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INTERNATIONAL STANDARD

NORME INTERNATIONALE

Maritime navigation and radiocommunication equipment and systems – Shipborne voyage data recorder (VDR) – Part 2: Simplified voyage data recorder (S-VDR) – Performance requirements, methods of testing and required test results

Matériels et systèmes de navigation et de radiocommunication maritimes – Enregistreur de données de navigation embarqué (VDR) – Partie 2: Enregistreur de données de navigation simplifié (S-VDR) – Exigences de performance, méthodes d'essai et résultats d'essai exigés

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

Tel.: +41 22 919 02 11
Fax: +41 22 919 03 00
info@iec.ch
www.iec.ch

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MARITIME NAVIGATION AND RADIOCOMMUNICATION EQUIPMENT AND SYSTEMS – SHIPBORNE VOYAGE DATA RECORDER (VDR) –

Part 2: Simplified voyage data recorder (S-VDR) – Performance requirements, methods of testing and required test results

FOREWORD

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International Standard IEC 61996-2 has been prepared by IEC technical committee 80: Maritime navigation and radiocommunication equipment and systems.

This bilingual version (2017-01) corresponds to the English version, published in 2007-11.

This second edition cancels and replaces the first edition published in 2006, and constitutes a technical revision. A new requirement has been added to 4.3.6 for an interface to be used for downloading the stored data to an external computer. This is defined in Annex C which replaces the Annex C of the first edition which contained an IMO Circular which recommended such an interface. An optional LAN interface for connection to radar has been added in 5.8. Some corrections to the text have also been made.

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

CDV	Report on voting
80/471/CDV	80/500/RVC

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

The French version of this standard has not been voted upon.

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

A list of all parts of the IEC 61996 series, under the general title *Maritime navigation and radiocommunication equipment and systems – Shipborne voyage data recorder (VDR)*, can be found on the IEC website.

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.

INTRODUCTION

The S-VDR has been introduced by IMO for fitting to existing ships as a simplified alternative to the voyage data recorder (VDR) which is required for all new ships.

This part of IEC 61996 provides information on the testing requirements for S-VDR as defined in IMO performance standard MSC.163(78).

The specification for S-VDR differs significantly from that for VDR in two areas:

a) the requirements for monitoring certain sensors are reduced when the data is not provided in IEC 61162 format, and

b) the requirements for the protective S-VDR capsule are different from the VDR capsule, both for the fixed and float-free versions.

Annex B provides a cross-reference between this standard and IEC 61996-1 to aid test houses who may already have test results for VDRs which are being submitted as S-VDRs.

Subsequent to publishing the performance standard for S-VDR, MSC.163(78), in 2004, the IMO sub-committee on Safety of Navigation (NAV) discussed the issue of download and playback of information. Recognising that after an accident there is a need for investigators to be able to download the stored data and playback the information from VDRs/S-VDRs without delay, the sub-committee agreed on recommended means for extracting stored data for investigation authorities. This was adopted by MSC.81 in 2006 as an amendment to resolution MSC.163(78) given in resolution MSC.214(81). This edition of the standard incorporates this amendment.

MARITIME NAVIGATION AND RADIOCOMMUNICATION EQUIPMENT AND SYSTEMS – SHIPBORNE VOYAGE DATA RECORDER (VDR) –

Part 2: Simplified voyage data recorder (S-VDR) – Performance requirements, methods of testing and required test results

1 Scope

This part of IEC 61996 specifies the minimum performance requirements, technical characteristics and methods of testing, and required test results, for simplified shipborne voyage data recorders (S-VDRs) as required by IMO MSC.163(78). It takes into account IMO resolution A.694(17) and is associated with IEC 60945. When a requirement in this standard is different from IEC 60945, the requirement in this standard takes precedence.

NOTE All text of this standard, whose wording is identical to that of IMO MSC.163(78) or A.861(20) is printed in *italics,* and the Resolution and associated performance standard paragraph numbers are indicated in brackets.

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 60068-2-27:1987, *Environmental testing – Part 2: Tests – Test Ea and guidance: Shock*

IEC 60268-16:2003, *Sound system equipment – Part 16: Objective rating of speech intelligibility by speech transmission index*

IEC 60945:2002, *Maritime navigation and radiocommunication equipment and systems – General requirements – Methods of testing and required test results*

IEC 61097-2, *Global maritime distress and safety system (GMDSS) – Part 2: COSPAS SARSAT EPIRB – Satellite emergency position indicating radio beacon operating on 406 MHz – Operational and performance requirements, methods of testing and required test results*

IEC 61097-7:1996, *Global maritime distress and safety system (GMDSS) – Part 7: Shipborne VHF radiotelephone transmitter and receiver – Operational and performance 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*

IEC 61162-2, *Maritime navigation and radiocommunication equipment and systems – Digital interfaces – Part 2: Single talker and multiple listeners, high-speed transmission*

IEC 61260:1995, *Electroacoustics – Octave-band and fractional-octave-band filters*

IEC 61672-1:2002, *Electroacoustics – Sound level meters – Part 1: Specifications*

IMO A.658(16), *Use and fitting of retro-reflective materials on life-saving appliances*