

SUB-COMMITTEE ON SHIP DESIGN AND CONSTRUCTION 6th session Agenda item 4

SDC 6/4/3 27 November 2018 Original: ENGLISH

REVIEW SOLAS CHAPTER II-1, PARTS B-2 TO B-4, TO ENSURE CONSISTENCY WITH PARTS B AND B-1 WITH REGARD TO WATERTIGHT INTEGRITY

Watertight door remote control positions (SOLAS regulations II-1/13.5.1 and II-1/13.6)

Submitted by IACS

SUMMARY

Executive summary: This document proposes amendments to SOLAS

regulations II-1/13.5.1 and II-1/13.6, which currently limit the remote operating positions for all power-operated sliding doors to the navigation bridge and the location above the bulkhead deck where hand operation is provided. The proposal is to extend the remote operating positions to other locations in light of the requirement in SOLAS regulation II-2/23.6 and the available computer technologies.

Strategic direction, if Other work

applicable:

Output: OW 41

Action to be taken: Paragraph 7

Related documents: None

Introduction

1 Provisions regarding openings in watertight bulkheads below the bulkhead deck in passenger ships are provided in SOLAS regulation II-1/13. In particular, SOLAS regulation II-1/13.5.1 states:

"Watertight doors, except as provided in paragraph 9.1 or regulation 14, shall be power-operated sliding doors complying with the requirements of paragraph 7 capable of being closed simultaneously from the central operating console at the navigation bridge in not more than 60 s with the ship in the upright position."



In addition, SOLAS regulation II-1/13.6 states:

"All power-operated sliding watertight doors shall be provided with means of indication which will show at all remote operating positions whether the doors are open or closed. Remote operating positions shall <u>only</u> be at the navigation bridge as required by paragraph 7.1.5 and at the location where hand operation above the bulkhead deck is required by paragraph 7.1.4."

- 2 Understanding the term "only" as meaning "exclusively" would mean that no other possibilities, other than those described above, are permitted on board to remotely close the watertight doors.
- 3 However, as a result of the increased use of new computer technologies on board ships, IACS members are aware of additional remote positions where it is possible to close the watertight doors. For example, emergency closing of watertight doors that is initiated from the engine control room has been proposed.

Discussion

- The above regulations might be interpreted so that the requirements prescribed therein refer to the mandatory remote control positions to operate the watertight doors in case of damage, but they do not prohibit the installation of additional remote controls associated with other safety systems. It is understood that systems associated with such remote controls do not impair the full functionality of the watertight doors' controls as required by SOLAS regulations II-1/13.5.1 and II-1/13.6.
- Moreover, it is noted that SOLAS regulation II-2/23.6 "Control and monitoring of safety systems", which has been in force since 1 July 2010, requires watertight door controls to be placed in the safety centre. The safety centre may not be on the navigating bridge.* The requirements of SOLAS regulation II-1/13.6 interpreted as described in paragraph 2 above would prevent the controls from being placed in the safety centre, which is not considered reasonable.

Proposal

•

- Based on the comments and analysis provided above, IACS proposes to amend SOLAS regulations II-1/13.5.1 and II-1/13.6 as follows (modifications are shown with deleted text in strikethrough, and new text in grey shading):
 - .1 Proposed amendments to SOLAS regulation II-1/13.5.1:

"Watertight doors, except as provided in paragraph 9.1 or regulation 14, shall be power-operated sliding doors complying with the requirements of paragraph 7 capable of being closed simultaneously from the central operating console at the navigation bridge and from the safety centre required by regulation II-2/23, where this is not located on the navigating bridge, in not more than 60 s with the ship in the upright position."

^{*} Paragraph 2 of the annex to document MSC.1/Circ.1368 states: "The safety centre may or may not be part of the navigation bridge."

.2 Proposed amendments to SOLAS regulation II-1/13.6:

"All power-operated sliding watertight doors shall be provided with means of indication which will show at all remote operating positions whether the doors are open or closed. Remote operating positions shall enly be at the navigation bridge as required by paragraph 7.1.5, at the safety centre as required by II-2/23.6 and at the location where hand operation above the bulkhead deck is required by paragraph 7.1.4. Additional remote operating positions, if fitted, shall not impair the full functionality of the controls required by this regulation."

Action requested of the Sub-Committee

The Sub-Committee is invited to consider the foregoing, in particular the proposal provided in paragraph 6 above, and decide, as appropriate.