



## PORTS and MARITIME AFFAIRS

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### Directive No. SOLAS/11

#### **GOAL-BASED SHIP CONSTRUCTION STANDARDS**

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

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## 1 Introduction

- (1) With reference to;
  - Legislative decree law no.14/1978 : Law for Registration of Ships and Determination of Safety Conditions thereof,
  - Regulation 1 of ministerial resolution 20/2016: Implementation of Conventions related to marine navigation.
  - 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
  - SOLAS 1974, regulation II-1/3-10: Goal-based ship (GBS) construction standards for bulk carriers and oil tankers
  - Resolution MSC.287(87): International goal-based ship construction standards (the GBS Standards) for bulk carriers and oil tankers; and
  - Resolution MSC.296(87): Guidelines for the verification of conformity with goal-based ship construction standards for bulk carriers and oil tankers (the GBS Verification Guidelines).
- (2) The Ports and Maritime Affairs (PMA) requires that classification societies' ship construction rules conform to the IMO goal-based ship construction standards for applicable new Bulk Carriers and Oil Tankers.
- (3) This directive guidance to ensure that every applicable ship complies with the SOLAS 1974, regulation II-1/3-10 "goal-based ship construction standards for bulk carriers and oil tankers".



## 2 Application

This directive shall apply to Bulk Carriers and Oil Tankers, which are:

- (1) 150 m in length and above;
- (2) constructed with single deck, top-side tanks and hopper side tanks in cargo spaces, excluding ore carriers and combination carriers (ore-bulk-oil carrier);
- (3) the building contract is placed on or after 1<sup>st</sup> July 2016;
- (4) in the absence of a building contract, the keels laid or a similar stage of construction on or after 1<sup>st</sup> July 2017; or
- (5) the delivery date is on or after 1<sup>st</sup> July 2020.

## 3 The GBS Requirement

- (1) Every ship entitled to register under Bahraini flag shall be designed and constructed for a specified design life to be safe and environmentally friendly, when properly operated and maintained under the specified operating and environmental conditions, in intact and specified damage conditions, throughout their life, in accordance with the provisions of SOLAS regulation II-1/3-10 and SOLAS regulation XI-1/1, conforming to the functional requirements of the Goal-based Ship Construction Standards (GBS) for Bulk Carriers and Oil Tankers.
- (2) The classification society ship construction rules shall be approved by the GBS Audit Teams established by the IMO Secretary-General in accordance with the Verification Guidelines (resolution MSC.296(87)).

## 4 The GBS Functional Requirements

The new constructed applicable vessels have to comply with the following fifteen IMO functional requirements:

### Design

- (1) design life: not less than 25 years
- (2) environmental conditions: designed for North Atlantic
- (3) structural strength: ship design to be compatible with purpose
- (4) fatigue life: not less than ship's design life
- (5) residual strength: sufficient for foreseeable casualty scenarios
- (6) protection against corrosion: net scantlings maintained for design life
- (7) structural redundancy: localized damage not lead to total collapse



- (8) watertight and weathertight integrity: adequate for intended service
- (9) human element considerations: using ergonomic principles
- (10) design transparency: design parameters shall be accessible

#### **Construction**

- (11) construction quality procedures: quality production standards
- (12) survey during construction: survey plan required

#### **In-service considerations**

- (13) survey and maintenance: designed to ensure easy survey
- (14) structural accessibility: provide adequate means of access

#### **Recycling considerations**

- (15) recycling: constructed of materials that are recyclable.

### **5 Ship Construction File**

- (1) A Ship Construction File with specific information on how the functional requirements of the Goal-based Ship Construction Standards for Bulk Carriers and Oil Tankers have been applied in the ship design and construction shall be provided upon delivery of a new ship, and kept on board the ship and ashore and updated as appropriate throughout the ship's service.
- (2) The contents of the Ship Construction File shall, at least, conform to the IMO guidelines for the information to be included in a Ship Construction File (MSC./Circ.1343)
- (3) No applicable ship shall be registered under Bahraini flag without obtaining a Ship Construction File.

### **6 Revision History:**

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

  
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 Undersecretary for Ports and Maritime Affairs  
 29<sup>th</sup> December 2016