

ANNEX 18

**RESOLUTION MSC.466(101)
(adopted on 14 June 2019)**

**AMENDMENTS TO THE PERFORMANCE STANDARDS FOR THE
PRESENTATION OF NAVIGATION-RELATED INFORMATION
ON SHIPBORNE NAVIGATIONAL DISPLAYS
(RESOLUTION MSC.191(79))**

THE MARITIME SAFETY COMMITTEE,

RECALLING Article 28(b) of the Convention on the International Maritime Organization concerning the functions of the Committee,

RECALLING ALSO resolution A.886(21) by which the Assembly resolved that the function of adopting performance standards and technical specifications, as well as amendments thereto, shall be performed by the Maritime Safety Committee on behalf of the Organization,

RECOGNIZING that harmonization of the requirements for the presentation of navigation-related information on the bridge will ensure that all navigational displays adopt a consistent human-machine interface philosophy and implementation,

RECOGNIZING ALSO that, for safety reasons, the terms, abbreviations and symbols used for the display of navigation-related information on all shipborne navigation equipment and systems should be consistent,

HAVING CONSIDERED the recommendation on the performance standards for the presentation of navigation-related information on shipborne navigational displays made by the Sub-Committee on Navigation, Communications and Search and Rescue, at its sixth session,

1 ADOPTS amendments to the *Performance standards for the presentation of navigation-related information on shipborne navigational displays* (resolution MSC.191(79)), set out in the annex to the present resolution;

2 RECOMMENDS Governments to ensure that, from the presentation of navigation-related information point of view:

- .1 shipborne navigational displays on the bridge of a ship for radar equipment, electronic chart display and information system (ECDIS) and integrated navigation systems (INS) installed on or after 1 January 2024;
- .2 all other navigational displays on the bridge of a ship installed on or after 1 July 2025,

conform to performance standards not inferior to those specified in the annex to resolution MSC.191(79), as amended by the present resolution, taking into account the guidance provided in SN.1/Circ.243/Rev.2;

3 ALSO RECOMMENDS Governments to ensure that, from the presentation of navigation-related information point of view:

- .1 shipborne navigational displays on the bridge of a ship for radar equipment, ECDIS and INS installed on or after 1 July 2008 but before 1 January 2024;
- .2 all other navigational displays on the bridge of a ship installed on or after 1 July 2008 but before 1 July 2025,

conform to performance standards not inferior to those specified in the annex to resolution MSC.191(79), taking into account the guidance provided in SN.1/Circ.243/Rev.1.

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**5 GENERAL REQUIREMENTS FOR THE PRESENTATION OF
INFORMATION**

5.1 Arrangement of information

- 1 The existing paragraph 5.1.1 is replaced with the following:

"5.1.1 The presentation of information should be consistent with respect to screen layout and arrangement of information. Data and control functions should be logically grouped. Appendix 3 of the annex to MSC.1/Circ.1609 on *Guidelines for the standardization of user interface design for navigation equipment* defines groups of related navigational information. Priority of information should be identified for each application, permanently displayed and presented to the user in a prominent manner by, for example, use of position, size and colour."

5.2 Readability

- 2 The existing paragraphs 5.2.3 and 5.2.4 are replaced with the following:

"5.2.3 Text should be presented using simple unambiguous language that is easy to understand. Navigation terms and abbreviations should be presented using the nomenclature defined in the *Guidelines for the presentation of navigation-related symbols, terms and abbreviations* (SN.1/Circ.243, as revised) and appendix 2 of the annex to MSC.1/Circ.1609 on *Guidelines for the standardization of user interface design for navigation equipment*.

5.2.4 When icons are used, their purpose should be intuitively recognized by appearance, placement and grouping as defined in appendix 2 of the annex to MSC.1/Circ.1609 on *Guidelines for the standardization of user interface design for navigation equipment*."
