

INTERNATIONAL STANDARD



**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**



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IEC Secretariat
3, rue de Varembe
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
info@iec.ch
www.iec.ch

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**Maritime navigation and radiocommunication equipment and systems –
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CONTENTS

FOREWORD	8
INTRODUCTION	10
1 Scope	11
2 Normative references	11
3 Terms, definitions and abbreviated terms	12
3.1 Terms and definitions	12
3.2 Abbreviated terms	12
4 General requirements	13
4.1 General	13
4.1.1 Capabilities of the Class B "CS" AIS	13
4.1.2 Quality assurance	13
4.1.3 Safety of operation	14
4.1.4 Additional features	14
4.1.5 Modes of operation	14
4.2 Manuals	15
4.3 Marking and identification	15
5 Environmental, power supply, interference and safety requirements	15
6 Performance requirements	16
6.1 Composition	16
6.2 Operating frequency channels	16
6.3 GNSS receiver for position reporting	16
6.4 Identification	17
6.5 AIS information	17
6.5.1 Information content	17
6.5.2 Information reporting intervals	18
6.5.3 Permissible initialisation period	18
6.6 Alarms and indications, fall-back arrangements	18
6.6.1 Integrity and protection	18
6.6.2 Transmitter shutdown procedure	19
6.6.3 Position sensor fallback conditions	19
6.6.4 SOG, COG sensor fallback conditions	20
6.7 User interface	20
6.7.1 Indicators and display	20
6.7.2 Static data input	20
6.7.3 External interfaces	20
6.8 Protection from invalid control commands	21
7 Technical requirements	21
7.1 General	21
7.2 Physical layer	22
7.2.1 General	22
7.2.2 Transceiver characteristics	22
7.2.3 Transmitter requirements	24
7.2.4 Receiver requirements	24
7.3 Link layer	25
7.3.1 General	25

7.3.2	Link sublayer 1: Medium access control (MAC)	25
7.3.3	Link sublayer 2: Data Link Service (DLS)	28
7.3.4	Link sublayer 3: Link management entity (LME)	33
7.4	Network layer	41
7.4.1	General	41
7.4.2	Dual channel operation	41
7.4.3	Channel management	42
7.4.4	Distribution of transmission packets	42
7.4.5	Data link congestion resolution	42
7.5	Transport layer	42
7.5.1	General	42
7.5.2	Transmission packets	43
7.5.3	Sequencing of data packets	43
7.6	Digital selective calling (DSC)	43
8	Test conditions	43
8.1	General	43
8.2	Normal and extreme test conditions	43
8.2.1	Normal test conditions	43
8.2.2	Extreme test conditions	43
8.3	Test signals	43
8.3.1	Standard test signal number 1	44
8.3.2	Standard test signal number 2	44
8.3.3	Standard test signal number 3	44
8.3.4	Standard test signal number 4	44
8.3.5	Standard test signal number 5	44
8.4	Test arrangements	45
8.4.1	Standard test environment	45
8.4.2	Modes of operation of an transmitter	46
8.4.3	Common test condition for protection from invalid controls	46
8.4.4	Measurement uncertainties	46
9	Power supply, environmental and EMC tests	47
9.1	Test summary	47
9.2	Vibration/shock	49
9.2.1	Vibration	49
9.2.2	Shock	49
9.3	Performance tests/checks	49
9.4	Undervoltage test (brown out)	50
9.4.1	Purpose	50
9.4.2	Method of test	50
9.4.3	Required result	50
10	Operational tests	50
10.1	General	50
10.1.1	Quality assurance	50
10.1.2	Safety of operation	50
10.1.3	Additional features	50
10.2	Modes of operation	51
10.2.1	Autonomous mode	51
10.2.2	Assigned mode	52
10.2.3	Polled mode/interrogation response	53

10.3	Messages extending one time period	54
10.3.1	Method of measurement	54
10.3.2	Required results	54
10.4	Channel selection	54
10.4.1	Valid channels	54
10.4.2	Invalid channels	54
10.5	Internal GNSS receiver	54
10.6	AIS information	55
10.6.1	Information content	55
10.6.2	Information update rates	56
10.7	Initialisation period	57
10.7.1	Method of measurement	57
10.7.2	Required results	57
10.8	Alarms and indications, fall-back arrangements	57
10.8.1	Built-in integrity test	57
10.8.2	Transceiver protection	58
10.8.3	Transmitter shutdown procedure	58
10.8.4	Position sensor fallback conditions	58
10.8.5	Speed sensors	59
10.9	User interface	59
10.9.1	Display	59
10.9.2	Message display	59
10.9.3	Static data input	60
10.9.4	External interfaces	60
11	Physical tests	60
11.1	TDMA transmitter	60
11.1.1	Frequency error	60
11.1.2	Carrier power	61
11.1.3	Transmission spectrum	61
11.1.4	Modulation accuracy	62
11.1.5	Transmitter output power versus time function	63
11.2	TDMA receivers	64
11.2.1	Sensitivity	64
11.2.2	Error behaviour at high input levels	65
11.2.3	Co-channel rejection	66
11.2.4	Adjacent channel selectivity	67
11.2.5	Spurious response rejection	67
11.2.6	Intermodulation response rejection	70
11.2.7	Blocking or desensitisation	71
11.3	Conducted spurious emissions	72
11.3.1	Spurious emissions from the receiver	72
11.3.2	Spurious emissions from the transmitter	72
12	Specific tests of link layer	73
12.1	TDMA synchronisation	73
12.1.1	Synchronisation test sync mode 1	73
12.1.2	Synchronisation test sync mode 2	74
12.1.3	Synchronisation test with UTC	74
12.2	Carrier-sense tests	74
12.2.1	Threshold level	74

12.2.2	Carrier-sense timing	76
12.3	VDL state/reservations	76
12.3.1	Method of measurement	76
12.3.2	Required results	77
12.4	Data encoding (bit stuffing)	77
12.4.1	Method of measurement	77
12.4.2	Required results	77
12.5	Frame check sequence	77
12.5.1	Method of measurement	77
12.5.2	Required results	77
12.6	Slot allocation (channel access protocol)	77
12.6.1	Autonomous mode allocation	77
12.6.2	DSC listening periods	78
12.7	Assigned operation	78
12.7.1	Assignment priority	78
12.7.2	Entering rate assignment	78
12.7.3	Reverting from rate assignment	78
12.7.4	Reverting from quiet mode	79
12.7.5	Retry of interrogation response	79
12.8	Message formats	79
12.8.1	Received messages	79
12.8.2	Transmitted messages	80
13	Specific tests of network layer	80
13.1	Regional area designation by VDL message	80
13.1.1	Method of measurement	80
13.1.2	Required results	80
13.2	Regional area designation by serial message or manually	81
13.2.1	Method of measurement	81
13.2.2	Required result	81
13.3	Management of received regional operating settings	81
13.3.1	Replacement or erasure of dated or remote regional operating settings	81
13.3.2	Channel management by addressed Message 22	82
13.3.3	Invalid regional operating areas	82
13.3.4	Continuation of autonomous mode reporting rate	83
13.3.5	Other conditions	83
Annex A (informative)	Results of computer simulations and testing of CSTDMA technology	84
A.1	Computer simulations	84
A.2	Carrier-sense tests	85
A.3	Range tests	86
A.4	Conclusion	86
Annex B (informative)	Description of the system	87
Annex C (normative)	DSC channel management	88
C.1	DSC functionality	88
C.2	DSC time sharing	88
C.3	DSC functionality tests	89
C.3.1	General	89
C.3.2	Regional area designation	89
C.3.3	Scheduling	89

C.3.4	DSC flag in Message 18	89
C.3.5	DSC monitoring time plan	89
C.3.6	Replacement or erasure of dated or remote regional operating settings	90
C.3.7	Test of addressed telecommand	90
C.3.8	Invalid regional operating areas	91
C.4	DSC receiver tests	91
C.4.1	General	91
C.4.2	Maximum sensitivity	91
C.4.3	Error behaviour at high input levels	92
C.4.4	Co-channel rejection	92
C.4.5	Adjacent channel selectivity	92
C.4.6	Spurious response rejection	93
C.4.7	Intermodulation response rejection	93
C.4.8	Blocking or desensitisation	94
Annex D (informative)	Channel management regions	95
Bibliography		96
Figure 1	– OSI layer model	22
Figure 2	– Carrier-sense timing	27
Figure 3	– Power versus time mask	28
Figure 4	– Transmission packet	29
Figure 5	– Training sequence	30
Figure 6	– Transmission timing	32
Figure 7	– Example for CSTDMA access	33
Figure 8	– Format for repeating four-packet cluster	44
Figure 9	– Measurement arrangement for carrier power	61
Figure 10	– Emission mask	62
Figure 11	– Measurement arrangement for modulation accuracy	63
Figure 12	– Measurement arrangement	65
Figure 13	– Measurement arrangement with two generators	66
Figure 14	– SINAD or PER/BER measuring equipment	68
Figure 15	– Measurement arrangement for intermodulation	70
Figure 16	– Configuration for carrier-sense threshold test	75
Figure 17	– Regional area scenario	80
Figure A.1	– Effect on Class A AIS messages of Class B messages	84
Figure A.2	– Reception of messages by Class A AIS	85
Figure A.3	– Reception of messages by Class B AIS	85
Figure A.4	– Range achieved by a Class A AIS from Class B AIS	86
Figure D.1	– Channel management regions used for test given in 13.3.1	95
Table 1	– Position sensor fallback conditions	19
Table 2	– Use of accuracy (PA) flag	20
Table 3	– Transceiver characteristics	23
Table 4	– Transmitter parameters	24
Table 5	– Receiver parameters	25

Table 6 – Definition of timings for Figure 3.....	28
Table 7 – Start-buffer.....	30
Table 8 – Summary of the transmission packet.....	31
Table 9 – Transmission timing.....	32
Table 10 – Access parameters.....	33
Table 11 – Use of VDL messages by a Class B "CS" AIS.....	36
Table 12 – Number of data bits for use with Message 14.....	37
Table 13 – Contents of Message 18.....	38
Table 14 – Message 24 Part A.....	39
Table 15 – Message 24 Part B.....	39
Table 16 – Contents of Message 23.....	40
Table 17 – Reporting interval settings for use with Message 23.....	41
Table 18 – Channel management.....	42
Table 19 – Content of first two packets.....	45
Table 20 – Fixed PRS data derived from ITU-T O.153.....	45
Table 21 – Test summary.....	48
Table 22 – Peak frequency deviation versus time.....	63
Table 23 – Frequencies for inter-modulation test.....	71
Table 24 – Required threshold test results.....	76
Table 25 – Required carrier-sense timing results.....	76
Table 26 – Required channels in use.....	81
Table C.1 – DSC monitoring times.....	89

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**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
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IEC 62287-1 edition 3.1 contains the third edition (2017-04) [documents 80/837/FDIS and 80/842/RVD] and its amendment 1 (2022-11) [documents 80/1042/CDV and 80/1052/RVC].

In this Redline version, a vertical line in the margin shows where the technical content is modified by amendment 1. Additions are in green text, deletions are in strikethrough red text. A separate Final version with all changes accepted is available in this publication.

International Standard IEC 62287-1 has been prepared by IEC technical committee 80: Maritime navigation and radiocommunication equipment and systems.

This third edition constitutes a technical revision.

This edition includes the following significant technical change with respect to the previous edition: in the synchronisation method, addition of a direct method for synchronisation from an internal UTC source.

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

A list of all parts of the IEC 62287 series published under the general title *Maritime navigation and radiocommunication equipment and systems – Class B shipborne equipment of the automatic identification system (AIS)*, can be found on the IEC website.

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Neil Peniket

Chief Operating Officer

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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 automatic identification system (AIS) equipment using carrier-sense time division multiple access (CSTDMA) techniques. This document 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 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 61108 (all parts), *Maritime navigation and radiocommunication equipment and systems – Global navigation satellite systems (GNSS)*

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

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*

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*

ITU-R Recommendation M.493, *Digital selective-calling system for use 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*