



NSAI
Standards

Irish Standard
I.S. EN IEC 63135:2019

Maritime navigation and radiocommunication equipment and systems - Automatic identification systems (AIS) - SAR Airborne equipment - Operational and performance requirements, methods of test and required test results

I.S. EN IEC 63135:2019

Incorporating amendments/corrigenda/National Annexes issued since publication:

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation — recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):

NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.

This document is based on:

EN IEC 63135:2019

Published:

2019-01-11

This document was published under the authority of the NSAI and comes into effect on:

2019-01-30

ICS number:

NOTE: If blank see CEN/CENELEC cover page

NSAI
1 Swift Square,
Northwood, Santry
Dublin 9

T +353 1 807 3800
F +353 1 807 3838
E standards@nsai.ie
W NSAI.ie

Sales:
T +353 1 857 6730
F +353 1 857 6729
W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

National Foreword

I.S. EN IEC 63135:2019 is the adopted Irish version of the European Document EN IEC 63135:2019, Maritime navigation and radiocommunication equipment and systems - Automatic identification systems (AIS) - SAR Airborne equipment - Operational and performance requirements, methods of test and required test results

This document does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

For relationships with other publications refer to the NSAI web store.

Compliance with this document does not of itself confer immunity from legal obligations.

In line with international standards practice the decimal point is shown as a comma (,) throughout this document.

This page is intentionally left blank

EUROPEAN STANDARD

EN IEC 63135

NORME EUROPÉENNE

EUROPÄISCHE NORM

January 2019

ICS 47.020.70

English Version

**Maritime navigation and radiocommunication equipment and systems - Automatic identification systems (AIS) - SAR Airborne equipment - Operational and performance requirements, methods of test and required test results
(IEC 63135:2018)**

Matériels et systèmes de navigation et de radiocommunication maritimes - Systèmes d'identification automatique (AIS) - Equipement aéroporté SAR - Exigences d'exploitation et de fonctionnement, méthodes d'essai et résultats d'essai exigés
(IEC 63135:2018)

Navigations- und Funkkommunikationsgeräte und -systeme für die Seeschifffahrt - Automatische Identifikationssysteme (AIS) - Ausrüstung für Such- und Rettungs-Fluggeräte - Betriebs- und Leistungsanforderungen, Prüfverfahren und geforderte Prüfergebnisse
(IEC 63135:2018)

This European Standard was approved by CENELEC on 2018-12-28. 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

EN IEC 63135:2019 (E)**European foreword**

The text of document 80/875/CDV, future edition 1 of IEC 63135, 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 63135:2019.

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) 2019-09-28
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2021-12-28

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 63135:2018 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 61108-3	NOTE	Harmonized as EN 61108-3
IEC 61162-2	NOTE	Harmonized as EN 61162-2
IEC 61162-3	NOTE	Harmonized as EN 61162-3
IEC 61162-450	NOTE	Harmonized as EN IEC 61162-450
IEC 61162-460	NOTE	Harmonized as EN IEC 61162-460
IEC 61993-2	NOTE	Harmonized as EN IEC 61993-2
IEC 62287-1	NOTE	Harmonized as EN 62287-1
IEC 62287-2	NOTE	Harmonized as EN 62287-2
IEC 62320-1	NOTE	Harmonized as EN 62320-1
IEC 62320-2	NOTE	Harmonized as EN 62320-2
ISO 9000	NOTE	Harmonized as EN ISO 9000

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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61162-1	-	Maritime navigation and radiocommunication equipment and systems - Digital interfaces - Part 1: Single talker and multiple listeners	-	-
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-T Recommendation O.153	-	Basic parameters for the measurement of error performance at bit rates below the primary rate	-	-

This page is intentionally left blank



IEC 63135

Edition 1.0 2018-11

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Maritime navigation and radiocommunication equipment and systems –
Automatic identification systems (AIS) – SAR airborne equipment – Operational
and performance requirements, methods of test and required test results**

**Matériels et systèmes de navigation et de radiocommunication maritimes –
Systèmes d'identification automatique (AIS) – Équipement aéroporté SAR –
Exigences d'exploitation et de fonctionnement, méthodes d'essai et résultats
d'essai exigés**



THIS PUBLICATION IS COPYRIGHT PROTECTED

Copyright © 2018 IEC, Geneva, Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either IEC or IEC's member National Committee in the country of the requester. If you have any questions about IEC copyright or have an enquiry about obtaining additional rights to this publication, please contact the address below or your local IEC member National Committee for further information.

Droits de reproduction réservés. Sauf indication contraire, aucune partie de cette publication ne peut être reproduite ni utilisée sous quelque forme que ce soit et par aucun procédé, électronique ou mécanique, y compris la photocopie et les microfilms, sans l'accord écrit de l'IEC ou du Comité national de l'IEC du pays du demandeur. Si vous avez des questions sur le copyright de l'IEC ou si vous désirez obtenir des droits supplémentaires sur cette publication, utilisez les coordonnées ci-après ou contactez le Comité national de l'IEC de votre pays de résidence.

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

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

About the IEC

The International Electrotechnical Commission (IEC) is the leading global organization that prepares and publishes International Standards for all electrical, electronic and related technologies.

About IEC publications

The technical content of IEC publications is kept under constant review by the IEC. Please make sure that you have the latest edition, a corrigenda or an amendment might have been published.

IEC Catalogue - webstore.iec.ch/catalogue

The stand-alone application for consulting the entire bibliographical information on IEC International Standards, Technical Specifications, Technical Reports and other documents. Available for PC, Mac OS, Android Tablets and iPad.

IEC publications search - webstore.iec.ch/advsearchform

The advanced search enables to find IEC publications by a variety of criteria (reference number, text, technical committee,...). It also gives information on projects, replaced and withdrawn publications.

IEC Just Published - webstore.iec.ch/justpublished

Stay up to date on all new IEC publications. Just Published details all new publications released. Available online and also once a month by email.

Electropedia - www.electropedia.org

The world's leading online dictionary of electronic and electrical terms containing 21 000 terms and definitions in English and French, with equivalent terms in 16 additional languages. Also known as the International Electrotechnical Vocabulary (IEV) online.

IEC Glossary - std.iec.ch/glossary

67 000 electrotechnical terminology entries in English and French extracted from the Terms and Definitions clause of IEC publications issued since 2002. Some entries have been collected from earlier publications of IEC TC 37, 77, 86 and CISPR.

IEC Customer Service Centre - webstore.iec.ch/csc

If you wish to give us your feedback on this publication or need further assistance, please contact the Customer Service Centre: sales@iec.ch.

A propos de l'IEC

La Commission Electrotechnique Internationale (IEC) est la première organisation mondiale qui élabore et publie des Normes internationales pour tout ce qui a trait à l'électricité, à l'électronique et aux technologies apparentées.

A propos des publications IEC

Le contenu technique des publications IEC est constamment revu. Veuillez vous assurer que vous possédez l'édition la plus récente, un corrigendum ou amendement peut avoir été publié.

Catalogue IEC - webstore.iec.ch/catalogue

Application autonome pour consulter tous les renseignements bibliographiques sur les Normes internationales, Spécifications techniques, Rapports techniques et autres documents de l'IEC. Disponible pour PC, Mac OS, tablettes Android et iPad.

Recherche de publications IEC - webstore.iec.ch/advsearchform

La recherche avancée permet de trouver des publications IEC en utilisant différents critères (numéro de référence, texte, comité d'études,...). Elle donne aussi des informations sur les projets et les publications remplacées ou retirées.

IEC Just Published - webstore.iec.ch/justpublished

Restez informé sur les nouvelles publications IEC. Just Published détaille les nouvelles publications parues. Disponible en ligne et aussi une fois par mois par email.

Electropedia - www.electropedia.org

Le premier dictionnaire en ligne de termes électroniques et électriques. Il contient 21 000 termes et définitions en anglais et en français, ainsi que les termes équivalents dans 16 langues additionnelles. Egalement appelé Vocabulaire Electrotechnique International (IEV) en ligne.

Glossaire IEC - std.iec.ch/glossary

67 000 entrées terminologiques électrotechniques, en anglais et en français, extraites des articles Termes et Définitions des publications IEC parues depuis 2002. Plus certaines entrées antérieures extraites des publications des CE 37, 77, 86 et CISPR de l'IEC.

Service Clients - webstore.iec.ch/csc

Si vous désirez nous donner des commentaires sur cette publication ou si vous avez des questions contactez-nous: sales@iec.ch.



IEC 63135

Edition 1.0 2018-11

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Maritime navigation and radiocommunication equipment and systems –
Automatic identification systems (AIS) – SAR airborne equipment – Operational
and performance requirements, methods of test and required test results**

**Matériels et systèmes de navigation et de radiocommunication maritimes –
Systèmes d'identification automatique (AIS) – Équipement aéroporté SAR –
Exigences d'exploitation et de fonctionnement, méthodes d'essai et résultats
d'essai exigés**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

ICS 47.020.70

ISBN 978-2-8322-6258-0

**Warning! Make sure that you obtained this publication from an authorized distributor.
Attention! Veuillez vous assurer que vous avez obtenu cette publication via un distributeur agréé.**

CONTENTS

FOREWORD.....	7
1 Scope.....	9
2 Normative references	9
3 Terms, definitions, symbols and abbreviated terms.....	9
3.1 Terms and definitions.....	9
3.2 Symbols and abbreviated terms	10
4 General requirements	11
4.1 General.....	11
4.1.1 Overview	11
4.1.2 Capabilities of the AIS	11
4.1.3 Transmitter shutdown procedure.....	11
4.2 Modes of operation	11
5 Performance requirements.....	11
5.1 Composition.....	11
5.2 Time and position	12
5.2.1 Source for UTC.....	12
5.2.2 Source for AIS position reporting	12
5.3 User interface	12
5.4 Identification	12
5.5 Information	13
5.5.1 Information provided by the AIS SAR airborne station.....	13
5.5.2 Information reporting intervals	13
5.5.3 AIS station reporting capacity	14
5.6 Permissible initialization period	14
5.7 Technical characteristics.....	14
5.8 Alarms and indications, fall-back arrangements	14
5.8.1 Built-in test equipment	14
5.8.2 Alarm messages	14
5.8.3 Status messages	16
6 Technical requirements	18
6.1 General.....	18
6.2 Physical layer	19
6.2.1 General	19
6.2.2 Transmitter parameters.....	19
6.2.3 Receiver parameters	21
6.3 Link layer	21
6.3.1 General	21
6.3.2 Link sublayer 1: medium access control (MAC).....	22
6.3.3 Link sublayer 2: data link service (DLS).....	22
6.3.4 Link sublayer 3: link management entity (LME).....	22
6.4 Network layer.....	24
6.4.1 General	25
6.4.2 Setting of operating channels	25
6.5 Transport layer	25
6.6 Presentation interface	25
6.6.1 General	25

6.6.2	Optional automatic input of sensor data	26
6.6.3	High speed input/output ports	27
7	Test conditions	29
7.1	Normal and extreme test conditions	29
7.1.1	Normal test conditions	29
7.1.2	Extreme test conditions	29
7.2	Standard test environment	30
7.3	Additional test arrangements.....	30
7.3.1	Arrangements for test signals applied to the receiver input	30
7.3.2	Encoder for receiver measurements	30
7.3.3	Waiver for receivers.....	30
7.3.4	Impedance.....	30
7.3.5	Artificial antenna (dummy load)	31
7.3.6	Facilities for access	31
7.3.7	Modes of operation of the transmitter.....	31
7.4	Common test conditions for protection from invalid controls	31
7.5	Measurement uncertainties	31
8	Test signals	32
8.1	Standard test signal number 1	32
8.2	Standard test signal number 2 (TDMA)	32
8.3	Standard test signal number 3 (TDMA)	32
8.4	Standard test signal number 4 (PRBS).....	32
8.5	Standard test signal number 5 (PRBS).....	32
9	Power supply, special purpose and safety tests	33
10	Environmental tests	33
11	Operational tests	33
11.1	Identification and operating modes.....	33
11.1.1	Autonomous mode	34
11.1.2	Polled mode	34
11.1.3	Addressed operation.....	35
11.1.4	Transmission retry	35
11.1.5	Broadcast operation.....	36
11.1.6	Multiple slot messages	37
11.2	Information	37
11.2.1	Information provided by the AIS.....	38
11.3	Initialization period.....	38
11.3.1	Method of measurement	38
11.3.2	Required results	38
11.4	Transceiver protection	38
11.4.1	Method of measurement	38
11.4.2	Required results	38
11.5	Alarms and indicators, fall-back arrangements	38
11.5.1	Monitoring of functions and integrity	38
11.5.2	Monitoring of sensor data	39
12	Physical tests	41
12.1	TDMA transmitter.....	41
12.1.1	Frequency error.....	41
12.1.2	Carrier power.....	42

12.1.3	Slotted transmission spectrum	42
12.1.4	Modulation accuracy	43
12.1.5	Transmitter output power characteristics.....	44
12.2	TDMA receivers	44
12.2.1	Sensitivity	44
12.2.2	Error behaviour at high input levels.....	45
12.2.3	Co-channel rejection	46
12.2.4	Adjacent channel selectivity.....	46
12.2.5	Spurious response rejection	47
12.2.6	Intermodulation response rejection and blocking.....	49
12.2.7	Blocking or desensitisation	50
12.2.8	Transmit to receive switching time	51
12.2.9	Immunity to out-of-band energy	52
12.3	Conducted spurious emissions.....	52
12.3.1	Spurious emissions from the transmitter	52
12.3.2	Spurious emissions from the receiver	53
13	Specific tests of Link layer	53
13.1	TDMA synchronisation	54
13.1.1	Synchronisation test using UTC	54
13.1.2	Synchronisation test using UTC with repeated messages	54
13.1.3	Synchronisation test without UTC, semaphore	55
13.1.4	Synchronisation test without UTC	55
13.1.5	Reception of un-synchronised messages	55
13.2	Synchronisation and jitter accuracy.....	55
13.2.1	Definition	55
13.2.2	Method of measurement	56
13.2.3	Required results	56
13.3	Data encoding (bit stuffing)	56
13.3.1	Method of measurement	56
13.3.2	Required results	56
13.4	Frame check sequence	56
13.4.1	Method of measurement	56
13.4.2	Required results	56
13.5	Slot allocation (channel access protocols).....	56
13.5.1	Network entry	56
13.5.2	Autonomous scheduled transmissions (SOTDMA)	57
13.5.3	Scheduling of other reporting intervals.....	57
13.5.4	Safety related/binary message transmission	58
13.5.5	Transmission of static data with Message 24A (ITDMA).....	58
13.5.6	Transmission of static data with Message 5 (ITDMA).....	59
13.5.7	Assigned operation	59
13.5.8	Group assignment	61
13.5.9	Fixed allocated transmissions (FATDMA).....	64
13.5.10	Randomisation of message transmissions	65
13.6	Message formats	65
13.6.1	Received messages.....	65
13.6.2	Transmitted messages.....	65
14	Specific tests of Network layer.....	66
14.1	Dual channel operation – Alternate transmissions	66

14.1.1	Method of measurement	66
14.1.2	Required results	66
14.2	Regional area designation by serial sentence	66
14.2.1	Method of measurement	66
14.2.2	Required results	66
14.3	Slot reuse	66
14.3.1	Method of measurement	66
14.3.2	Required results	67
15	Specific tests of Transport layer	67
15.1	Behaviour of NavStatus 14 reception	67
15.1.1	Test of AIS SART message	67
15.1.2	Test of MOB-AIS message.....	68
15.1.3	Test of EPIRB-AIS message	68
16	Specific presentation interface tests	68
16.1	General.....	68
16.2	Checking manufacturer's documentation	68
16.3	Test of sensor input	69
16.3.1	Test of GNS input	69
16.3.2	Test of RMC input.....	69
16.3.3	Test of DTM input	70
16.3.4	Test of GBS input	70
16.3.5	Test of VTG input	71
16.4	Test of high speed output.....	71
16.4.1	Method of measurement	71
16.4.2	Required results	71
16.5	High speed output interface performance.....	71
16.5.1	Method of measurement	71
16.5.2	Required results	71
16.6	Test of high speed input.....	72
16.6.1	General	72
16.6.2	Test of VSD input sentence	72
16.6.3	Test of SSD input sentence	72
16.6.4	Test of EPV input sentence	73
Annex A (informative) Block diagram of AIS SAR airborne station.....		74
Bibliography.....		75
Figure 1 – OSI layer model		19
Figure 2 – Power versus time characteristics		20
Figure 3 – Format for repeating four-packet cluster.....		32
Figure 4 – Measurement arrangement for frequency error.....		41
Figure 5 – Measurement arrangement for carrier power		42
Figure 6 – Emission mask for slotted transmission		43
Figure 7 – Measurement arrangement for modulation accuracy		43
Figure 8 – Measurement arrangement		45
Figure 9 – Measurement arrangement with two generators		46
Figure 10 – SINAD or PER/BER measuring equipment		48
Figure 11 – Measurement arrangement for intermodulation.....		50

Figure 12 – Measurement arrangement for blocking or desensitisation	50
Figure 13 – Transmit to receive switching time measurement setup	51
Figure A.1 – Block diagram of AIS SAR airborne station	74
Table 1 – Integrity alarm conditions signalled using ALR sentence formatter	15
Table 2 – Sensor status indications signalled using TXT sentence formatter	16
Table 3 – Position sensor fall-back conditions	17
Table 4 – Use of position accuracy (PA) flag	18
Table 5 – Transmitter parameters	20
Table 6 – Power versus time characteristics	21
Table 7 – Receiver parameters	21
Table 8 – Use of VDL messages	23
Table 9 – Presentation interface access	26
Table 10 – IEC 61162-1 sensor sentences	26
Table 11 – AIS high-speed input data and formats	27
Table 12 – AIS high-speed output data and formats	28
Table 13 – Property identifiers	29
Table 14 – Content of first two packets	33
Table 15 – Fixed PRS data derived from Recommendation ITU-T O.153	33
Table 16 – Peak frequency deviation versus time	44
Table 17 – Frequencies for inter-modulation test	50

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**MARITIME NAVIGATION AND RADIOCOMMUNICATION EQUIPMENT
AND SYSTEMS – AUTOMATIC IDENTIFICATION SYSTEMS (AIS) – SAR
AIRBORNE EQUIPMENT – OPERATIONAL AND PERFORMANCE
REQUIREMENTS, METHODS OF TEST AND REQUIRED TEST RESULTS**

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 63135 has been prepared by IEC technical committee 80: Maritime navigation and radiocommunication equipment and systems.

The text of this International Standard is based on the following documents:

CDV	Report on voting
80/875/CDV	80/889/RVC

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.

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.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

MARITIME NAVIGATION AND RADIOCOMMUNICATION EQUIPMENT AND SYSTEMS – AUTOMATIC IDENTIFICATION SYSTEMS (AIS) – SAR AIRBORNE EQUIPMENT – OPERATIONAL AND PERFORMANCE REQUIREMENTS, METHODS OF TEST AND REQUIRED TEST RESULTS

1 Scope

This document specifies the minimum operational and performance requirements, methods of testing and required test results as applicable for automatic identification systems (AIS) VHF data link (VDL) related parts of an AIS SAR airborne station. This document incorporates the applicable technical characteristics of AIS SAR airborne equipment included in Recommendation ITU-R M.1371 and takes into account the ITU Radio Regulations, where applicable.

This document also specifies the minimum requirements for the interfaces to other equipment suitable to be used as means of input and display data.

Attention is drawn on that other requirements specific for airborne equipment can exist and are beyond the scope of this document.

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

ITU-R Recommendation M.1371-5:2014, *Technical characteristics for an automatic identification system using time division multiple access in the VHF maritime mobile frequency band*

ITU-T Recommendation O.153, *Basic parameters for the measurement of error performance at bit rates below the primary rate*

3 Terms, definitions, symbols and abbreviated terms

3.1 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
 - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-