

## **EXPLANATORY STATEMENT**

### **Issued by the Australian Communications and Media Authority**

*The Radiocommunications (Electromagnetic Radiation – Human Exposure) Amendment Standard 2011 (No. 1)*

### ***Radiocommunications Act 1992***

#### **Purpose**

The *Radiocommunications (Electromagnetic Radiation – Human Exposure) Amendment Standard 2011 (No. 1)* (the Amendment Standard) modifies the existing *Radiocommunications (Electromagnetic Radiation – Human Exposure) Standard 2003* (the existing Standard) to adopt the international test methodology, known as IEC 62209-1, EN 62209-2 and EN 62209-2 to be used in the health exposure assessment of mobile/cordless phones and similar devices.

#### **Legislative provisions**

The existing Standard is made under subsection 162(1) of the *Radiocommunications Act 1992* (the Act). Subsection 162(1) allows the Australian Communications and Media Authority (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 Amendment Standard amends the existing Standard to adopt the following additional international Electromagnetic Emissions (EME) test method standards, to run concurrently with the existing mandated international EME test method standard EN 62209-1,

- IEC 62209-1 *Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices - Human models, instrumentation, and procedures - Part 1: Procedure to determine the specific absorption rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz), and*
- IEC 62209-2 and EN 62209-2 *Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices - Human models, instrumentation, and procedures - Part 2: Procedure to determine the specific absorption rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz).*

## Background

The ACMA regulates human exposure to EME from radiocommunications transmitters to protect the health and safety of persons exposed to emissions from these transmitters.

The ACMA regulates EME compliance of portable transmitters with integral antennas, such as mobile telephones and hand-held two-way radios, at point of supply by way of the *Radiocommunications (Compliance Labelling – Electromagnetic Radiation) Notice 2003* (the Labelling Notice). The Labelling Notice, made under section 182 of the Act, lists the applicable standards.

The ACMA's EME regulatory arrangements require each supplier of a radiocommunications device that falls within the scope of the existing 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 ACMA routinely makes standards under section 162 of the Act adopting technical requirements contained in industry standards made by Standards Australia and international standards making bodies including the International Electrotechnical Commission (IEC), the Comité International Spécial des Perturbations Radioélectriques (CISPR) and the European Telecommunications Standards Institute (ETSI).

The EME exposure limits are defined by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) in its publication the *Radiation Protection Standard for Maximum exposure Levels to Radiofrequency Fields – 3kHz to 300 GHz (2002)* (the ARPANSA standard). The ARPANSA standard is available on the ARPANSA website.

The ACMA is not an expert body in the health effects of EME to humans and therefore takes the advice of ARPANSA and adopts the ARPANSA standard in its regulatory arrangements.

## Operation

The Amendment Standard adopts the EME test method standards IEC 62209-1, IEC 62209-2 and EN 62209-2. Within two years these will replace the current EME test methods which are applicable only to Australia.

As a result, a supplier will be able to choose to demonstrate compliance for transmitters used in close proximity to the ear by way of a compliant test report to IEC 62209-1 in addition to the current requirement of demonstrating compliance with EN 62209-1.

To facilitate the changes imposed in adopting IEC 62209-2 and EN 62209-2 the ACMA intends to provide a two year overlap period where a manufacturer/supplier may choose to comply with either the existing or the new arrangements for particular radiocommunications transmitters used within 20 cm from the human body. The purpose of these arrangements is to assist industry in the transition from the old to the new requirements.

The ACMA proposes to continue to apply labelling requirements to the amended existing Standard by way of the Labelling Notice consistent with those applied to the existing Standard. This imposes no change on the relative regulatory burden between the proposed and existing standards.

## 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*.

A general call for comment on the amendment was made from the ACMA website home page commencing on 19 November 2010 concluding on 20 December 2010. In addition, a broad range of radiocommunications industry peak bodies, manufacturers, importers, consultants and Government agencies were directly canvassed for comment.

All feedback received expressed support for the Amendment Standard.

### **Regulation Impact**

The Office of Best Practice Regulation (the OBPR) has advised that it considers the making of the Amendment Standard will have minor and machinery impacts and that further analysis in the form of a Regulation Impact Statement is not required (OBPR Reference No. 2010/12142).

### **Documents incorporated into this Standard by Reference**

IEC 62209-1 *Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices - Human models, instrumentation, and procedures - Part 1: Procedure to determine the specific absorption rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)*, and

IEC 62209-2 and EN 62209-2 *Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices - Human models, instrumentation, and procedures - Part 2: Procedure to determine the specific absorption rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)*.

### **Notes on the instrument**

#### **Section 1 Name of Standard**

Section 1 provides that the Amendment Standard is to be named the *Radiocommunications (Electromagnetic Radiation — Human Exposure) Amendment Standard 2011 (No. 1)*.

#### **Section 2 Commencement**

Section 2 provides that the Amendment Standard commences on 1 February 2011.

#### **Section 3 Amendment of *Radiocommunications (Electromagnetic Radiation – Human Exposure) Standard 2003***

Section 3 provides that the existing Standard is amended as detailed in Schedule 1 of the Amendment Standard.

## **Schedule 1          Amendments**

### **[1]      Subsection 5 (1), after definition of EN 62209-1**

This amendment inserts the definition of EN 62209-2.

### **[2]      Subsection 5 (1), after definition of human body**

This amendment inserts the definitions of IEC 62209-1 and IEC 62209-2.

### **[3]      Subsection 10 (2) and (3)**

This amendment provides that from 1 February 2011, the use of test methodology EN 62209-1 or IEC 62209-1 will be permitted to determine if a device meets the amended existing Standard (that is, the existing Standard once amended by the Amendment Standard).

### **[4]      Subsections 11 (2) and (3)**

This amendment provides transitional arrangements to permit the use of test methodologies specified by Schedule 2 of the amended existing Standard, or EN 62209-2 or IEC 62209-2 to determine whether a device meets the amended existing Standard before 1 February 2013.

After 1 February 2013 Schedule 2 of the amended existing Standard will no longer be applicable and only the use of test methodologies EN 62209-2 or IEC 62209-2 will be permitted to determine whether a device meets the amended existing Standard.