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

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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Maritime navigation and radiocommunication equipment and systems - Bridge alert management - Part 1: Operational and performance requirements, methods of testing and required test results
(IEC 62923-1:2018)

Matériels et systèmes de navigation et de radiocommunication maritimes - Gestion des alertes a la passerelle - Partie 1: Exigences d'exploitation et de fonctionnement, méthodes d'essai et résultats d'essai exigés
(IEC 62923-1:2018)

Navigations- und Funkkommunikationsgeräte und -Systeme für die Seeschifffahrt - Brücken Alert Management - Teil 1: Betriebs- und Leistungsanforderungen, Prüfverfahren und geforderte Prüfergebnisse
(IEC 62923-1:2018)

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Europäisches Komitee für Elektrotechnische Normung

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EN IEC 62923-1:2018 (E)**European foreword**

The text of document 80/892/FDIS, future edition 1 of IEC 62923-1, 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 62923-1:2018.

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IEC 60812	NOTE	Harmonized as EN 60812
IEC 61162-2	NOTE	Harmonized as EN 61162-2
IEC 62065	NOTE	Harmonized as EN 62065
IEC 62616	NOTE	Harmonized as EN 62616
IEC 62940	NOTE	Harmonized as EN 62940

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.

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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 61162-1	-	Maritime navigation and radiocommunication equipment and systems - Digital interfaces - Part 1: Single talker and multiple listeners	EN 61162-1	-
IEC 61162-450	-	Maritime navigation and radiocommunication equipment and systems - Digital interfaces - Part 450: Multiple talkers and multiple listeners - Ethernet interconnection	EN IEC 61162-450	-
IEC 61924-2	-	Maritime navigation and radiocommunication equipment and systems - Integrated navigation systems - Part 2: Modular structure for INS - Operational and performance requirements, methods of testing and required test results	EN 61924-2	-
IEC 62288	-	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	EN 62288	-
IEC 62923-2	2018	Maritime navigation and radiocommunication equipment and systems - Bridge alert management - Part 2: Alert and cluster identifiers and other additional features	-EN IEC 62923-2	2018
IMO MSC.302(87)	-	Performance standards for Bridge Alert Management (BAM)	-	-



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

**Matériels et systèmes de navigation et de radiocommunication maritimes –
Gestion des alertes a la passerelle –
Partie 1: Exigences d'exploitation et de fonctionnement, méthodes d'essai et résultats d'essai exigés**



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Part 1: Operational and performance requirements, methods of testing and required test results**

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Partie 1: Exigences d'exploitation et de fonctionnement, méthodes d'essai et résultats d'essai exigés**

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CONTENTS

FOREWORD.....	7
INTRODUCTION.....	9
1 Scope.....	10
2 Normative references	10
3 Terms, definitions and abbreviated terms	11
3.1 Terms and definitions.....	11
3.2 Abbreviated terms.....	16
4 Description	17
4.1 Purpose	17
4.2 EUT function types	17
4.3 Application	18
4.4 Implementation of BAM interfaces.....	18
4.5 Clusters	19
5 Test methods.....	20
5.1 Subject of tests	20
5.2 Test set-ups.....	20
5.3 General requirements	20
5.4 Configuration for testing.....	21
6 Module A – Presentation and handling of alerts on the bridge.....	21
6.1 General.....	21
6.1.1 Provisions.....	21
6.1.2 Number of alerts for one situation	21
6.1.3 Alert presentation at several locations	22
6.1.4 Central alert management HMI	22
6.2 Priorities classification and categories	23
6.2.1 Applicability	23
6.2.2 Requirement.....	23
6.2.3 Methods of test and required results	25
6.3 Presentation and state of alerts	25
6.3.1 Applicability	25
6.3.2 General	25
6.3.3 Emergency alarms.....	29
6.3.4 Alarms	29
6.3.5 Warnings	34
6.3.6 Cautions	39
6.3.7 Alert escalation.....	39
6.4 Presentation of alerts on the bridge	41
6.4.1 Applicability	41
6.4.2 General requirements	41
6.4.3 Aids for decision making.....	45
6.4.4 Audible annunciation	45
6.4.5 Display of icons	48
6.4.6 Functionality to help reduce the number of high-priority alerts	48
6.5 Systems failures, redundancies, back-up and fallback arrangements	49
6.5.1 Applicability.....	49
6.5.2 Requirement.....	49

6.5.3	Methods of test and required results	50
6.6	Documentation.....	51
6.6.1	Applicability	51
6.6.2	Requirement.....	52
6.6.3	Methods of test and required results	52
6.7	Functional alert grouping	52
6.7.1	Applicability	52
6.7.2	Functional alert group source	52
6.7.3	Functional alert group display.....	55
6.8	Alert aggregation	57
6.8.1	Applicability	57
6.8.2	Alert aggregation source.....	57
6.8.3	Aggregation display	59
6.9	Responsibility transfer	61
6.9.1	EUT performing reevaluation	61
6.9.2	EUT as source of alerts	62
7	Module B – Central alert management system functionality	63
7.1	Applicability	63
7.2	Central alert management human machine interface (CAM-HMI)	63
7.2.1	General requirements	63
7.2.2	Aggregated header alerts	67
7.2.3	Alert history	68
7.3	Functional aspects of a CAM	70
7.3.1	Requirement.....	70
7.3.2	Methods of test and required results	70
7.4	Back-up and redundancies.....	71
7.4.1	Requirement.....	71
7.4.2	Methods of test and required results	71
7.5	System failures and fallback arrangements	71
7.5.1	Requirement.....	71
7.5.2	Methods of test and required results	72
8	Module C – Interfacing	73
8.1	Interfacing requirements for alert-related communication	73
8.1.1	Communication protocol	73
8.1.2	Alert priority, state and text.....	74
8.1.3	Time of last change	75
8.1.4	Acknowledgement and silence.....	75
8.1.5	Aggregation.....	76
8.1.6	Reconnection	77
8.2	Connection to the ship's power supply	77
8.2.1	Applicability	77
8.2.2	Requirement.....	77
8.2.3	Methods of test and required results	77
8.3	Function not in operational use	77
8.3.1	Applicability	77
8.3.2	Requirement.....	78
8.3.3	Methods of test and required results	78
9	Module D – System and equipment documentation for CAM system	78
9.1	Applicability	78

9.2	Manuals	78
9.2.1	Requirement	78
9.2.2	Methods of test and required results	78
9.3	Information regarding system configuration for surveyor	78
9.3.1	Requirement	78
9.3.2	Methods of tests and required results	79
9.4	Failure analysis	79
9.4.1	Requirement	79
9.4.2	Methods of test and required results	79
9.5	Guidance to equipment manufacturers for the provision of on-board familiarization material	79
9.5.1	Requirement	79
9.5.2	Methods of test and required results	79
Annex A (informative)	Test set-ups	80
A.1	Applicability	80
A.2	Purpose	80
A.3	Generic representation	80
A.4	Test set-up 1	82
A.5	Test set-up 2	82
A.6	Test set-up 3	83
A.7	Test set-up 4	84
Annex B (informative)	Guidance to equipment manufacturers for the provision of on-board familiarization material (Appendix 2 of IMO Resolution MSC.302(87))	86
B.1	Applicability	86
B.2	General	86
B.3	On-board familiarization	86
B.4	Familiarization training framework	87
B.4.1	General description	87
B.4.2	Detailed operation	87
Annex C (normative)	Logical interfaces for alert communication	88
C.1	Applicability	88
C.2	Logical interfaces	88
C.3	Alert sentences for exchanging alert information	89
C.4	Alert communication in case of successful revaluation and priority reduction	91
C.5	Alert communication in case of unsuccessful revaluation	92
C.6	Additional requirements for use of BAM sentences on IEC 61162-450	93
C.6.1	Use of ALF	93
C.6.2	Use of ALC	93
C.6.3	Use of ACN	94
C.6.4	Use of ARC	94
C.6.5	Use of AGL	94
C.7	Alert communication in case of inconsistent content of ALF messages	94
Annex D (informative)	Properties of aggregation and functional grouping	95
Annex E (informative)	Guidance on alert management	96
E.1	Applicability	96
E.2	Alert management strategic changes	96
E.3	Alert management tactics	96
E.4	Alert management means and methods	97
E.4.1	Overview	97

E.4.2	Functional alerts	98
E.4.3	Tools	100
E.4.4	Clusters	102
E.4.5	Technical and structural approach	104
Annex F (normative)	Icons for alert management	105
Annex G (normative)	Alert state diagrams	108
Annex H (normative)	Legacy alert handling	111
H.1	Applicability	111
H.2	Introduction to legacy alert sources	111
H.3	Conversion of legacy alerts	112
H.3.1	Requirement	112
H.3.2	Methods of test and required results	112
Annex I (normative)	Alert group list (AGL) message for functional grouping	114
I.1	Applicability	114
I.2	General	114
I.3	AGL – Alert group list	114
Annex J (normative)	TAG block for cluster identification	115
J.1	Applicability	115
J.2	General	115
J.3	Destination cluster identification "x"	115
J.4	Source cluster identification "z"	115
Annex K (informative)	Additional talker identifiers for alert sources	116
Bibliography	117
Figure 1	– Interfacing legacy alert sources with BAM compliant equipment	19
Figure 2	– Example of cluster-dependent alert management limitations	20
Figure 3	– Multiple alerts with audible annunciation existing simultaneously	46
Figure 4	– Occurrence of alerts during a temporary silence period	46
Figure 5	– Escalation of a warning as warning during a temporary silence period	47
Figure 6	– Occurrence of multiple warnings	47
Figure A.1	– BAM concept	81
Figure A.2	– Test set-up 1: no revaluation of input data	82
Figure A.3	– Test set-up 2: with revaluation of input data	83
Figure A.4	– Test set-up 3: BAM compliant CAM system	84
Figure A.5	– Test set-up 4: BAM/CAM system compliant INS	85
Figure C.1	– Logical interfaces	88
Figure C.2	– Alert communication showing priority reduction, alert condition rectified	92
Figure C.3	– Alert communication in case of no priority reduction, with user acknowledgement	93
Figure E.1	– Alert management decision flow	97
Figure E.2	– Clusters and their functional relations	103
Figure G.1	– State diagram of an alert of priority emergency alarm	108
Figure G.2	– State diagram of an alert of priority alarm	109
Figure G.3	– State diagram of an alert of priority warning	110
Figure G.4	– State diagram of an alert of priority caution	110

Figure H.1 – Division of functional blocks of alert management when BAM compliant alert source is interfaced to CAM	111
Figure H.2 – Division of functional blocks of alert management when legacy alert source is interfaced to CAM	111
Table 1 – Alert states and related conditions	26
Table 2 – Alert state and presentation for emergency alarms	26
Table 3 – Alert state and presentation for alarms	27
Table 4 – Alert state and presentation for warnings	28
Table 5 – Alert state and presentation for cautions	28
Table C.1 – IEC 61162-1 sentences received by BAM compliant equipment	90
Table C.2 – IEC 61162-1 sentences transmitted by BAM compliant equipment	91
Table D.1 – Properties of aggregation and functional grouping	95
Table F.1 – Alert management icons – basic.....	105
Table F.2 – Alert management icons – additional qualifiers.....	107
Table F.3 – Alert management icons – selected display status.....	107
Table K.1 – Talker identifiers for automation equipment.....	116

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**MARITIME NAVIGATION AND RADIOCOMMUNICATION
EQUIPMENT AND SYSTEMS – BRIDGE ALERT MANAGEMENT –**
**Part 1: Operational and performance requirements,
methods of testing and required test results**

FOREWORD

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International Standard IEC 62923-1 has been prepared by IEC technical committee 80: Maritime navigation and radiocommunication equipment and systems.

The text of this document is based on the following documents:

FDIS	Report on voting
80/892/FDIS	80/897/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 62923 series, published under the general title *Maritime navigation and radiocommunication equipment and systems – Bridge alert management*, can be found on the IEC website.

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

- reconfirmed,
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INTRODUCTION

IEC 62923-1 has been written in pursuit of IMO resolution MSC.302(87), to further detail the technical requirements of bridge alert management and to enable testing of any equipment against the requirements of bridge alert management.

Bridge alert management (BAM) is the IMO defined overall concept for the management, handling and harmonized presentation of alerts on the bridge.

This document has been written in such a way that this form of alert management can be applied ship wide, next to, and in cooperation with, cluster(s) on the bridge.

Individual equipment that applies the BAM principles uses

- harmonized states for its alerts,
- harmonized presentation for presentation of its alerts, and
- harmonized alert communications for
 - communication with other equipment (VDR and equipment with more knowledge, as applicable), and
 - communication with a central alert management (CAM) system, if provided on board.

A CAM system, including its human machine interface(s) (HMI),

- uses harmonized states for its alerts,
- uses harmonized presentation for presentation of all alerts generated on the bridge,
- uses harmonized alert communications for communication with other equipment (VDR, alert source equipment),
- provides the function to silence all audible alerts on the bridge, and
- provides the function to individually acknowledge all alerts generated on the bridge for which additional decision support information is not required;

A CAM system may be standalone or combined with other equipment, for example in the case of an integrated navigation system (INS).

All equipment that applies the BAM principles may provide intelligence to deal with the processing of non-BAM "legacy" alarm communications for harmonized presentation at its HMI.

This document provides the harmonization requirements.

MARITIME NAVIGATION AND RADIOCOMMUNICATION EQUIPMENT AND SYSTEMS – BRIDGE ALERT MANAGEMENT –

Part 1: Operational and performance requirements, methods of testing and required test results

1 Scope

This part of IEC 62923 specifies the operational and performance requirements, methods of testing, and required test results for the bridge alert management (BAM) in support of IMO resolution MSC.302(87). It is applicable to all alerts presented on and transferred to the bridge.

NOTE All text of this document whose wording is identical to that of IMO resolution MSC.302(87) is printed in italics, and the resolution and associated performance standard paragraph numbers are indicated in brackets.

(MSC.302/2) *To enhance the safety of operation, the Performance standards given in resolution MSC.302(87) provide requirements for the harmonized presentation and treatment of alerts on the bridge and specify a central alert management (CAM) system.*

Annex E provides guidance on design principles that, when applied, will achieve the desired enhancement of safety.

(MSC.302/3) *Module A (Clause 6) of this document describes the general concept of the BAM and the presentation of alerts on the bridge equipment. Modules B (Clause 7) and D (Clause 9) contain requirements for the CAM and the CAM-HMI. Module C (Clause 8) describes the interface requirements for BAM.*

BAM is a concept that imposes requirements on equipment that handles and presents alerts on the bridge, including equipment that provides central alert management (CAM) system functionalities.

- Equipment is BAM compliant if it meets Module A – Presentation and handling of alerts on the bridge and Module C – Interfacing of this document.
- Equipment is CAM system compliant if it is BAM compliant equipment and, in addition, meets Module B – Central alert management system functionality and Module D – System and equipment documentation for CAM system of this document.

To support retrofitting a ship with BAM compliant equipment handling alert related communication with remaining non-BAM compliant equipment (referred to as "legacy alert sources"), this document includes guidance on how to interface BAM compliant equipment with remaining devices that are not BAM compliant (see 4.4 and Annex H).

IEC 62923-2 provides standardized alert and cluster identifiers and other additional features.

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 61162-1, *Maritime navigation and radiocommunication equipment and systems – Digital interfaces – Part 1: Single talker and multiple listeners*

IEC 61162-450, *Maritime navigation and radiocommunication equipment and systems – Digital interfaces – Multiple talkers and multiple listeners – Ethernet interconnection*

IEC 61924-2, *Maritime navigation and radiocommunication equipment and systems – Integrated navigation systems – Part 2: Modular structure for INS – Operational and performance requirements, methods of testing and required test results*

IEC 62288, *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 62923-2:2018, *Maritime navigation and radiocommunication equipment and systems – Bridge alert management – Part 2: Alert and cluster identifiers and other additional features*

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

koniec náhľadu – text ďalej pokračuje v platenej verzii STN