AS/NZS 4869.3:2015

Australian/New Zealand Standard™

Maritime survivor locating systems (MSLS)

Part 3: Maritime survivor locating devices (MSLD) – Operating on 156.575 MHz and/or 161.975 MHz/162.025 MHz (RTCM 11901.1:2012, MOD)

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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 14 April 2015 and on behalf of the Council of Standards New Zealand on 17 April 2015.
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The following are represented on Committee RC-004:

Australian Communications and Media Authority
Australian Industry Group
Australian Maritime Safety Authority
Australian Radio Communications Industry Association
Australian Volunteer Coast Guard Association
Civil Aviation Safety Authority
Department of Defence (Australian Government)
Electromagnetic Technical Evaluation Committee
Maritime New Zealand
Ministry of Business, Innovation and Employment, New Zealand
Telecommunications Users Association of New Zealand
Wireless Institute Australia
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We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Please address your comments to the Chief Executive of either Standards Australia or Standards New Zealand at the address shown on the back cover.

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PREFACE

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

The objective of this Standard is to provide the essential requirements for maritime survivor locating devices (MSLD) that use the digital selective calling frequency of 156.525 MHz, and also automatic identification system frequencies of 161.975 MHz and 162.025 MHz, that are described in the adopted RTCM standard.

This Standard includes environmental, operational and radiofrequency requirements. These specifications are required by both the appropriate national spectrum management authority and maritime safety authority in each country.

This Standard is an adoption with national modifications and has been reproduced from the Radio Technical Commission For Maritime Services standard, RTCM 1190.1:2012. *RTCM Standard 11901.1 for Maritime Survivor Locating Devices (MSLD)*, which incorporates Amendment 1 (2014), and has been varied as indicated to take account of Australian/New Zealand conditions. The modifications are specified in Appendix ZZ.

References to International Standards should be replaced by references to Australian or Australian/New Zealand Standards, as follows:

Reference to International Standard		*Australian/New Zealand Standard*	
IEC		AS	
60529	Degrees of protection provided by enclosures (IP Code)	60529	Degrees of protection provided by enclosures (IP Code)
		AS/NZS	
61097	Global maritime distress and safety system (GMDSS)	4415	Radiotelephone transmitters and receivers for the maritime mobile service operating in the VHF bands—Technical characteristics and methods of measurement
61097-7	Part 7: Shipborne VHF radiotelephone transmitter and receiver—Operational and performance requirements, methods of testing and required test results	4415.1	Part 1: Shipborne equipment and limited coast stations (including DSC) (IEC 61097-7:1996, MOD)

Only normative references that have been adopted as Australian or Australian/New Zealand Standard have been listed.

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

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1 Scope

This document specifies the minimum functional and technical requirements for a Maritime Survivor Locating Device (MSLD) system.

MSLD Alerting Units (AUs) are intended to be carried by individuals engaged in on-deck activities on vessels, or in activities on shore where falls into the water are a risk, or in other marine activities where location of persons may be required.

The purpose of the AU is to send a local alert primarily to a mating Base Unit (BU) on one's own vessel or facility, and possibly also to other BUs on other vessels nearby. The MSLD system is not intended to perform the functions of an Emergency Position Indicating Radio Beacon (EPIRB). The AU may also serve as a locating beacon to assist in the individual's recovery.

The AU typically consists of a transmitter module, an integral antenna, and a power source, all contained in a wearable watertight case. The AU is typically used in conjunction with a mating BU on a vessel, but may be used with an existing receiver suited for the purpose. In addition, the system includes a Locating Function (LF) to aide in the search and rescue of the individual, which may or may not be part of the BU.

The MSLD system operates on a radio frequency authorized for this type of service.

The body of this standard is organized into two main parts:

- Common requirements for all MSLDs (Sections 1 through 8).
- Requirements for specific types of MSLDs (Annexes A through E).

2 Normative References

The following referenced documents are indispensable for the application of this document to the extent specified herein. 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 radio communication equipment and systems general requirements - methods of testing and required test results* (2002-08)

IEC 61097-3 – *Global maritime distress and safety system (GMDSS) - Part 3: Digital selective calling (DSC) equipment - Operational and performance requirements, methods of testing and required testing results*

IEC 61097-7 – *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 61108-1 - *Maritime navigation and radio communication 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* (2003-07)