BS EN 62287-2:2013

BSI Standards Publication

Maritime navigation and radiocommunication equipment and systems — Class B shipborne equipment of the automatic identification system (AIS)

Part 2: Self-organising time division multiple access (SOTDMA) techniques

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The UK participation in its preparation was entrusted to Technical Committee EPL/80, Maritime navigation and radiocommunication equipment and systems.

A list of organizations represented on this committee can be obtained on request to its secretary.

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ISBN 978 0 580 71055 1

ICS 47.020.70

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This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 July 2013.

Amendments/corrigenda issued since publication

Date	Text affected

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 62287-2

June 2013

ICS 47.020.70

English version

Maritime navigation and radiocommunication equipment and systems - Class B shipborne equipment of the automatic identification system (AIS) - Part 2: Self-organising time division multiple access (SOTDMA) techniques

(IEC 62287-2:2013)

Matériels et systèmes de navigation et de radiocommunications maritimes - Transpondeur embarqué du système d'identification automatique (AIS) de classe B - Partie 2: Technique d'accès multiple par répartition dans le temps auto-adaptatif (SOTDMA)
(CEI 62287-2:2013)

Navigations- und Funkkommunikationsgeräte und -systeme für die Seeschifffahrt – Geräte der Klasse B des automatischen Identifikationssystems (AIS) für Schiffe – Teil 2: Sich selbst abstimmende Zeitmultiplex-Vielfachzugriffstechniken (SOTDMA)
(IEC 62287-2:2013)

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Ref. No. EN 62287-2:2013 E

Foreword

The text of document 80/685/FDIS, future edition 1 of IEC 62287-2, 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 62287-2:2013.

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)	2014-01-22
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2016-04-22

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

IEC 62287-1:2010	NOTE	Harmonized as EN 62287-1:2011 (not modified).
ISO 9000	NOTE	Harmonized as EN ISO 9000.

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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.

Publication	Year	Title	EN/HD	Year
IEC 60945 + corr. April	2002 2008	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 61108-4	-	Maritime navigation and radiocommunication equipment and systems - Global navigation satellite systems (GNSS) - Part 4: Shipborne DGPS and DGLONASS maritime radio beacon receiver equipment - Performance requirements, methods of testing and required test results	EN 61108-4	-
IEC 61162	Series	Maritime navigation and radiocommunication equipment and systems - Digital interfaces	EN 61162	Series
IEC 61162-1	-	Maritime navigation and radiocommunication equipment and systems - Digital interfaces - Part 1: Single talker and multiple listeners	EN 61162-1	-
IEC 61993-2	-	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	EN 61993-2	-
ITU Radio regulations	2012	Appendices	-	-
ITU-R Recommendation M.1084-5	-	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.825-3	1998	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.1371-4	2010	Technical characteristics for an automatic identification system using time-division multiple access 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 2: Self-organising time division multiple access (SOTDMA) techniques

1 Scope

This part of IEC 62287 specifies operational and performance requirements, methods of testing and required test results for Class B “SO” shipborne AIS equipment using Self-organised TDMA (SOTDMA) techniques as described in Recommendation ITU-R M.1371. This standard takes into account other associated IEC International Standards and existing national standards, as applicable.

The main differences between Class B “CS” (IEC 62287-1) and Class B “SO” units are that the Class B “SO”:

- covers all 25 kHz channels listed in Recommendation ITU-R M.1084-5;
- only uses the internal GNSS, no position sensor input is allowed;
- requires use of VDL Message 17 for correction of the internal GNSS;
- has a presentation interface;
- has additional reporting intervals, down to 5 s;
- has two power settings, with a high level of 5 W;
- has the capability to transmit binary messages.

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

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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 radio communication equipment and systems – Global navigation satellite systems (GNSS)*

IEC 61108-4, *Maritime navigation and radio communication equipment and systems – Global navigation satellite systems (GNSS) – Part 4: Shipborne DGPS and DGLONASS maritime radio beacon receiver equipment – Performance requirements, methods of testing and required test results*

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