附件7

第 MSC.555(108)号决议
(2024 年 5 月 23 日通过)

《国际消防安全系统规则》(《消防规则》)修正案

海上安全委员会，

忆及《国际海事组织公约》关于本委员会职能的第 28(b)条，

还忆及以第 MSC.98(73)号决议通过的《国际消防安全系统规则》(“《消防规则》”)，根据《1974 年国际海上人命安全公约》(“本公约”)第 II-2 章已成为强制性规则，

进一步忆及关于《消防规则》修正程序的本公约第 VIII(b)条和第 II-2/3.22 条，

在其第 108 届会议上，**审议了**按本公约第 VIII(b)(i)条提出和分发的《消防规则》修正案，

1 按本公约第 VIII(b)(iv)条，**通过**《消防规则》修正案，其文本载于本决议附件；

2 按本公约第 VIII(b)(vi)(2)(bb)条，**决定**该修正案应于 2025 年 7 月 1 日被视为获得接受，除非在此日期之前，有三分之一以上的本公约缔约国政府或拥有商船合计吨位数不少于世界商船总吨数 50%的缔约国政府已通知其反对该修正案；

3 **提请**本公约各缔约国政府注意，按本公约第 VIII(b)(vii)(2)条，该修正案在按上述第 2 段获得接受后，应于 2026 年 1 月 1 日生效；

4 **要求**秘书长，按本公约第 VIII(b)(v)条，将本决议及其附件中所载修正案文本的核正无误副本送交本公约所有缔约国政府；

5 **还要求**秘书长将本决议及其附件的副本分发给非本公约缔约国政府的本组织各会员。

附件

《国际消防安全系统规则》(《消防规则》)修正案

第 7 章
固定式压力水雾和细水雾灭火系统

2　　技术要求

1　　现有第 2.4 节(滚装处所、车辆处所和特种处所的固定式水基灭火系统)后新增以下第 2.5 节：

“**2.5　　拟载运车辆的滚装客船露天甲板上的固定式水基灭火系统**

本节详细规定了公约第 II-2 章所要求的拟载运车辆的滚装客船露天甲板上的固定式水基灭火系统的技术要求。本节要求须适用于 2026 年 1 月 1 日或以后建造的滚装客船。

2.5.1　受保护区域须为拟载运车辆的露天甲板整个长度和宽度。固定式水炮须能将水喷射至：

.1　拟载运车辆的露天甲板区域；和

.2　从拟储存车辆的区域水平方向上测量至多 8.0 m 的区域(包括上层建筑界限面)，或下一个垂向界限面，取较小者。

2.5.2　所有固定式水炮的组合容量在受保护区域须至少为 2.0 L/min 每平方米，但任一水炮的输出量不得小于 1,250 L/min。须确保水的均匀分布。

2.5.3　从水炮至其前方所保护区域最远端的距离，须不大于该炮在静止空气中射程的 75%。

2.5.4　每个水炮须位于其保护的区域外的安全位置，其通道不大可能在失火时被切断。

水炮的安装位置须在车辆存储至露天甲板最大容量时允许无阻挡的水覆盖。但是，无法被水炮覆盖的区域须受水枪保护。水枪的设计和安装须考虑到天气情况，在其覆盖区域的喷水率为 5.0 L/min 每平方米并且释放控制的位置须在失火时易于接近。

2.5.5　系统须能立即使用并能持续供水。供水须能以所要求的喷水率在整个拟载运车辆的露天甲板整个宽度和 40 m 的长度范围(或如果长度小于 40 m，整个长度范围)，同时供水。在任何情况下供水量须不小于最大水炮所需的水量。

2.5.6 每个系统可由消防总管、用于其他固定式水基灭火系统的泵或专用泵持续供应海水。

当使用船舶的消防泵给水炮供水时：

.1 须可以通过一个阀门将船舶消防总管和水炮分隔以分别或同时操作两个系统；和

.2 泵的容量须足以同时用于两个系统，包括来自消防总管系统具有所需压力的两股水柱。如果露天甲板还须载运危险货物，须设有具有所需压力的四股水柱的容量。

当使用另一个固定式水基灭火系统给水炮供水时：

.3 须可以通过一个阀门将另一个固定式水基灭火系统和水炮分隔以分别或同时操作两个系统；和

.4 对于开式滚装处所，泵的容量须足以同时用于两个系统，固定式水基灭火系统至少两个区段靠近面向露天甲板的开口和服务于露天甲板的一个水炮。对于闭式滚装处所和特种处所，不要求同时操作。”

第 9 章
固定式探火和失火报警系统

1 适用范围

2 第 1.1 段由以下替换：

“1.1 本章详细规定了《安全公约》第 II-2 章所要求的固定式探火和失火报警系统的技术要求。除另有明文规定外，本章要求须适用于 2012 年 7 月 1 日或以后建造的船舶。本章第 2.3.1.5 和 2.4.2.2 段的要求须适用于 2026 年 1 月 1 日或以后建造的船舶。”

2 技术要求

2.3 部件要求

3 第 2.3.1.3 和 2.3.1.4 段由以下替换：

“2.3.1.3 感温探测器和线性感温探测器须经验证，当温度以每分钟不大于 1ºC 的速率升高时，须在温度超过 78ºC 前动作，但在超过 54ºC 之前须不动作。试验时须按 EN 54:2001 和 IEC 60092-504 标准进行。经主管机关确定，也可使用替代试验标

准。温升率更大时，感温探测器和线性感温探测器须在主管机关认为满意的温度范围内动作，并要考虑到避免探测器不灵敏或过度灵敏的情况。

2.3.1.4 感温探测器和线性感温探测器的动作温度在干燥室和通常处于高温环境的类似处所内可以是 130ºC，在桑拿室内可到 140ºC。”

4 第 2.3.1.4 段后新增以下第 2.3.1.5 段，且后续段落相应地重新编号：

“2.3.1.5 线性感温探测器须按 EN 54-22:2015 和 IEC 60092-504 标准进行试验。经主管机关确认，也可使用替代试验标准。”

2.4 安装要求

2.4.2 探测器的位置

5 第 2.4.2.2 段和其中的表 9.1(探测器的间距)由以下替换：

“2.4.2.2 探测器的最大间距须符合下表：

表 9.1—探测器的间距

探测器类型	每一探测器的最大地板面积(m^2)	探测器间的最大中心间距(m)	与舱壁的最大距离(m)
感温式	37	9	4.5
感烟式	74	11	5.5
感温感烟混合式	74	9	4.5

2.4.2.2.1 主管机关可根据证实探测器特性的试验资料，要求或允许其他间距。安装在移动式滚装甲板以下的探测器须符合上述要求。

2.4.2.2.2 线性感温探测系统的两条传感器电缆之间的距离须不大于 9.0 m，此类电缆和舱壁的距离须不大于 4.5 m。”

2.5 系统控制要求

2.5.1 视觉和听觉失火信号

6 第 2.5.1.1 段后新增以下第 2.5.1.2、2.5.1.3 和 2.5.1.4 段，且后续段落相应地重新编号：

“2.5.1.2 在 2026 年 1 月 1 日或以后建造的滚装客船上，报警通知须遵循一致的报警展示模式(措辞、词汇、颜色和位置)。报警须能在驾驶室被立即识别并须不受噪音或位置不佳影响。

2.5.1.3 在 2026 年 1 月 1 日或以后建造的滚装客船上，界面须提供报警来源，使船员识别报警历史，最近一次的报警和抑制报警的方式，同时确保目前具有触发条件的报警仍清晰可见。

2.5.1.4 在 2026 年 1 月 1 日或以后建造的滚装客船上，特种处所和滚装处所的感烟探测器功能可以在车辆装卸期间断开。断开的时间须顺应装卸时间并在该预设时间后自动复位。中央单元须表明探测器区段是否断开。不允许断开感温探测功能或手动报警点。”

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ANNEX 7

RESOLUTION MSC.555(108)
(adopted on 23 May 2024)

AMENDMENTS TO THE INTERNATIONAL CODE FOR FIRE SAFETY SYSTEMS (FSS CODE)

THE MARITIME SAFETY COMMITTEE,

RECALLING Article 28(b) of the Convention on the International Maritime Organization concerning the functions of the Committee,

RECALLING ALSO resolution MSC.98(73), by which it adopted the International Code for Fire Safety Systems ("the FSS Code"), which has become mandatory under chapter II-2 of the International Convention for the Safety of Life at Sea, 1974 ("the Convention"),

RECALLING FURTHER article VIII(b) and regulation II-2/3.22 of the Convention concerning the procedure for amending the FSS Code,

HAVING CONSIDERED, at its 108th session, amendments to the FSS Code, proposed and circulated in accordance with article VIII(b)(i) of the Convention,

1 ADOPTS, in accordance with article VIII(b)(iv) of the Convention, amendments to the FSS Code, the text of which is set out in the annex to the present resolution;

2 DETERMINES, in accordance with article VIII(b)(vi)(2)(bb) of the Convention, that the amendments shall be deemed to have been accepted on 1 July 2025 unless, prior to that date, more than one third of the Contracting Governments to the Convention, or Contracting Governments the combined merchant fleets of which constitute not less than 50% of the gross tonnage of the world's merchant fleet have notified the Secretary-General of their objections to the amendments;

3 INVITES Contracting Governments to note that, in accordance with article VIII(b)(vii)(2) of the Convention, the amendments shall enter into force on 1 January 2026 upon their acceptance in accordance with paragraph 2 above;

4 REQUESTS the Secretary-General, in conformity with article VIII(b)(v) of the Convention, to transmit certified copies of the present resolution and the text of the amendments contained in the annex to all Contracting Governments to the Convention;

5 ALSO REQUESTS the Secretary-General to transmit copies of this resolution and its annex to Members of the Organization which are not Contracting Governments to the Convention.

ANNEX

AMENDMENTS TO THE INTERNATIONAL CODE FOR FIRE SAFETY SYSTEMS (FSS CODE)

CHAPTER 7
Fixed pressure water-spraying and water mist fire-extinguishing systems

2 Engineering specifications

1 The following new section 2.5 is added after existing section 2.4 (Fixed water-based fire-fighting systems for ro-ro spaces, vehicle spaces and special category spaces):

"**2.5 Fixed water-based fire-extinguishing system on ro-ro passenger ships' weather decks intended for the carriage of vehicles**

This paragraph details the specification of fixed water-based fire-extinguishing system on ro-ro passenger ships having weather decks intended for the carriage of vehicles as required by chapter II-2 of the Convention. The requirements of this paragraph shall apply to ro-ro passenger ships constructed on or after 1 January 2026.

2.5.1 The protected area shall be the entire length and width of the weather deck intended for the carriage of vehicles. The fixed monitor(s) shall be capable of delivering water to:

.1 the area of weather decks intended for carriage of vehicles; and

.2 the area, including superstructure boundaries located up to 8.0 m, measured horizontally, from the area intended for vehicle storage, or the next vertical boundaries, whichever is less.

2.5.2 The combined capacity of all fixed monitors shall be minimum 2.0 L/min per square metre of the protected area, but in no case shall the output of any monitor be less than 1,250 L/min. Even distribution of water shall be ensured.

2.5.3 The distance from the monitor to the farthest extremity of the protected area forward of that monitor shall not be more than 75% of the monitor throw in still air conditions.

2.5.4 Each monitor shall be located outside the area which it protects, in a safe position, with access not likely to be cut off in case of fire.

Monitors shall be installed in positions which allow for unobstructed water coverage with vehicles stowed to maximum capacity of the weather deck. However, areas that cannot be covered by water monitors shall be protected by water nozzles. Nozzles shall be designed and installed taking into account weather conditions and provide 5.0 L/min per square metre for the area they cover and have release controls in a position being accessible in case of a fire.

2.5.5 The system shall be available for immediate use and capable of continuously supplying water. The water supply shall be capable of simultaneously supplying water at the required rate for the entire width of the weather deck intended for carriage of vehicles and a length of 40 m, or the entire length of the weather deck if this is less than 40 m. In no case shall the supply capacity be less than that required for the largest monitor.

2.5.6 The system may be supplied by the fire main, the pump(s) serving other fixed water-based fire-fighting systems or a dedicated pump providing a continuous supply of seawater.

Where the ship's fire pumps are used to feed the monitor(s):

.1 it shall be possible to segregate the ship's fire main from the monitor(s) by means of a valve in order to operate both systems separately or simultaneously; and

.2 the capacity of the pumps shall be sufficient to serve both systems simultaneously, including two jets of water at the required pressure from the fire main system. In case the weather deck shall also carry dangerous goods, capacity for four jets of water at the required pressure shall be provided.

Where another fixed water-based fire-fighting system is used to feed the monitor(s):

.3 it shall be possible to segregate the other fixed water-based fire-fighting system from the monitor(s) by means of a valve in order to operate both systems separately or simultaneously; and

.4 the capacity of the pump(s) shall, in case of open ro-ro spaces, be sufficient to serve both systems simultaneously, minimum two sections of the fixed water-based fire-fighting system being close to the openings facing weather deck and one monitor serving the weather deck. For closed ro-ro spaces and special category spaces, simultaneous operation is not required."

CHAPTER 9
Fixed fire detection and fire alarm systems

1 Application

2 Paragraph 1.1 is replaced by the following:

"1.1 This chapter details the specification of fixed fire detection and fire alarm systems as required by chapter II-2 of the Convention. Unless expressly provided otherwise, the requirements of this chapter shall apply to ships constructed on or after 1 July 2012. The requirements of 2.3.1.5 and 2.4.2.2 of this chapter shall apply to ships constructed on or after 1 January 2026."

2 Engineering specifications

2.3 Component requirements

3 Paragraphs 2.3.1.3 and 2.3.1.4 are replaced by the following:

"2.3.1.3 Heat detectors and linear heat detectors shall be certified to operate before the temperature exceeds 78ºC but not until the temperature exceeds 54ºC, when the temperature is raised to those limits at a rate less than 1ºC per min, when tested according to relevant parts of standards EN 54:2001 and IEC 60092-504. Alternative testing standards may be used as determined by the Administration. At higher rates of temperature rise, the heat detector and linear heat detector shall operate within temperature limits to the satisfaction of the Administration having regard to the avoidance of detector insensitivity or oversensitivity.

2.3.1.4 The operation temperature of heat detectors and linear heat detectors in drying rooms and similar spaces of a normal high ambient temperature may be up to 130ºC, and up to 140ºC in saunas."

4 The following new paragraph 2.3.1.5 is inserted after the existing paragraph 2.3.1.4 and subsequent paragraphs are renumbered accordingly:

"2.3.1.5 Linear heat detectors shall be tested according to standards EN 54-22:2015 and IEC 60092-504. Alternative testing standards may be used as determined by the Administration."

2.4 Installation requirements

2.4.2 Positioning of detectors

5 Paragraph 2.4.2.2 and the associated table 9.1 (Spacing of detectors) therein are replaced by the following:

"**2.4.2.2** The maximum spacing of detectors shall be in accordance with the table below:

Table 9.1 – Spacing of detectors

Type of detector	Maximum floor area per detector (m^2)	Maximum distance apart between centres (m)	Maximum distance away from bulkheads (m)
Heat	37	9	4.5
Smoke	74	11	5.5
Combined smoke and heat	74	9	4.5

2.4.2.2.1 The Administration may require or permit other spacing based upon test data which demonstrate the characteristics of the detectors. Detectors located below movable ro-ro decks shall be in accordance with the above.

2.4.2.2.2 The distance between two sensor cables of the linear heat detection system shall not be more than 9.0 m, while the distance between such cables and bulkheads shall not be more than 4.5 m."

2.5 System control requirements

2.5.1 Visual and audible fire signals

6 The following new paragraphs 2.5.1.2, 2.5.1.3 and 2.5.1.4 are inserted after paragraph 2.5.1.1 and the subsequent paragraphs are renumbered accordingly:

"**2.5.1.2** On ro-ro passenger ships constructed on or after 1 January 2026, alarm notifications shall follow a consistent alarm presentation scheme (wording, vocabulary, colour and position). Alarms shall be immediately recognizable on the navigation bridge and shall not be compromised by noise or poor placing.

2.5.1.3 On ro-ro passenger ships constructed on or after 1 January 2026, the interface shall provide alarm addressability, allow the crew to identify the alarm history, the most recent alarm and the means to suppress alarms while ensuring the alarms with ongoing trigger conditions are still clearly visible.

2.5.1.4 On ro-ro passenger ships constructed on or after 1 January 2026, the smoke detector function in special category and ro-ro spaces may be disconnected during loading and unloading of vehicles. The time of disconnection shall be adapted to the time of loading/unloading and be automatically reset after this predetermined time. The central unit shall indicate whether the detector sections are disconnected or not. Disconnection of the heat detection function or manual call points shall not be permitted."

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