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COMMENTED VERSION

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colour inside

Maritime navigation and radiocommunication equipment and systems – Presentation of navigation-related information on shipborne navigational displays – General requirements, methods of testing and required test results

INTERNATIONAL
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MARITIME NAVIGATION AND RADIOCOMMUNICATION EQUIPMENT AND SYSTEMS – PRESENTATION OF NAVIGATION-RELATED INFORMATION ON SHIPBORNE NAVIGATIONAL DISPLAYS – GENERAL REQUIREMENTS, METHODS OF TESTING AND REQUIRED TEST RESULTS

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This commented version (CMV) of the official standard IEC 62288:2021 edition 3.0 allows the user to identify the changes made to the previous IEC 62288:2014 edition 2.0. Futhermore, comments from IEC TC 80 experts are provided to explain the reasons of the most relevant changes.

A vertical bar appears in the margin wherever a change has been made. Additions are in green text, deletions are in strikethrough red text. Experts' comments are identified by a blue-background number. Mouse over a number to display a pop-up note with the comment.

This publication contains the CMV and the official standard. The full list of comments is available at the end of the CMV.

IEC 62288 has been prepared by IEC technical committee 80: Maritime navigation and radiocommunication equipment and systems. It is an International Standard.

This third edition cancels and replaces the second edition published in 2014. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) Clause 4 has been revised to remove requirements for indications of alerts which are now given in IEC 62923-1;
b) Clause 5 has been extensively revised to add new requirements for AIS, ASM and DSC presentation together with three new supporting annexes, Annex J, Annex K, Annex L;
c) Annex A and Annex B have been revised to incorporate changes to IMO circular SN.1/Circ.243;
d) Annex E has been revised to incorporate changes to IMO resolution MSC.191(79) and renamed as "Operational controls and logical grouping".
e) two new annexes have been added, Annex H on operator actions and Annex I on default settings in support of IMO circular MSC.1/Circ.1609.

The text of this International Standard is based on the following documents:

Draft	Report on voting
80/1013/FDIS	80/1017/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

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MARITIME NAVIGATION AND RADIOCOMMUNICATION EQUIPMENT AND SYSTEMS – PRESENTATION OF NAVIGATION-RELATED INFORMATION ON SHIPBORNE NAVIGATIONAL DISPLAYS – GENERAL REQUIREMENTS, METHODS OF TESTING AND REQUIRED TEST RESULTS

1 Scope

This document specifies the general requirements, methods of testing, and required test results, for the presentation of navigation-related information on shipborne navigational displays in support of IMO resolutions MSC.191(79) as amended by MSC.466(101) in June 2019, and where applicable MSC.302(87). 1

This document also supports the guidelines included in the related IMO Circulars MSC.1/Circ.1609 on the standardization of user interface design for navigation equipment and SN.1/Circ.243 as revised in June 2019 on the presentation of navigation related symbols, terms and abbreviations. 1

This document also specifies the presentation of AIS data reports and the AIS Application Specific Messages defined for international use in IMO SN.1/Circ.289 and intended to be received by a ship for display onboard. 2

NOTE All text in this document whose wording is identical to text contained in an IMO document is printed in *italics*. Reference to the document is noted at the beginning of the paragraph. The notation contains a prefix referring to the document and a suffix with the paragraph number from the document (for example, (MSC191/1); (SN243/1), etc.).

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60945:2002, *Maritime navigation and radiocommunication equipment and systems – General requirements – Methods of testing and required test results*

IEC 61174, *Maritime navigation and radiocommunication equipment and systems – Electronic chart display and information system (ECDIS) – Operational and performance requirements, methods of testing and required test results*

IEC 61966-4, *Multimedia systems and equipment – Colour measurement and management – Part 4: Equipment using liquid crystal display panels*

~~IEC 62065, *Maritime navigation and radiocommunication equipment and systems – Track control systems – Operational and performance requirements, methods of testing and required test results*~~

IEC 62388, *Maritime navigation and radiocommunication equipment and systems – Shipborne radar – Performance requirements, methods of testing and required test results*

IEC 62923-1, *Maritime navigation and radiocommunication equipment and systems – Bridge alert management – Part 1: Operational and performance requirements, methods of testing and required test results*

IHO S-52, *Specifications for chart content and display aspects of ECDIS*

~~IHO S-52 Annex A, *IHO ECDIS presentation library*~~ **3**

IMO, *Seafarers' Training, Certification and Watchkeeping Code (STCW Code)*

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IMO MSC.191(79):2004, *Performance standards for the presentation of navigation related information on shipborne navigational displays*

IMO MSC.192(79):2004, *Performance standards for radar equipment*

IMO MSC.232(82):2006, *Revised performance standards for electronic chart display and information systems (ECDIS)*

IMO SN.1/Circ.243/~~Rev.1:2014~~Rev.2:2019+Corr.1, *Guidelines for the presentation of navigation related symbols, terms and abbreviations*

~~IMO MSC.252(83):2007, *Performance standards for integrated navigation systems (INS)*~~

IMO SN.1/Circ.289:2010, *Guidance on the use of AIS application-specific messages*

IMO MSC.302(87):2010, *Performance standards for bridge alert management (BAM)*

IMO MSC.1/Circ.1609:2019, *Guidelines for the standardization of user interface design for navigation equipment*

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VESA-2001-6, *Flat Panel Display Measurements* (*FPDM*)

Edition 3.0 2021-12

INTERNATIONAL STANDARD

NORME INTERNATIONALE

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Maritime navigation and radiocommunication equipment and systems – Presentation of navigation-related information on shipborne navigational displays – General requirements, methods of testing and required test results

Matériels et systèmes de navigation et de radiocommunication maritimes – Présentation des informations relatives à la navigation sur des affichages de navigation de bord – Exigences générales, méthodes d'essai et résultats d'essai exigés

IEC 62288:2021-12(en-fr)

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IMO MSC.302(87):2010, *Performance standards for bridge alert management (BAM)*

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VESA-2001-6, *Flat Panel Display Measurements* (*FPDM*)

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COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

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MATÉRIELS ET SYSTÈMES DE NAVIGATION ET DE RADIOCOMMUNICATION MARITIMES – PRÉSENTATION DES INFORMATIONS RELATIVES À LA NAVIGATION SUR DES AFFICHAGES DE NAVIGATION DE BORD – EXIGENCES GÉNÉRALES, MÉTHODES D'ESSAI ET RÉSULTATS D'ESSAI EXIGÉS

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L'IEC 62288 a été établie par le comité d'études 80 de l'IEC: Matériels et systèmes de navigation et de radiocommunication maritimes. Il s'agit d'une Norme internationale.

Cette troisième édition annule et remplace la deuxième édition parue en 2014. Cette édition constitue une révision technique.

Cette édition inclut les modifications techniques majeures suivantes par rapport à l'édition précédente:

a) l'Article 4 a été révisé pour supprimer les exigences relatives aux indications d'alertes qui sont maintenant spécifiées dans l'IEC 62923-1;

b) l'Article 5 a fait l'objet d'une révision approfondie afin d'ajouter de nouvelles exigences relatives à la présentation des AIS, ASM et DSC, ainsi que trois nouvelles annexes, l'Annexe J, l'Annexe K et l'Annexe L;

c) l'Annexe A et l'Annexe B ont été révisées afin d'intégrer les modifications apportées à la circulaire SN.1/Circ.243 de l'OMI;

d) l'Annexe E a été révisée afin d'intégrer les modifications apportées à la résolution MSC.191(79) de l'OMI et renommée "Commandes opérationnelles et regroupement logique";

e) deux nouvelles annexes ont été ajoutées : l'Annexe H relative aux actions de l'opérateur et l'Annexe I relative aux paramètres par défaut et venant à l'appui de la circulaire MSC.1/Circ.1609 de l'OMI.

Le texte de cette Norme internationale est issu des documents suivants:

Projet	Rapport de vote
80/1013/FDIS	80/1017/RVD

Le rapport de vote indiqué dans le tableau ci-dessus donne toute information sur le vote ayant abouti à son approbation.

La version française de la norme n'a pas été soumise au vote.

La langue employée pour l'élaboration de cette Norme internationale est l'anglais.

Le présent document a été rédigé selon les Directives ISO/IEC, Partie 2, il a été développé selon les Directives ISO/IEC, Partie 1 et les Directives ISO/IEC, Supplément IEC, disponibles sous http://www.iec.ch/members_experts/refdocs. Les principaux types de documents développés par l'IEC sont décrits plus en détail sous www.iec.ch/standardsdev/publications.

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MATÉRIELS ET SYSTÈMES DE NAVIGATION ET DE RADIOCOMMUNICATION MARITIMES – PRÉSENTATION DES INFORMATIONS RELATIVES À LA NAVIGATION SUR DES AFFICHAGES DE NAVIGATION DE BORD – EXIGENCES GÉNÉRALES, MÉTHODES D'ESSAI ET RÉSULTATS D'ESSAI EXIGÉS

1 Domaine d'application

Le présent document spécifie les exigences générales, les méthodes d'essai et les résultats d'essai exigés pour la présentation des informations relatives à la navigation sur des affichages de navigation de bord, et vient à l'appui de la résolution MSC.191(79) de l'OMI amendée par la MSC.466(101) de juin 2019, et la résolution MSC.302(87) lorsqu'elle est applicable.

Le présent document vient également à l'appui des lignes directrices exposées dans la circulaire associée MSC.1/Circ.1609 de l'OMI relative à la normalisation de la conception de l'interface utilisateur pour les matériels de navigation, ainsi que dans la circulaire SN.1/Circ.243 dans sa version révisée de juin 2019 concernant la présentation des symboles, termes et abréviations liés à la navigation.

Le présent document spécifie également la présentation des comptes rendus de données AIS et les messages spécifiques à l'application de l'AIS définis pour un usage international dans la circulaire SN.1/Circ.289 de l'OMI et destinés à être reçus pour un affichage à bord d'un navire.

NOTE Tout texte du présent document dont la formulation est identique au texte contenu dans un document de l'OMI est imprimé en *italique*. Le document de référence est indiqué au début du paragraphe. La notation contient un préfixe renvoyant au document et un suffixe se rapportant au numéro de paragraphe du document (par exemple, (MSC.191/1); (SN243/1), etc.).

2 Références normatives

Les documents suivants sont cités dans le texte de sorte qu'ils constituent, pour tout ou partie de leur contenu, des exigences du présent document. Pour les références datées, seule l'édition citée s'applique. Pour les références non datées, la dernière édition du document de référence s'applique (y compris les éventuels amendements).

IEC 60945:2002, *Matériels et systèmes de navigation et de radiocommunication maritimes – Spécifications générales – Méthodes d'essai et résultats exigibles*

IEC 61174, *Matériels et systèmes de navigation et de radiocommunication maritimes – Système de visualisation des cartes électroniques et d'information (ECDIS) – Exigences opérationnelles et de fonctionnement, méthodes d'essai et résultats d'essai exigés*

IEC 61966-4, *Systèmes et appareils multimédia – Mesure et gestion de la couleur – Partie 4: Appareils utilisant des afficheurs à cristaux liquides*

IEC 62388, *Matériels et systèmes de navigation et de radiocommunication maritimes – Radar de bord – Exigences de performance, méthodes d'essai et résultats exigés*

IEC 62923-1, *Matériels et systèmes de navigation et de radiocommunication maritimes – Gestion des alertes à la passerelle – Partie 1: Exigences opérationnelles et de fonctionnement, méthodes d'essai et résultats d'essai exigés*

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