



## PORTS and MARITIME AFFAIRS

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### Directive No. SOLAS/13

#### **EMERGENCY ESCAPE BREATHING DEVICES (EEBDS)**

Issued under the enabling power of the Ministerial Resolution 20/2016

Issue Date: 29 December 2016

## 1 Introduction

(1) With reference to:

- Ports and Maritime Affairs (PMA) resolution no. 8/2016: regarding the implementation of the requirements of the International Convention for the Safety of Life at Sea, 1974 and its amendments
- MSC/Circ.849, Guidelines for the performance, location, use, and care of emergency escape breathing devices (EEBDs);
- MSC/Circ.1081, Unified interpretation of the revised SOLAS Chapter II-2; and
- MSC.1/Circ.1432, Revised guidelines for the maintenance and inspection of fire protection systems and appliances.

(2) This Directive outlines the carriage and maintenance requirements for EEBDs.

## 2 Application

This Directive applies to:

- (1) All Bahraini flagged ships and offshore units to which SOLAS applies;
- (2) Offshore units certified under the 1979, 1989 or 2009 Code for the Construction and Equipment of Mobile Offshore Drilling Units (MODU Code) shall be provided with EEBDs as if they were SOLAS certified.



### 3 General

- (1) All EEBDs shall comply with the requirements specified in Chapter 3.2.2 of the Fire Safety Systems Code.
- (2) The number and location of all EEBDs shall be indicated on the fire control plan.

### 4 Carriage Requirement

- (1) SOLAS Chapter II-2, Regulation 13.3.4 specifies the following minimum carriage requirement for EEBDs in accommodation spaces:
  - (a) Cargo ships: 2 EEBDs;
  - (b) Passenger ships carrying not more than 36 passengers : 2 EEBDs in each main vertical zone;
  - (c) Passenger ships carrying more than 36 passengers: 4 EEBDs in each main vertical zone.
- (2) The number of EEBDs to be provided in the machinery spaces is not specified in SOLAS, however guidance is provided in MSC/Circ.1081.
- (3) The PMA requires the Company<sup>1</sup> to carry out a risk assessment to determine the location and number of EEBDs required in the machinery spaces. The risk assessment must take into account the size and layout of the machinery spaces, number of persons normally present, the length of the escape routes and any other relevant factors. Unless personnel are individually carrying EEBDs, consideration should be given to placing EEBDs along the escape routes within the machinery spaces or at the foot of each escape ladder within the space. In addition, control spaces and workshops located within the machinery spaces should also be considered for the possible location of EEBDs.
- (4) The number and location of EEBDs identified by the risk assessment is to be agreed with the Recognised Organisation responsible for the issue of statutory certificates on behalf of the PMA.
- (5) In the event that the Company and Recognised Organisation cannot reach agreement on the location and numbers of EEBDs to be provided in the machinery spaces, the PMA will act as the final arbiter.

<sup>1</sup>The "Company" is the entity responsible for the management of the ship in accordance with the ISM Code. For ships to which the ISM Code is not applicable, the Company is the "Managing Owner".



- (6) All ships shall carry spare EEBDs that shall be located in a control station. Cargo ships and offshore units shall carry a minimum of one (1) spare EEBD and passenger ships shall carry a minimum of two (2) spare EEBDs.
- (7) In order to satisfy the SOLAS requirements for on-board training in the use of EEBDs, the vessel shall have either:
  - (a) at least one separate EEBD clearly marked as designated for training; or
  - (b) facilities to re-instate the EEBD that was used during the training exercise to a fully operational condition (such as means of recharging the cylinder to full operating pressure).
- (8) With respect to Bahraini ships carrying dangerous chemicals in bulk, the PMA will permit the carriage of the emergency equipment specified in either paragraph 14.3.1 of the International Code for the Construction and Equipment of Ships Carrying dangerous Chemicals in Bulk (IBC Code) or paragraph 3.16.10 of the Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (BCH Code), in lieu of EEBDs.
- (9) With respect to Bahraini ships carrying liquefied gases in bulk, the PMA will permit the carriage of the emergency equipment specified in paragraph 14.4.2 of the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk 1983, as amended (IGC Code), in lieu of EEBDs.

## 5 Inspection and Testing

- (1) All EEBDs shall be inspected by a competent person<sup>2</sup> at least annually.
- (2) Maintenance and servicing of EEBDs shall be carried out in accordance with the manufacturer's instructions.
- (3) Hydrostatic pressure testing of EEBD cylinders shall be undertaken at least once every five years, or in accordance with the manufacturer's instructions if such testing is required on a more frequent basis. The test pressure and test date shall be clearly and permanently marked on the cylinder.



- (4) Where EEBDs are fitted with a small capacity oxygen cartridge and manufacturers specify a fixed service life without scheduled hydrostatic pressure testing (e.g. "Ocenco" M-20.2), hydrostatic testing is not required.

## 6 Records

Records of inspection, maintenance and testing shall be retained on board for examination. The records must include the test certificates and the inspection status of each cylinder.

## 7 Survey Requirements

- (1) During Safety Equipment surveys the Recognized Organization shall verify that:
- the manufacturer's instructions for the EEBDs are provided and are readily available on board;
  - the EEBDs have been inspected and maintained in accordance with the manufacturer's instructions and this Directive;
  - the records of inspection, maintenance and testing are available and up to date;
  - spare EEBDs are provided in accordance with paragraph 6 in section 4 above.
- (2) Recognized Organizations shall notify the PMA, with relevant recommendations, when a Bahraini ship does not satisfy the requirements for periodical inspections and testing or carriage of spares, prior to the issue or endorsement of a Cargo Ship Safety Equipment Certificate, Passenger Ship Safety Certificate or any other statutory certificate that relates to safety equipment (e.g. MODU/MOU Safety Certificates).

## 8 Penalty

Failure to comply with this directive, the Undersecretary may withdraw the Navigation License of a Bahraini ship, and/or the ship's master and the company may be fined in accordance with Amiri Decree No. 14/1978.



**9 Revision History**

Revision No. 1 of the present Directive is the first revision.

**Hassan Ali Al Majed**  
Undersecretary for Ports and Maritime Affairs  
29<sup>th</sup> December 2016