EXPLANATORY STATEMENT

Issued by the Australian Communications and Media Authority

Radiocommunications (UHF CB Radio Equipment) Standard 2011 (No.1)

Radiocommunications Act 1992

Purpose

The *Radiocommunications (UHF CB Radio Equipment) Standard 2011 (No.1)* (the Standard) revokes the *Radiocommunications (UHF CB Radio Equipment) Standard 2004* (the 2004 Standard) and sets out the applicable performance and testing requirements for Ultra High Frequency Citizen Band Radio Service (UHF CBRS) equipment for the purposes of the Australian radiocommunications compliance and labelling regime.

The Standard also revokes the *Radiocommunications (UHF CB Radio Equipment) Standard 2011* that was made by the Australian Communications and Media Authority (the ACMA) on 18 February 2011. It was not registered on the Federal Register of Legislative Instruments. Hence it never commenced operation. It is being revoked to avoid doubt.

Legislative provisions

The Standard is made under subsection 162 (1) of the *Radiocommunications Act 1992* (the Act). Subsection 162 (1) allows the ACMA to make a standard in the form of a written instrument regulating the performance of specified devices or setting maximum permitted levels of radio emissions from devices other than radiocommunications devices within specified parts of the spectrum.

Subsection 162(3) provides that a standard made under section 162 may only consist of such requirements (relating to the performance of specified devices) that are necessary or convenient for:

- containing interference to radiocommunications, or to any uses or functions of devices;
- establishing adequate levels of immunity from electromagnetic disturbance for the operation of radiocommunications transmitters and receivers; and
- protecting the health or safety of persons who operate, work on, use or are likely to be affected by the services supplied by radiocommunications transmitters or receivers.

In making a standard, the ACMA may apply, adopt or incorporate (with or without modification) a standard in force from time to time, made by another person (section 314A of the Act).

Accordingly, the Standard provides that the applicable standard for performance of UHF CB radio equipment is the joint Australia/New Zealand AS/NZS 4365:2011 (*Radiocommunications equipment used in the UHF citizen band radio service*) as modified by the Standard. AS/NZS 4365:2011 was developed by Standards Australia Limited and can be purchased from Standards Australia International Global (SAI Global) Limited.

Background

The ACMA's radiocommunications regulatory arrangements require each supplier of a radiocommunications device that falls within the scope of an applicable standard to apply a compliance label to the device prior to supply to the market and to keep prescribed records. Compliance is determined against technical standards made under section 162 of the Act.

The *Radiocommunications Devices (Compliance Labelling) Notice 2003* (the Labelling Notice) made under section 182 of the Act, lists those standards and applies labelling and record keeping requirements in relation to radiocommunications devices covered by a listed standard.

The ACMA routinely makes standards under section 162 of the Act adopting technical requirements contained in industry standards made by Standards Australia.

From April 2008 to April 2010, the ACMA undertook a review of arrangements for the radiofrequency spectrum in the range 403-520 MHz (the 400 MHz band). The 400 MHz band accommodates the UHF CBRS.

The review determined that the overall benefit to the community from this band can be significantly improved through the introduction of a number of reforms. One proposed reform involves a restructure of the UHF CBRS band.

The UHF CBRS band occupies a 1 MHz segment of the 400 MHz band and is currently structured into forty 25 kHz wide channels. One of the decisions made by the ACMA in respect of the 400 MHz band review is that the UHF CBRS will be restructured into eighty 12.5 kHz wide channels.

Of the eighty channels, seventy-five will be available for speech purposes using emissions suitable for 12.5 kHz wide channels and two will continue to use wider emissions for telecommand and telemetry purposes as is permitted by the 2004 Standard. The remaining three channels are interleaved with and are partially occupied by emissions from the telecommand and telemetry channels. These will be unused and transmission on these channels is not permitted under the *Radiocommunications (Citizen Band Radio Stations) Class Licence 2002* (Class Licence).

The 2004 Standard, which is being revoked, addresses requirements for equipment designed to operate in 25 kHz channels and is unsuitable for the reformed UHF CBRS. The requirements in the Standard have been developed to support this reform of the UHF CBRS.

The Standard differs from the Radiocommunications (UHF CB Radio Equipment) Standard 2011 in one area of technical detail. The Radiocommunications (UHF CB Radio Equipment) Standard 2011 prescribed performance limits and test methods appropriate for equipment designed to operate in 12.5 kHz channels only. That is, The *Radiocommunications (UHF CB Radio Equipment) Standard 2011* required the usage of two channels reserved for telecommand and telemetry purposes to be in accordance with 12.5 kHz channelling technical requirements. That was a change relative to the requirements of the 2004 standard and was not intended. It does not adequately address technical requirements for the wider telecommand and telemetry emissions.

The Standard restores requirements permitting wider emissions on the two telecommand and telemetry channels to those of the 2004 standard. The Standard prescribes performance limits and test methods appropriate for equipment designed to operate in the seventy-five 12.5 kHz speech channels and for the wider emissions permitted on the two telecommand and telemetry channels.

Operation

The Standard prescribes performance requirements for UHF CB Radio equipment, which is defined as radiocommunications transmitters and receivers that can operate on a frequency specified by the ACMA for the provision of UHF CB radio services in Australia, other than repeater stations. It is intended to cover UHF CB radio equipment to be used in the reformed UHF CBRS using 12.5 kHz channel spacing. Seventy-five channels are reserved for speech purposes using 12.5 kHz channel spacing, two remain in use with wider emissions for telecommand and telemetry applications and the remaining three channels are unused.

The Standard keeps emission bandwidth requirements for the two telecommand and telemetry channels as they are in effect at present under the 2004 Standard.

The Standard revokes:

- the *Radiocommunications (UHF CB Radio Equipment) Standard 2004*; and
- the *Radiocommunications (UHF CB Radio Equipment) Standard 2011*.

In order to allow for a transition period, the Standard provides that UHF CB radio equipment compliant with the 2004 Standard will be taken to be compliant with the Standard if the equipment is manufactured or imported within 18 months after the Standard commences.

Equipment that complies with the 2004 Standard may be operated lawfully for approximately 6 years from the commencement of the Standard under the terms of the Class Licence as varied.

This means that 25 kHz speech equipment that meets the previous standard may not be used after the period specified in the Class Licence.

It is intended that after 18 months from the commencement of the Standard 25 kHz channel spacing speech equipment that is manufactured, imported, altered or modified in a material way will be non-standard equipment for the purposes of the Act. The supply of a non-standard device may be in breach of section 160 of the Act.

Similarly, 25 kHz channel spacing speech equipment manufactured, imported, altered or modified in a material way after the commencement of the Standard that is used after the period specified in the Class Licence is intended to be taken as the use of or transmission from a non-standard device which may be in breach of section 157 of the Act.

This is intended to provide industry with an 18 month period in which to clear stocks of 25 kHz speech equipment and users with the expectation of a (approximately) 6 year service life for 25 kHz speech equipment from the commencement of the Standard.

Consultation

Section 163 of the Act requires that before the ACMA makes a section 162 standard, the ACMA must ensure, so far as practicable, that interested parties have an opportunity to comment on a proposed standard and that due consideration be given to any comments received. This section is consistent with the consultation requirements arising from section 17 of the *Legislative Instruments Act 2003*.

AS/NZS 4365:2011 on which the standard for performance is based, was developed by a committee comprising regulators (including representatives from the ACMA) relevant sections of industry, consumer groups and interested parties. In developing AS/NZS 4365:2011, Standards Australia consulted with both industry and the community.

In respect of the Standard, a general call for comments was publicised on the homepage of the ACMA website as an 'Issue for Comment', number 23/2010. Issue For Comment 23/2010 was also promoted in the "What's new" section of the ACMA "Equipment compliance & labelling (A-Tick/C-Tick)" webpage. Email invitations to comment were also sent to fifty-one stakeholders from a broad range of industry sectors and to members of Standards Australia radiocommunications committees RC-004 and RC-006.

These stakeholders included the New Zealand Ministry of Economic Development, the National Association of Testing Authorities, design and engineering consultants, regulatory compliance consultants, manufacturers and importers, peak associations of manufacturers and importers, Standards Australia Limited and test houses.

A total of 13 responses were received. Responses either supported or made no comment on the adoption of AS/NZS 4365:2011. None of the responses opposed the adoption of the AS/NZS 4365:2011 by the ACMA.

The main concern raised by respondents centred on a proposed 6 month period for the supply of 25 kHz channel speech equipment once the Standard commences. Industry were

concerned that this was not long enough for suppliers to clear old stock. In response to feedback from industry, the ACMA has provided industry with a period of 18 months within which to continue the importation and manufacture of 25 kHz speech equipment.

Following the identification of the technical inconsistency in the *Radiocommunications (UHF CB Radio Equipment) Standard 2011* further consultation was undertaken. Email advice of the intended change together with an invitation to comment was sent to the same stakeholders mentioned above including industry representatives such as Standards Australia radiocommunications technical committees, industry peak bodies, the New Zealand regulator (Ministry of Economic Development) and all parties that responded to the original consultation exercise. As at the date of the making of the Standard, four industry representatives have responded with none expressing opposition to the Standard or its referencing in the Labelling Notice.

Regulation Impact

The Office of Best Practice Regulation (OBPR) was consulted on the making of the *Radiocommunications (UHF CB Radio Equipment) Standard 2011* and it advised that it considered the making of the instrument to have minor and machinery impacts and that further analysis in the form of a Regulation Impact Statement is not required (OBPR Reference No. 11897).

OBPR was further consulted on the making of the Standard and it advised that it considered the making of the Standard to have minor and machinery impacts and that further analysis in the form of a Regulation Impact Statement is not required. ACMA staff were advised by OBPR that the OBPR Reference No. 11897 would also apply in respect of the making of the Standard.

Documents incorporated into this Standard by Reference

The Australian / New Zealand standard *AS/NZS 4365:2011 Radiocommunications equipment used in the UHF citizen band radio service* is incorporated by reference.

Notes on the instrument

Section 1 - Name of Standard

This section provides that the name of the Standard is the *Radiocommunications (UHF CB Radio Equipment) Standard 2011 (No.1)*.

Section 2 - Commencement

This section provides that the Standard commences on the later of the day after it is registered on the Federal Register of Legislative Instruments and the commencement of the *Radiocommunications (Citizen Band Radio Stations) Class Licence Variation 2011 (No.1)*. Both of these events must occur before the Standard commences.

Section 3 - Revocation of specified instruments

This section revokes both of the following instruments:

a) the previous standard in effect for UHF CB radio equipment, the *Radiocommunications (UHF CB Radio Equipment) Standard 2004*: and

b) the *Radiocommunications (UHF CB Radio Equipment) Standard 2011.*

Section 4 - Definitions

This section defines the terms used in the Standard, including the “Act”, “UHF CB radio equipment”, “model”, “radiocommunications equipment” and “significant event”.

“AS/NZS 4365:2011” is defined as the standard of that number published by Standards Australia as in force from time to time.

The definition of “device” is intended to ensure that stand alone radiocommunications transmitters, stand alone radiocommunications receivers and combined radiocommunications transmitters and receivers (transceivers) fall within the scope of the standard.

The definition of “multi-role device” defines radiocommunications transmitters and receivers that can operate in the UHF CBRS in addition to being able to operate on some other radio frequency. For example, a land mobile radio service transceiver that can also operate in the UHF CBRS is a multi-role device. The definitions reflect industry standard meanings and understandings of these terms.

The Note to section 4 provides a list of the terms used in the Standard that are defined in the Act or in the *Radiocommunications (Interpretation) Determination 2000.*

Section 5 - Application

This section states that the Standard applies to UHF CB radio equipment, other than equipment imported solely for use in connection with a significant event, and multi-role devices in respect their operation on frequencies other than those specified by the ACMA for UHF CB radio services in Australia.

A multi-role device must comply with the Standard in respect of its operation in the UHF CBRS. For example, a device capable of operating in a range of radio services that can also operate in the UHF CBRS must comply with the Standard when operating in the UHF CBRS and also with other standards applicable to any other radio service when operating in those services.

Section 6 - Standard for performance

This section provides that subject to section 7, the standard for performance is the AS/NZS 4365:2011 standard, except for the modifications and omissions provided in subsections 6(2) to 6(7).

- Clause 5.2, and references to New Zealand, the MED and GURL in clauses 5.3 and 5.8 and in notes to Table 1 are omitted from the standard.
- Clause 5.3(a) is replaced with the clause 5.3(a) set out in subsection 6(3) of the Standard.
- Clause 6.7.3 is replaced with the clause 6.7.3 set out in subsection 6(5) of the Standard.
- Clause 6.7.4 is replaced with the clause 6.7.4 set out in subsection 6(6) of the Standard.
- Clause 6.7.5 is inserted after clause 6.7.4 as set out in subsection 6(7) of the Standard.

Subsections 6 (5) and 6(6) amend the adjacent channel power performance requirements and test method applicable to telecommand and telemetry transmissions to those appropriate for operation using emissions suitable for a 25 kHz channel.

Subsection 6(7) inserts a set of requirements for the characteristics of a power measuring receiver required under subsection 6(6).

Section 7- Compliance with this Standard - devices complying with the former Standard

This section implements transitional arrangements for equipment that complies with the former standard.

It provides that equipment that complies with the *Radiocommunications (UHF CB Radio Equipment) Standard 2004* (the former standard) and is manufactured or imported within 18 months after the commencement of the Standard will be taken to comply with the Standard.