

MARITIME SAFETY COMMITTEE
105th session
Agenda item 15

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SHIP DESIGN AND CONSTRUCTION

Comments on document MSC 105/15

Submitted by Belgium, United States and IACS

SUMMARY

Executive summary: This document clarifies paragraph 2.2.2 of the appendix to the draft revised Performance standards for water level detectors on ships subject to SOLAS regulations II-1/25, II-1/25-1 and XII/12, which was finalized at SDC 8 and submitted to MSC 105 for adoption, and proposes a change pertaining to the measurement of installation height of sensors, with a view towards global and uniform implementation

Strategic direction, if applicable: 7

Output: 7.38

Action to be taken: Paragraph 11

Related documents: SDC 8/13, SDC 8/13/1, SDC 8/18 and MSC 105/15

Introduction

1 This document is submitted in accordance with the provisions of paragraph 6.12.5 of the *Organization and method of work of the Maritime Safety Committee and the Marine Environment Protection Committee and their subsidiary bodies* (MSC-MEPC.1/Circ.5/Rev.2) and provides comments on document MSC 105/15, paragraph 2.12.

Background

2 The Maritime Safety Committee (MSC), at its 103rd session, adopted amendments to SOLAS chapter II-1, which include requirements for water level detectors on multiple hold cargo ships other than bulk carriers and tankers, i.e. SOLAS regulation II-1/25-1, by resolution MSC.482(103), with an entry into force date of 1 January 2024.

3 As a consequence of the adoption of the new SOLAS regulation II-1/25-1, MSC 103 instructed the SDC Sub-Committee to review the *Performance standards for water level detectors on bulk carriers and single hold cargo ships other than bulk carriers* (resolution MSC.188(79)) to consider the aspects of new regulation, in addition to SOLAS regulations II-1/25 and XII/12.

4 SDC 8 considered document SDC 8/13 (Belgium et al.), which proposed amendments to resolution MSC.188(79), taking also into account document SDC 8/13/1 (China), and finalized the revision, as found in annex 10 to document SDC 8/18, with a view to approval at MSC 105.

Discussion

5 Unlike SOLAS regulations II-1/25 and XII/12, the new SOLAS regulation II-1/25-1.3 now allows an installation of a bilge level sensor serving a bilge pumping arrangement as an alternative to the water level detector at pre-alarm level (0.3 m), as quoted below:

"3 As an alternative to the water level detector at a height of not less than 0.3 m as per sub-paragraph 2.1, a bilge level sensor serving the bilge pumping arrangements required by regulation 35-1 and installed in the cargo hold bilge wells or other suitable location is considered acceptable, subject to:

.1 the fitting of the bilge level sensor at a height of not less than 0.3 m at the aft end of the cargo hold; and ..."

6 The co-sponsors understand that the installation heights of sensors at pre-alarm and main-alarm levels, as required by SOLAS regulations II-1/25.3, II-1/25-1.2 and XII/12.1, should be measured from the bottom of cargo hold that is usually the upper surface of the inner bottom.

7 However, bilge level sensors, which may be accepted as an alternative to SOLAS regulation II-1/25-1.2, are normally installed in bilge wells located below the inner bottom of cargo holds to effectively collect bilges and/or condensation; thus, the location of bilge level sensors may not be adequate to apply the same measurement principle, i.e. from the upper surface of the inner bottom. It is thought that the installation heights of bilge level sensors, as permitted by new SOLAS regulation II-1/25-1.3, should be measured from the bottom of the bilge well, while those of other sensors at pre-alarm and main-alarm levels should be measured from the upper surface of the inner bottom.

8 On that basis, and subsequent to the proposal contained in document SDC 8/13, new paragraph 2.2.2 of the appendix to the draft revised Performance Standards was introduced, as follows:

"2.2.2 The sensors should be located at the height specified in the regulations. These heights are to be measured from the upper surface of the inner bottom and if the bottom of the bilge well is below the upper surface of the inner bottom, its heights are to be measured from the bottom of the bilge well."

9 Having carefully reviewed the outcome of SDC 8, in particular in respect of that new paragraph 2.2.2 of the appendix to the draft revised Performance Standards, the co-sponsors opine that the original intention, as explained in paragraph 7 above, was not fully captured. It is considered that the application of paragraph 2.2.2 of the appendix to the draft revised Performance Standards, as reproduced in paragraph 8 above, would require the installation height of all sensors, regardless of their type, to be measured from the bottom of the bilge well, as bilge wells of most cargo holds are located below the upper surface of the inner bottom.

Proposal

10 In order to address the issue discussed in paragraphs 5 to 9 above, the co-sponsors propose that paragraph 2.2.2 of the appendix to the draft revised Performance Standards, as contained in annex 10 to document SDC 8/18, should be clarified to read as follows:

"2.2.2 The sensors should be located at the height specified in the regulations. These heights are to be measured from the upper surface of the inner bottom ~~and~~. However, if the bottom of the bilge well is below the upper surface of the inner bottom, ~~its~~ the heights of bilge level sensors subject to SOLAS regulation II-1/25-1.3 are to be measured from the bottom of the bilge well."*

Action requested of the Committee

11 The Committee is invited to consider the foregoing, the proposal in paragraph 10 above and take action, as appropriate.

* Tracked changes are indicated using "strikeout" for deleted text and "grey shading" to highlight all modifications and new insertions, including deleted text.