

TECHNICAL REGULATORY NEWS No. 5/2020 – STATUTORY

# IMO SUB-COMMITTEE ON SHIP SYSTEMS AND EQUIPMENT

Relevant for ship owners and managers of cargo ships and passenger ships.

March 2020

The 7th session of IMO's Sub-Committee on Ship Systems and Equipment (SSE) was held in London from 2 to 6 March 2020. SSE 7 agreed on draft new requirements for on-board lifting appliances, and on draft new interim guidelines for safe operation of shore power. SSE 7 further progressed work on ventilation of survival craft and on fire safety of ro-ro passenger ships, and initiated work to improve the safety of commercial diving operations.



## Meeting highlights

- Drafted new SOLAS requirements and guideline for lifting appliances
- Drafted new interim guideline on safe operation of shore power
- Progressed draft new requirements for ventilation of survival craft
- Progressed draft SOLAS amendments to enhance the fire safety of ro-ro passenger ships
- Agreed to improve the safety of commercial diving operations

## Life-saving appliances

### Ventilation of survival craft

SSE 6 finalized draft new ventilation requirements to address overheating and high CO<sub>2</sub> concentrations inside totally enclosed lifeboats. As a follow-up, SSE 7 agreed to amendments to resolution MSC.81(70) to address prototype testing of the ventilation means for totally enclosed lifeboats.

SSE 7 made good progress on developing draft new mandatory ventilation requirements to achieve habitable microclimates inside partially enclosed lifeboats and life rafts.

The draft new requirements for partially enclosed lifeboats and life rafts require the long-term CO<sub>2</sub> concentration to be below 5,000 ppm, considering a ventilation system providing 5 m<sup>3</sup>/hr/person as one option for compliance in the tests (resolution MSC.81(70)). The work will be continued in a correspondence group until SSE 8 (March 2021).

### Fall and hook systems with on-load release capability

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

SSE 7 agreed to amendments to LSA Code paragraph 4.4.7.6.17 to ensure adequate safety standards for lifeboats and rescue boats fitted with single fall and hook systems with on-load release capability.

The draft amendments will be submitted to a future session of MSC for approval, targeting entry into force on 1 January 2024.

### Launching of free-fall lifeboats

SSE 7 agreed to remove the requirement to launch free-fall lifeboats with the ship making headway at speeds up to 5 knots in calm water, as there is no additional dynamic load on the launching arrangements to be accounted for.

Draft amendments to SOLAS chapter III, LSA Code and resolution MSC.81(70) were agreed accordingly, in addition to a draft MSC circular on voluntary early implementation of draft amendments.

The draft amendments will be submitted to MSC 103 (November 2020) for approval.

### Life-saving appliance evaluation and test report forms

SSE 7 agreed to restructure and amend the non-mandatory "Standardized life-saving appliance evaluation and test report forms" (MSC/Circ. 980 and addenda) to incorporate effective amendments to

the LSA Code and the “Revised recommendation on testing of life-saving appliances” (resolution MSC.81(70)).

The draft revised evaluation and test report forms will be submitted to MSC 103 (November 2020) for approval.

#### Revision of SOLAS chapter III and the LSA Code

The IMO has agreed to revise SOLAS chapter III on life-saving appliances and arrangements and the related LSA Code to remove gaps, inconsistencies and ambiguities, and to restructure the requirements to a goal-based format.

SSE 7 agreed to a road map and an action plan for the revision of SOLAS chapter III and the LSA Code. Work will be conducted in a correspondence group until SSE 8 (March 2021).

#### Fire protection

##### Fire safety of ro-ro passenger ships

Several serious fire incidents have occurred on vehicle decks on ro-ro passenger ships over the past decade. The IMO intends to implement SOLAS amendments addressing this, targeting entry into force on 1 January 2024.

SSE 7 focused on appropriate measures for new ro-ro passenger ships, including enhanced fire detection, CCTV and monitors on weather deck. Suitable measures for existing ships were also considered. Discussions will continue in a correspondence group until SSE 8 (March 2021).

SSE 7 agreed on draft amendments to the “Revised guidelines for the design and approval of fixed water-based fire-fighting systems for ro-ro spaces” (MSC.1/Circ.1430/Rev.1). It was agreed to extend the maximum height for these systems from 9 to 10 metres for alignment with the definition of special category spaces. The draft amendments will be submitted to MSC 103 (November 2020) for approval.

##### Dry chemical powder fire extinguishing systems for LNG tankers

SSE 7 discussed draft amendments to the “Guidelines for the approval of fixed dry chemical powder fire-extinguishing systems for the protection of ships carrying liquefied gases in bulk” (MSC.1/Circ.1315).

SSE 7 agreed to use currently available ISO standards to conduct fire tests of the dry chemical powder, including a small-scale fire test. The permitted type of dry chemical powder will be further discussed at SSE 8 (March 2021).

##### Fault isolation of fire detection systems

SSE 7 agreed on draft amendments to chapter 9 of the Fire Safety Systems (FSS) Code, addressing fixed fire detection systems, to adjust the requirements to short circuit isolators. It was agreed that short circuit isolators do not need to be provided at each individually identifiable fire detector for cargo ships and for passenger ship balconies. For cargo ships, one per deck will typically be acceptable.

The draft amendments will be submitted to MSC 103 (November 2020) for approval.

##### Fixed carbon dioxide fire-extinguishing systems

SSE 7 agreed on draft amendments to the “Guidelines for the maintenance and inspections of fixed CO<sub>2</sub> fire-extinguishing systems” (MSC.1/Circ.1318). This represents a significant increase in the hydrostatic test regime for CO<sub>2</sub> cylinders.

Ten per cent of the total number of CO<sub>2</sub> cylinders shall still be tested at the 10-year inspection, but the 20-year test regime has been expanded from testing another 10% to all cylinders not tested so far (90%). All cylinders (100%) shall be tested at every 10-year anniversary thereafter.

The draft amendments will be submitted to MSC 103 (November 2020) for approval.

##### On-board lifting appliances and anchor handling winches

The IMO has agreed to develop new safety measures for shipboard cranes on board all ships and for anchor handling winches on board vessels used for anchor handling operations. Neither is covered by the current IMO instruments.

SSE 7 agreed on a new draft SOLAS regulation II-1/3-13 requiring applicable on-board lifting appliances and anchor handling winches to be designed, constructed and installed in accordance with classification rules or equivalent rules acceptable to the flag Administration. The draft new regulation will have retroactive application.

SSE 7 made good progress on developing corresponding guidelines for lifting appliances and associated loose gear. The work on these guidelines, and on guidelines for anchor handling winches on board vessels used for anchor handling operations, will continue in a correspondence group until SSE 8 (March 2021).

The draft new SOLAS regulation and the associated guidelines’ target entry into force is 1 January 2024.

##### Revision of SOLAS chapter II-1

Following up on the IMO intention to offer goal-based regulations, SSE 7 agreed to an action plan to develop goals and functional requirements for SOLAS chapter II-1, parts C, D and E on machinery installations, electrical installations and periodically unattended machinery spaces, respectively.

The work will be carried out in an intersessional correspondence group.

##### On-shore power supply

Following the global efforts to reduce air pollution from ships, an increasing amount of ports require or encourage ships to use shore power instead of fuel oil.

SSE 7 agreed to a draft interim guideline on the “safe operation of onshore power supply (OPS) service in port”. The draft interim guideline will be submitted to the Sub-Committee on Human Element, Training and Watchkeeping for consideration, and to MSC 103 (November 2020) for approval.

### Safety for diving systems and hyperbaric evacuation systems

SSE 7 agreed to update the non-mandatory “Code of safety for diving systems” and the “Guidelines and specifications for hyperbaric evacuation systems” to improve the safety of commercial diving operations.

The new draft code will be restructured according to the generic guidelines for developing IMO goal-based standards (MSC.1/Circ.1394/Rev.2). The work will take place in a correspondence group until SSE 8 (March 2021).

### Unified interpretations

#### Isolated pantries on passenger ships carrying more than 36 passengers

SSE 7 agreed to a unified interpretation to clarify acceptable structural fire protection arrangements for isolated pantries (fire risk category 9) on board ships carrying more than 36 passengers.

### Any other business

#### Listing of test laboratories and halon facilities

Information on test laboratories and halon facilities is now available through the IMO’s online information database GISIS. Member states were encouraged to update the information in the new GISIS module.

#### Information on evaluation of lifeboat hooks

SSE 7 agreed to keep the GISIS module, although no longer in active use, containing reports on the evaluation of lifeboat hooks as “read only”. Since 1 July 2019, all lifeboat hooks are expected to be SOLAS compliant.

### Water-based fire extinguishing systems on ro-ro decks

SSE 7 agreed to a corrigendum to MSC.1/Circ.1430/Rev.1 to prevent unintentional retroactive application of the fire and component test requirements for systems installed before 1 January 2021.

### Escape route signs and equipment location markings

SSE 7 agreed to consequential minor amendments to footnotes in the SOLAS Convention and the LSA Code following adoption of resolution A.1116(30) on “Escape route signs and equipment location markings”.

### Recommendations

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 GL recommends our customers to monitor the outcome of future MSC sessions.

Most of the regulatory development work taking place in SSE targets entry into force on 1 January 2024, following the four-year cycle of entry into force of SOLAS amendments.

### CONTACT

#### For customers:

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