

LOCAL VESSELS ADVISORY COMMITTEE

Recommendations to Enhance the Response to Fire Accidents of Class I Vessels Carrying More Than 100 Passengers

Purpose

This paper sets out the proposals of the Marine Department (MD) regarding amendments to the Code of Practice – Safety Standards for Class I Vessels (the Code), so as to enhance the response to fire accidents of Class I vessels carrying more than 100 passengers and further protect passengers.

Background

2. Recently, an electrical short-circuit caused a fire to break out in the engine room of a local launch while it was underway at sea. Since the electric power cables within the engine room, including those of the emergency power supply (accumulator battery) system inside, were damaged, onboard electricity supply was interrupted, resulting in the malfunction of the public address system (PA system). In addition, as no fire detection system had been installed in the vessel's engine room, crew members were unable to discover the incident and notify passengers in a timely manner, thus arousing panic and chaos amongst them.

3. Section 7 of Chapter V "Passenger and Crew Accommodation" in the current Code stipulates that a PA system shall be provided on a Class I vessel which carries more than 100 passengers or accommodates passengers on more than one deck. In addition, for a ferry vessel or a launch which carries not more than 100 passengers and accommodates passengers on only one deck, provision of either a portable loudspeaker or a PA system is allowed. Furthermore, Section 20.4 of Part 4 "Electrical Installation" in Chapter III A of the Code stipulates that a vessel shall be provided with emergency power supply of sufficient capacity for the operation of the vessel's essential systems, including emergency lighting, fire detection, alarm, fire extinguishing system and PA system. Section 20.5 also stipulates that the emergency source of power of vessels built on or after 29 November 2014 shall not be located below the full-load waterline of the vessel, which means that the emergency source of power shall be installed on or above the main deck.

4. Table 1 of Part 2 of Schedule 4 of the existing Merchant Shipping (Local Vessels) (Safety and Survey) Regulation stipulates that fire detection and fire alarm systems shall be provided on a new vessel that is 24 metres or more in length and newly licensed on or after 2 January 2007 ^{Note 1}.

Proposals

5. To avoid recurrence of the incident mentioned in paragraph 2 above, the MD has put forward the following proposals to further optimise the current requirements:

- (1) The emergency source of electrical power for supplying power to the PA system on board

For any Class I vessel carrying more than 100 passengers, the emergency source of electrical power (an accumulator battery in general) provided on board to supply power to the PA system under emergency conditions should be installed elsewhere outside the engine room (e.g. in the wheelhouse). However, it is also accepted by the MD as an alternative plan to provide a portable loudspeaker on each passenger deck other than in the wheelhouse on board and on the deck where the wheelhouse is located.

- (2) Smoke detector

For any Class I vessel carrying more than 100 passengers (regardless of its construction year and length), at least one smoke detector should be provided in each engine room if it is not fitted with a fire detection and fire alarm system. When an engine room has a fire creating smoke, the detector should be able to trigger the sound and light alarm in the wheelhouse. A smoke detector is installed for the purpose of helping crew members to be vigilant immediately when a fire occurs in the engine room at its incipient stage, so that proper actions can be taken in a timely manner to prevent the fire from intensifying and spreading.

^{Note1} Refer to Section 2 “Interpretation” of the Merchant Shipping (Local Vessels) (Safety and Survey) Regulation.

Amendments to the Code

6. In view of the above proposals, the MD has amended Chapter V (Passenger and Crew Accommodation) and Chapter VI (Fire Protection and Fire-fighting Apparatus) of the Code. For details, please refer to the draft document attached.

Consultation

7. The amendments to the CoP proposed in this paper have been endorsed by the Sub-committee on Class I and Class II Vessels at its meeting held on 17 December 2021. It was also agreed at the meeting that such amendments would be submitted to the Local Vessels Advisory Committee for discussion.

Way Forward

8. Members' views are sought on the proposed amendments to the Code as mentioned above.

Marine Department
Local Vessels and Examination Division
December 2021

Amendment to Code of Practice - Safety Standards for Class I Vessels

Amendment (i)

CHAPTER V PASSENGER AND CREW ACCOMMODATION

7 Public Address System

- 7.2A Any vessel licensed to carry more than 100 passengers the source of emergency power supplied to the public address system shall be fitted outside engine room and meet the requirement of chapter IIIA/20.5 (e.g. in the wheel house).
- 7.2B For any vessel built before 29 November 2014, instead of meeting the requirement of 7.2A, MD accepts a battery powered portable loudspeaker to be fitted in the wheel house and on each passenger deck other than the wheel house deck as an alternative.

Amendment (ii)

CHAPTER VI FIRE PROTECTION AND FIRE-FIGHTING APPARATUS

2 Fire-fighting Apparatus, Type and Quantity

- 2.4 Any vessel (of whatever year of built and length) which is licensed to carry more than 100 passengers and not fitted with a fire detection and alarm system in engine room shall be fitted with one set of smoke detector. The installation shall be capable to give visual and audio alarms in the wheel house in the case of a fire in the engine room.