

**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

Käesolev Eesti standard EVS-EN 61023:2002 sisaldab Euroopa standardi EN 61023:1999 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 18.12.2002 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 61023:2002 consists of the English text of the European standard EN 61023:1999.

This standard is ratified with the order of Estonian Centre for Standardisation dated 18.12.2002 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

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

Standardite reprodutseerimis- ja levitamiseõigus kuulub Eesti Standardikeskusele

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English version

**Maritime navigation and radiocommunication equipment and systems
Marine speed and distance measuring equipment (SDME) - Performance
requirements - Methods of testing and required test results
(IEC 61023:1999)**

Matériels et systèmes de navigation
et de radiocommunication maritimes
Instruments de mesure de la vitesse et
de la distance pour navires (Lochs)
Exigences de fonctionnement
Méthodes d'essai et résultats d'essai
exigés
(CEI 61023:1999)

Navigations- und
Funkkommunikationsgeräte und
-systeme für die Seeschifffahrt
Fahrtmeßanlagen für die Seeschifffahrt
(SDME) - Leistungsanforderungen
Prüfverfahren und geforderte
Prüfergebnisse
(IEC 61023:1999)

This European Standard was approved by CENELEC on 1999-10-01. 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.

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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and 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 80/214/FDIS, future edition 2 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 1999-10-01.

This European Standard supersedes EN 61023:1993.

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) 2000-07-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2002-10-01

Annexes designated "normative" are part of the body of the standard.

In this standard, annex ZA is normative.

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61023:1999 was approved by CENELEC as a European Standard without any modification.

This document is a preview

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

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	1996	Maritime navigation and radiocommunication equipment and systems General requirements - Methods of testing and required test results	EN 60945	1997
IEC 61162-1	1995	Maritime navigation and radiocommunication equipment and systems Digital interfaces Part 1: Single talker and multiple listeners	EN 61162-1	1996
IMO A.694	1991	General requirements for shipborne radio equipment forming part of the global maritime distress and safety system (GMDSS) and for electronic navigational aids	-	-
IMO A.824	1995	Performance standards for devices to indicate speed and distance	-	-

INTERNATIONAL STANDARD

IEC
61023

Second edition
1999-07

**Maritime navigation and radiocommunication
equipment and systems –**

**Marine speed and distance measuring
equipment (SDME) –**

Performance requirements –

Methods of testing and required test results

*Matériels et systèmes de navigation et
de radiocommunication maritimes –*

*Instruments de mesure de la vitesse et
de la distance pour navires (Lochs) –*

Exigences de fonctionnement –

Méthodes d'essai et résultats d'essai exigés



Reference number
IEC 61023:1999(E)

Numbering

As from 1 January 1997 all IEC publications are issued with a designation in the 60000 series.

Consolidated publications

Consolidated versions of some IEC publications including amendments are available. For example, edition numbers 1.0, 1.1 and 1.2 refer, respectively, to the base publication, the base publication incorporating amendment 1 and the base publication incorporating amendments 1 and 2.

Validity of this publication

The technical content of IEC publications is kept under constant review by the IEC, thus ensuring that the content reflects current technology.

Information relating to the date of the reconfirmation of the publication is available in the IEC catalogue.

Information on the subjects under consideration and work in progress undertaken by the technical committee which has prepared this publication, as well as the list of publications issued, is to be found at the following IEC sources:

- **IEC web site***
- **Catalogue of IEC publications**
Published yearly with regular updates
(On-line catalogue)*
- **IEC Bulletin**
Available both at the IEC web site* and as a printed periodical

Terminology, graphical and letter symbols

For general terminology, readers are referred to IEC 60050: *International Electrotechnical Vocabulary* (IEV).

For graphical symbols, and letter symbols and signs approved by the IEC for general use, readers are referred to publications IEC 60027: *Letter symbols to be used in electrical technology*, IEC 60417: *Graphical symbols for use on equipment. Index, survey and compilation of the single sheets* and IEC 60617: *Graphical symbols for diagrams*.

* See web site address on title page.

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International Electrotechnical Commission
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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

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the 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, the IEC publishes International Standards. 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. The 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 the 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 National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 61023 has been prepared by IEC technical committee 80: Maritime navigation and radiocommunication equipment and systems.

This second edition cancels and replaces the first edition published in 1990 of which it constitutes a technical revision.

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

FDIS	Report on voting
80/214/FDIS	80/236/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 3.

The committee has decided that this publication remains valid until 2004.

At this date, in accordance with the committee's decision, the publication will be

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

Annex A is for information only.

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 12 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 A.824. The clause numbering of that resolution is indicated in parentheses in clause 4 and all sub-clauses 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 A.824 and the tests of this standard are summarized in annex A.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60945:1996, *Maritime navigation and radiocommunication equipment and systems – General requirements – Methods of testing and required test results*

IEC 61162-1:1995, *Maritime navigation and radiocommunication equipment and systems – Digital interfaces – Part 1: Single talker and multiple listeners*

IMO A.694:1991, *General requirements for shipborne radio equipment forming part of the global maritime distress and safety system (GMDSS) and for electronic navigational aids*

IMO A.824:1995, *Performance standards for devices to indicate speed and distance*

3 Abbreviations

IMO International Maritime Organisation

VBW Dual ground/water speed

VLW Distance travelled through the water