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MSC.1/Circ.1362/Rev.2  
14 July 2023

## UNIFIED INTERPRETATION OF SOLAS CHAPTER II-1

1 The Maritime Safety Committee, at its eighty-seventh session (12 to 21 May 2010), with a view to providing more specific guidance for application of the relevant requirements of the 1974 SOLAS Convention, approved a unified interpretation of SOLAS regulation II-1/2.14, prepared by the Sub-Committee on Stability and Load Lines and on Fishing Vessels Safety, at its fifty-second session.

2 The Maritime Safety Committee, at its 105th session (20 to 29 April 2022), agreed to amend the above unified interpretation by incorporating interpretations for SOLAS regulations II-1/5.4 and II-1/5.5, prepared by the Sub-Committee on Ship Design and Construction, at its eighth session (17 to 21 January 2022).

3 The Maritime Safety Committee, at its 107th session (31 May to 9 June 2023), in order to clarify the documentation which is necessary to support an Administration or a recognized organization (RO) in verifying compliance with SOLAS regulation II-1/3-8, as well as to provide clarification for pressure testing of penetrations in watertight divisions after a fire test (SOLAS regulation II-1/13.2.3), approved amendments to MSC.1/Circ.1362/Rev.1, prepared by the Sub-Committee on Ship Design and Construction, at its ninth session.

4 Member Governments are invited to use the annexed unified interpretations as guidance when applying relevant provisions of SOLAS chapter II-1 and to bring them to the attention of all parties concerned.

5 This circular revokes MSC.1/Circ.1362/Rev.1.

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## ANNEX

### UNIFIED INTERPRETATION OF SOLAS CHAPTER II-1

#### Regulation 3-8

SOLAS regulation II-1/3-8, as amended by resolution MSC.474(102) reads:

#### "Regulation 3-8

##### *Towing and mooring equipment*

- 1 Paragraphs 4 to 6 of this regulation apply to ships constructed on or after 1 January 2007.
- 2 Paragraphs 7 and 8 of this regulation only apply to ships:
  - .1 for which the building contract is placed on or after 1 January 2024; or
  - .2 in the absence of a building contract, the keel of which is laid, or which is at a similar stage of construction on or after 1 July 2024; or
  - .3 the delivery of which is on or after 1 January 2027.
- 3 This regulation does not apply to towing arrangements provided in accordance with regulation 3-4.
- 4 Ships shall be provided with arrangements, equipment, and fittings of sufficient safe working load to enable the safe conduct of all towing and mooring operations associated with the normal operation of the ship.
- 5 Arrangements, equipment and fittings provided in accordance with paragraph 4 above shall meet the appropriate requirements of the Administration or an organization recognized by the Administration under regulation I/6.<sup>1</sup>
- 6 Each fitting or item of equipment provided under this regulation shall be clearly marked with any limitations associated with its safe operation, taking into account the strength of the supporting ship's structure and its attachment to it.

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<sup>1</sup> Refer to the *Guidance on shipboard towing and mooring equipment* (MSC.1/Circ.1175) for ships constructed on or after 1 January 2007 but before 1 January 2024 and the *Guidance on shipboard towing and mooring equipment* (MSC.1/Circ.1175/Rev.1) for ships constructed on or after 1 January 2024.

7 For ships of 3,000 gross tonnage and above, the mooring arrangement shall be designed, and the mooring equipment including lines shall be selected, in order to ensure occupational safety and safe mooring of the ship, based on the guidelines developed by the Organization.<sup>2</sup> Ship-specific information shall be provided and kept on board.<sup>3</sup>

8 Ships of less than 3,000 gross tonnage should comply with the requirement in paragraph 7 above as far as reasonably practicable, or with applicable national standards of the Administration.

9 For all ships, mooring equipment, including lines, shall be inspected and maintained in a suitable condition for their intended purposes.<sup>4</sup>

### Interpretation

1 The expression "all ships" in SOLAS regulation II-1/3-8.9 means ships constructed before, on, or after 1 January 2009 in accordance with SOLAS regulation II-1/1.1.3.2.

2 Irrespective of the scope of review by the Administration or a recognized organization (RO), as clarified below, for ships covered by the application provisions described in SOLAS regulations II-1/3-8.1 and II-1/3-8.2, as amended by resolution MSC.474(102), owners and designers should comply with the:

- .1 *Revised guidance on shipboard towing and mooring equipment* (MSC.1/Circ.1175/Rev.1);
- .2 *Guidelines on the design of mooring arrangements and the selection of appropriate mooring equipment and fittings for safe mooring* (MSC.1/Circ.1619); and
- .3 *Guidelines for inspection and maintenance of mooring equipment including lines* (MSC.1/Circ.1620),

footnoted in SOLAS regulation II-1/3-8, in its entirety, and ensure that appropriate measures are taken to mitigate any occupational risks arising from deviations.

3 While applying the requirements of SOLAS regulation II-1/3-8.4 to regulation II-1/3-8.6 and SOLAS regulation II-1/3-8.8, for ships of less than 3,000 gross tonnage, the following is recommended:

- .1 the "Towing and mooring arrangements plan" should be provided for information, where the winch brake holding capacities should be included in addition to the information provided in section 5 (Towing and mooring arrangements plan) of the annex to MSC.1/Circ.1175/Rev.1. A technical specification document of the mooring lines supplied with the ship should be provided for information. The manufacturers' recommended minimum diameter D of each fitting in contact with the mooring lines and the Line Design Break Force (LDBF) of the mooring lines should be included in the document;

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<sup>2</sup> Refer to the *Guidelines on the design of mooring arrangements and the selection of appropriate mooring equipment and fittings for safe mooring* (MSC.1/Circ.1619).

<sup>3</sup> Refer to towing and mooring arrangement plan in the *Guidelines on the design of mooring arrangements and the selection of appropriate mooring equipment and fittings for safe mooring* (MSC.1/Circ.1619).

<sup>4</sup> Refer to the *Guidelines for inspection and maintenance of mooring equipment including lines* (MSC.1/Circ.1620).

- .2 for confirmation of the appropriate selection of mooring line, the properties of mooring lines related to LDBF and bend radius (D/d ratio) should be submitted to the Administration or the RO. A warning should be provided that the wear rate of lines may be higher for lower diameter (paragraph 5.6 of MSC.1/Circ.1620); and
- .3 at delivery of the ship, the Administration or the RO should confirm that the towing and mooring arrangements plan is provided on board.

4 While applying the requirements of SOLAS regulation II-1/3-8.4 to regulation II-1/3-8.6 and the SOLAS regulation II-1/3-8.7, for ships of 3,000 gross tonnage and above, the following is recommended in addition to those specified under paragraph 3 of this interpretation:

- .1 a document should be provided by the designer for information and as a supplement to the towing and mooring arrangements plan, confirming that MSC.1/Circ.1619 has been considered. The document should explicitly state that the deviations, if any, were unavoidable;
- .2 deviations should be recorded (paragraph 6.1 of MSC.1/Circ.1619), justification and suitable safety measures should be provided (paragraph 6.2 of MSC.1/Circ.1619) in the supplement to the towing and mooring arrangements plan. A reference to the supplement should be included in the towing and mooring arrangements plan (paragraph 6.3 of MSC.1/Circ.1619);
- .3 if deviations are not found necessary, and the supplement is not needed, then this should be mentioned explicitly in the towing and mooring arrangements plan;
- .4 the mooring winches' brake holding capacities should be less than 100% of the Ship Design Minimum Breaking Load ( $MBL_{SD}$ ) (paragraphs 5.2.3.3 and 5.2.4 of MSC.1/Circ.1619). The winches should be fitted with brakes that allow for the reliable setting of the brake rendering load; and
- .5 at delivery of the ship, the Administration or the RO should confirm that the towing and mooring arrangements plan and the supplement describing deviations and suitable safety measures is provided on board.

5 While applying the requirements of SOLAS regulation II-1/3-8.9, the following should be complied with, and compliance should be confirmed by the surveyor at the initial survey for new ships or at the first annual survey for the issuance of the Cargo Ship Safety Construction Certificate or renewal survey for the issuance of the Passenger Ship Safety Certificate after 1 January 2024 for existing ships:

- .1 procedures for mooring operations, inspection and maintenance of mooring equipment, including mooring lines, should be established and available on board (paragraph 3.1 of MSC.1/Circ.1620), taking into account industry practices (section 7 of MSC.1/Circ.1620);
- .2 procedures to allow the identification and control of mooring lines, tails and associated attachments should be established and available on board (paragraph 3.3 of MSC.1/Circ.1620);

- .3 the periodic inspection of mooring lines, mooring line tails and associated attachments should be included in the onboard maintenance plan or equivalent maintenance management system (paragraph 4.1.1 of MSC.1/Circ.1620);
- .4 manufacturers' criteria for replacement of mooring lines should be available (paragraph 4.3.1 of MSC.1/Circ.1620);
- .5 records of the original design concept, equipment, arrangements and specifications should be available on board (paragraph 4.4.4 of MSC.1/Circ.1620). For ships the keels of which were laid before 1 January 2007 and without appropriate documentation, owners may establish the  $MBL_{SD}$  for mooring based on the safe working load of mooring equipment provided on board. If no safe working load is specified, then owners are advised to check strength of mooring equipment and their supporting hull structure based on MSC.1/Circ.1175/Rev.1 and determine  $MBL_{SD}$  based on actual capacity of the equipment and their supporting hull structure on board. Manufacturers' test certificates for mooring lines, joining shackles and synthetic tails should be kept on board and properly linked back to the equipment, if available (paragraph 6.2 of MSC.1/Circ.1620); and
- .6 a document should be provided on board for gathering the information above and describe how the information listed above is filed and collected.

6 While applying the requirements of SOLAS regulation II-1/3-8.9, the following should be complied with, and the compliance should be confirmed by the surveyor at the periodical survey for endorsement/issue of the Cargo Ship Safety Construction Certificate or the renewal survey for the Passenger Ship Safety Certificate after 1 January 2024 for existing ships:

- .1 the records of inspection and maintenance of mooring equipment and inspection and replacement of mooring lines, since the last periodical survey, should be kept updated and available on board (paragraphs 4.4.3 and 6.1 of MSC.1/Circ.1620).