

EXPLANATORY STATEMENT

Approved by the Australian Communications and Media Authority

Radiocommunications Act 1992

Radiocommunications (Low Interference Potential Devices) Class Licence Variation 2019 (No. 1)

Authority

The Australian Communications and Media Authority (**the ACMA**) has made the *Radiocommunications (Low Interference Potential Devices) Class Licence Variation 2019 (No. 1)* (**the instrument**) under section 132 of the *Radiocommunications Act 1992* (**the Act**) and subsection 33(3) of the *Acts Interpretation Act 1901* (**the AIA**).

Section 132 of the Act allows the ACMA, by legislative instrument, to issue class licences to authorise any person to operate a radiocommunications device of a specified kind or for a specified purpose.

Subsection 33(3) of the AIA relevantly provides that, where an Act confers a power to make, grant or issue an instrument of a legislative character, 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.

Section 134 of the Act provides that, to avoid doubt, the power to vary a class licence in accordance with subsection 33(3) of the AIA includes the power to vary the class licence by including one or more further conditions or revoking any conditions of the class licence.

Section 136 of the Act requires the ACMA, before varying a class licence, to invite persons to make representations about the proposed variation and provide those persons with at least one month from the date of publication in which to make those representations. Details about the consultation undertaken are set out below. Section 136 also requires the ACMA, before varying a class licence, if the variation would affect spectrum allocated, to be allocated or to be re-allocated by issuing or re-issuing spectrum licences, to be satisfied that the variation would not result in unacceptable levels of interference to the operation of radiocommunications devices operated, or likely to be operated, under spectrum licences, and that the variation of the class licence would be in the public interest.

Section 137 provides that the ACMA must not issue a class licence that is inconsistent with the spectrum plan or any relevant frequency band plans. The ACMA has made the instrument in accordance with sections 132, 136 and 137 of the Act, and subsection 33(3) of the AIA.

Purpose and operation of the instrument

The instrument varies the *Radiocommunications (Low Interference Potential Devices) Class Licence 2015* (**the LIPD Class Licence**) to:

- update arrangements for data communication transmitters and fixed point-to-point link transmitters and extend their authorised frequency band from 57-66 GHz to 57-71 GHz;
- include new arrangements for all transmitters operating in the 57-64 GHz band;
- revise arrangements for underground transmitters operating in the 70-520 MHz band;
- authorise the operation of higher power radiodetermination transmitters in the 76-77 GHz band;
- authorise the operation of ground and wall penetration radiodetermination transmitters in the 30-12400 MHz band;
- align existing arrangements for ultra-wideband devices with European arrangements by adding the 3100-3400 MHz and 8500-9000 MHz bands for such devices and by authorising ultra-wide band transmitters onboard aircraft operating in 6000-8500 MHz band.

It is a general requirement of the Act that the operation of all radiocommunications devices within Australia be authorised by a radiocommunications licence. A class licence is one type of licence available to authorise the operation of radiocommunications devices. It is an effective and efficient means of spectrum management for services where a limited set of common frequencies are employed, and equipment is operated under a common set of conditions. A class licence is not issued to an individual user and does not involve the payment of licence fees.

The LIPD Class Licence authorises the operation of a wide range of low interference radiocommunications transmitters in various segments of the radiofrequency spectrum. The LIPD Class Licence sets out the conditions under which these transmitters may be operated. These transmitters do not require individual frequency coordination because of their low interference potential characteristics. Examples of transmitters covered by the LIPD Class Licence include WiFi equipment, radio-frequency identification transmitters, personal alarms, and ground and wall penetrating radar devices.

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

The instrument is a disallowable legislative instrument for the purposes of the *Legislation Act 2003 (the LA)*.

Documents incorporated by reference

The instrument inserts into the LIPD Class Licence references to documents and writing as in force from time to time, as permitted by section 314A of the Act. The documents being incorporated into the LIPD Class Licence for the first time are:

- ETSI Standard EN 301 091-2 *Short Range Devices; Transport and Traffic Telematics (TTT); Radar equipment operating in the 76 GHz to 77 GHz range; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU; Part 2: Fixed infrastructure radar equipment*
- ETSI Standard EN 301 091-3 *Short Range Devices; Transport and Traffic Telematics (TTT); Radar equipment operating in the 76 GHz to 77 GHz range; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU; Part 3: Railway/Road Crossings obstacle detection system applications*
- ETSI Standard EN 302 066 *Short Range Devices (SRD); Ground- and Wall- Probing Radio determination (GPR/WPR) devices; Harmonised Standard for access to radio spectrum*
- ETSI Guide EG 202 730 *Electromagnetic compatibility and Radio spectrum Matters (ERM); Code of Practice in respect of the control, use and application of Ground Probing Radar (GPR) and Wall Probing Radar (WPR) systems and equipment*
- ETSI Standard EN 302 065-5 *Short Range Devices (SRD) using Ultra Wide Band technology (UWB); Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU; Part 5: Devices using UWB technology onboard aircraft*
- Code of Federal Regulation Title 47 §15.509, *Part 15, Section 509 Technical requirements for ground penetrating radars and wall imaging systems*
- written instructions of the CSIRO to operate certain transmitters within a nominated distance of a specified Australian radio-astronomy site
- written instructions of earth station licensees to operate certain transmitters within a nominated distance of a specified SRS earth station.

The instrument also inserts into the LIPD Class Licence references to the following documents and writing as in force from time to time, which are already referred to in the LIPD Class Licence:

- ETSI Standard EN 302 065 *Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices (SRD) using Ultra Wide Band technology (UWB)*

- Code of Federal Regulation Title 47 §15.255, *Part 15, Section 255 Operation within the band 57-71 GHz*.

At the date of making the instrument, the European Telecommunications Standards Institute (ETSI) standards and guides are available free of charge from the ETSI website: www.etsi.org. The Code of Federal Regulation is available free of charge from the e-CFR website: www.ecfr.gov. The written instructions will be available on the website of the ACMA, which, at the date of making the instrument, could be accessed free of charge.

Consultation

Before making the instrument, the ACMA was satisfied that consultation was undertaken to the extent appropriate and reasonably practicable, in accordance with section 17 of the *Legislation Act 2003 (the LA)*.

Section 136 of the Act requires that a notice setting out particular details of the variation be published on the ACMA's website, and in one, or more, other forms that are readily accessible by the public. The notice must allow for a period of at least one month to be provided for public comment. Paragraph 136 (1A)(b) also requires consultation with spectrum licensees if their licences would be affected by the instrument.

On 18 December 2018, the ACMA published a notice [on its website](#) and in the *Government Gazette*, inviting public comment on the draft variation instrument until 22 February 2019.

All affected spectrum licensees were consulted on the proposed variation.

Eighteen submissions were received in response to the invitation for public comment. All submissions and the Response to submissions paper are published [on the ACMA's website](#).

Regulation Impact Statement

Prior to releasing the draft variation instrument for comment, the ACMA consulted with the Office of Best Practice Regulation (**the OBPR**) on the requirement for a Regulation Impact Statement (**RIS**) for the instrument. The OBPR advised that the ACMA could self-assess the performance of the instrument and the regulatory change made by the instrument. The ACMA considers that the instrument does not give rise to the need for a RIS because it is only likely to have minor and machinery impacts. The OBPR reference for this assessment is ID 24375.

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 with human rights to be prepared in respect of that legislative instrument.

The statement of compatibility set out below has been prepared to meet that requirement.

Overview of the instrument

The instrument varies the LIPD Class Licence to:

- update arrangements for data communication transmitters and fixed point-to-point link transmitters and extend their authorised frequency band from 57-66 GHz to 57-71 GHz;
- include new arrangements for all transmitters operating in the 57-64 GHz band;
- revise arrangements for underground transmitters operating in the 70-520 MHz band;
- authorise the operation of higher power radiodetermination transmitters in the 76-77 GHz band;
- authorise the operation of ground and wall penetration radiodetermination transmitters in the 30-12400 MHz band;
- align existing arrangements for ultra-wideband devices with European arrangements by adding the 3100-3400 MHz and 8500-9000 MHz bands for such devices and by authorising ultra-wide band transmitters onboard aircraft operating in 6000-8500 MHz band.

The instrument also includes new arrangements for all transmitters operating in the 57-64 GHz band and revises arrangements for underground transmitters operating in the 70-520 MHz band. The instrument also authorises the operation of higher power radiodetermination transmitters in the 76-77 GHz band and the operation of ground and wall penetration radiodetermination transmitters in the 30-12400 MHz band, and aligns existing arrangements for ultra-wideband devices with European arrangements by adding the 3100-3400 MHz and 8500-9000 MHz bands to the current arrangements in the LIPD Class Licence.

Human rights implications

The ACMA has assessed whether the instrument is compatible with human rights, being the 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 instrument and the nature of the applicable rights and freedoms, the ACMA has formed the view that the instrument does not engage any of those rights or freedoms.

Conclusion

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

Notes to the *Radiocommunications (Low Interference Potential Devices) Class Licence Variation 2019 (No.1)*

Section 1 Name of instrument

This section provides for the instrument to be cited as the *Radiocommunications (Low Interference Potential Devices) Class Licence Variation 2019 (No.1)* (**the instrument**).

Section 2 Commencement

This section provides that the instrument commences at the start of the day after it is registered on the Federal Register of Legislation.

Section 3 Authority

This section identifies the provision that authorises the making of the instrument, namely section 132 of the *Radiocommunications Act 1992* (**the Act**).

Section 4 Variations

This section provides that the legislative instrument specified in Schedule 1, the *Radiocommunications (Low Interference Potential Devices) Class Licence 2015* (**the LIPD Class Licence**), is varied as set out in that Schedule.

Schedule 1 Variations

Item 1 Subsection 3A (1), after the definition of *coverage area*

A new item is inserted to define *CSIRO* as meaning means the Commonwealth Scientific and Industrial Research Organisation.

Item 2 After section 3A

New section 3B of the LIPD Class Licence is inserted to provide that, unless specified otherwise, instruments and documents that are incorporated into the LIPD Class Licence by reference are incorporated as in force or as in existence from time to time, as permitted by section 314A of the Act.

Item 3 Schedule 1 (after table item 22)

A new item 22A is inserted in Schedule 1 to the LIPD Class Licence to authorise the use of transmitters within the 57000-64000 MHz frequency band. The maximum equivalent isotropically radiated power (**EIRP**) is limited to 100 mW as specified in column 3. The maximum transmitter output power and maximum radiated power spectral density are limited by paragraphs (a) and (b) of column 4. In paragraph (a) the transmitter output power has been limited to 10 mW, and in paragraph (b) the maximum radiated power spectral density has been limited to 13 dBm per 1 MHz.

Item 4 Schedule 1 (table item 47, column 2)

This item repeals paragraphs (g) to (t) and substitutes them with new paragraphs (g) to (p). It effectively replaces the authorised frequency bands, to consolidate and expand the frequencies on which the devices in table item 47 may be used.

Item 5 Schedule 1 (table item 65, column 2)

This item extends the permitted frequency band from 57000-66000 MHz to 57000-71000 MHz for the devices in table item 65.

Item 6 Schedule 1 (after table item 65)

A new item 65A is inserted in Schedule 1 to the LIPD Class Licence to authorise the use of fixed point-to-point links used outdoors in the 57000-71000 MHz band. The maximum EIRP is limited by a compliance requirement with FCC Title 47 Part 15 Section 255 (see paragraph (a) in column 4). Paragraph (b) in column 4 requires that these transmitters must not be operated in the 58200-59000 MHz or 64000-65000

MHz bands within a nominated distance of a specified Australian radio astronomy site unless the CSIRO has issued written instructions for the use of the transmitter.

Item 7 Schedule 1 (after table item 69)

A new item 69A is inserted in Schedule 1 to the LIPD Class Licence to authorise the use of radiodetermination transmitters in the 76000-77000 MHz band to be used for fixed infrastructure and at road crossings of railway tracks. The use of these transmitters must comply either with Part 2 or Part 3 of the ETSI Standard EN 301 091. Part 2 of the Standard specifies technical characteristics and method of measurements for radiodetermination transmitters for fixed infrastructure. Part 3 of the Standard covers radar equipment for obstacle detection at the road crossing of a railway track and short-range devices for the use at the road crossing of a railway track.

Item 8 Schedule 1 (after table item 71)

A new item 71A is inserted in Schedule 1 to the LIPD Class Licence to authorise the use of radiodetermination transmitters in the 30-12400 MHz band. This item authorises ground and wall penetration radars (**GPR/WPR**) operating in that band. Guidance on the operation of these transmitters is provided at new Notes 4 and 5 (see item 12, below). Paragraph (a) in column 4 specifies that the operational positions of these transmitters must be such that their emissions are directed towards the ground or a wall of a building or similar structure. Paragraph (b) in column 4 requires that these transmitters must comply with either ETSI Standard EN 302 066 or the technical requirements of FCC Rule Title 47 Part 15 Section 509. Paragraph (b) effectively limits the maximum mean and peak EIRP density for GPR/WPR radars. Paragraph (c) in column 4 requires that these transmitters must not be operated within a nominated distance of a specified Australian radio astronomy site unless the CSIRO has issued written instructions for the use of the transmitter. Paragraph (d) in column 4 requires that these transmitters must not be operated in the 8400-8500 MHz band within a nominated distance of a specified space research service earth station unless the relevant earth station licensee has issued written instructions for the use of the transmitter.

Item 9 Schedule 1 (table item 78, column 2)

This item extends the permitted frequency bands for the devices in table item 78, from 3400-4800 MHz and 6000-8500 MHz to 3100-4800 MHz and 6000-9000 MHz.

Item 10 Schedule 1 (table item 78, column 4, paragraph (a))

This item removes reference to a former standard, being ETSI Standard EN 302 500.

Item 11 Schedule 1 (table item 78, column 4, paragraph (c))

This item removes an outdated requirement which banned operation of the devices in table item 78 in the 3425-3575 MHz band before 14 December 2015.

Item 12 Schedule 1 (after table item 78)

A new item 78A is inserted in Schedule 1 to the LIPD Class Licence to authorise the use of ultra-wideband transmitters onboard aircraft in the 6000-8500 MHz band. The use of these transmitters must comply with Part 5 of the ETSI Standard EN 302 065. The ETSI Standard limits the maximum mean power spectral density for the ultra-wideband transmitters operating onboard aircraft. The item authorises radio-links for intra-aircraft communications purposes inside an aircraft.

Item 13 Schedule 1, after note 3

This item inserts Note 4 and Note 5 into Schedule 1.

Note 4 states that ETSI Guide EG 202 730 provides advice on the control, use and application of GPR/WPR systems.

Note 5 states that ultra-wideband sensors used in crop harvesting where the sensor is no more than 1 metre above the crop height and 3.7 metres above the ground will meet the requirement to comply with FCC Rules Title 47 Part 15 Section 509.

Item 14 Schedule 2 (after table item 7)

This item inserts two new entries in the table titled 'Instruments that apply to a transmitter' in Schedule 2 to the LIPD Class Licence, in relation to radiodetermination transmitters in the 76000-77000 MHz band.

The first new entry lists the ETSI Standard EN 301 091-2: *Short Range Devices; Transport and Traffic Telematics (TTT); Radar equipment operating in the 76 GHz to 77 GHz range; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU; Part 2: Fixed infrastructure radar equipment.*

The second new entry lists the ETSI Standard EN 301 091-3: *Short Range Devices; Transport and Traffic Telematics (TTT); Radar equipment operating in the 76 GHz to 77 GHz range; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU; Part 3: Railway/Road Crossings obstacle detection system applications.*

Item 15 Schedule 2 (after table item 9)

This item inserts two new entries in the table titled "Instruments that apply to a transmitter" in Schedule 2 to the LIPD Class Licence, in relation to radiodetermination transmitters in the 30-12400 MHz band.

The first new entry lists the ETSI Standard EN 302 066: *Short Range Devices (SRD); Ground- and Wall-Probing Radio determination (GPR/WPR) devices. Harmonised Standard for access to radio spectrum.*

The second new entry lists the ETSI Guide EN 202 730: *Electromagnetic compatibility and Radio spectrum Matters (ERM); Code of Practice in respect of the control, use and application of Ground Probing Radar (GPR) and Wall Probing Radar (WPR) systems and equipment.*

Item 16 Schedule 2 (table item 12)

This item repeals item 12 from the table.

Item 17 Schedule 2 (before table item 13)

This item inserts a new item 12A in the table titled "Instruments that apply to a transmitter" in Schedule 2 to the LIPD Class Licence, in relation to ultra-wideband transmitters onboard aircraft.

The new entry lists the ETSI Standard EN 302 065-5: *Short Range Devices (SRD) using Ultra Wide Band technology (UWB); Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU; Part 5: Devices using UWB technology onboard aircraft.*

Item 18 Schedule 2 (after table item 18)

This item inserts a new entry in the table titled "Instruments that apply to a transmitter" in Schedule 2 to the LIPD Class Licence, in relation to radiodetermination transmitters in the 30-12400 MHz band.

The new entry lists the FCC Rules Title 47 Part 15 Section 509: *Technical requirements for ground penetrating radars and wall imaging systems.*