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Marin navigerings- och kommunikationsutrustning – System för automatisk identifiering (AIS) – Utrustning i klass B för fartyg – Del 1: CSTDMA

*Maritime navigation and radiocommunication equipment and systems –
Class B shipborne equipment of the automatic identification system (AIS) –
Part 1: Carrier-sense time division multiple access (CSTDMA) techniques*

Som svensk standard gäller europastandarden EN 62287-1:2011. Den svenska standarden innehåller den officiella engelska språkversionen av EN 62287-1:2011.

Nationellt förord

Europastandarden EN 62287-1:2011

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 62287-1, Second edition, 2010 - Maritime navigation and radiocommunication equipment and systems - Class B shipborne equipment of the automatic identification system (AIS) - Part 1: Carrier-sense time division multiple access (CSTDMA) techniques**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 62287-1, utgåva 1, 2006, gäller ej fr o m 2014-01-01.

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English version

**Maritime navigation and radiocommunication equipment and systems -
Class B shipborne equipment of the automatic
identification system (AIS) -
Part 1: Carrier-sense time division multiple access (CSTDMA) techniques
(IEC 62287-1:2010)**

Matériels et systèmes de navigation et de
radiocommunications maritimes -
Transpondeur embarqué du système
d'identification automatique (AIS) de
classe B -
Partie 1: Technique d'accès multiple par
répartition dans le temps avec écoute de
porteuse (CSTDMA)
(CEI 62287-1:2010)

Navigations- und
Funkkommunikationsgeräte und -systeme
für die Seeschifffahrt -
Geräte der Klasse B des automatischen
Identifikationssystems (AIS) für Schiffe -
Teil 1: Zeitmultiplex-
Vielfachzugriffstechniken mit
Aktivitätserkennung (CSTDMA)
(IEC 62287-1:2010)

This European Standard was approved by CENELEC on 2011-01-01. 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 Central Secretariat 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 Central Secretariat 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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

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

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Foreword

The text of document 80/605/FDIS, future edition 2 of IEC 62287-1, prepared by IEC TC 80, Maritime navigation and radiocommunication equipment and systems, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 62287-1 on 2011-01-01.

This European Standard supersedes EN 62287-1:2006.

The major technical changes with respect to EN 62287-1:2006 are the following. The reference to the relevant recommendation of the ITU has been updated from M.1371-1 to M.1371-4 with some consequential small changes. A previous option of providing short safety-related messages in 6.5.1.5 has been removed on advice from the IMO. A new requirement for a default MMSI has been added in 6.4 and a further new requirement for protection from invalid control commands has been added in 6.8. Some test methods have been updated and, in particular, small revisions have been made to the frequencies used for testing in some of the test methods. The introduction has been deleted since it is only of historic interest.

Some editorial rearrangement has been made.

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

The following dates were fixed:

- | | | |
|--|-------|------------|
| – latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement | (dop) | 2011-10-01 |
| – latest date by which the national standards conflicting with the EN have to be withdrawn | (dow) | 2014-01-01 |

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 62287-1:2010 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

ISO 9000	NOTE Harmonized as EN ISO 9000.
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Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application 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 When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<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 61108	Series	Maritime navigation and radiocommunication equipment and systems - Global navigation satellite systems (GNSS)	EN 61108	Series
IEC 61162	Series	Maritime navigation and radiocommunication equipment and systems - Digital interfaces	EN 61162-1	Series
IEC 61993-2	-	Maritime navigation and radiocommunication equipment and systems - Automatic Identification Systems (AIS) - Part 2: Class A shipborne equipment of the universal automatic identification system (AIS) - Operational and performance requirements, methods of test and required test results	EN 61993-2	-
IEC 62320-1	-	Maritime navigation and radiocommunication equipment and systems - Automatic Identification Systems (AIS) - Part 1: AIS Base Stations - Minimum operational and performance requirements, methods of testing and required test results	EN 62320-1	-
IMO MSC.140(76)	-	Recommendation for the protection of the AIS - VHF data link	-	-
ITU-R Recommendation M.493-13	-	Digital selective-calling system for use 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-R Recommendation M.1084-4	-	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.1371-4	-	Technical characteristics for an automatic identification system using time-division multiple access in the VHF maritime mobile band	-	-

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ITU Radio Regulations, Appendix 18	-	Table of transmitting frequencies in the VHF maritime mobile band	-	-

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**MARITIME NAVIGATION AND RADIOCOMMUNICATION
EQUIPMENT AND SYSTEMS –
CLASS B SHIPBORNE EQUIPMENT OF
THE AUTOMATIC IDENTIFICATION SYSTEM (AIS) –**

**Part 1: Carrier-sense time division multiple access
(CSTDMA) techniques**

1 Scope

This part of IEC 62287 specifies the minimum operational and performance requirements, methods of testing and required test results for Class B shipborne AIS equipment using CSTDMA techniques. This standard takes into account other associated IEC International Standards and existing national standards, as applicable.

It is applicable for AIS equipment used on craft that are not covered by the mandatory carriage requirement of AIS under SOLAS Chapter V.

An AIS station intended to operate in receive-only mode is not considered a Class B shipborne mobile AIS station.

2 Normative references

The following referenced documents are indispensable for the application 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 61108 (all parts), *Maritime navigation and radiocommunication equipment and systems – Global navigation satellite systems (GNSS)*

IEC 61162 (all parts), *Maritime navigation and radiocommunication equipment and systems – Digital interfaces*

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

IEC 62320-1, *Maritime navigation and radiocommunication equipment and systems – Automatic identification systems (AIS) – Part 1: AIS Base Stations – Minimum operational and performance requirements, methods of testing and required test results*

IMO MSC.140(76), *Recommendation for the protection of the AIS VHF data link*

ITU-R Recommendation M.493-13, *Digital selective-calling system for use 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-R Recommendation M.1084-4, *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.1371-4, *Technical characteristics for a universal shipborne automatic identification system using time division multiple access in the VHF maritime mobile band*

ITU Radio Regulations, Appendix 18, <http://www.itu.int/publ/R-REG-RR/en>