Maritime navigation and radiocommunication equipment and systems - Automatic Identification Systems (AIS) - Part 2: Class A shipborne equipment of the automatic identification system (AIS) - Operational and performance requirements, methods of test and required test results

EESTI STANDARDIKESKUS
ESTONIAN CENTRE FOR STANDARDISATION

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN IEC 61993-2:2018 sisaldab Euroopa standardi EN IEC 61993-2:2018 ingliskeelset teksti.	This Estonian standard EVS-EN IEC 61993-2:2018 consists of the English text of the European standard EN IEC 61993-2:2018.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 26.10.2018.	Date of Availability of the European standard is 26.10.2018.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 47.020.70

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 61993-2

October 2018

ICS 47.020.70

Supersedes EN 61993-2:2013

English Version

Maritime navigation and radiocommunication equipment and systems - Automatic Identification Systems (AIS) - Part 2: Class A shipborne equipment of the automatic identification system (AIS) - Operational and performance requirements, methods of test and required test results (IEC 61993-2:2018)

Matériels et systèmes de navigation et de radiocommunication maritimes - Systèmes d'identification automatique (AIS) Partie 2: Équipements AIS de type Classe A embarqués - Exigences d'exploitation et de fonctionnement, méthodes d'essai et résultats d'essai exigés
(IEC 61993-2:2018)

Navigations- und Funkkommunikationsgeräte und -systeme für die Seeschifffahrt - Automatische Identifikationssysteme (AIS) - Teil 2: Geräte der Klasse A des universellen automatischen Identifikationssystems (AIS) für Schiffe - Betriebs- und Leistungsanforderungen, Prüfverfahren und geforderte Prüfergebnisse
(IEC 61993-2:2018)

This European Standard was approved by CENELEC on 2018-08-23. 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.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, 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

Ref. No. EN IEC 61993-2:2018 E

European foreword

The text of document 80/888/FDIS, future edition 3 of IEC 61993-2, 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 61993-2:2018.

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) 2019-05-23
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2021-08-23

This document supersedes EN 61993-2:2013.

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.

Endorsement notice

The text of the International Standard IEC 61993-2:2018 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 61097-14	NOTE	Harmonized as EN 61097-14
IEC 61108-1	NOTE	Harmonized as EN 61108-1
IEC 61108-2	NOTE	Harmonized as EN 61108-2
IEC 61162-3	NOTE	Harmonized as EN 61162-3
IEC 61924-2	NOTE	Harmonized as EN 61924-2
IEC 62287-1	NOTE	Harmonized as EN 62287-1
IEC 62320-1	NOTE	Harmonized as EN 62320-1
IEC 62320-2	NOTE	Harmonized as EN 62320-2

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.

Publication	Year	Title	EN/HD	Year
IEC 60945	2002	Maritime navigation and radiocommunication equipment and systems - General requirements - Methods of testing and required test results	EN 60945	2002
IEC 61108	series	Maritime navigation and radiocommunication equipment and systems - Global navigation satellite systems (GNSS)	EN 61108	series
IEC 61162-1	2016	Maritime navigation and radiocommunication equipment and systems - Digital interfaces - Part 1: Single talker and multiple listeners	EN 61162-1	2016
IEC 61162-2	-	Maritime navigation and radiocommunication equipment and systems - Digital interfaces - Part 2: Single talker and multiple listeners, high-speed transmission	EN 61162-2	-
IEC 61162-450	2018	Maritime navigation and radiocommunication equipment and systems - Digital interfaces - Part 450: Multiple talkers and multiple listeners - Ethernet interconnection	EN IEC 61162-450	2018
IEC 61162-460	-	Maritime navigation and radiocommunication equipment and systems - Digital interfaces - Part 460: Multiple talkers and multiple listeners - Ethernet interconnection - Safety and security	EN IEC 61162-460	-
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 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 and performance requirements, methods of testing and required test results	-	-
IEC 62923-2	-	Maritime navigation and radiocommunication equipment and systems – Bridge alert management - Part 2: Alert and cluster identifiers and other additional features	EN 62923-2[1]	-
ITU-R Recommendation M.1084-5	2012	Interim solutions for improved efficiency in the use of the band 156-174 MHz by stations in the maritime mobile service	-	-
ITU-R Recommendation M.1371-5	2014	Technical characteristics for an automatic identification system using time-division multiple access in the VHF maritime mobile band	-	-
ITU-R Recommendation M.493-14	-	Digital selective-calling system for use in the maritime mobile service	-	-
ITU-R Recommendation M.541-10	-	Operational procedures for the use of digital selectivecalling equipment in the maritime mobile service	-	-
ITU-R Recommendation M.825-3	-	Characteristics of a transponder system using digital selective calling techniques for use with vessel traffic services and ship-to-ship identification	-	-
ITU-T Recommendation O.153	-	Basic parameters for the measurement of error performance at bit rates below the primary rate	-	-
IMO Resolution-A.694 (17)		General requirements for shipborne radio equipment forming part of the Global Maritime Distress and Safety System (GMDSS) and for electronic navigational aids		
IMO Resolution-MSC.302(87)		Performance standards for Bridge Alert Management		
IMO Resolution-MSC.43(64)		Guidelines and Criteria for Ship Reporting Systems (as amended by MSC.111(73))		
IMO Resolution-MSC.74(69)		Performance standards for an Universal sphipborne automatic identification systems (AIS)		

[1] Under preparation. Stage at the time of publication: FprEN 62923-2:2018.

CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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MARITIME NAVIGATION AND RADIOCOMMUNICATION EQUIPMENT AND SYSTEMS – AUTOMATIC IDENTIFICATION SYSTEMS (AIS) –

Part 2: Class A shipborne equipment of the automatic identification system (AIS) – Operational and performance requirements, methods of test and required test results

FOREWORD

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International Standard IEC 61993-2 has been prepared by IEC technical committee 80: Maritime navigation and radiocommunication equipment and systems.

This third edition cancels and replaces the second edition published in 2012. This edition constitutes a technical revision.

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

a) it incorporates the technical characteristics included in Recommendation ITU-R M.1371-5:2014;
b) it introduces the concept of locating device groups in order to include EPIRB AIS and MOB AIS in addition to AIS SART;
c) it adds security features for configuration input by introducing a new sentence SSA;

d) it adds optional implementation of IEC 61162-450/460 interfaces;

e) it adds requirements for bridge alert management (BAM);

f) it introduces extended dimension values used by towing vessels;

g) it adds a software update requirement.

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

FDIS	Report on voting
80/888/FDIS	80/890/RVD

Full information on the voting for the approval of this 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 61993 series, published under the general title *Maritime navigation and radiocommunication equipment and systems – Automatic identification systems (AIS),* 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,
- withdrawn,
- replaced by a revised edition, or
- amended.

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