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NORME INTERNATIONALE

Maritime navigation and radiocommunication equipment and systems – Shipborne voyage data recorder (VDR) – Part 1: 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 1: Exigences de fonctionnement, méthodes d'essai et résultats d'essai exigés

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CONTENTS

FOREWORD 6
1 Scope 8
2 Normative references 8
3 Terms, definitions and abbreviations 9
3.1 Terms and definitions 9
3.2 Abbreviations 12
4 Performance requirements 12
4.1 General 12
4.2 Purpose 12
4.3 Operational requirements 12
4.3.1 Design and construction 12
4.3.2 Maintenance of sequential records 13
4.3.3 Co-relation in date and time 13
4.3.4 Final recording medium 13
4.3.5 Interfaces 14
4.3.6 Performance test 15
4.4 Data selection and security 15
4.4.1 Selection of data items 15
4.4.2 Configuration data 15
4.4.3 Resistance to tampering 16
4.4.4 Recording integrity 16
4.5 Operation 17
4.5.1 Recording and saving of data 17
4.5.2 Power source 17
4.5.3 Dedicated reserve power source 17
4.5.4 Recording period and duration 17
4.6 Data items to be recorded 17
4.6.1 Date and time 17
4.6.2 Ship's position 18
4.6.3 Speed 18
4.6.4 Heading 18
4.6.5 Bridge audio 18
4.6.6 Communications audio 18
4.6.7 Radar data – post-display selection 18
4.6.8 ECDIS 19
4.6.9 Echo sounder 19
4.6.10 Main alarms 19
4.6.11 Rudder order and response 19
4.6.12 Engine and thruster order and response 19
4.6.13 Hull openings (doors) status 19
4.6.14 Watertight and fire door status 20
4.6.15 Accelerations and hull stresses 20
4.6.16 Wind speed and direction 20
4.6.17 AIS 20
4.6.18 Rolling motion 20
4.6.19 Configuration data 20

4.6.20 Electronic logbook 20
5 Technical characteristics 21
5.1 Co-relation in date and time 21
5.2 Particular design requirements for the final recording medium 21
5.2.1 Fixed protective capsule 21
5.2.2 Float-free capsule 21
5.2.3 Long-term recording medium 21
5.3 Location beacons 22
5.3.1 Fixed protective capsule 22
5.3.2 Float-free capsule 22
5.4 Survivability of recorded data 22
5.4.1 Long-term retention 22
5.4.2 Physical protection 22
5.5 Information to be included in the manufacturer's documentation 23
5.5.1 Installation guidelines 23
5.5.2 Operation and maintenance manual 23
5.5.3 Information for use by an investigation authority 24
5.6 Bridge audio specifications 24
5.6.1 Input interface 24
5.6.2 Reference signal 24
5.6.3 Audio frequency response 24
5.6.4 Quality index 25
5.6.5 Signal noise level – Signal to noise and distortion 25
5.6.6 Ability to handle complex signals 25
5.6.7 Suppression of low frequency out band noise 25
5.6.8 Microphones 26
5.7 Communications audio 26
5.7.1 Input interfaces 26
5.7.2 Reference signal 26
5.7.3 Audio frequency response 26
5.7.4 Quality index 26
5.7.5 Audio noise level – Signal to no signal 27
5.7.6 Signal noise level – Signal to noise and distortion (SINAD) 27
5.8 Screen image capture 27
5.8.1 Input interface 27
5.8.2 Image outputs 28
5.9 Radar data – Post-display selection 28
5.10 ECDIS data 28
5.11 Configuration data 29
5.11.1 Distribution of data in final recording media 29
5.11.2 Protection 29
5.11.3 Synchronisation of sensor and configuration data 29
5.12 Operational performance test 29
5.13 Bridge alert management system 29
6 Methods of testing and required test results 29
6.1 General 29
6.1.1 Test setup 29
6.1.2 Download and playback equipment 30
6.1.3 Sequence of tests 31

6.1.4 Requirements to be checked by inspection only 31
6.1.5 Environmental test conditions for normal operation 31
6.1.6 Recording duration 32
6.1.7 Reserve power source 32
6.1.8 Recharging of reserve source of power 33
6.1.9 Brief interruption of electrical power 33
6.1.10 Recording integrity 33
6.1.11 Maintenance of sequential records 34
6.1.12 Co-relation in date and time 34
6.1.13 Design and construction of the fixed protective capsule 34
6.1.14 Design and construction of the float-free capsule 36
6.1.15 Operational performance test 37
6.1.16 Power source 38
6.2 Data items to be recorded 38
6.2.1 Date/time – Ship's position – Speed – Heading 38
6.2.2 Bridge audio 38
6.2.3 Communications audio 44
6.2.4 Radar data, post-display selection and ECDIS 47
6.2.5 Other items 55
6.2.6 Electronic logbook 56
6.3 Interfaces 56
Annex A (normative) IEC 61162 sentence formats 57
Annex B (informative) Mandatory alarms 58
Annex C (normative) Download and playback equipment for investigating authorities 61
Annex D (informative) Requirement/test – Cross-references 65
Annex E (normative) LAN image protocol 67
Annex F (informative) Network for image transmission 71
Annex G (normative) ECDIS display source information 74
Bibliography 79

Figure 1 – Insertion of Morse letter "V" in homing transmission 22
Figure 2 – Test set-up block diagram 49
Figure 3 – Comparison of images 53
Figure F.1 – Network with a switch 71
Figure F.2 – Network with direct connections 72
Figure F.3 – Network for a ship with an extensive bridge 73

Table 1 – Bridge audio, signal to no signal measurements 41
Table 2 – Bridge audio, signal to noise and distortion (SINAD) measurements 42
Table 3 – Complex signals 43
Table 4 – Communications audio, signal to no-signal measurements 46
Table 5 – Communications audio, signal to noise and distortion (SINAD) measurements 47
Table 6 – Intersection colours of test images 1 and 2 51
Table A.1 – References in this standard 57
Table B.1 – Mandatory alarms on the bridge 58
Table D.1 – Subject list and subclauses *(1 of 2)* 65

Table E.1 – Default values for transmitting equipment 70
Table E.2 – Default values for receiving equipment..... 70
Table G.1 – Required chart information 75
Table G.2 – Additional chart information 75

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

Part 1: Performance requirements, methods of testing and required test results

FOREWORD

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International Standard IEC 61996-1 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 2007 and constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition.

a) The description of the protective capsule in 4.3.4 has been changed in line with the requirements of the new IMO performance standards given in Resolution MSC.333(90) which now require a final recording medium comprising three parts; fixed, float-free and long-term.

b) A new requirement for a performance test has been added in 4.3.6.

c) Further data items to be recorded have been added to 4.6 for ECDIS, AIS, rolling motion and electronic logbooks.

d) Clause 5 contains new technical requirements for configuration data, operational performance test and bridge alert management system. In addition, further technical requirements have been added to 5.6 for bridge audio and to 5.8 for radar and ECDIS images.

e) References to “alarm” requirements in the previous edition have been substituted by references to “cautions” in line with current IMO recommendations. The test methods in Clause 6 have been updated to reflect the new requirements.

f) New Annexes E, F and G concerning protocols for interfacing images using a Local Area Network have been added.

This bilingual version (2017-06) corresponds to the English version, published in 2013-05.

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

FDIS	Report on voting
80/690/FDIS	80/699/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.

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.

NOTE All text of this standard, whose wording is identical to that of IMO Resolution MSC.333(90), is printed in *italics,* and the Resolution and associated performance standard paragraph numbers are indicated in brackets.

The committee has decided that the contents of this publication will remain unchanged until the stability 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.

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

Part 1: Performance requirements, methods of testing and required test results

1 Scope

This part of IEC 61996 specifies the minimum performance requirements, technical characteristics, methods of testing and required test results, for shipborne voyage data recorder (VDR) installations as required by Chapter V of the International Convention for Safety of Life at Sea (SOLAS), as amended. It takes account of 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.

This standard incorporates the applicable parts of the performance standards included in IMO Resolution MSC.333(90).

NOTE All text of this standard, whose wording is identical to that of IMO Resolution MSC.333(90), is printed in *italics,* and the Resolution and associated performance standard paragraph numbers are indicated in brackets.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60068-2-27:2008, *Environmental testing – Part 2-27: Tests – Test Ea and guidance: Shock*

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

IEC 60945, *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 (all parts), *Maritime navigation and radiocommunication equipment and systems – Digital interfaces*

IEC 61162-450:2011, *Maritime navigation and radiocommunication equipment and systems – Digital interfaces – Part 450: Multiple talkers and multiple listeners – Ethernet interconnection*