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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**



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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

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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- withdrawn,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