

**SLOVENSKI STANDARD
SIST EN IEC 62288:2022****01-april-2022****Nadomešča:
SIST EN 62288:2014**

Oprema in sistemi za pomorsko navigacijo in radiokomunikacije - Predstavljanje podatkov o plovbi na ladijskih navigacijskih prikazovalnikih - Splošne zahteve, merilne metode in pričakovani rezultati preskušanja (IEC 62288:2021)

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)

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)

[SIST EN IEC 62288:2022](#)

<https://standards.iteh.ai/catalog/standards/sist/63671fa2-6874523800c1/e4971995a/sist-en-iec-62288-2022>
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)

Ta slovenski standard je istoveten z: EN IEC 62288:2022

ICS:

47.020.70	Navigacijska in krmilna oprema	Navigation and control equipment
-----------	--------------------------------	----------------------------------

SIST EN IEC 62288:2022 en

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN IEC 62288:2022

<https://standards.iteh.ai/catalog/standards/sist/63671fa2-d687-4525-b66c-17e497195ba7/sist-en-iec-62288-2022>

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN IEC 62288

February 2022

ICS 47.020.70

Supersedes EN 62288:2014 and all of its amendments
and corrigenda (if any)

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)

Matériaux 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)

IEH STANDARD
PREVIEW

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.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

[SIST EN IEC 62288:2022](#)

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



European Committee for Electrotechnical Standardization
 Comité Européen de Normalisation Electrotechnique
 Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN IEC 62288:2022 (E)**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

This document supersedes EN 62288:2014 and all of its amendments and corrigenda (if any).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

iTeh STANDARD

PREVIEW
Endorsement notice

(standards.iteh.ai)

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

[SIST EN IEC 62288:2022](#)

In the official version, for Bibliography, the following notes have to be added for the standards indicated:
<https://standards.iteh.ai/catalog/standards/sist/6367162-d687-4525-b66c-17e497195ba7/sist-en-iec-62288-2022>

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)	-	-

<https://standards.iteh.ai/catalog/standards/sist/63671fa2-d687-4525-b66c-17e497195ba7/sist-en-iec-62288-2022>



INTERNATIONAL STANDARD

NORME INTERNATIONALE



iTeh STANDARD

**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
(standards.iteh.ai)**

**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** <https://standards.iteh.ai/standards/sist-en-iec-62288-2022/d687-4525-b66c-17e497195ba7/sist-en-iec-62288-2022>

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

Warning! Make sure that you obtained this publication from an authorized distributor.

Attention! Veuillez vous assurer que vous avez obtenu cette publication via un distributeur agréé.

CONTENTS

FOREWORD	9
1 Scope	11
2 Normative references	11
3 Terms, definitions and abbreviated terms	12
3.1 Terms and definitions.....	12
3.2 Abbreviated terms.....	19
4 General requirements for all displays on the bridge of a ship	19
4.1 Relationship to IMO standards	19
4.2 Application of IEC 60945.....	21
4.2.1 Remark.....	21
4.2.2 General requirements	21
4.3 Arrangement of information.....	21
4.3.1 Consistency of layout and logical grouping	21
4.3.2 Consistent presentation of information.....	22
4.3.3 Separation of operational display area.....	22
4.4 Readability.....	22
4.4.1 Readability under all ambient light conditions	22
4.4.2 Legibility of alphanumeric data and text.....	25
4.4.3 Presentation of text and icons.....	25
4.5 Colours and intensity	26
4.5.1 Discrimination of colours – Requirement.....	26
4.5.2 Methods of test and required results	27
4.6 Symbols.....	27
4.6.1 Operational information	27
4.6.2 Electronic chart information	28
4.7 Colour coding	29
4.7.1 Colour coding for discrimination.....	29
4.7.2 Colour coding of information	29
4.7.3 Colour coding in combination with other attributes	29
4.7.4 Flashing of information	29
4.8 Integrity marking	30
4.8.1 Indication of source, validity and integrity status	30
4.8.2 Colour coding of validity and integrity	30
4.8.3 Indication of presentation failure	30
4.9 Alerts and indications.....	31
4.9.1 Operational status	31
4.9.2 List of alerts.....	31
4.9.3 Alert related information from multiple sources	31
4.9.4 Speech output for alarms and warnings	31
4.10 Presentation mode	31
4.10.1 Requirement.....	31
4.10.2 Methods of test and required results	32
4.11 User manuals, instructions and reference guides	32
4.11.1 Requirement.....	32
4.11.2 Methods of test and required results	32
5 Presentation of operational information	32

5.1	Application	32
5.2	Presentation of own ship information	32
5.2.1	Graphical representation of own ship – Requirement	32
5.2.2	Methods of test and required results	33
5.3	Presentation of chart information	33
5.3.1	Alteration of chart information	33
5.3.2	Colours and symbols for charted information	33
5.4	Presentation of radar information	34
5.4.1	Radar video images	34
5.4.2	Target trails	35
5.5	Presentation of target information	35
5.5.1	Providing target information	35
5.5.2	Consistent user interface for target information	36
5.5.3	Indication of exceeding target capacity	36
5.5.4	Presentation of repeated AIS reports	37
5.5.5	Filtering sleeping AIS targets	38
5.5.6	Activation of AIS targets	38
5.5.7	Graphical presentation of targets	39
5.5.8	Target selection	40
5.5.9	Indication of target derivation	41
5.5.10	Presentation of tracked radar target information	41
5.5.11	Presentation of reported AIS target information	42
5.5.12	Continual update of target information	43
5.5.13	Own ship's AIS information	43
5.5.14	Obscuring the operational display area	44
5.6	Operational alerts	44
5.6.1	Alert status	44
5.6.2	CPA/TCPA alarms	44
5.6.3	Acquisition/activation zones warnings	45
5.6.4	Lost target warnings	45
5.7	AIS and radar target association	46
5.7.1	Requirement	46
5.7.2	Methods of test and required results	46
5.8	AIS presentation user selectors and their status indications	47
5.8.1	Requirement	47
5.8.2	Methods of test and required results	48
5.9	Trial manoeuvre	49
5.9.1	Requirement	49
5.9.2	Methods of test and required results	49
5.10	Measurement	49
5.10.1	Measurement from own ship	49
5.10.2	Bearing and range measurements	49
5.11	Navigation tools	50
5.11.1	General requirements	50
5.11.2	Range rings	50
5.11.3	Variable range marker (VRM)	50
5.11.4	Bearing scale	51
5.11.5	Electronic bearing line (EBL)	52
5.11.6	Parallel index lines (PI)	53

5.11.7	Offset measurement of range and bearing	54
5.11.8	User cursor.....	55
5.12	AIS data link message processing capacity.....	56
5.12.1	General	56
5.12.2	Requirements	56
5.12.3	Methods of test and required results	56
5.13	AIS data report	56
5.13.1	General	56
5.13.2	AIS data report capacity	56
5.13.3	AIS data report display	57
5.13.4	Graphical presentation of AIS AtoN dimensions	60
5.14	AIS locating device	60
5.14.1	General	60
5.14.2	AIS locating device capacity	61
5.14.3	AIS locating device display	61
5.15	AIS ASM	63
5.15.1	General	63
5.15.2	Categories	64
5.15.3	AIS ASM capacity	66
5.15.4	AIS ASM display.....	68
5.16	Presentation of AIS synthetic target	70
5.16.1	Requirement.....	70
5.16.2	Methods of test and required results	71
5.17	Presentation of association of DSC received call with a displayed AIS object.....	72
5.17.1	Requirement.....	72
5.17.2	Methods of test and required results	72
5.18	AIS ASM information extending reported AIS target information.....	73
5.19	Received AIS safety related messages.....	74
5.19.1	Requirements	74
5.19.2	Methods of test and required results	75
5.20	Sent AIS safety related messages.....	76
5.20.1	Requirements	76
5.20.2	Methods of test and required results	76
6	INS, radar and chart displays	76
6.1	General.....	76
6.1.1	Application.....	76
6.1.2	Multifunction displays	76
6.1.3	Simultaneous display of radar and chart data	77
6.1.4	Range scales.....	77
6.1.5	Operational display area	78
6.1.6	Motion display modes	78
6.1.7	Orientation modes	78
6.1.8	Off-centring	79
6.1.9	Stabilisation modes	79
6.2	Radar displays	80
6.2.1	Application.....	80
6.2.2	Radar video image.....	80
6.2.3	Brightness of radar information	81
6.2.4	Display of chart information on radar	81

6.2.5	Priority of radar information	82
6.2.6	Display of map graphics	82
6.3	Chart displays	83
6.3.1	Application	83
6.3.2	Display of chart information	83
6.3.3	IMO ECDIS display categories	84
6.3.4	Adding or removing information from the display	84
6.3.5	Safety contour	85
6.3.6	Safety depth	85
6.3.7	Chart scale	85
6.3.8	Display of radar and target information	86
6.3.9	Display of additional information	86
6.4	Composite task-oriented presentations	87
6.4.1	User-configured presentations	87
6.4.2	Information associated with the task-at-hand	87
6.5	Single and simple operator actions	87
6.5.1	Applicability	87
6.5.2	Requirement	88
6.5.3	Methods of test and required results	88
6.6	User and default settings	88
6.6.1	General	88
6.6.2	User-settings	88
6.6.3	Default settings	89
7	Physical requirements (standards.iteh.ai)	89
7.1	General	89
7.2	Display adjustment	89
7.2.1	Contrast and brightness	89
7.2.2	Magnetic interference	90
7.2.3	Temporal stability	90
7.2.4	Physical controls and status indicators	91
7.3	Screen size	91
7.3.1	Requirement	91
7.3.2	Method of test and required results	92
7.4	Multicoloured display equipment	92
7.4.1	Requirement	92
7.4.2	Method of test and required results	92
7.5	Screen resolution	93
7.5.1	Requirement	93
7.5.2	Method of test and required results	93
7.6	Screen viewing angle	93
7.6.1	Requirement	93
7.6.2	Methods of test and required results	93
	Annex A (normative) Presentation colours and symbols	94
A.1	Overview	94
A.2	Purpose	94
A.3	Use	94
A.4	Application	94
A.5	Navigation-related symbols	94

Annex B (normative) Guidelines for the presentation of navigation-related terminology and abbreviations	130
B.1 Overview.....	130
B.2 Purpose	130
B.3 Use of these guidelines.....	130
B.4 Application.....	130
B.5 Navigation related terminology and abbreviations	130
Annex C (informative) Guidance on display and dialogue design in IMO MSC/Circ.982.....	137
C.1 Overview.....	137
C.2 General.....	137
C.3 Requirements in IMO MSC/Circ.982 related to the display design	137
Annex D (informative) Guidance on testing	139
D.1 Methods of test	139
D.1.1 General	139
D.1.2 Observation.....	139
D.1.3 Inspection of documented evidence	139
D.1.4 Measurement.....	140
D.1.5 Analytical evaluation.....	140
D.2 Application of IEC 60945.....	140
D.2.1 Display equipment category.....	140
D.2.2 Technical performance	140
D.2.3 Pre-conditioning for environmental tests	141
D.2.4 Methods of test applied for IEC 60945	141
D.3 Compliance with requirements	142
D.4 Simulation.....	143
D.5 Electronic chart data	143
Annex E (normative) Operational controls and logical grouping	144
E.1 Overview.....	144
E.2 Logical grouping of data and control functions	144
E.3 Navigation related terminology and icons for common function controls (hot keys and shortcuts).....	146
Annex F (normative) Icons for presentation of the state of an alert.....	160
Annex G (normative) Testing for colours, intensity and flicker	161
G.1 Testing for colours and intensity	161
G.1.1 General	161
G.1.2 Test personnel.....	162
G.1.3 Method of test.....	162
G.2 Testing for flicker	163
G.2.1 Overview	163
G.2.2 Analytic model	163
G.2.3 Decision criteria.....	165
Annex H (normative) Single and simple operator actions	167
H.1 General.....	167
H.2 Tables for single and simple operator actions	167
Annex I (normative) Default settings	169
I.1 General.....	169
I.2 ECDIS default settings	169
I.3 Radar default settings	171

Annex J (normative) Implementation details of AIS ASM	172
J.1 General.....	172
J.2 AIS ASM	172
Annex K (informative) Overview of AIS Messages	181
K.1 General.....	181
K.2 Use case guidance on AIS ASM.....	183
Annex L (informative) Overview of the use AIS AtoN status field bits	184
Bibliography.....	185
 Table 1 – Ambient light conditions	23
Table 2 – Operational status of indications	31
Table 3 – User selectors for AIS presentation	47
Table 4 – AIS status indications	48
Table 5 – AIS data report capacity	57
Table 6 – AIS locating devices capacity	61
Table 7 – AIS ASM object capacity	66
Table 8 – Extended reported AIS target information from AIS ASM	73
Table A.1 – Own ship symbols	95
Table A.2 – Radar and AIS symbols.....	99
Table A.3 – Navigation symbols	115
Table A.4 – Navigation tools	120
Table A.5 – Other symbols.....	121
Table A.6 – Example of possible colour scheme	129
Table B.1 – List of standard terms and abbreviations	131
Table B.2 – List of standard units of measurement and abbreviations	136
Table C.1 – Paragraphs in MSC/Circ.982 associated with IEC 60945 requirements	137
Table C.2 – Other paragraphs in MSC/Circ.982 related to display design.....	138
Table C.3 – Other paragraphs in MSC/Circ.982 partially related to display design	138
Table D.1 – Methods of test applied for IEC 60945	141
Table E.1 – Logical grouping for radar, ECDIS and INS applications (based on MSC.1/Circ.1609)	145
Table E.2 – Examples of logical grouping for voluntary implementation.....	146
Table E.3 – General controls	147
Table E.4 – General navigation functions (based on MSC.1/Circ.1609).....	148
Table E.5 – Radar specific controls.....	151
Table E.6 – Control of chart display functions (based on MSC.1/Circ.1609)	152
Table E.7 – Control of chart functionality (based on MSC.1/Circ.1609)	157
Table E.8 – Database functions (based on MSC.1/Circ.1609)	157
Table E.9 – Route plan and monitoring functions (based on MSC.1/Circ.1609)	158
Table E.10 – Groups of functions (based on MSC.1/Circ.1609)	158
Table G.1 – Values of predicted energy and special coefficients	166
Table H.1 – Access to functions, as defined before June 2019 (based on MSC.1/Circ.1609)	167
Table H.2 – Access to functions (based on MSC.1/Circ.1609)	168

Table H.3 – Access to group of functions (based on MSC.1/Circ.1609)	168
Table I.1 – ECDIS settings configured in response to "Default" selection (based on MSC.1/Circ.1609)	169
Table I.2 – Radar control settings configured in response to "Default" selection (based on MSC.1/Circ.1609)	171
Table J.1 – Details of AIS ASM	172
Table K.1 – AIS Messages.....	181
Table K.2 – AIS ASM Messages	182
Table L.1 – AIS AtoN status field	184

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN IEC 62288:2022

<https://standards.iteh.ai/catalog/standards/sist/63671fa2-d687-4525-b66c-17e497195ba7/sist-en-iec-62288-2022>

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
<https://standardsiteh.ai/catalog/standards/sist/63671fa2-d687-4525-b66c-17e497195ba7/sist-en-iec-62288-2022>
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

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;