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Marin navigerings- och kommunikationsutrustning – Presentation av navigeringsinformation på dataskärmar ombord – Allmänna fordringar, provningsmetoder och erforderliga provningsresultat

*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*

Som svensk standard gäller europastandarden EN IEC 62288:2022. Den svenska standarden innehåller den officiella engelska språkversionen av EN IEC 62288:2022.

Nationellt förord

Europastandarden EN IEC 62288:2022

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SEK Svensk Elstandard

Box 1284
164 29 Kista
Tel 08-444 14 00
www.elstandard.se

English Version

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
(IEC 62288:2021)

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)

Navigations- und Funkkommunikationsgeräte und -systeme
für die Seeschifffahrt - Darstellung von
navigationsbezogenen Informationen auf
Navigationsanzeigen für Schiffe - Allgemeine
Anforderungen, Prüfverfahren und geforderte
Prüfergebnisse
(IEC 62288:2021)

This European Standard was approved by CENELEC on 2022-01-24. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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Europäisches Komitee für Elektrotechnische Normung

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European foreword

The text of document 80/1013/FDIS, future edition 3 of IEC 62288, prepared by IEC/TC 80 "Maritime navigation and radiocommunication equipment and systems" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62288:2022.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2022-10-24
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2025-01-24

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The text of the International Standard IEC 62288:2021 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 61162 (series) NOTE Harmonized as EN IEC 61162-460 (series)

IEC 61924-2 NOTE Harmonized as EN IEC 61924-2

IEC 61993-2 NOTE Harmonized as EN IEC 61993-2

IEC 62065 NOTE Harmonized as EN 62065

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60945	2002	Maritime navigation and radiocommunication equipment and systems - General requirements - Methods of testing and required test results	EN 60945	2002
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	EN 61174	-
IEC 61966-4	-	Multimedia systems and equipment - Colour measurement and management - Part 4: Equipment using liquid crystal display panels	EN 61966-4	-
IEC 62388	-	Maritime navigation and radiocommunication equipment and systems - Shipborne radar - Performance requirements, methods of testing and required test results	EN 62388	-
IEC 62923-1	-	Maritime navigation and radiocommunication equipment and systems - Bridge alert management - Part 1: Operational performance requirements, methods of testing and required test results	EN IEC 62923-1	-
IHO S-52	-	Specifications for chart content and display aspects of ECDIS	-	-
IMO	-	Seafarers' Training, Certification and Watchkeeping Code (STCW Code)	-	-

EN IEC 62288:2022 (E)

IMO A.694(17)	1991	General requirements for shipborne radio equipment forming part of the global maritime distress and safety system (GMDSS) and for electronic navigational aids	-	-
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.2	2019	Guidelines for the presentation of navigation related symbols, terms and abbreviations	-	-
+ Corr.1	-		-	-
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	-	-
IMO A.1021(26)	2009	Code on Alerts and Indications	-	-
VESA-2001-6	-	Flat Panel Display Measurements (FPDM)	-	-

INTERNATIONAL STANDARD

NORME INTERNATIONALE



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Presentation of navigation-related information on shipborne navigational
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Présentation des informations relatives à la navigation sur des affichages de
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d'essai exigés**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

FOREWORD

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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.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

IMPORTANT – The "colour inside" logo on the cover page of this document indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

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).

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.

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.

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 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*

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

IMO A.694(17):1991, *General requirements for shipborne radio equipment forming part of the global maritime distress and safety system (GMDSS) and for electronic navigational aids*

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.2:2019+Corr.1, *Guidelines for the presentation of navigation related symbols, terms and abbreviations*

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*

IMO A.1021(26):2009, *Code on Alerts and Indications*

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