to MSC 107 (June 2023) for approval.

Unified Interpretations

Reliability of essential propulsion components

SOLAS Regulation II-1/26.2 requires the Administration to give special consideration to the reliability of single essential propulsion components and may require a separate source of propulsion power sufficient to give the ship a navigable speed, especially in the case of unconventional arrangements.

SSE 9 agreed on a draft interpretation of SOLAS Regulation II-1/26.2 to clarify its application to single shaft-line electric propulsion systems. The draft interpretation addresses the risk of permanent loss of propulsion for ships without additional propulsion units in case of a non-repairable single failure in the winding of an electric propulsion motor.

Electric torches in life rafts, lifeboats and rescue boats

SSE 9 agreed to a draft Unified Interpretation of the LSA Code to clarify the requirements to spare light sources for LED torches.

Electrical equipment in hazardous areas

SSE 9 agreed to a draft revision of MSC.1/Circ. 1557 to clarify discrepancies in hazardous area classification issues between SOLAS, the IBC and IGC Codes and the IEC 60092-502:1999.

Arrangement of ventilation ducts

SSE 9 agreed to draft consequential amendments to MSC.1/Circ.1276 on "Unified interpretations to SOLAS chapter II-2" to align the interpretations with the amendments to SOLAS II-2/9.7 as adopted by MSC.365(93). The draft amendments address arrangements and separation of ventilation ducts, including galley ducts, when they pass through spaces.

Any other business

Onshore power supply

SSE 9 finalized the draft of interim guidelines on the safe operation of onshore power supply (OPS) service in port.

Following the global efforts to reduce air pollution from ships, an increasing number of ports require or encourage ships to use shore power instead of fuel oil. The draft of the interim guidelines intends to prevent accidents caused by operational errors in relation to ships' connections to shore power.

The draft of the interim guidelines will be submitted to MSC 107 (June 2023) for approval.

Service personnel for life-saving appliances

Different understandings of terms such as "make" and "type" related to the servicing of life-saving appliances has caused inconsistent application of the requirements to maintenance, thorough examination, operational testing, overhaul and repair of lifeboats and rescue boats, launching appliances and release gear (Resolution MSC.402(96)).

A draft justification, prepared by SSE 9, for addressing this matter under a separate agenda item will be submitted to MSC 107 (June 2023) for approval.

Recommendation

As SSE is a Sub-Committee, all decisions concerning rules, regulations and dates are subject to further consideration and approval by the Maritime Safety Committee (MSC). DNV recommends that our customers monitor the outcome of MSC 107 in June 2023.

Contact

For customers:

DATE - Direct Access to Technical Experts via [My Services](#) on Veracity.

Otherwise:

Use our [office locator](#) to find the nearest office.