EXPLANATORY STATEMENT

Approved by the Australian Communications and Media Authority

Radiocommunications Act 1992

Radiocommunications (Electromagnetic Compatibility) Standard 2017

Authority

The Australian Communications and Media Authority (**the ACMA**) has made the *Radiocommunications (Electromagnetic Compatibility) Standard 2017* (**the Standard**) under subsection 162(1) of the *Radiocommunications Act 1992* (**the Act**) and subsection 33(3) of the *Acts Interpretation Act 1901* (**the AIA**).

Subsection 162(1) of the Act provides that the ACMA may, by legislative instrument, make standards for the performance of specified devices or for the maximum permitted level of radio emissions from devices (other than radiocommunications from radiocommunications devices in accordance with Chapter 3 of the Act) within specified parts of the spectrum.

Subsection 33(3) of the AIA relevantly provides that where an Act confers a power to make a legislative instrument, the power shall be construed as including a power exercisable in the like manner and subject to the like conditions (if any) to repeal, rescind, revoke, amend, or vary any such instrument.

Purpose and operation of the Standard

Under subsection 162(1) of the Act, the ACMA has made the Standard for the performance and maximum permitted level of radio emissions from devices, by reference to a list of industry standards that set out technical performance matters (including test methods and limits). Subject to certain exemptions in Divisions 4 and 5 of Part 4.1 of the Act:

- it is an offence under section 158 of the Act for a person to have in his or her possession a device that the person knows to be a non-standard device; and
- it is an offence under section 160 for a person to supply a device that the person knows to be a non-standard device.

A non-standard device is a device that does not comply with the requirements of a section 162 standard that applies to the device.

In concert with the *Radiocommunications Labelling (Electromagnetic Compatibility) Notice 2017* (**the EMC Labelling Notice**) made under subsection 182(1) of the Act, the Standard regulates the supply of devices in Australia. The Standard adopts industry standards that set performance and radio emission level requirements for specified devices.

The EMC Labelling Notice imposes testing, labelling and record-keeping obligations for manufacturers and importers of those devices subject to an applicable section 162 standard.

The key purpose of the Standard and the EMC Labelling Notice is to manage the risk of unintentional electromagnetic interference from devices that may affect the performance of other devices, or cause interference to radiocommunications.

Sunsetting provisions

Under Part 4 of Chapter 3 of the *Legislation Act 2003* (**the LA**), most legislative instruments 'sunset' (that is, they are automatically repealed) on the 1 April or 1 October that first occurs 10 years after they are registered.

Standards made by the ACMA under section 162 of the Act are subject to sunsetting. The ACMA has made the Standard to repeal and replace the *Radiocommunications (Electromagnetic Compatibility) Standard 2008* (**the 2008 Standard**) because the 2008 Standard is due to sunset on 1 April 2018.

The Standard does not substantially change the regulatory arrangements created by the 2008 Standard. The ACMA has formed the view that the 2008 Standard was operating effectively and efficiently and, as such, continues to form a necessary and useful part of the legislative framework. Accordingly, the ACMA has made the Standard to replace the 2008 Standard prior to the date on which it would be automatically repealed, so that the ongoing effect of the Standard is preserved.

A provision-by-provision description of the Standard is set out in the notes at **Attachment A**.

The Standard is a legislative instrument for the purposes of the LA.

Documents incorporated by reference

An instrument made under the Act may make provision for certain matters by applying, adopting or incorporating (with or without modifications) matters contained in any other instrument or writing, as in force or existing at a particular time or from time to time, even if the other instrument or writing does not yet exist when the first instrument is made (subsection 314A(2) of the Act).

The Standard adopts, by reference, a list of standards (both Australian and international) published on the ACMA website, as in existence from time to time. The Standard provides that, in order to be included in the list of standards, a document must consist of or include requirements that are necessary or convenient for containing interference to radiocommunications or containing interference to any uses of functions of devices. A document must also have been created by Standards Australia, the International Electrotechnical Commission, the European Committee for Electrotechnical Standardization or another standards development organisation.

At the date of making the Standard, the list of standards included the following industry standards:

Industry Standard	Full title of Standard
AS/NZS 61000.6.3 EN 61000-6-3 IEC 61000-6-3	Electromagnetic compatibility (EMC) – Part 6.3: Generic standards – Emission standard for residential, commercial and light-industrial environments
AS/NZS 61000.6.4 EN 61000-6-4 IEC 61000-6-4	Electromagnetic compatibility (EMC) – Part 6.4: Generic standards – Emission standard for industrial environments
EN 50083-2	Cabled networks for television signals and interactive services - Part 2: Electromagnetic Compatibility for Equipment
IEC 60728-2	Cabled distribution systems for television and sound signals- Part 2: Electromagnetic Compatibility for Equipment
AS/NZS CISPR 11 CISPR 11 EN 55011	Industrial scientific and medical (ISM) radio-frequency equipment – Electromagnetic disturbance characteristics – Limits and methods of measurement

Industry Standard	Full title of Standard
AS/NZS CISPR 12 EN 55012 CISPR 12	Vehicles, boats and internal combustion engine driven devices – Radio disturbance characteristics – Limits and methods of measurement for the protection of receivers except those installed in the vehicle/boat/device itself or in adjacent vehicles/boats/devices
AS/NZS CISPR 13	Sound and television broadcast receivers and associated equipment – Radio disturbance characteristics – Limits and methods of measurement
AS/NZS CISPR 14.1 EN 55014-1 CISPR 14-1	Electromagnetic Compatibility – Requirements for household appliances, electric tools and similar apparatus – Part 1: Emissions
AS/NZS CISPR 15 EN 55015 CISPR 15	Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment
AS/NZS CISPR 22	Information technology equipment – Radio disturbance characteristics – Limits and methods of measurement
AS/NZS CISPR 32 EN 55032 CISPR 32	Electromagnetic compatibility of multimedia equipment - Emission requirements
EN 60974-10 IEC 60974-10	Arc welding equipment – Part 10: Electromagnetic compatibility (EMC) requirements
EN 50065-1	Specification for signalling on low-voltage electrical installations in the frequency range 3 kHz to 148.5 kHz. General requirements, frequency bands and electromagnetic disturbances
IEC 61000-3-8	Electromagnetic compatibility (EMC) - Part 3: Limits - Section 8: Signalling on low-voltage electrical installations - Emission levels, frequency bands and electromagnetic disturbance levels
AS 62040.2 EN 62040-2 IEC 62040-2	Uninterruptible power systems (UPS) - Part 2: Electromagnetic compatibility (EMC) requirements
EN 50148	Electronic taximeters
EN60255-26	Measuring relays and protection equipment – Part 26: Electromagnetic compatibility requirements
EN 50270	Electromagnetic compatibility. Electrical apparatus for the detection and measurement of combustible gases, toxic gases or oxygen
EN 55103-1	Electromagnetic compatibility - Product family standard for audio, video, audio-visual and entertainment lighting control apparatus for professional use - Part 1: Emission
EN 60204-31 IEC 60204-31	Safety of machinery - Electrical equipment of machines - Part 31: Particular safety and EMC requirements for sewing machines, units and systems
EN 61439-1 IEC 61439-1	Low-voltage switchgear and control gear assemblies - Part 1: Type-tested and partially type-tested assemblies
	Low-voltage switchgear and control gear assemblies - Part 1: General rules

Industry Standard	Full title of Standard
EN 60669-2-1 IEC 60669-2-1	Switches for household and similar fixed electrical installations - Part 2-1: Particular requirements - Electronic switches
EN 60669-2-2 IEC 60669-2-2	Switches for household and similar fixed electrical installations - Part 2-2: Particular requirements - Electromagnetic remote-control switches (RCS)
EN 60669-2-3 IEC 60669-2-3	Switches for household and similar fixed electrical installations - Part 2-3: Particular requirements - Time-delay switches (TDS)
EN 62053-22 IEC 62053-22	Electricity metering equipment (a.c.) - Particular requirements - Part 22: Static meters for active energy (classes 0,2 S and 0,5 S)
EN 60730-1 IEC 60730-1	Automatic electrical controls for household and similar use - Part 1: General requirements
EN 60730-2-5 IEC 60730-2-5	Automatic electrical controls for household and similar use - Part 2-5: Particular requirements for automatic electrical burner control systems
EN 60730-2-6 IEC 60730-2-6	Automatic electrical controls for household and similar use - Part 2-6: Particular requirements for automatic electrical pressure sensing controls including mechanical requirements
EN 60730-2-7 IEC 60730-2-7	Automatic electrical controls for household and similar use. Part 2: Particular requirements for timers and time switches
EN 60730-2-8 IEC 60730-2-8	Automatic electrical controls for household and similar use - Part 2-8: Particular requirements for electrically operated water valves, including mechanical requirements
EN 60730-2-9 IEC 60730-2-9	Automatic electrical controls for household and similar use - Part 2-9: Particular requirements for temperature sensing controls
EN 60730-2-11 IEC 60730-2-11	Automatic electrical controls for household and similar use - Part 2-11: Particular requirements for energy regulators
EN 60730-2-13 IEC 60730-2-13	Automatic electrical controls for household and similar use - Part 2-13: Particular requirements for humidity sensing controls
EN 60730-2-14 IEC 60730-2-14	Automatic electrical controls for household and similar use - Part 2-14: Particular requirements for electric actuators
IEC 60730-2-15 EN 60730-2-15	Automatic electrical controls for household and similar use - Part 2: Particular requirements for automatic electrical water and air flow sensing controls
EN 60870-2-1 IEC 60870-2-1	Telecontrol equipment and systems - Part 2: Operating conditions - Section 1: Power supply and electromagnetic compatibility
EN 60945 IEC 60945	Maritime navigation and radio-communication equipment and systems - General requirements - Methods of testing and required test results
EN 60947-1	Low-voltage switch gear and control gear - Part 1: General rules
EN 60947-2 IEC 60947-2	Low-voltage switchgear and control gear - Part 2: Circuit-breakers
EN 60947-3 IEC 60947-3	Low-voltage switch gear and control gear - Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units

Industry Standard	Full title of Standard
EN 60947-4-1 IEC 60947-4-1	Low-voltage switch gear and control gear - Part 4-1: Contactors and motor-starters - Electromechanical contactors and motor-starters
EN 60947-4-2 IEC 60947-4-2	Low-voltage switch gear and control gear - Part 4-2: Contactors and motor-starters - AC semiconductor motor controllers and starters
EN 60947-4-3 IEC 60947-4-3	Low-voltage switch gear and control gear - Part 4-3: Contactors and motor-starters - AC semiconductor controllers and contactors for non-motor loads
EN 60947-5-1 IEC 60947-5-1	Low-voltage switch gear and control gear - Part 5-1: Control circuit devices and switching elements - Electromechanical control circuit devices
EN 60947-5-2 IEC 60947-5-2	Low-voltage switch gear and control gear - Part 5-2: Control circuit devices and switching elements - Proximity switches
EN 60947-5-3 IEC 60947-5-3	Low-voltage switch gear and control gear - Part 5-3: Control circuit devices and switching elements - Requirements for proximity devices with defined behaviour under fault conditions (PDF)
EN 60947-5-6 IEC 60947-5-6	Low-voltage switch gear and control gear - Part 5-6: Control circuit devices and switching elements - DC interface for proximity sensors and switching amplifiers (NAMUR)
EN 60947-6-1 IEC 60947-6-1	Low-voltage switch gear and control gear - Part 6-1: Multiple function equipment - Transfer switching equipment
EN 60947-6-2 IEC 60947-6-2	Low-voltage switch gear and control gear - Part 6-2: Multiple function equipment - Control and protective switching devices (or equipment) (CPS)
EN 61008-1 IEC 61008-1	Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCBs) - Part 1: General rules
EN 62053-21 IEC 62053-21	Electricity metering equipment (a.c.) - Particular requirements - Part 21: Static meters for active energy (classes 1 and 2)
EN 62054-11 IEC 62054-11	Electricity metering (a.c.) - Tariff and load control - Part 11: Particular requirements for electronic ripple control receivers
EN 62054-21 IEC 62054-21	Electricity metering (a.c.) - Tariff and load control - Part 21: Particular requirements for time switches
EN 62053-23 IEC 62053-23	Electricity metering equipment (a.c.) - Particular requirements - Part 23: Static meters for reactive energy (classes 2 and 3)
EN 61326-1 IEC 61326-1	Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 1: General requirements
EN 61543 IEC 61543	Residual current-operated protective devices (RCDs) for household and similar use - Electromagnetic compatibility
EN 61800-3 IEC 61800-3	Adjustable speed electrical power drive systems - Part 3: EMC requirements and specific test methods
EN 61812-1 IEC 61812-1	Specified time relays for industrial use - Part 1: Requirements and tests

Industry Standard	Full title of Standard
EN 300 386	Electromagnetic compatibility and Radio spectrum Matters (ERM); Telecommunication network equipment; Electromagnetic Compatibility (EMC) requirements
ISO 13766	Earthmoving Machinery –Electromagnetic compatibility
ISO 14982	Agricultural and forestry machinery – Electromagnetic compatibility – Test methods and acceptance criteria
EN 50561-1	Power Line Communication Apparatus Used In Low-Voltage Installations - Radio Disturbance Characteristics - Limits And Methods Of Measurement - Part 1: Apparatus For In-Home Use
UN ECE R10	Uniform provisions concerning the approval of vehicles with regard to electromagnetic compatibility

A copy of an industry standard referred to in the list of standards could, at the date of making this Standard be obtained as follows:

Standards beginning with the prefix …	Name/s of standards development organisation	Website address
AS/NZS	Joint Australian/New Zealand standards	http://www.standards.org.au
AS	Standards Australia	http://www.standards.org.au
CISPR	The Comité International Spécial des Perturbations Radioélectriques	http://www.iec.ch
IEC	International Electrotechnical Commission	http://www.iec.ch
ISO	International Organisation for Standardisation	http://www.iso.org
EN	European Committee for Standardization European Committee for Electrotechnical Standardization European Telecommunications Standards Institute	Available from any of the National Committees which are listed at https://www.cenelec.eu/dyn/www/f?p+web:5
UN ECE	The United Nations Economic Commission for Europe	https://www.unece.org/?id=39139

If, in any case, the industry standard could only be obtained for a fee from the organisation that created the standard, it could be viewed at an office of the ACMA or Australian Competition and Consumer Commission on prior request to the ACMA and subject to licensing conditions.

The Standard also incorporates the following documents by reference, or otherwise refers to them:

- the Act;
- the *Radiocommunications (Interpretation) Determination 2015* (**the Interpretation Determination**); and
- the EMC Labelling Notice.

The Act, the Interpretation Determination and the EMC Labelling Notice can each be found on the Australian Government's Federal Register of Legislation (http://www.legislation.gov.au).

Consultation

Before the Standard was made, the ACMA was satisfied that consultation was undertaken that was appropriate and reasonably practicable, in accordance with section 17 of the LA.

Subsection 163(1) of the Act requires that, before the ACMA makes a standard the ACMA must, so far as is practicable, try to ensure that interested persons have had an adequate opportunity to make representations about the proposed standard and that due consideration has been given to any representations so made.

The ACMA conducted a public consultation process during the period 24 August to 29 September 2017 in relation to the proposal to make the Standard. A consultation paper and a draft of the Standard were made available on the ACMA website. The consultation paper explained the sunsetting (automatic repeal) process and the ACMA's preliminary view that the existing arrangements should be continued in the Standard without any significant changes. Interested parties were notified of the release of the discussion paper and invited to comment.

The ACMA received four submissions from industry in response to the consultation paper. None of the submissions dealt with the substance or operation of the Standard. Accordingly, no further drafting changes to the Standard were necessary.

Regulatory impact assessment

A preliminary assessment of the proposal to make the Standard was conducted by the Office of Best Practice Regulation (**OBPR**), based on information provided by the ACMA, for the purposes of determining whether a Regulation Impact Statement (**RIS**) would be required. OBPR advised that the Standard may have more than minor regulatory impacts, but that a RIS would not be required if the ACMA assessed the 2008 Standard to be operating effectively and efficiently (OBPR reference number 22316). Having conducted consultation as described above, the ACMA has assessed the 2008 Standard as operating effectively and efficiently.

Statement of compatibility with human rights

Subsection 9(1) of the *Human Rights (Parliamentary Scrutiny) Act 2011* requires the rule-maker in relation to a legislative instrument to which section 42 (disallowance) of the LA applies to cause a statement of compatibility to be prepared in respect of that legislative instrument.

This statement has been prepared in accordance with Part 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011*.

Overview of the instrument

As noted above, the purpose of the Standard is to repeal and replace the 2008 Standard because it was due to sunset on 1 April 2018, with no substantive changes to the operation or effect of the 2008 Standard.

The Standard requires specified devices to comply with particular technical requirements and to meet maximum radio emission requirements (as set out in particular industry standards incorporated into the Standard). These requirements are designed to contain interference caused by devices to radiocommunications or to any uses or functions of other devices.

Human rights implications

The ACMA has assessed whether the Standard is compatible with human rights, being the human rights and freedoms recognised or declared by the international instruments listed in subsection 3(1) of the *Human Rights (Parliamentary Scrutiny) Act 2011* as they apply to Australia.

Having considered the likely impact of the Standard and the nature of the applicable rights and freedoms, the ACMA has formed the view that the Standard does not engage any of those rights or freedoms.

Conclusion

The Standard is compatible with human rights as it does not raise any human rights issues.

Attachment A

Notes to the *Radiocommunications (Electromagnetic Compatibility) Standard 2017*

Part 1–Preliminary

Section 1 Name

This section provides for the Standard to be cited as the *Radiocommunications (Electromagnetic Compatibility) Standard 2017*.

Section 2 Commencement

This section provides for the Standard to commence at the start of the day after it is registered on the Federal Register of Legislation.

The Federal Register of Legislation may be accessed at www.legislation.gov.au.

Section 3 Authority

This section identifies the provision of the Act that authorises the making of the Standard, namely subsection 162(1) of the Act.

Section 4 Repeal of the *Radiocommunications (Electromagnetic Compatibility) Standard 2008*

This section repeals the 2008 Standard, which the Standard has replaced.

Section 5 Background

Subsection 5(1) provides that the Standard applies to particular devices, as provided by section 9, and is made for the performance of those devices.

Subsection 5(2) provides, pursuant to subsection 163(3) of the Act, that the Standard consists only of such requirements that are necessary or convenient for the purposes of:

(a) containing interference to radiocommunications; or
(b) containing interference to any uses or functions of devices.

Part 2 – Interpretation

Section 6 Definitions

Subsection 6(1) defines a number of key terms used throughout the Standard.

A number of other expressions used in the Standard are defined in the Act and the Interpretation Determination.

Subsection 6(2) defines the ***list of standards***, each entry on which forms an applicable industry standard that is applied to devices by the Standard. For a document to be included on the list of standards:

- the title of the document must appear in a list published on the web address http://www.acma.gov.au/standards/emc;

- the document must consist of, or include, requirements necessary or convenient for containing interference to radiocommunications or containing interference to any uses or functions of devices; and
- the document must have been created by Standards Australia, International Electrotechnical Commission, European Committee for Electrotechnical Standardization or another standards development organisation.

When considering whether an industry standard should be added or removed from the list of standards, technical advice may be sought from Standards Australia's technical electromagnetic compatibility (***EMC***) committee TE-003.

Section 7 References to other instruments

This section provides that in the Standard, as permitted by section 314A of the Act and unless the contrary intention appears:

- a reference to any other legislative instrument is a reference to that other legislative instrument as in force from time to time; and
- a reference to any other kind of instrument or writing is a reference to that other instrument or writing as in force from time to time.

Section 8 Applicable industry standard

This section defines what constitutes an applicable industry standard.

The list of standards (published on the ACMA's website at www.acma.gov.au/standards/emc) is divided into two parts: Part 1 "generic standards" and Part 2 "product family and equipment standards".

Subsection 8(1) includes a table to be used to identify the applicable industry standard for a device (subject to subsections (2), (3) and (4)). Item 1 of the table provides that the applicable industry standard for a device is a document that is listed in column 2 of Part 2 of the list of standards that is expressed to apply to the device. If multiple documents in Part 2 of the list of standards are expressed to apply to the device, the manufacturer of the device in Australia or the importer of the device into Australia may choose one of those documents as the applicable industry standard for the device (subsection 8(3)). The EMC regulatory arrangement requires compliance with only one applicable industry standard, though several may be suitable.

Item 2 of the table in subsection 8(1) provides that if no document in column 2 of Part 2 of the list of devices is expressed to apply to the device, any one of the generic standards listed in column 2 of Part 1 of the list of standards is the applicable industry standard for the device.

Subsection 8(2) of the Standard provides that if a document listed in column 2 of Part 1 or 2 of the list of standards has expired, that document will not be an applicable industry standard.

Section 8(4) provides that a document listed in column 2 of the list of standards may be modified by remarks in column 10 of the list of standards. If there are remarks that modify the application or requirements of that document, then the applicable industry standard for the device is the document as modified by those remarks.

Part 3–Application and requirements

Section 9 Application

This section provides that the Standard applies to all devices that are manufactured in, or imported into, Australia for supply in Australia, unless the device is mentioned in Schedule 2 to the EMC Labelling Notice.

Schedule 2 to the EMC Labelling Notices lists the device to which that Notice does not apply.

Section 10 Requirement

This section provides that a device must comply with an applicable industry standard for the device, as in force on either the day the device was manufactured in Australia or the day the device was imported, as the case may be.

The note to this section further explains that a device must comply with an applicable industry standard for the device only to the extent that its requirement that relate to interference with radiocommunications or to any uses or functions of devices.

Section 11 Transition periods – choice of applicable industry standard

Subsection 11(1) defines the term ***transition period***. A transition period in relation to an applicable industry standard will apply if an applicable industry standard is amended or replaced.

If the applicable industry standard is created by the European Committee for Electrotechnical Standardization, the transition period will be the Official Journal period. The term ***Official Journal period*** is defined in subsection 6(1) to mean the period commencing on the day the applicable industry standard is amended or replaced and ending on the date of cessation of presumption of conformity mentioned from time to time in the Official Journal of the European Union for the applicable industry standard.

If the applicable industry standard is created by any other standards development organisation, the transition period will be two years from the day on which the applicable industry standard was amended or replaced.

Subsection 11(2) deals with the scenario where a device is manufactured or imported during a transition period which is triggered by the amendment or replacement of an applicably industry standard. In such a case, the manufacturer or importer of the device may choose whether the applicable industry standard for the device is the applicable industry standard as in force immediately before the commencement of the transition period (**the old standard**), or the amended old standard or the new applicable industry standard as in force at the commencement of the transition period.

Subsection 11(3) deals with the scenario where one transition periods overlaps with another transition period and a device is manufactured or imported during the period of overlap. In such a case, the manufacturer or importer may choose whether the device complies with:

- the applicable standard in force prior to the commencement of the earliest of the transition periods; or
- either:
    - if the applicable standard was amended during one of the transition periods, the applicable industry standard as in force at the commencement of the earliest of the transition periods; or

- if the applicable standard was replaced during one of the transition periods, the new applicable industry standard as in force at the commencement of any one of the transition periods.

Part 4–Savings and transitional arrangements

Section 12 Transitional arrangements in relation to the previous standard

This section implements transitional arrangements in relation to devices that comply with the 2008 Standard. It provides that if a device was manufactured or imported before the commencement day of the Standard, and the device complies with the 2008 Standard as in force immediately before the commencement day, the device is taken to comply with the Standard.