

IMO Ship Systems and Equipment (SSE 11)

Summary Report

Summary of significant outcomes

Below is a brief overview of some of the significant outcomes from SSE 11:

- Draft amendments to the LSA Code were finalised on the <u>development of design and prototype test</u>
 <u>requirements for the arrangements used in the operational testing of free-fall lifeboat release systems</u>
 <u>without launching the lifeboat</u>.
- A draft unified interpretation of paragraphs 6.1.1.3 and 6.1.2.2 of the <u>LSA Code Manual hoisting of a dedicated rescue boat</u> was agreed to clarify that, for cargo ships, manual hoisting of a dedicated rescue boat should be considered as part of launching preparation, but not part of launching process.
- Draft amendments to resolution MSC.81(70) and MSC.1/Circ.1628/Rev.1 were agreed to improve the <u>test</u> <u>procedure for the lifejacket buoyancy test</u> and make acceptance criteria consistent with the LSA Code.
- Draft amendments to <u>MSC/Circ.1086 Code of Practice for Atmospheric Oil Mist Detectors</u> were agreed. This
 relates to concerns raised that fires on board ships are often caused or enhanced by oil leaks in enginerooms.
- A <u>draft unified interpretation of SOLAS regulation II-2/10.11</u> and regulation 7.9.4 of the 1994 and 2000 HSC
 Codes was agreed to clarify how compliance with the requirements to prohibit PFOS will be demonstrated
 for both new and existing ships.
- A <u>draft unified interpretation of SOLAS regulation II-1/3-13.2.4</u> was agreed to facilitate uniform documentation of load testing and thorough examination for existing non-certified lifting appliances. The interpretation provides a factual statement, as a form of documentation of load testing and thorough examination of existing lifting appliances without valid certificates, which were installed before 1 January 2026, to be effective from 1 January 2026, which is aligned with the entry into force of amended SOLAS regulation II-1/3-13.
- Work continued on <u>development of amendments to SOLAS chapter II-2 and the FSS Code concerning detection and control of fires in cargo holds and on the cargo deck of containerships</u>, including draft amendments to SOLAS regulation II-2/10.7.3 concerning water mist lances and fixed and mobile water monitors, draft new SOLAS regulation II-2/7.11 including requirements for portable infrared thermal imagers and development of draft *Guidelines for the design*, performance, testing, and approval of water mist lances used for the protection of on-deck cargo areas of ships designed and constructed to carry containers on or above the weather deck.
- Work continued on the <u>evaluation of the adequacy of fire protection</u>, <u>detection and extinction</u>
 arrangements in <u>vehicle</u>, <u>special category and ro-ro spaces in order to reduce the fire risk of ships carrying new energy vehicles</u>.

Introduction

SSE 11 took place from 24 to 28 February 2025 at the IMO in London. This report summarises discussions which are significant to Lloyd's Register's clients.

Lloyd's Register (LR) contributed to discussions in the Fire Protection and LSA working groups.

Additional Information LR's SSE 10 Summary Report.

Life-saving Appliances (LSA)

Requirements for the ventilation of partially enclosed lifeboats and liferafts

No proposals were submitted to SSE 11 for ventilation of partially enclosed liferafts. The sub-committee agreed that there was a compelling need to consider further ventilation requirements for partially enclosed lifeboats and developed draft amendments to the LSA Code, chapter IV - Survival Craft, adding a new paragraph 4.5.5 which requires a means to admit sufficient air to prevent a long-term CO_2 concentration of more than 5,000 ppm for the number of persons the lifeboat is permitted to accommodate, even with the entrances closed. The draft amendments provide several options for achieving the aforementioned requirement:

- the arrangement should provide a ventilation rate of at least 5 m³/h per person for the number of persons which the lifeboat is permitted to accommodate and for a period of not less than 24 hours. The ventilation means shall be operable from inside the lifeboat and shall be arranged to ensure that the lifeboat is ventilated without stratification or formation of unventilated pockets. Where the means of ventilation is powered, the source shall not be the radio batteries referred to in paragraph 4.4.6.11; and where dependent on the lifeboat engine, sufficient fuel shall be provided to comply with paragraph 4.4.6.8; or
- providing ventilation openings [with the total cross section of at least 4% of the floor area of the lifeboat] with openings set in the opposite direction [, as far apart from each other] and as high as possible; or
- any other appropriate solutions that prevent a long-term CO₂ concentration of more than 5,000 ppm.

The entry into force date for the draft amendments to the LSA Code is yet to be decided. SSE 11 instructed the LSA correspondence group reporting to SSE 12 (2026) to continue work on the draft amendments to the LSA Code and to develop draft amendments to MSC.81(70) *Revised recommendation on the testing of life-saving appliances for the ventilation of totally enclosed lifeboats*, and draft consequential amendments to the *Revised standardized test report forms for survival craft* (MSC.1/Circ.1630/Rev.3).

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

The sub-committee continued work to develop amendments to the LSA Code to include requirements for the design of the arrangements, taking into account the lifeboat's static weight, as well as the shock loading that would be experienced in the operational testing of the free-fall lifeboat release system without launching the lifeboat (a simulated launch).

SSE 11 finalised draft amendments to the LSA Code, together with consequential draft amendments to SOLAS chapter III, resolutions MSC.81(70) and MSC.402(96), and other relevant instruments (MSC.1/Circ.1205/Rev.1, MSC.1/Circ.1529, MSC.1/Circ.1578 and MSC.1/Circ.1630/Rev.3). In addition, the sub-committee clarified that the draft amendments to the LSA Code are not intended to apply retrospectively.

Draft amendments to the LSA Code

Previous discussions at SSE focused on amending existing paragraph 4.7.6.4 of the LSA Code, however, SSE 11 instead agreed to add a new paragraph "4.7.7 Lifeboat release testing" rather than amending the existing provisions in paragraph 4.7.6.4.

The draft amendments require that for free-fall lifeboats, the arrangement to test the release system under load without launching the lifeboat into the water, in accordance with paragraph 4.7.6.4, is to be designed with a safety factor of at least 6 on the basis of the calculated maximum working load, with a full complement of persons and equipment, and the ultimate strength of the materials used for its construction considering static and relevant dynamic loads. Components of this arrangement that are exposed to the marine environment, other than falls and temporarily installed equipment, are to be constructed from materials that are corrosion resistant in the marine environment without the need for coatings or galvanising.

The draft amendments are expected to be approved by MSC 110 (June 2025) for subsequent adoption by MSC 111 (2026) and are expected to apply to free-fall lifeboats installed on or after 1 January 2031.

Consequential draft amendments to SOLAS chapter III

Consequential draft amendments to SOLAS chapter III, regulation 19 – *Emergency training and drills*, were finalised, changing the footnote reference for paragraph 3.4.4 from referring to "Measures to prevent accidents with lifeboats (MSC.1/Circ.1206 /Rev.1)", to instead referring to the "*Revised guidelines on safety during abandon ship drills using lifeboats* (MSC.1/Circ.1578/Rev.1)". The draft amendments are expected to be approved by MSC 110 (June 2025) for subsequent adoption by MSC 111 (2026) and are expected to enter into force on 1 January 2028.

Consequential draft amendments to resolution MSC.402(96) - Requirements for Maintenance, Thorough Examination, Operational Testing, Overhaul and Repair of Lifeboats and Rescue Boats, Launching Appliances and Release Gear

SSE 11 finalised consequential draft amendments to resolution MSC.402(96) for approval by MSC 110 (June 2025) and subsequent adoption by MSC 111 (2026). The draft amendments are expected to enter into force on 1 January 2028 and to be applied to free-fall lifeboats installed on or after 1 January 2031. The draft amendments introduce a requirement in paragraph 6.2 – *Annual thorough examination and operational test*, for free-fall lifeboats to have an arrangement to test the release system under load without launching the lifeboat into the water. In addition, in order to reference the new paragraph 4.7.7 of the LSA Code, draft amendments were made to paragraph 6.2.7 on the method to carry out the operational testing of the free-fall lifeboat release function.

Consequential draft amendments to resolution MSC.81(70) - Revised Recommendation on Testing of Life-Saving Appliances

Consequential draft amendments to resolution MSC.81(70) were finalised for adoption by MSC 111 (2026), along with the adoption of the associated draft amendments to SOLAS chapter III, the LSA Code and resolution MSC.402(96). The draft amendments are included in Part 1, paragraph 6.9 – *Release mechanism test* and Part 2, paragraph 6.1 – *Launching appliances using falls and winches*, and ensure that arrangements to

test the release system under load without launching the free-fall lifeboat into the water conform to the amended prototype, production and installation tests.

Consequential draft amendments to other instruments (MSC.1/Circ.1205/Rev.1, MSC.1/Circ.1529, MSC.1/Circ.1578 and MSC.1/Circ.1630/Rev.3)

SSE 11 finalised consequential draft amendments to MSC.1/Circ.1205/Rev.1, MSC.1/Circ.1529, MSC.1/Circ.1578 and MSC.1/Circ.1630/Rev.3, for approval by MSC 111 (2026), in conjunction with the adoption of the associated draft amendments to SOLAS chapter III, the LSA Code and resolution MSC.402(96).

Revision of SOLAS chapter III and the LSA Code

SSE 11 considered the report of the LSA correspondence group on revision of SOLAS chapter III and the LSA Code. The report includes draft functional requirements and expected performance, taking into account the road map set out at SSE 10. The sub-committee also considered documents from III 10 about accidents related to faulty lifeboat slings and rescue/survival craft accidents.

SSE agreed to the following draft functional requirements:

Alarm phase:

- All persons on board shall be alerted by an onboard emergency alarm and communication system without delay depending on the emergency;
- The emergency alarm and communication of subsequent actions to be taken shall be readily understandable by all persons on board;
- Special consideration shall be given for persons who do not follow the instruction; and
- The onboard emergency alarm and communication system shall be capable of preventing and overriding erroneous alarms.

Proceed to embarkation phase:

- More than one escape route separated from each other shall be provided from a person's actual location to the [embarkation position] [position of safe evacuation];
- Escape routes shall be protected against the effect of the accident;
- Escape routes shall be safely usable under adverse environmental conditions;
- Escape routes shall be protected from obstacles hindering the safe use;
- Escape routes shall be safely usable under adverse static and dynamic ship conditions;
- Escape route shall provide sufficient capacity for the number of escaping persons;
- All persons shall be able to escape irrespective of their disability or impairment;
- Escape routes shall be clearly and consistently identifiable for all persons under all conditions;
- Proper instruction and familiarisation regarding the escape routes from all locations authorised for access shall be provided to all persons [at embarkation [to the vessel]];
- All persons on board shall receive timely guidance to move to the position of safe evacuation; and
- Escape routes shall be designed to facilitate a safe and timely transit to a [position of safe evacuation] [muster/embarkation position].

Work on drafting the necessary functional requirements and expected performance for the remaining phases will continue intersessionally in the LSA correspondence group, taking into account discussions at SSE 11 on definitions, in particular, recognising the need to be consistent and clear with the words and phrases used and to utilise terms from existing IMO instruments to aid consistency.

Amendments to SOLAS chapter III and chapter IV of the LSA Code to require the carriage of self-righting or canopied reversible liferafts for new ships

SSE 11 considered a proposal to equip all passenger ships and cargo ships with automatically self-righting or canopied reversible liferafts (except for liferafts with a capacity of no more than six persons) and, consequentially, to amend regulations 21, 26 and 31 of SOLAS chapter III and paragraphs 4.2 and 4.3 of chapter IV of the LSA Code. The LSA correspondence group reporting to SSE 12 (2026) were requested to continue this work, including consideration of transitional arrangements of 3 and 5 years for the implementation for passenger ships and cargo ships, respectively.

Comprehensive review of the Requirements for maintenance, thorough examination, operational testing, overhaul and repair of lifeboats and rescue boats, launching appliances and release gear (resolution MSC.402(96)) to address challenges with their implementation

SSE 11 continued the work to further develop, validate and prioritise the list of issues for consistent implementation of the requirements contained in resolution MSC.402(96), including draft definitions of "make", "type", "model" and "series". Proposals were invited to be submitted to SSE 12 (2026) to clarify the need for manufacturers to be authorised as service providers in order to undertake the servicing for their own equipment and/or equipment not manufactured by themselves.

There was insufficient time for SSE 11 to consider draft amendments to resolution MSC.402(96), taking into account the list of issues for consistent implementation of the requirements contained in resolution MSC.402(96). Furthermore, the sub-committee agreed that the work on this agenda item did not need to continue intersessionally.

Draft revised categorisation list of issues for consistent implementation of the requirements contained in resolution MSC.402(96)

SSE previously categorised the identified issues for consideration when developing draft amendments to resolution MSC.402(96) as follows:

- Authorisation of service providers, including equipment manufacturers
- Manufacturer's established certification programme
- Clarification of the certification of personnel
- Definitions of various terms
- Timing of annual servicing
- Other issues

With regard to the above, SSE 11 identified a number of additional "new uncategorised issues" for consideration when developing draft amendments.

Draft definitions of "make", "type", "model" and "series" to be used in resolution MSC.402(96)

SSE 11 agreed in principle to the following draft definitions of "make", "type", "model" and "series":

- **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 (non-exhaustive examples are 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.

In addition to the above, a non-exhaustive list of examples was developed to support the draft definitions and the ISO were invited to update ISO 23678:2022 to align with the newly developed four draft definitions, so that a reference to the standard can be made by a footnote in the draft amendments to resolution MSC.402(96).

Amendments to the LSA Code for thermal performance of immersion suits

The IMO first considered this work in 2008 but agreed to defer the development of any amendments pending the outcome of practical work that was considered necessary, including the determination of suitable thermal resistance criteria, and the finalisation and validation of testing methodology.

Amendments to MSC.81(70) Revised recommendation on testing of life-saving appliances have been adopted and amendments to MSC.1/Circ.1628/Rev.1 on Revised standardized life-saving appliance evaluation and test report forms (personal life-saving appliances) have been approved. However, having noted the ongoing work of ISO/TC 188/SC.1 on thermal performance of immersion suits, it was agreed that further discussion on the thermal performance of immersion suits was required. SSE 11 agreed to keep this item on the agenda for SSE 12 (2026) for further work and requested MSC 110 to extend the deadline for completing the work to 2027.

Unified interpretation of provisions of IMO safety, security and environment, facilitation, liability and compensation-related conventions (LSA)

Draft unified interpretation of paragraphs 6.1.1.3 and 6.1.2.2 of the LSA Code - Manual hoisting of a dedicated rescue boat

SSE 10 (2024) discussed the draft unified interpretation provided by the LSA correspondence group, however, unanimous agreement to the draft text could not be reached, therefore, it was sent to the LSA correspondence group for review and discussion at SSE 11. Additional documents submitted to SSE 10 under this agenda item were also referred to the LSA correspondence group for consideration.

SSE 11 concluded that the original draft interpretation for paragraph 6.1.1.3 was unnecessary because the interpretation only provides redundant information. However, the sub-committee agreed the following unified interpretation to clarify that, for cargo ships, manual hoisting of a dedicated rescue boat should be considered as part of launching preparation, but not part of launching process:

"Interpretation

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."

Regarding paragraph 6.1.2.2, SSE 11 approved the following unified interpretations:

"Interpretation

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.

Additional interpretation

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."

A draft MSC circular is expected to be approved at MSC 110 (June 2025).

Any Other Business (LSA)

Under this agenda item, SSE 11 considered the following:

Proposal for amendments to the test procedure and acceptance criteria for lifejacket buoyancy test (resolution MSC.81(70) and MSC.1/Circ.1628/Rev.1)

SSE 11 agreed draft amendments to resolution MSC.81(70) and MSC.1/Circ.1628/Rev.1, to improve the test procedure for the lifejacket buoyancy test and make acceptance criteria consistent with the LSA Code. They are expected to be adopted at MSC 110.

Proposal to amend resolution MSC.81(70) on Revised recommendation on testing of life-saving appliances

SSE 11 considered a proposal to amend the test procedure and acceptance criteria of resolution MSC.81(70) for flame exposure of lifejackets to include requirements that lifejackets should not be damaged which would cause loss of buoyant material, or any other type of damage that affects its performance in the water. A proposal to include a timeframe of 5 minutes in the test procedure and acceptance criteria for load testing for new lifeboats and rescue boats of resolution MSC.81(70) was also considered.

Although there was general support for the proposal, SSE 11 asked interested parties to prepare a new output submission for a future MSC meeting.

Differences between the LSA Code and ISO 18813 on Survival equipment for survival craft and rescue boats

A proposal to amend paragraphs 4.1.5.1.18 and 4.1.5.1.19 of the LSA Code to align it with ISO 18813 was considered. It was noted that the requirements for food rations and emergency drinking water have not changed between the 2006 and 2022 versions of ISO 18813. However, despite the unchanged provisions between the 2006 and 2022 versions of ISO 18813, it was noted that discrepancies persist when comparing these versions with the LSA Code requirements. It was agreed that rather than amending the LSA Code, the preference would be for the ISO standard to be updated.

Updates to ISO survival craft equipment standard in the LSA Code

SSE 11 considered updates to the revised ISO standard 18813:2022 and approved draft amendments to the LSA Code, as a minor correction, to be included in the next edition of the LSA Code and associated resolution MSC.218(82). The amendments change the footnoted ISO references in paragraph 4.1.5.1.18 and 4.1.5.1.19 of the LSA Code from "ISO 18813:2006" to "ISO 18813:2022".

Proposal to amend the "Temperature cycling test- test data sheets" to facilitate and to record the ordinary room temperatures and dates in various applicable Revised standardized life-saving appliance evaluation and test report forms (MSC.1/Circ.1628/Rev.2, MSC.1/Circ.1629, MSC.1/Circ.1630/Rev.2 and MSC.1/Circ.1633)

A proposal was submitted to modify the "Temperature cycling test - test data" sheets to confirm the exposure of prototype samples to ordinary room temperature condition between the hot and cold cycles of LSA (lifebuoys, lifebuoy self-igniting lights, lifejackets, immersion suits, thermal protective aids, lifeboat buoyant material, rocket parachute flares, hand flares, line-throwing appliances etc.) and to record the associated information in various applicable revised standardised life-saving appliance evaluation and test report forms. The LSA correspondence group will review the proposal (draft amendments to MSC.1/Circ.1628/Rev.2, MSC.1/Circ.1629, MSC.1/Circ.1630/Rev.3 and MSC.1/Circ.1633), including consideration of the amendments as a minor correction, and report to SSE 12 (2026) for possible approval by MSC 112 (2026).

Fire Protection (FP), Detection and Extinguishing

Review and update of the Code of practice for atmospheric oil mist detectors (MSC.1/Circ.1086)

SSE agreed draft amendments to MSC/Circ.1086 - *Code of Practice for Atmospheric Oil Mist Detectors*. This work relates to concerns raised that fires on board ships are often caused or enhanced by oil leaks in engine-rooms.

The draft amendments include consideration of the following:

- Agreement to retain the scope of the draft revised code by concentrating on conventional oil, i.e. not to consider alternative fuels in the draft revised code.
- Agreement to delete the list of types of detection systems from the draft revised code. With regard to
 approval of detectors, it was also agreed to include a provision stating that oil mist detectors should be
 approved in accordance with international standards acceptable to the Administration, with a
 corresponding footnote referring to the relevant ISO standard.
- Having harmonised the terminology in the draft revised code about setting alert levels and indication, it was agreed to include a footnote reference to the 2009 Code on Alerts and Indicators.
- Agreement to include provisions in the draft revised code stating that inspection and maintenance should be done in accordance with the manufacturer's instructions, and that the detectors should be accompanied by an instruction manual.

The draft revised code of practice for atmospheric oil mist detectors, along with an associated draft MSC circular, are expected to be approved at MSC 110 (June 2025).

Revision of the 2010 FTP Code to allow for new fire protection systems and materials

Several proposals related to revision of the 2010 FTP Code and relevant fire test procedures therein were considered which allow for new fire protection systems and materials to be included. The proposals considered included:

• Incorporating into the 2010 FTP Code a reference to resolution A.753(18) on *Guidelines for the use of plastic pipes on ships*, as amended, as a footnote;

- Various draft text adjustments and corrections to the 2010 FTP Code with the aim of improving uniformity, to ensure a consistent and fair interpretation and a level playing field among manufacturers, test laboratories and Administrations;
- Edits to the 2010 FTP Code, providing clarification to a number of sections, proposing changes to existing text, and identifying areas for discussion and development; and
- Amendments to Part 3, Annex 1 of the 2010 FTP Code by adding fire test requirements for "H" class
 divisions, so as to provide guidance on the implementation of tests according to unified standards and
 ensure the accuracy and reliability of the tests.

Due to time constraints, the work on this item will be progressed intersessionally by the Fire Protection correspondence group.

Review and update of SOLAS regulation II-2/9 on containment of fire to incorporate existing guidance and clarify requirements

SSE 11 continued the work to review and update SOLAS regulation II-2/9 on containment of fire to incorporate existing guidance and clarify requirements in SOLAS regulations II-2/9.7.3.1.3 (fire insulation of duct sleeves) and 9.2.3.3 (fire integrity of bulkheads and decks), and tables 9.5 (fire integrity of bulkheads separating adjacent spaces) and 9.6 (fire integrity of decks separating adjacent spaces), to remove any ambiguities. The sub-committee also considered a proposal for a new guidance document, (i.e. an MSC Circular) to incorporate existing explanatory figures associated with guidance text that has been proposed to include in the update to SOLAS regulation II-2/9.

SSE 11 agreed to continue this work in the Fire Protection correspondence group reporting to SSE 12 (2026). Regarding a proposal to include various IACS unified interpretations in the scope of work for this agenda item, SSE requested MSC 110 to advise if the scope of work can be amended to include this proposal.

Development of amendments to SOLAS chapter II-2 and the FSS Code concerning detection and control of fires in cargo holds and on the cargo deck of containerships

SSE 11 considered the following:

- Draft new SOLAS regulation II-2/7.11 on portable infrared thermal imagers;
- Draft amendments to SOLAS regulation II-2/10.7.3 concerning water mist lances and fixed and mobile water monitors;
- Draft guidelines for the design, performance, testing and approval of water mist lances; and
- Revision of MSC.1/Circ.1472 on mobile water monitor systems.

SSE 11 also considered proposals related to bilge pumping capacity for cargo holds of container ships, including free surface effects and stability issues. The sub-committee agreed to defer consideration of bilge capacity, potential free surface effects and stability issues until consideration on active protection systems has been finalised.

Due to time constraints, SSE 11 did not progress work on the following items, instead, requesting the Fire Protection correspondence group to further consider them:

- Active protection systems (e.g. spraying water horizontally below the hatch coaming and deluge systems integrated into the pontoon hatches, as well as passive protection systems)
- Potential impact of some measures on other systems or other parts of the existing requirements

- Application and approval standards of video fire detection systems
- Draft amendments to MSC.1/Circ.1472 Guidelines for the Design, Performance, Testing and Approval of Mobile Water Monitors used for the Protection of On – Deck Cargo areas of Ships Designed and Constructed to Carry Five or More Tiers of Containers On or Above the Weather Deck

Draft new SOLAS regulation II-2/7.11

SSE 11 drafted amendments to SOLAS regulation II-2/7 – *Detection and alarm*. The amendments relate to localisation and confirmation of fires on ships designed to carry containers on or above the weather deck, including requirements for portable infrared thermal imagers (number, storage, testing and functionality) and reference to relevant international or recognised standards. The requirements are expected to apply to ships constructed on or after 1 January 2032.

Draft amendments to SOLAS regulation II--2/10.7.3 concerning water mist lances and fixed and mobile water monitors

SSE 11 drafted amendments to SOLAS regulation II-2/10.7.3, including updates to the requirements for the carriage of water mist lances (to be approved by the Administration in accordance with the guidelines shown below) and fixed and mobile water monitors. The sub-committee agreed to a goal-based approach regarding a requirement for number and installation of fixed water monitors but was not able to agree to a specific provision at this stage. With regard to carriage of dangerous goods, SSE 11 agreed to replace the reference from SOLAS regulation II-2/19.3.1.5 to II-2/19.3.1.2, to state in the corresponding provision that, "If the ship is intended to carry dangerous goods in dedicated areas, the capacity of fire pumps and fire main diameter shall also comply with regulation 19.3.1.2, as far as applicable to on-deck cargo areas".

The requirements are expected to apply to ships constructed on or after 1 January 2032. Ships constructed on or after 1 January 2016 and before 1 January 2032 are to comply with the previously applicable requirements.

Draft guidelines for the design, performance, testing, and approval of water mist lances used for the protection of on-deck cargo areas of ships designed and constructed to carry containers on or above the weather deck

Guidelines for the for the design, performance, testing, and approval of water mist lances were drafted, as required by SOLAS regulation II-2/10.7.3. The guidelines include relevant definitions and principle requirements related to corrosion resistance, operation, performance, risk mitigations for fire fighting crews, operating manual and transportation, amongst others. The sub-committee also considered the capacity of a water mist lance but could not reach a consensus on this matter. Therefore, the wording "between 50 l/min and 100 l/min" was left to the Fire Protection correspondence group to further consider.

Development of provisions to consider prohibiting the use of fire-fighting foams containing fluorinated substances, in addition to PFOS, for fire-fighting on board ships

No submissions were made to SSE 11 on the development of provisions to consider prohibiting the use of fire-fighting foams containing fluorinated substances, in addition to PFOS, for fire-fighting on board ships. Having noted that there is ongoing work related to this topic in the Persistent Organic Pollutants Review Committee (next conference May 2025) and the European Union, the sub-committee agreed to keep this item on the agenda for further consideration at SSE 12 (2026).

Evaluation of adequacy of fire protection, detection and extinction arrangements in vehicle, special category and ro-ro spaces in order to reduce the fire risk of ships carrying new energy vehicles

SSE previously agreed on a road map and a goal-based approach for an effective consideration of fire safety system to reduce the fire risk of ships carrying new energy vehicles, including battery electric vehicles (BEVs). SSE 11 reviewed the work of the Fire Protection correspondence group, including discussions on the following:

- Gathering of information related to fire safety systems for ships carrying new energy vehicles, including Battery Electric Vehicles (BEVs);
- Detection systems within vehicle spaces and ro-ro spaces on cargo ships, e.g. heat and smoke detectors within an addressable system; and
- The proposed way forward and preliminary draft amendments relating to fire confirmation (video monitoring system) within vehicle spaces and ro-ro spaces on cargo ships.

A draft action plan was developed, based on the previously agreed road map, taking into consideration the work done by the correspondence group, the high volume of work needed and the time available until the next potential entry into force date in 2032. Further work to be carried out intersessionally includes:

- Developing the draft action plan.
- Developing the list of relevant scientific reports and studies, etc.
- Consider proposals related to video fire detection (VFD) systems for ships carrying new energy vehicles, technologies and methodologies for enhancing fire safety on ships carrying battery electric vehicles and definitions for the terminology used in the context of lithium-ion battery fires.
- Identify hazards related to new energy vehicles, including BEVs and risk control options.

A proposal regarding use of brine systems to extinguish lithium battery fires on Ro-Ro passenger ships was considered, however, it was felt that more results from the referenced tests and information about the design of the system would be needed, therefore, a request was made for additional submissions to future sessions.

Unified interpretation of provisions of IMO safety, security, environment, facilitation, liability and compensation-related conventions (FP)

Draft unified interpretation regarding the fitting of a small-diameter self-closing control cock on sounding pipes of tanks for flammable oils other than oil fuel and lubricating oil

SSE 11 considered a draft unified interpretation on the fitting of the small-diameter self-closing control cock required by SOLAS regulation II-2/4 on sounding pipes in certain tanks. The draft interpretation is intended to clarify issues regarding the intent of requirements and the identification of tanks whose sounding pipes should not necessarily be fitted with a small-diameter self-closing control cocks required by SOLAS regulation II-2/4.2.4.

SSE 11 agreed to continue the discussion in the Fire Protection correspondence group reporting to SSE 12 (2026).

IACS unified interpretation SC 211/Rev.1 of SOLAS regulations II-2/3.6 and II-2/4.5.1.1 relating to the protection of fuel oil tanks and to the designation of fore peak spaces

SSE 11 noted the submission of an IACS unified interpretation of SOLAS regulations II-2/3.6 and II-2/4.5.1.1 relating to the protection of fuel oil tanks and to the designation of fore peak spaces. IACS UI SC 211 was revised as a consequential amendment to alignment of IACS UR F44 with IEC 60092. The IACS unified interpretation is to be uniformly implemented by IACS members on ships contracted for construction on or after 1 January 2026, unless advised otherwise by the flag State in writing.

IACS unified interpretation SC 307 of SOLAS regulation II-2/4.5.10 regarding protection of cargo pumprooms

SSE 11 noted the submission of an IACS unified interpretation of SOLAS regulation II-2/4.5.10 regarding protection of cargo pump-rooms. The interpretation is intended to provide clarity regarding a number of vague expressions, where the detectors should be fitted and where the bilge high-level alarms are to be provided in order to allow detection at an early stage of any leakage or explosive atmospheric condition. The IACS unified interpretation will be applied by IACS members from 1 July 2025 to ships contracted for construction on or after 1 January 2026, unless advised otherwise by the flag State in writing.

IACS unified interpretation SC 269/Rev.2 of SOLAS regulation II-2/13.4.2 relating to the means of escape from the steering gear spaces in cargo ships

SSE 11 noted the submission of an IACS unified interpretation of SOLAS regulation II-2/13.4.2 relating to the means of escape from the steering gear spaces in cargo ships. IACS UI SC 269 was revised to clarify that the last sentence of SOLAS regulation II-2/13.4.2.2 applies regardless of ship size and that it should be read in conjunction with SOLAS regulation II-2/13.4.2.3, as steering gear spaces are typically regarded as "other machinery spaces". The IACS unified interpretation is to be uniformly implemented by IACS members from 1 January 2026, unless advised otherwise by the flag State in writing.

Proposed unified interpretations of SOLAS regulation II-2/10.11 relating to the extinguishing media containing PFOS and of regulation 7.9.4 of the 1994 and 2000 HSC Codes relating to the fire-extinguishing media restrictions

MSC 107 adopted resolutions MSC.532(107), MSC.536(107) and MSC.537(107), which included amendments to SOLAS and the 1994 and 2000 HSC Codes on the prohibition of the use and storage of fire-extinguishing media containing perfluorooctane sulfonic acid (PFOS). SSE 11 agreed to a draft unified interpretation of SOLAS regulation II-2/10.11 and regulation 7.9.4 of the 1994 and 2000 HSC Codes and prepared a draft MSC Circular for approval by MSC 110 (June 2025). The interpretation provides clarity on how compliance with the requirements to prohibit PFOS will be demonstrated for both new and existing ships.

Proposal for unified interpretations of paragraph 2.4.2.2 of chapter 9 of the FSS Code relating to the spacing of combined smoke and heat detectors

MSC 108 adopted amendments to SOLAS regulation II-2/20 and the FSS Code, respectively, through resolutions MSC.550(108) and MSC.555(108) to enhance the fire safety of ro-ro passenger ships. SSE 11 agreed to a draft unified interpretation of paragraph 2.4.2.2 of chapter 9 of the FSS Code and prepared a draft MSC Circular for approval by MSC 110 (June 2025) with expected entry into force date of 1 January 2026. The interpretation provides clarity on the acceptable spacing of combined smoke and heat detectors, with a view towards global and uniform implementation.

Proposal on unified interpretation of paragraph 2.1.3.3 of chapter 5 of the FSS Code on the positions of means of control of any fixed gas fire-extinguishing system

SSE 11 considered a draft unified interpretation regarding the position requirements for means of control of any fixed gas fire-extinguishing system in paragraph 2.1.3.3 of chapter 5 of the FSS Code to facilitate unified understanding and implementation by the shipping industry. The sub-committee did not support the proposal.

Unified interpretation of provisions of IMO safety, security and environment-related conventions (not covered under LSA or FP)

Draft unified interpretation of SOLAS Regulation II-1/3-13.2.4 with respect to a factual statement for the test and thorough examination of non-certified lifting appliances

MSC 107 adopted SOLAS regulation II-1/3-13 on shipboard lifting appliances and anchor handling winches (resolution MSC.532(107) for entry into force 1 January 2026) and approved the *Guidelines for lifting appliances* (MSC.1/Circ.1663).

SSE 11 agreed a draft unified interpretation of SOLAS regulation II-1/3-13.2.4 to facilitate uniform documentation of load testing and thorough examination for existing non-certified lifting appliances. The interpretation provides a factual statement, as a form of documentation of load testing and thorough examination of existing lifting appliances without valid certificates, which were installed before 1 January 2026, to be effective from 1 January 2026, which is aligned with the entry into force of amended SOLAS regulation II-1/3-13. A draft MSC Circular was prepared for approval by MSC 110 (June 2025) with expected entry into force date of 1 January 2026.

IACS unified interpretation SC11 of SOLAS regulation II-1/45.5.3

SSE 11 noted the submission of an IACS unified interpretation of the vague phrase "other high fire risk areas" in SOLAS regulation II-1/45.5.3 relating to the precautions against shock, fire and other hazards of electrical origin. The intention of the interpretation is to clarify which areas the cables and wiring serving essential or emergency power, lighting, internal communications or signals should be routed clear of, so far as practicable. The IACS unified interpretation is to be uniformly implemented by IACS members on ships contracted for construction on or after 1 January 2026, unless advised otherwise by the flag State in writing.

IACS unified interpretation (UI) SC305 (new) of SOLAS regulation II-1/26.2 relating to single essential propulsion components and their reliability

SSE 11 noted the submission of an IACS unified interpretation of SOLAS regulation II-1/26.2 relating to single essential propulsion components and their reliability. The IACS unified interpretation text is taken from MSC.1/Circ.1685 (approved at MSC 109 with an effective date of 1 January 2026) and is extended to apply to cargo ships in addition to passenger ships. The IACS unified interpretation is to be uniformly implemented by IACS members on ships contracted for construction on or after 1 January 2026, unless advised otherwise by the flag State in writing.

Any Other Business (not covered under LSA or FP)

Comments on PPR 11 relating to P/V valve opening pressure

SSE 11 considered a request by PPR 11 concerning a requirement for new crude oil tankers to be fitted with P/V valves with opening pressure of minimum 0.20 bar and to identify any negative implications. Based on comments received to this session, the sub-committee concluded that there would be no negative implications and invited PPR 13 (2026) to take note of this conclusion and take action as appropriate.

SSE 11 also referred a commenting paper to PPR 13 for further consideration. The commenting paper states that, as the requirement will be directly linked to the reduction of Volatile Organic Compound (VOC) emissions from tankers, it is proposed that the requirement for PV-valve pressure settings should be regulated under the existing framework in MARPOL Annex VI. Furthermore, it proposes that the requirement on minimum P/V-valve pressure setting should be included in regulation 15 of Annex VI to MARPOL, as follows:

"Regulation 15 Volatile organic compounds

8 For tankers carrying crude oil constructed on or after DD-MM-YYYY, where pressure-vacuum devices are installed in accordance with regulation 11.6.1 of SOLAS chapter II-2, such devices shall have a pressure relief pressure setting of not less than 0.20 bar gauge."

Biennial Status Report and Provisional Agenda for SSE 12

SSE agreed to include the following on the provisional agenda of SSE 12, subject to agreement by MSC 110:

- Revision of the Revised guidelines for the maintenance and inspections of fixed carbon dioxide fireextinguishing systems (MSC.1/Circ.1318/Rev.1) to clarify the testing and inspection provisions for CO₂ cylinders; and
- Development of amendments to paragraph 2.1.2.5 of Chapter 5 of the FSS Code on construction requirement for gaskets.

SSE agreed to move the following to the provisional agenda of SDC 12, subject to agreement by MSC 110:

- Development of amendments to chapter 6 of the 2009 MODU Code on electrical equipment capable of operation after shutdown (from SSE 10);
- Development of amendments to chapter 15 of the International Code for Fire Safety System (FSS Code) on enclosed spaces containing a nitrogen receiver or a buffer tank of nitrogen generator system (from SSE 10); and
- Proposal to include the output on "Revision of the Guidelines for the application of plastic pipes on ships (resolution A.753(18))" in the provisional agenda for SSE 12.

Regulatory Affairs

Lloyd's Register Global Technology Centre, Hampshire House Hampshire Corporate Park, Southampton SO53 3RY, UK

Lloyd's Register EMEA

e: RegulatoryAffairs@lr.org

w: www.lr.org/imo

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