

Australian/New Zealand Standard™

**Maritime survivor locating systems  
(MSLS)**

**Part 4: Maritime low power personal  
locating devices employing Automatic  
Identification System (AIS)**

*This standard is an identical adoption of ETSI EN 303 098-1:2014.  
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## **AS/NZS 4869.4:2015**

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee RC-004, Radiocommunications Equipment—Maritime and Safety of Life. It was approved on behalf of the Council of Standards Australia on 30 October 2015 and on behalf of the Council of Standards New Zealand on 4 November 2015. This Standard was published on 23 December 2015.

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The following are represented on Committee RC-004:

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Australian Industry Group  
Australian Maritime Safety Authority  
Australian Volunteer Coast Guard Association  
Civil Aviation Safety Authority  
Department of Defence (Australian Government)  
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*This Standard was issued in draft form for comment as DR AS/NZS 4869.4:2015.*

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# Australian/New Zealand Standard™

## Maritime survivor locating systems (MSLS)

### Part 4: Maritime low power personal locating devices employing Automatic Identification System (AIS)

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## PREFACE

A1 | This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee RC-004, Radiocommunications Equipment—Maritime and Safety of Life.

*This Standard incorporates Amendment No. 1 (April 2016). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.*

The objective of this Standard is to provide the essential requirements for maritime survivor locating devices (MSLD) that use automatic identification system (AIS) frequencies of 161.975 MHz and 162.025 MHz, which are described in the adopted standard.

This Standard is identical with, and has been reproduced from ETSI EN 303 098-1:2014, *Electromagnetic compatibility and Radio spectrum Matters (ERM); Maritime low power personal locating devices employing AIS; Part 1: Technical characteristics and methods of measurement*.

As this Standard is reproduced from a European Standard, a full point substitutes for a comma when referring to a decimal marker.

None of the normative references in the source document have been adopted as Australian or Australian/New Zealand Standards.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the annex to which they apply. A ‘normative’ annex is an integral part of a Standard, whereas an ‘informative’ annex is only for information and guidance.

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NOTES

## AUSTRALIAN/NEW ZEALAND/NEW ZEALAND STANDARD

**Maritime survivor locating systems (MSLS)**

## Part 4:

**Maritime low power personal locating devices employing Automatic Identification System (AIS)**

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## 1 Scope

The present document lays down the minimum requirements for low power maritime personal locating devices employing AIS and an integrated GNSS receiver to provide the locating function. The present document incorporates the relevant provisions of the International Telecommunication Union (ITU) radio regulations [i.3] included in Recommendation ITU-R M.1371-5 [1].

For this application, both the radiated power and the length of time of operation are limited to enable the equipment to be sufficiently small and light to be worn comfortably at all times and to limit the operating range to a local area.

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## 2 References

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the reference document (including any amendments) applies.

Referenced documents which are not found to be publicly available in the expected location might be found at <http://docbox.etsi.org/Reference>.

NOTE: While any hyperlinks included in this clause were valid at the time of publication, ETSI cannot guarantee their long term validity.

### 2.1 Normative references

The following referenced documents are necessary for the application of the present document.

- [1] Recommendation ITU-R M.1371-5 (02/2014): "Technical characteristics for an automatic identification system using time-division multiple access in the VHF maritime mobile band".
- [2] ETSI TR 100 028 (all parts) (V1.4.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics".
- [3] ETSI TR 102 273-7 (2001): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Improvement on Radiated Methods of Measurement (using test site) and evaluation of the corresponding measurement uncertainties; Part 7: Artificial human beings".
- [4] CENELEC EN 61108-1 (2003): "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".
- [5] CENELEC EN 61108-2 (1998): "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".
- [6] CENELEC EN 61108-3 (2010): "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".
- [7] Recommendation ITU-T O.153 (10/1992): "Basic parameters for the measurement of error performance at bit rates below the primary rate".
- [8] IMO ANNEX 11 - RESOLUTION MSC.149(77) - (adopted on 3 June 2003): "Adoption of the revised performance standards for survival craft portable two-way VHF radiotelephone apparatus".