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Maritime navigation and radiocommunication equipment and systems – Electronic chart display and information system (ECDIS) – Operational and performance requirements, methods of testing and required test results

*Matériels et systèmes de navigation et de radiocommunication
maritimes – Systèmes de visualisation des cartes électroniques
et d'information (ECDIS) – Exigences d'exploitation et de
fonctionnement, méthodes d'essai et résultats d'essai exigés*

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

MARITIME NAVIGATION AND RADIOCOMMUNICATION EQUIPMENT AND SYSTEMS – ELECTRONIC CHART DISPLAY AND INFORMATION SYSTEM (ECDIS) – OPERATIONAL AND 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.
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International Standard IEC 61174 has been prepared by IEC technical committee 80: Maritime navigation and radiocommunication equipment and systems.

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

FDIS	Report on voting
80/190/FDIS	80/201/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.

Annexes A, B, C, D, E and F form an integral part of this standard.

Annex G is for information only.

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

**MARITIME NAVIGATION AND RADIOCOMMUNICATION
EQUIPMENT AND SYSTEMS –
ELECTRONIC CHART DISPLAY AND INFORMATION SYSTEM (ECDIS) –
OPERATIONAL AND PERFORMANCE REQUIREMENTS,
METHODS OF TESTING AND REQUIRED TEST RESULTS**

1 Scope

This International Standard specifies the performance requirements, methods of testing and required test results of equipment conforming to performance standards not inferior to those adopted by the IMO in resolution A.817.

This standard is based upon the performance standards of IMO resolution A.817, and is also associated with IMO resolution A.694 and IEC 60945. Reference is made, where appropriate, to IMO resolution A.817, and all subclauses whose wording is identical to that in the resolution are printed in italics.

In association with the above IMO resolution A.817, are the International Hydrographic Organization (IHO) publications S-52 and S-57. This standard has included extracts from the above publications where they are applicable to this equipment. Where reference is made, all subclauses whose wording is identical to that in the publications, are printed in italics.

The requirements of this standard are not intended to prevent the use of new techniques in equipments and systems, provided the facilities offered are not inferior to those stated.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and 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. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60872:1987, *Marine automatic radar plotting aids (ARPA) – Operational requirements – Methods of testing and test results*
Amendment 1 (1991)

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*

ISO 9000 (all parts), *Quality management and quality assurance standards*

IMO:1974 (as amended), *Convention for safety of life at sea (SOLAS)*

IMO A.424:1979, *Performance standards for gyro-compasses*

IMO A.686:1991, *Code on alarms and indicators*

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.817:1995, *Performance standards for electronic chart display and information systems (ECDIS)*

IMO A.821:1995, *Performance standards for gyro-compasses for high-speed craft*

IMO A.823:1995, *Performance standards for automatic radar plotting aids (ARPAs)*

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

IMO MSC.64(67):1996, Annex 4 – *Performance standards for radar equipment*

IMO MSC.64(67):1996, Annex 5 – *Amendment to IMO.817 – Appendix 6 – Back up arrangements*

IHO S-52:1996, *Specifications for chart content and display aspects of ECDIS*

IHO S-52 appendix 1:1996, *Guidance on updating the electronic navigational chart*

IHO S-52 appendix 2:1997, *Colour and symbol specifications for ECDIS*

IHO S-52 appendix 3:1997, *Glossary of ECDIS – related terms*

IHO S-57:1996, *Transfer standard for digital hydrographic data*

IHO:1997, *Test data set for use with IEC 61174*