

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE



**Maritime navigation and radiocommunication equipment and systems – Maritime survivor locating devices (man overboard devices) – Minimum requirements, methods of testing and required test results**

**Matériels et systèmes de navigation et de radiocommunication maritimes – Dispositifs de localisation des survivants en mer (dispositifs en cas d'homme à la mer) – Exigences minimales, méthodes d'essai et résultats d'essai exigés**



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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**MARITIME NAVIGATION AND RADIOCOMMUNICATION EQUIPMENT  
AND SYSTEMS – MARITIME SURVIVOR LOCATING DEVICES  
(MAN OVERBOARD DEVICES) – MINIMUM REQUIREMENTS,  
METHODS OF TESTING AND REQUIRED TEST RESULTS**

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

Draft	Report on voting
80/1031/FDIS	80/1040/RVD

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

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/standardsdev/publications](http://www.iec.ch/standardsdev/publications).

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# MARITIME NAVIGATION AND RADIOCOMMUNICATION EQUIPMENT AND SYSTEMS – MARITIME SURVIVOR LOCATING DEVICES (MAN OVERBOARD DEVICES) – MINIMUM REQUIREMENTS, METHODS OF TESTING AND REQUIRED TEST RESULTS

## 1 Scope

This document specifies the minimum requirements for aspects related to operation, construction, documentation, methods of testing and required test results for ITU-R M.2135 AMRD Group A man overboard (MOB) devices intended for alerting and locating purposes, as defined by IMO and in accordance with ITU-R M.493 Class-M. This document consists of three modules where the first module, Module A, covers general requirements and aspects. Further Module B covers AIS technologies and Module C covers DSC technologies that are required within MOB equipment.

This document incorporates the technical characteristics included in applicable ITU recommendations. Where applicable, it also takes into account the ITU Radio Regulations. This document takes into account other associated IEC International Standards and existing national standards, as applicable.

This document defines the requirements for coexistence of AIS and DSC technology incorporated within a single equipment. Only when the equipment complies with the three Modules can it be categorised as AMRD Group A equipment and be entitled to operate on channel AIS 1, channel AIS 2 and channel 70.

## 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 60529, *Degrees of protection provided by enclosures (IP Code)*

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

IEC 61108-1, *Maritime navigation and radiocommunication equipment and systems – Global navigation satellite systems (GNSS) – Part 1: Global positioning system (GPS) – Receiver equipment – Performance standards, methods of testing and required test results*

IEC 61108-2, *Maritime navigation and radiocommunication equipment and systems – Global navigation satellite systems (GNSS) – Part 2: Global navigation satellite system (GLONASS) – Receiver equipment – Performance standards, methods of testing and required test results*

IEC 61108-3, *Maritime navigation and radiocommunication equipment and systems – Global navigation satellite systems (GNSS) – Part 3: Galileo receiver equipment – Performance requirements, methods of testing and required test results*

IEC 61108-5, *Maritime navigation and radiocommunication equipment and systems – Global navigation satellite systems (GNSS) – Part 5: BeiDou navigation satellite system (BDS) – Receiver equipment – Performance requirements, methods of testing and required test results*