

**Maritime navigation and
radiocommunication equipment and
systems - Marine speed and distance
measuring equipment (SDME) -
Performance requirements, methods of
testing and required test results**

Maritime navigation and radiocommunication
equipment and systems - Marine speed and
distance measuring equipment (SDME) -
Performance requirements, methods of testing and
required test results

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 61023:2007 sisaldab Euroopa standardi EN 61023:2007 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 17.12.2007 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 61023:2007 consists of the English text of the European standard EN 61023:2007.</p> <p>This document is endorsed on 17.12.2007 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>This International Standard specifies the minimum performance requirements, methods of testing and required test results of devices to indicate speed and distance – speed and distance measuring equipment (SDME) required by Regulation 19 of Chapter V of the International Convention for the Safety of Life at Sea (SOLAS), 1974, as amended, and which is associated with IEC 60945. This standard is based upon the requirements of IMO Resolution MSC.96(72). The clause numbering of that resolution is indicated in parentheses in Clause 4 and all subclauses whose meaning is identical to that in the resolution are printed in italics. In the tests of Clause 5, the corresponding requirement of Clause 4 is indicated in parentheses. The cross-references between the IMO performance standards in Resolution MSC.96(72) and the tests of this standard are summarized in Annex A.</p>	<p>Scope:</p> <p>This International Standard specifies the minimum performance requirements, methods of testing and required test results of devices to indicate speed and distance – speed and distance measuring equipment (SDME) required by Regulation 19 of Chapter V of the International Convention for the Safety of Life at Sea (SOLAS), 1974, as amended, and which is associated with IEC 60945. This standard is based upon the requirements of IMO Resolution MSC.96(72). The clause numbering of that resolution is indicated in parentheses in Clause 4 and all subclauses whose meaning is identical to that in the resolution are printed in italics. In the tests of Clause 5, the corresponding requirement of Clause 4 is indicated in parentheses. The cross-references between the IMO performance standards in Resolution MSC.96(72) and the tests of this standard are summarized in Annex A.</p>
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ICS 47.020.70

Võtmesõnad: methods of testing, navigational instruments, operational requirements, performance requirements, required test results, s d m e, ship

**Maritime navigation and radiocommunication equipment and systems -
Marine speed and distance measuring equipment (SDME) -
Performance requirements, methods of testing and required test results
(IEC 61023:2007)**

Matériels et systèmes de navigation
et de radiocommunication maritimes -
Equipements de mesurage
de la vitesse et de la distance (SDME) -
Exigences de performance,
méthodes de test et résultats exigibles
(CEI 61023:2007)

Navigations- und
Funkkommunikationsgeräte
und -systeme für die Seeschifffahrt -
Fahrtmessanlagen
für die Seeschifffahrt (SDME) -
Leistungsanforderungen, Prüfverfahren
und geforderte Prüfergebnisse
(IEC 61023:2007)

This European Standard was approved by CENELEC on 2007-10-01. 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.

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CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, 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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 80/478/FDIS, future edition 3 of IEC 61023, 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 61023 on 2007-10-01.

This European Standard supersedes EN 61023:1999.

The main technical changes with regard to EN 61023:1999 are listed below:

Amendments resulting from changes to the IMO performance standards for SDME agreed in resolution MSC.96(72) in 2000. The amendments reduce the minimum depth of water under the keel for correct operation of the SDME to 2 m for a ground based equipment, reduce the accuracy required of analogue displays and add a requirement for a serial interface.

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) | 2008-07-01 |
| – latest date by which the national standards conflicting with the EN have to be withdrawn | (dow) | 2010-10-01 |

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61023:2007 was approved by CENELEC as a European Standard without any modification.

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 61162-1	– ¹⁾	Maritime navigation and radiocommunication equipment and systems - Digital interfaces - Part 1: Single talker and multiple listeners	EN 61162-1	2000 ²⁾
IMO Resolution A.694 (17)	– ¹⁾	General requirements for shipborne radio equipment forming part of the global maritime distress and safety system (GMDSS) and for electronic navigational aids	–	–
IMO MSC.96(72)	– ¹⁾	Performance standards for devices to measure and indicate speed and distance	–	–

¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

INTERNATIONAL STANDARD

IEC
61023

Third edition
2007-06

**Maritime navigation and radiocommunication
equipment and systems –
Marine speed and distance
measuring equipment (SDME) –
Performance requirements, methods
of testing and required test results**



Reference number
IEC 61023:2007(E)



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IEC Central Office
3, rue de Varembe
CH-1211 Geneva 20
Switzerland
Email: inmail@iec.ch
Web: www.iec.ch

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61023

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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

PRICE CODE

M

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CONTENTS

FOREWORD.....	3
1 Scope.....	5
2 Normative references.....	5
3 Abbreviations.....	5
4 Minimum performance requirements	6
4.1 Introduction	6
4.2 Methods of presentation	6
4.3 Accuracy of measurement	7
4.4 Roll and pitch	7
4.5 Construction and installation	7
5 Methods of testing and required test results	7
5.1 General	7
5.2 Test arrangements	7
5.3 Minimum depth	8
5.4 General requirements	8
5.5 SDME configuration	8
5.6 Optional facilities	8
5.7 System configuration	9
5.8 Methods of presentation	9
5.8.1 Speed.....	9
5.8.2 Distance run	9
5.8.3 Display	9
5.9 Distance run external output	9
5.9.1 Contact closure.....	9
5.9.2 Digital interface.....	10
5.10 Mode selection and indication	10
5.11 Additional speed indications.....	10
5.12 Accuracy of measurement	10
5.12.1 Indication of speed.....	10
5.12.2 Indication of distance run	11
5.13 Effects of environment.....	11
5.14 Roll and pitch	11
5.15 Construction and installation	11
Annex A (informative) Cross-references – IMO Resolution MSC.96(72) and the tests in this standard	13
Figure 1 – Ship speed velocity vectors.....	12

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**MARITIME NAVIGATION AND RADIOCOMMUNICATION
EQUIPMENT AND SYSTEMS –
MARINE SPEED AND DISTANCE MEASURING EQUIPMENT (SDME) –
PERFORMANCE REQUIREMENTS,
METHODS OF TESTING AND REQUIRED TEST RESULTS**

FOREWORD

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International Standard IEC 61023 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 1999. It constitutes a technical revision.

The main technical changes with regard to the previous edition are listed below:

- amendments resulting from changes to the IMO performance standards for SDME agreed in resolution MSC.96(72) in 2000. The amendments reduce the minimum depth of water under the keel for correct operation of the SDME to 2 m for a ground based equipment, reduce the accuracy required of analogue displays and add a requirement for a serial interface.

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

FDIS	Report on voting
80/478/FDIS	80/484/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 publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this standard may be issued at a later date.

**MARITIME NAVIGATION AND RADIOCOMMUNICATION
EQUIPMENT AND SYSTEMS –
MARINE SPEED AND DISTANCE MEASURING EQUIPMENT (SDME) –
PERFORMANCE REQUIREMENTS,
METHODS OF TESTING AND REQUIRED TEST RESULTS**

1 Scope

This International Standard specifies the minimum performance requirements, methods of testing and required test results of devices to indicate speed and distance – speed and distance measuring equipment (SDME) required by Regulation 19 of Chapter V of the International Convention for the Safety of Life at Sea (SOLAS), 1974, as amended, and which is associated with IEC 60945.

This standard is based upon the requirements of IMO Resolution MSC.96(72). The clause numbering of that resolution is indicated in parentheses in Clause 4 and all subclauses whose meaning is identical to that in the resolution are printed in italics.

In the tests of Clause 5, the corresponding requirement of Clause 4 is indicated in parentheses. The cross-references between the IMO performance standards in Resolution MSC.96(72) and the tests of this standard are summarized in Annex A.

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

IMO 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 MSC.96(72), *Performance standards for devices to measure and indicate speed and distance*

3 Abbreviations

IMO International Maritime Organization
VBW Dual ground/water speed
VLW Distance travelled through the water