IEC 61924-2

Edition 2.0 2021-02

INTERNATIONAL STANDARD

NORME INTERNATIONALE

colour inside

Maritime navigation and radiocommunication equipment and systems – Integrated navigation systems (INS) – Part 2: Modular structure for INS – Operational and performance requirements, methods of testing and required test results

Matériels et systèmes de navigation et de radiocommunication maritimes – Systèmes de navigation intégrés (INS) – Partie 2: Structure modulaire des systèmes de navigation intégrés – Exigences opérationnelles et de fonctionnement, méthodes d'essai et résultats d'essai exigés

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MARITIME NAVIGATION AND RADIOCOMMUNICATION EQUIPMENT AND SYSTEMS – INTEGRATED NAVIGATION SYSTEMS (INS) –

Part 2: Modular structure for INS – Operational and performance requirements, methods of testing and required test results

FOREWORD

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International Standard IEC 61924-2 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 2012, of which it constitutes a technical revision.

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

a) addition of a requirement for INS to provide capability for Maritime Safety Information to comply with requirements of the International Maritime Organization;

b) modification of Clause 8 (Alert management) and associated annexes to align it with IEC 62923-1 concerning bridge management;

c) modifications to Annex D to incorporate newer recommendations of the International Maritime Organization.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
80/977/FDIS	80/970/RVC

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

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

A list of all parts in the IEC 61924 series, published under the general title *Maritime navigation and radiocommunication equipment and systems – Integrated navigation systems (INS)*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific document. At this date, the document will be

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- withdrawn,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

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MARITIME NAVIGATION AND RADIOCOMMUNICATION EQUIPMENT AND SYSTEMS – INTEGRATED NAVIGATION SYSTEMS (INS) –

Part 2: Modular structure for INS – Operational and performance requirements, methods of testing and required test results

1 Scope

This part of IEC 61924 specifies the minimum requirements for the design, manufacture, integration, methods of testing and required test results for an integrated navigation system (INS) to comply with the International Maritime Organization (IMO) requirements of Resolution MSC.252(83), as amended by Resolution MSC.452(99). In addition, it takes account of IMO Resolution A.694(17) to which IEC 60945 is associated. When a requirement in this document is different from IEC 60945, the requirement of this document takes precedence.

For bridge alert management, IMO Resolution MSC.302(87) supersedes IMO Resolution MSC.252(83). Accordingly, this document incorporates references to IEC 62923-1 and IEC 62923-2 which are associated with Resolution MSC.302(87) for requirements and tests, where applicable. This document indicates which requirements and associated tests of MSC.252(83) have been superseded by MSC.302(87).

NOTE All text of this document whose wording is identical to that in IMO Resolution MSC.252(83), as amended by MSC.452(99), is printed in *italics* and the Resolution and paragraph number indicated between brackets.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 61162-1:2016*, 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 61162-450, *Maritime navigation and radiocommunication equipment and systems – Digital interfaces – Part 450: Multiple talkers and multiple listeners – Ethernet interconnection*

IEC 61174:2015, *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*

IEC 62065:2014, *Maritime navigation and radiocommunication equipment and systems – Track control systems – Operational and performance requirements, methods of testing and required test results*