

Australian/New Zealand Standard™

**Portable Very High Frequency (VHF)
radiotelephone equipment for the
maritime mobile service operating
in the VHF bands (for non-GMDSS
applications only)**



AS/NZS ETSI EN 301 178:2018

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- Australian Industry Group
- Australian Maritime Safety Authority
- Australian Volunteer Coast Guard Association
- Civil Aviation Safety Authority
- Consumer Electronics Suppliers Association
- Electromagnetic Technical Evaluation Committee
- Ministry of Business, Innovation and Employment (NZ)
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- Wireless Institute Australia

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Originates as AS/NZS 4415:1996.
Jointly revised and redesignated as AS/NZS 4415.1:2003 and AS/NZS 4415.2:2003.
Jointly revised, amalgamated and redesignated as AS/NZS ETSI EN 301 178:2018.

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Preface

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee RC-004, Radio Communications Equipment — Maritime and Safety of Life, to supersede AS/NZS 4415.1:2003, *Radiotelephone transmitters and receivers for the maritime mobile service operating in the VHF bands — Technical characteristics and methods of measurement, Part 1: Shipborne equipment and limited coast stations (including DSC) (IEC 61097-7:1996, MOD)* and AS/NZS 4415.2:2003, *Radiotelephone transmitters and receivers for the maritime mobile service operating in the VHF bands — Technical characteristics and methods of measurement, Part 2: Major coast stations, limited coast stations, ship stations and hand-held stations (non DSC) (ETS 300 162:1998, MOD)*.

The objective of this Standard is to specify the minimum technical characteristics and methods of measurement required for portable Very High Frequency (VHF) radiotelephones not providing maritime distress and safety communications functions (i.e. not forming part of the Global Maritime Distress and Safety System (GMDSS)) operating in certain frequency bands allocated to the maritime mobile service using either 25 kHz or 25 kHz and 12.5 kHz channels.

This Standard also specifies technical characteristics, methods of measurement and required test results.

This Standard will be published as part of a set of Standards which include the following:

- (a) AS/NZS ETSI EN 301 025, *VHF radiotelephone equipment for general communications and associated equipment for Class “D” Digital Selective Calling (DSC)*.
- (b) AS/NZS ETSI EN 301 178, *Portable Very High Frequency (VHF) radiotelephone equipment for the maritime mobile service operating in the VHF bands (for non-GMDSS applications only)* (this Standard).
- (c) AS/NZS ETSI EN 302 885, *Portable Very High Frequency (VHF) radiotelephone equipment for the maritime mobile service operating in the VHF bands with integrated hand-held class H DSC*.

On publication of this set of Standards, AS/NZS 4415.1:2003 and AS/NZS 4415.2:2003 will be superseded in full.

This Standard is identical with, and has been reproduced from, ETSI EN 301 178 V2.2.2 (2017-04), *Portable Very High Frequency (VHF) radiotelephone equipment for the maritime mobile service operating in the VHF bands (for non-GMDSS applications only)*.

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

Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific Standards.

The terms “normative” and “informative” are used in Standards to define the application of the appendices or annexes to which they apply. A “normative” appendix or annex is an integral part of a Standard whereas an “informative” appendix or annex is only for information and guidance.

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Foreword

This Harmonised European Standard (EN) has been produced by ETSI Technical Committee Electromagnetic compatibility and Radio spectrum Matters (ERM).

The present document has been prepared under the Commission's standardisation request C(2015) 1376 final [i.5] to provide one voluntary means of conforming to the essential requirements of Directive 2014/53/EU on the harmonisation of the laws of the Member States relating to the making available on the market of radio equipment and repealing Directive 1999/5/EC [i.2].

Once the present document is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of the present document given in table A.1 confers, within the limits of the scope of the present document, a presumption of conformity with the corresponding essential requirements of that Directive, and associated EFTA regulations.

National transposition dates	
Date of latest announcement of this EN (doa):	31 July 2017
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	31 January 2018
Date of withdrawal of any conflicting National Standard (dow):	31 January 2019

Modal verbs terminology

In the present document "shall", "shall not", "should", "should not", "may", "need not", "will", "will not", "can" and "cannot" are to be interpreted as described in clause 3.2 of the [ETSI Drafting Rules](#) (Verbal forms for the expression of provisions).

"must" and "must not" are **NOT** allowed in ETSI deliverables except when used in direct citation.

1 Scope

The present document specifies technical characteristics and methods of measurements for equipment:

- 1) portable Very High Frequency (VHF) transceivers operating with 25 kHz channels;
- 2) portable Very High Frequency (VHF) transceivers operating with both 25 kHz and 12,5 kHz channels.

These radiotelephones are not providing maritime distress and safety communications functions (i.e. not forming part of the Global Maritime Distress and Safety System (GMDSS)) operating in certain frequency bands allocated to the maritime mobile service using either 25 kHz or 25 kHz and 12,5 kHz channels.

The present document covers the essential requirements of article 3.2 of Directive 2014/53/EU [i.2] under the conditions identified in annex A.

2 References

2.1 Normative references

References are specific, identified by date of publication and/or edition number or version number. Only the cited version 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.

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

- [1] ITU Radio Regulations (2016), appendix 18: "Table of transmitting frequencies in the VHF maritime mobile band".
- [2] Recommendation ITU-T E.161 (01-2001): "Arrangement of digits, letters and symbols on telephones and other devices that can be used for gaining access to a telephone network".
- [3] Recommendation ITU-R M.493-14 (2015): "Digital selective-calling system for use in the maritime mobile service".
- [4] Recommendation ITU-R M.541-10 (2015): "Operational procedures for the use of digital selective-calling equipment in the maritime mobile service".
- [5] ETSI EN 300 225 (V1.5.1) (12-2015): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Technical characteristics and methods of measurement for survival craft portable VHF radiotelephone apparatus".
- [6] Recommendation ITU-T O.41 (10-1994): "Psophometer for use on telephone-type circuits".
- [7] Recommendation ITU-R M.1084-5 (03-2012): "Interim solutions for improved efficiency in the use of the band 156-174 MHz by stations in the maritime mobile service".
- [8] ETSI TS 103 052 (V1.1.1) (03-2011): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Radiated measurement methods and general arrangements for test sites up to 100 GHz".