

IMO SSE 11 Meeting Summary

10 March 2025



The 11th session of the International Maritime Organization Sub-Committee on Ship Systems and Equipment (SSE 11) was held 24-28 February 2025 at the IMO Headquarters in London, supplemented by hybrid (remote) arrangements.

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

ID	Subject
WG 1	Working Group 1 on Life-Saving Appliances (lifeboat, liferaft and other Life-saving appliances) except for those assigned to Working Group 2 (WG 2)
WG 2	Working Group 2 on Life-Saving Appliances (Maintenance, thorough examination, operational testing, overhaul and repair of lifeboats and rescue boats, launching appliances and release gear (resolution MSC.402(96)))
WG 3	Working Group on Fire Protection

Ventilation of partially enclosed lifeboat and liferaft

107th session of the Maritime Safety Committee (MSC 107) adopted amendments to the Life-Saving Appliances (LSA) Code (MSC.535(107)) to mandate ventilation of totally enclosed lifeboats and amendments to the *Revised recommendations on testing of life-saving appliances* (MSC.81(70)). The amendments are expected to enter into force on 1 January 2026 for a totally enclosed lifeboat installed on or after 1 January 2029. The SSE Sub-Committee was tasked with considering the compelling need to apply the requirements to partially enclosed lifeboats and liferafts.

Partly enclosed lifeboat

SSE 11 agreed on the inclusion of ventilation requirements for partially enclosed lifeboats in both the LSA Code and resolution MSC.81(70) on the *Revised recommendations on testing of lifesaving appliances*, together with consequential amendments to the *Revised standardized life-saving appliance evaluation and test report forms (survival crafts)* (MSC.1/Circ.1630/Rev.3) and the CG was tasked to further develop the text.

The original target for entry into force was 1 January 2028. However, since SSE 11 failed to agree on a concrete text, entry into force may be postponed to 1 January 2032.

Liferaft

SSE 11 agreed that no compelling need had been demonstrated for liferafts.

Design and prototype test requirements for the arrangements used in the operational testing of free-fall lifeboat release systems without launching the lifeboat

SSE 11 developed requirements for the type approval of a simulation test device for free-fall lifeboat, and prepared the draft amendments to the LSA Code, resolution MSC.81(70), and other consequential draft amendments to resolution MSC.402(96), MSC.1/Circ.1205/Rev.1, MSC.1/Circ.1529, MSC.1/Circ.1578 and MSC.1/Circ.1630/Rev.3, with a view to approval and subsequent adoption by the Maritime Safety Committee (MSC).

There was an intense discussion on the scope of application of the above requirements. It was concluded that the scope of application of the amendments to the LSA Code and the Revised Recommendation was to new installations only on or after 1 January 2031, while legal entry into force of the amendment will be 1 January 2028.

Revision of SOLAS Chapter III and the LSA Code

The IMO has agreed to revise SOLAS Chapter III and the LSA Code to remove gaps, inconsistencies and ambiguities and to restructure the requirements to a goal-based format. The goal-based structure intends to capture safety objectives, functional requirements and generic requirements within SOLAS chapter III, and technical requirements within the LSA Code. At SSE 11, the focus was on requirements and expected performances for the "Alarm" phase and, partly, "Proceed to Embarkation" phase. There are 8 remaining phases to consider, which were assigned to the CG.

Self-righting or canopied reversible liferaft

SOLAS requires liferafts on ro-ro passenger ships to be equipped with either an automatically self-righting liferaft or a canopied reversible liferaft, which can operate safely regardless of its floating orientation. Similar requirements are currently not applicable to other ship types. For larger conventional liferafts, righting in an emergency may be challenging due to injuries, exhaustion, adverse sea conditions or the dimensions (size of the raft).

MSC 99 considered the document proposing to equip all passenger and cargo ships with automatically self-righting or canopied reversible liferafts (except for liferafts with a capacity of no more than six persons).

SSE 11 agreed to require self-righting or canopied reversible liferaft for passenger and cargo ships for future installations, except for liferaft with a capacity of up to 12 persons. The CG was tasked to develop concrete texts for the SOLAS Convention, the LSA Code and other relevant instruments.

Atmospheric Oil Mist Detectors (MSC.1/CIRC.1086)

A submission proposes a new output on the agenda of MSC to update the "Code of Practice for Atmospheric Oil Mist Detectors" (MSC/Circ.1086, approved in 2003).

Studies of engine-room fires have found that most are caused by leaks or fractures in flammable liquid systems. Most engine-room fires begin as a result of the ignition of airborne hydrocarbons. In general, liquid oil can be airborne as a mist or vapour. Oil spray and mist (airborne drops) may result from leakages in high pressure systems, such as pipes. In addition,

airborne oil particles may also appear as leaking oil is vaporized due to heat. At high temperatures and high concentrations such vapours may be detected by mist detectors. ISO 16437:2012 describes that detectors can be incorporated in arrangements to automatically shut down valves, machinery, etc. to prevent the outbreak of a fire.

SSE 11 finalized the draft revision of *the Code of Practice for Atmospheric Oil Mist Detectors* (MSC/Circ.1086). The key changes are:

- Inspection and maintenance should be carried out in accordance with the manufacturer's instructions, and detectors should be accompanied by an instruction manual;
- The revised code addresses only conventional fuels and does not cover alternative or new fuels;
- The list of types of detection systems has been deleted from the draft revised code;
- Oil mist detectors should be approved in accordance with international standards acceptable to the flag State Administration, with a corresponding footnote referring to the relevant ISO standard; and

The above-mentioned *draft revised Code of Practice for Atmospheric Oil Mist Detectors*, is expected to be approved by MSC 110, scheduled for June 2025.

Review and update SOLAS regulation II-2/9 (Containment of fire)

The SSE Sub-Committee has been working on amendments to SOLAS regulation II-2/9 (Containment of fire) to incorporate existing guidance and clarify requirements in SOLAS regulations II-2/9.7.3.1.3 relevant to the fire insulation of duct sleeves , 9.2.3.3 addressing the fire integrity of bulkheads and decks and tables 9.5 and 9.6 (fire integrity of decks/bulkheads separating adjacent spaces) to remove any ambiguities.

Due to time constraints, SSE 11 could not address the matter. The work will be continued by the CG.

Unified interpretations

Launching Arrangements for Rescue Boats

SSE agreed on the following interpretation of paragraphs 6.1.1.3 and 6.1.2.2 of the LSA Code for approval by MSC 110:

For cargo ships, hoisting-up of a dedicated rescue boat from its stowed position should be considered as part of launching preparation, but not part of launching process. Therefore, manual hoisting up prior to embarkation may be acceptable for subsequent slewing out.

For cargo ships not fitted with stored mechanical power in compliance with paragraph 6.1.1.3 of the LSA Code, as amended through resolution MSC.459(101), the manual hoisting from the stowed position and turning out to the embarkation position of the rescue boat does not need to be actuated from a position within the rescue boat.

Launching mechanism is the means to control the launch of the lifeboat or rescue boat after the point of embarkation when all persons assigned have boarded. Therefore, for cargo ships, manual hoisting up of a dedicated rescue boat prior to embarkation may be acceptable for subsequent slewing out by stored mechanical power.

Perfluorooctane sulfonic acid (PFOS) ban

SSE 11 agreed on the unified interpretation of SOLAS regulation II-2/10.11, relating to the extinguishing media containing PFOS, and a unified interpretation of regulation 7.9.4 of the 1994 and 2000 HSC Codes. Key points are:

- The phrase "fire-extinguishing media" should include the firefighting foams;
- The phrase "containing perfluorooctane sulfonic acid (PFOS)" should mean present in concentrations of PFOS above 10 mg/kg (0.001% by weight);
- Verification that "extinguishing media containing perfluorooctane sulfonic acid (PFOS)" are not used or stored on ships, should require the flag State Administration (the Administration) or its recognized organization to review the maker's declaration or laboratory test reports for the extinguishing media covered by the SOLAS Convention, which should be provided to the Administration or to its recognized organization by shipyards, repair yards and equipment makers;
- The declaration issued by the foam maker should contain information about the foam such as, but not limited to: foam type, production period, batch No., ref. to type approval / MED Certificate for the foam;
- For extinguishing media installed before 1 January 2026, where the maker's declaration or laboratory test reports are not available, sampling and testing of the extinguishing media on board should be required to be conducted in accordance with a recognized standard.

The above-mentioned interpretations are expected to be approval by MSC 110, with the effective date of 1 January 2026.

Spacing of combined smoke and heat detector

There was a proposed unified interpretation of paragraph 2.4.2.2 of chapter 9 of the FSS Code, as amended by resolution MSC.555(108), to clarify acceptable spacings of combined smoke and heat detectors, with a view towards global and uniform implementation.

SSE 11 agreed to the draft MSC circular on the unified interpretation of the FSS Code, with a view to approval by MSC 110, with the effective date of 1 January 2026.

Lifting appliance

A submission document responded to the outcome of SSE 10 and proposed a revised draft unified interpretation of SOLAS regulation II-1/3-13.2.4 to facilitate the uniform documentation of load testing and thorough examination for existing non-certified lifting appliances. To ensure the consistent application of SOLAS regulation II-1/3-13.2.4, the document proposed a draft unified interpretation providing a factual statement as a form of documentation for the load testing and thorough examination of existing lifting appliances without valid certificates, which were installed before 1 January 2026. This interpretation is intended to take effect from 1 January 2026, aligning with the expected entry into force of the regulation.

Subsequently, SSE 11 agreed to the draft MSC circular on the unified interpretation of SOLAS regulation II-1/3-13.2.4, with a view to approval by MSC 110.

Validation of mode courses

SSE 11 validated Model Course 3.05 on Survey of Fire Appliances and Provisions.

Detection and control of fire on container ships

SSE 11 addressed the following issues for container ships, with the aim of a mandatory entry into force on 1 January 2032. However, it could not reach a concrete agreement. The matter will be further addressed in the correspondence group (CG) in particular:

- Breaching tools in the draft guidelines for the design, performance, testing, and approval of water mist lances;
- Fixed CO₂ fire-extinguishing systems;
- Fixed and mobile water monitors;
- Active protection system (e.g. spraying water horizontally below the hatch coaming and deluge systems integrated into the pontoon hatches) and bilge pumping performance for cargo holds of container ships; and
- Fire detection systems, including the application of the video fire detection system and approval standards.

Maintenance, thorough examination, operational testing, overhaul and repair of lifeboats and rescue boats, launching appliances and release gear (resolution MSC.402(96))

Triggered by the discussion at the MSC on the definition of “make” and “type”, the SSE Sub-Committee has been working on the comprehensive review of the resolution, including the definitions of the terms. While the ISO PAS 23673 series (2020) provided the details of “make” and “type”, it was modified when the ISO developed ISO 23678; 2022 series.

SSE 11 developed definitions of Make, Type, Series and Model based on the following understanding and agreed in principle, for further consideration:

- Make – original manufacturer of the type, model and series of equipment, as referred to on the approval certificate and/or ID plate, as appropriate.
- Type – category of equipment having common functional or design characteristics (a non-exhaustive list of examples is listed in the annex).
- Model – a specific version of a particular make and type, as referred to on the approval certificate and/or ID plate, as appropriate.
- Series – a specific range of models from the same manufacturer that have equivalent design characteristics and maintenance requirements.

EXAMPLES OF "MAKE", "TYPE", "MODEL" AND "SERIES"

Make	Type	Series	Model
Launching appliances (incl. davits, ramps)			
AA manufacturer	Hydraulic davit	ABC	ABC - 1, ABC - 2, ABC - 3
BB manufacturer	Hinged davit	XXX	XXX (A), XXX (B), XXX (C)
CC Manufacturer	Freefall davit	ZZZ	ZZZ 100, ZZZ 101, ZZZ 102

SSE 12 (2026) will further work on this subject.

Carriage of new energy vehicles in special category and ro-ro spaces

SSE 10 (2024) had considered and agreed on a road map and a goal-based approach to effectively consider the fire safety system to reduce the fire risk of ships carrying new energy vehicles, including battery electric vehicles (BEVs) in special category and ro-ro spaces. This agenda item addresses ship-type-specific matters, and the general safety issue of carriage of new energy vehicles, including BEVs, has been addressed by the Sub-Committee on Carriage of Cargoes and Containers (CCC) in conjunction with the IMDG Code.

SSE 11 addressed detection systems, fire-fighting systems and the clarification of terminologies such as “thermal runaway.” However, due to time constraints, SSE 11 could not consider the issue in detail and tasked the CG with reviewing the proposals.

Any other business

Lifejacket buoyancy test

SSE 11 developed amendments to the following instruments on revising the test procedure and acceptance criteria for the lifejacket buoyancy test for finalization by MSC 110:

- Resolution MSC.81(70) on the Revised recommendation on testing of life-saving appliances; and
- MSC.1/Circ.1628/Rev.3 on the Revised standardized life-saving appliance evaluation and test report forms (personal life-saving appliances)

ISO survival craft equipment standard

SSE 11 agreed to update the reference to the revised ISO international standard 18813:2022 and to amend the corresponding footnotes referring to the standard in the LSA Code.

Further information

For further information please contact: imo@lisr.com

Annex

Provisional list of draft circular/resolution

- Draft amendments on simulation launch (amendments to the LSA Code, together with consequential draft amendments to resolutions MSC.81(70) and MSC.402(96) and MSC Circulars (MSC.1/Circ.1205/Rev.1, MSC.1/Circ.1529, MSC.1/Circ.1578 and MSC.1/Circ.1630/Rev.3);
- Draft revision to *the Code of practice for atmospheric oil mist detectors* (MSC/Circ.1086);
- Draft Unified Interpretation on the launching arrangements for rescue boats;
- Draft Unified Interpretation on spacing of combined smoke and heat detector (paragraph 2.4.2.2 of chapter 9 of the FSS Code);
- Draft Unified Interpretation on SOLAS regulation II-1/3-13.2.4 regarding factual statement on load testing and thorough examination for existing non-certified lifting appliances;
- Draft Unified Interpretation on perfluorooctane sulfonic acid (PFOS) ban (SOLAS regulation II-2/10.11.2.2 and regulation 7.9.4 of the 1994 and 2000 HSC Codes);
- Draft amendments of the relevant IMO instruments relating to lifejacket buoyancy test (resolution MSC.81(70) on *the Revised recommendation on testing of life-saving appliances* and MSC.1/Circ.1628/Rev.3); and
- Draft updates of the footnote of the LSA Code on the reference to the ISO standards.