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**GUIDELINES FOR THE APPROVAL OF FIXED FIRE DETECTION  
AND FIRE ALARM SYSTEMS FOR CABIN BALCONIES**

1 The Committee, at its eighty-third session (3 to 12 October 2007), having recognized the need for guidelines for the approval of fixed fire detection and fire alarm systems for cabin balconies, taking into account the amendments to SOLAS chapter II-2 and the FSS Code adopted by resolutions MSC.216(82) and MSC.217(82), considered the proposal by the Sub-Committee on Fire Protection at its fifty-first session (5 to 9 February 2007) and approved Guidelines for the approval of fixed fire detection and fire alarm systems for cabin balconies, as set out in the annex.

2 Member Governments are invited to apply the annexed Guidelines when approving fixed fire detection and fire alarm systems for cabin balconies on passenger ships for systems installed on or after 1 July 2008 and bring them to the attention of ship designers, ship owners, equipment manufacturers, test laboratories and other parties concerned.

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## ANNEX

### GUIDELINES FOR THE APPROVAL OF FIXED FIRE DETECTION AND FIRE ALARM SYSTEMS FOR CABIN BALCONIES

#### 1 General

Fixed fire detection and fire alarm systems, as required by SOLAS regulation II-2/7.10, for the protection of cabin balconies where furniture and furnishings other than those of restricted fire risk are used should be shown by test to have the capability of detecting typical fires expected in such areas before they spread to the adjacent cabin and to other balconies. These Guidelines should be applied when approving fixed fire detection and fire alarm systems for cabin balconies on passenger ships to be installed on or after 1 July 2008.

#### 2 Principal requirements for the system

- 2.1 The system should be capable of immediate operation at all times.
- 2.2 The system should be capable of fire detection based on testing conducted in accordance with internationally recognized standards or as prescribed by the Administration.
- 2.3 The system should be capable of fire detection on cabin balconies with expected wind conditions while the vessel is underway.
- 2.4 The system and its components should be suitably designed to withstand ambient temperature changes, vibration, humidity, shock, corrosion and impact normally encountered on ships. External components should additionally be designed to withstand sun irradiation, ultraviolet exposure, water ingress and corrosion normally encountered on open deck areas.
- 2.5 If detectors are not remotely and individually identifiable dedicated to cabin balconies only, the detectors should be grouped into sections. The system indicating units should, as a minimum, denote the section in which a detector has been activated.
- 2.6 The location and spacing of the detectors should be within the limits tested.
- 2.7 There should be not less than two sources of power supply for the electrical equipment used in the operation of the fixed fire detection and fire alarm system, one of which should be an emergency source. The supply should be provided by separate feeders reserved solely for that purpose. Such feeders should run to an automatic change-over switch situated in or adjacent to the control panel for the fire detection system.
- 2.8 Detectors should be operated by heat, smoke or other products of combustion, flame, or any combination of these factors. Detectors operated by other factors indicative of incipient fires may be considered by the Administration provided that they are no less sensitive than such detectors.
- 2.9 All detectors should be of a type such that they can be tested for correct operation and restored to normal surveillance without the renewal of any component.

2.10 The activation of any detector should initiate a visual and audible fire signal\* at the control panel and indicating units. If the signals have not received attention within 2 min an audible alarm should be automatically sounded throughout the crew accommodation and service spaces, control stations and machinery spaces of category A. This alarm sounder system need not be an integral part of the detection system.

2.11 The control panel should be located on the navigation bridge or in the onboard safety centre.

2.12 At least one indicating unit should be so located that it is easily accessible to responsible members of the crew at all times.

2.13 Clear information should be displayed on or adjacent to each indicating unit about the spaces covered and the location of the sections.

2.14 Power supplies and electric circuits necessary for the operation of the system should be monitored for loss of power or fault conditions as appropriate. Occurrence of a fault condition should initiate a visual and audible fault signal at the control panel which should be distinct from a fire signal.

2.15 Suitable instructions and component spares for testing and maintenance should be provided, taking into account any special requirements for detectors located in external areas. Detectors should be periodically tested using equipment suitable for the types of fires to which the detector is designed to respond. Ships with self-diagnostic systems that have in place a cleaning regime for areas where heads may be prone to contamination, may carry out testing in accordance with the requirements of the Administration.

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\* Refer to the Code on Alarms and Indicators as adopted by the Organization by resolution A.830(19).