

Australian/New Zealand Standard

**MF and HF radiocommunications
equipment in the international maritime
mobile radiotelephone service
(ETS 300 373:1995, MOD)**

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STANDARDS
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AS/NZS 4582:2004

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 22 April 2004 and on behalf of the Council of Standards New Zealand on 30 April 2004. This Standard was published on 11 June 2004.

The following are represented on Committee RC-004:

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Australian Electrical and Electronic Manufacturers Association
Australian Federal Police
Australian Maritime Safety Authority
Australian Yachting Federation
Department of Defence, Australia
Electromagnetic Technical Evaluation Committee
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Australian/New Zealand Standard

MF and HF radiocommunications equipment in the international maritime mobile radiotelephone service (ETS 300 373:1995, MOD)

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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, as one of a series of Standards providing specifications for spectrum management and minimum radio equipment performance. It supersedes AS/NZS 4582:1999 which remains available superseded.

This Standard incorporates Amendment No. 1 (January 2005) and Amendment No. 2 (August 2013). The changes required by the Amendments are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

Technical Committee RC-004 has reviewed the content of this publication and has agreed that the publication is still valid and does not require change. The referenced documents have not been modified and users are advised to ensure they are using the latest version of the relevant documents.

AS/NZS 4582:1999 used an annex (ZZ) to apply amendments to a suitably marked, photographically reproduced copy of the base European Standard, ETS 300 373:1995.

At the time of publication AS/NZS 4582:1999 is the Standard referenced in the ACA Australian Communications Authority Standard *Radiocommunications (MF and HF Radiotelephone Equipment— International Maritime Mobile Service) Standard 2002*. The ACA consulted widely with industry in the making of the ACA Standard. As a result, a number of corrections and updates were included in the ACA Standard. The major variations relate to ITU regulation changes which remove the requirement for H3E emissions. To ensure visibility of these changes to users of the Standards Australia website, amendments were initiated by the ACA to the original Standard, through the RC-004 working committee. As a result of the Standards Australia consultation process, the committee developed some additional amendments which are published as amendment AS/NZS 4582:1999/Amdt 1:2004.

For legal purposes, AS/NZS 4582:1999 and the subsequent amendment, continues to be the Standard for performance reference by the ACA Standard.

This revised Standard is the result of work by Committee RC-004 to make the amended Standard much clearer and easier to use. It is an electronically edited, industry consolidation of the AS/NZS 4582:1999. It is developed from the Standard's base document ETS 300 373:1995 and ETS 300 373A:1997 Amdt, which has been incorporated into the source text. This standard includes—

- Annex ZL modifications of AS/NZS 4582:1999 as direct edits (see that process discussed in the following paragraph below);
- ACA variations to AS/NZS 4582:1999 as direct edits; and
- the latest amendments to AS/NZS 4582:1999 as published in amendment AS/NZS 4582:1999/Amdt 1:2004.

Variations to ETS 300 373:1995 are indicated at the appropriate places throughout this Standard. Strikethrough (**example**) identifies ETS text, tables and figures which, for the purposes of this Australian/New Zealand Standard, are deleted. Where text, tables or figures are added, each is set in its proper place and identified by shading (**example**). Added figures are not themselves shaded, but are identified by a shaded border.

The objective of this Standard is to specify the minimum requirements for radio transmitters and receivers, for use on ships, operating in either the Medium Frequency (MF) only or in the Medium and High Frequency (MF/HF) bands allocated in the International Telecommunications Union (ITU) Radio Regulations [1], to the Maritime Mobile Service (MMS).

As this Standard is reproduced from an International Standard, the following applies:

- (a) Its number does not appear on each page of text and its identity is shown only on the cover and title page.
- (b) In the source text 'this European Telecommunication Standard (ETS)' should read 'this Australian/New Zealand Standard'.
- (c) A full point should be substituted for a comma when referring to a decimal marker.
- (d) Any French text on figures should be ignored.

The term 'informative' has been used in this Standard to define the application of the annex to which it applies. An 'informative' annex is only for information and guidance.

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NOTES

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Any table, figure or text of the international standard that is struck through is not part of this standard. Any Australian/New Zealand table, figure or text that is added is part of this standard and is identified by shading.

1 Scope

This European Telecommunication Standard (ETS) states the minimum requirements for radio transmitters and receivers, for use on ships, operating in either the Medium Frequency (MF) only or in the Medium and High Frequency (MF/HF) bands allocated in the International Telecommunications Union (ITU) Radio Regulations [1], to the Maritime Mobile Service (MMS). Radio transmitters and receivers capable of operation only in the medium frequency (MF) are not permitted.

This ETS refers to equipment for one or more of the following:

- Single SideBand (SSB) modulation for telephony transmission and reception; (J3E) ~~and H3E as required~~ AM modulation for telephony; (H3E)

NOTE: From 1 July 2002 H3E emission is no longer required. (Refer to ITU Radio Regulations Appendix 13 Distress and Safety Communications.)

- Frequency Shift Keying (FSK) or SSB modulation of a keyed sub-carrier to transmit and receive Digital Selective Calling (DSC) signals in accordance with ITU-R Recommendation 493-5 [5].

This Standard also refers to equipment capable of narrow band direct printing telegraphy (NBDP). This ETS also refers to radio equipment, which is not integrated with the DSC encoder or decoder, but defines the interfaces with such equipment.

NOTE: The requirements for integrated equipment may be found in other relevant ETSS.

The tests in this ETS are applicable to receivers for operating on all frequencies in the bands 1 605 kHz to 4 000 kHz or 1 605 kHz to 27,5 MHz as allocated in the Radio Regulations [1], to the MMS. Equipment operating only in the frequency band 1605 kHz to 4000 kHz is not permitted.

Other spot frequency receivers should meet all the requirements of this ETS and other relevant standards as applicable for the frequencies and modes provided.

This ETS includes the International Maritime Organisation (IMO) and ITU requirements included in the relevant provisions of the Radio Regulations [1], the International Convention for the Safety Of Life At Sea (SOLAS) [3], and the IMO Resolutions A.421(XI), A.610(15), A.613(15), and A.694(17) [4].