

Radiocommunications (Low Interference Potential Devices) Class Licence Variation 2018 (No. 1)

*Radiocommunications Act 1992*

The AUSTRALIAN COMMUNICATIONS AND MEDIA AUTHORITY makes this Variation under section 132 of the *Radiocommunications Act 1992*.

Dated 21 June 2018

Nerida O’Loughlin

[signed]
Member

James Cameron

[signed]
Member/~~General Manager~~

Australian Communications and Media Authority

1 Name of instrument

 This instrument is the *Radiocommunications (Low Interference Potential Devices) Class Licence Variation 2018 (No. 1)*.

2 Commencement

 This instrument commences on the day after it is registered on the Federal Register of Legislation.

 *Note* All legislative instruments must be registered on the Federal Register of Legislation Instruments required to be maintained under the *Legislation Act 2003*.

3  Authority

               This instrument is made under section 132 of the *Radiocommunications Act 1992*.

4 Variation of *Radiocommunications (Low Interference Potential Devices) Class Licence 2015*

 Schedule 1 varies the *Radiocommunications (Low Interference Potential Devices) Class Licence 2015* [F2015L01438].

Schedule 1 Variations

(section 4)

[1] Schedule 1, after item 23

insert

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 23A | All transmitters | 122000-122250 | See limitations | 1. The maximum radiated power spectral density must not exceed 10 dBm per 250 MHz
2. The maximum radiated power spectral density must not exceed ‑48 dBm per MHz for elevations above 30 degrees.
 |

**[2] Schedule 1, item 33, Column 4 – Limitations**

 *omit sub-paragraph (b)(ii) and susbtitute*

 FCC Rules Title 47 Part 95 Sections 2573 and 2579

**[3] Schedule 1, after item 34**

*insert*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 34A | Medical endoscopy capsule transmitters(see Note 2 and Note 3) | 430-440 | See limitations | 1. The maximum effective radiated power spectral density must not exceed ‑50 dBm per 100 kHz.
2. The total effective radiated power must not exceed ‑40 dBm within a 10 MHz measurement bandwidth
3. Both limits are intended for measurement outside the patient’s body
 |

**[4] Schedule 1, after item 35**

*insert*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 35A | Medical body area network transmitters(see Note 2) | 2483.5-2500  | See limitations | The transmitter must comply with ETSI Standard EN 303 203 |
| 35B | Low power active medical implant(see Note 2) | 2483.5-2500  | See limitations | The transmitter must comply with ETSI Standard EN 301 559 |

**[5] Schedule 1, item 65, Column 1**

 *omit* ‘used indoors’

**[6] Schedule 1, item 65, Column 4 – Limitations**

 *omit paragraphs (a) to (d) and substitute*

The transmitter must comply with FCC Rules Title 47 Part 15 Section 255.

**[7] Schedule 1, *Note 2***

 *substitute*

*Note 2* The systems and associated medical implant communications systems transmitters mentioned in items 33, 34, 34A, 35A and 35B are devices that require marketing approval from the Therapeutic Goods Administration.

**[8] Schedule 1, immediately following *Note 2***

 *insert*

*Note 3* A transmitter that complies with ETSI Standard EN 303 520 will meet the requirement not to exceed the Limitations (Column 4) specified at item 34A.

**[9] Schedule 2, after item 5**

 *insert*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 5A | 35A | EN 303 203 | *Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices (SRD); Medical Body Area Network Systems (MBANSs) operating in the 2483.5 MHz to 2500 MHz range;*  | ETSI  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 5B | 35B | EN 301 559 | *Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices (SRD); Low Power Active Medical Implants (LP-AMI) operating in the 2483.5 MHz to 2500 MHz range;*  | ETSI  |

**[10] Schedule 2, item 16**

 o*mit the item and substitute*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 16 | 33 | Code of Federal Regulation Title 47 §95 section 2573 | *Part 95, Section 2573 MedRadio authorized bandwidth* | FCC  |

**[11] Schedule 2, item 17**

 o*mit the item and substitute*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 17 | 33 | Code of Federal Regulation Title 47 §95 Section 2579 | *Part 95, Section 2579 MedRadio unwanted emissions limits* | FCC  |

**[12] Schedule 2, after item 17**

 *insert*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 18 | 65 | Code of Federal Regulation Title 47 §15.255 | *Part 15, Section 255 Operation within the band 57-71 GHz* | FCC  |

**EXPLANATORY STATEMENT**

Approved by the Australian Communications and Media Authority

*Radiocommunications Act 1992*

***Radiocommunications (Low Interference Potential Devices) Class Licence Variation 2018 (No. 1)***

**Authority**

The Australian Communications and Media Authority (**the ACMA**) has made the *Radiocommunications (Low Interference Potential Devices) Class Licence Variation 2018 (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.

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. . There are no spectrum licences affected by the proposed variation.

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 include new arrangements for all transmitters operating in the 122000-122250 MHz band and new arrangements for medical telemetry and telecommand transmitters operating in the 430‑440 MHz and 2483.5-2500 MHz bands. The instrument also removes the indoor restriction for digital communication transmitters in the 57000-66000 MHz band and updates references for medical implant communication transmitters operating in the 402-405 MHz band. It is a general requirement of the Actthat 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 and personal alarms. 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. These documents are:

* ETSI Standard EN 303 203 *Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices (SRD); Medical Body Area Network Systems (MBANSs) operating in the 2483.5 MHz to 2500 MHz range;*
* ETSI Standard EN 301 559 *Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices (SRD); Low Power Active Medical Implants (LP-AMI) operating in the 2483.5 MHz to 2500 MHz range;*
* Code of Federal Regulation Title 47 §95, *Part 95,* *Section 2573, MedRadio authorized bandwidths;*
* Code of Federal Regulation Title 47 §95, *Part 95*, *Section 2579, MedRadio unwanted emission limits;*
* 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 ETSI Standards are available free of charge from the ETSI website: [www.etsi.org](http://www.etsi.org). The Code of Federal Regulation is available free of charge from e-CFR website: [www.ecfr.gov](http://www.ecfr.gov).

**Consultation**

Before the instrument was made, 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*.

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 aperiod of at least one month to be provided for public comment. Section 136 also requires consultation with spectrum licensees if their licences would be affected by the instrument. No spectrum licences are affected by the variation.

On 22 November 2017, the ACMA published a notice on its website and in the *Government Gazette*,inviting public comment on the draft variation instrument until 19 January 2018.

Thirteen submissions were received in response to the invitation for public comment. All submissions were supportive of the changes proposed in the draft variation instrument.

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 (**the 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 22710.

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.

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 include new arrangements for all transmitters operating in the 122000-122250 MHz band and new arrangements for medical telemetry and telecommand transmitters operating in the 430‑440 MHz and 2483.5-2500 MHz bands. The instrument also removes the indoor restriction for digital communication transmitters in the 57000-66000 MHz band and updates references for medical implant communication transmitters operating in the 402-405 MHz band.

***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.

**ATTACHMENT A**

##### Details of the Radiocommunications (Low Interference Potential Devices) Class Licence Variation 2018 (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 2018 (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 1991* (**the Act**).

**Section 4** **Variation of *Radiocommunications (Low Interference Potential Devices) Class Licence 2015***

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

**Schedule 1 Variations**

**Item 1 Schedule 1, after item 23**

A new item is inserted in Schedule 1 to the LIPD Class Licence to authorise the use of transmitters within the 122000-122250 MHz frequency band. The maximum radiated power spectral density is limited by paragraphs (a) and (b) of Column 4. In paragraph (a) the maximum radiated power spectral density has been limited to 10 dBm per 250 MHz, while in paragraph (b) the maximum radiated power spectral density has been limited to minus 48 dBm per MHz for elevations above 30 degrees.

**Item 2 Schedule 1, item 33, Column 4 - Limitations**

This item removes an outdated reference to the United States Federal Communications Commission (**FCC**) Rules contained in the US Code of Federal Regulation (**CFR**) Rules Title 47 Part 95 Section 627 and 635, and inserts new text referring to the FCC Rules Title 47 Part 95 Sections 2573 and 2579.

**Item 3 Schedule 1, after item 34**

A new item 34A is inserted in Schedule 1 to the LIPD Class Licence to authorise the use of medical endoscopy capsule transmitters in the 430-440 MHz band. These are used for performing medical observation of the human gastrointestinal tract by swallowing a capsule camera and receiving images by an external dedicated recorder receiver. The maximum effective radiated power spectral density is limited by paragraphs (a) and (b) of Column 4. In paragraph (a) the maximum effective radiated power spectral density has been limited to minus 50 dBm per 100 kHz, while in paragraph (b) the total effective radiated power has been limited to 40 dBm per 10 MHz measurement bandwidth. Paragraph (c) in Column 4 requires that these limits are to be measured outside the patient’s body.

**Item 4 Schedule 1, after item 35**

This item inserts two new items in Schedule 1 to the LIPD Class licence.

Item 35A authorises the use of medical body area network (**MBAN**) transmitters in the 2483.5-2500 MHz band. These are used for transmission of non-voice data to and from medical devices for the purposes of monitoring, diagnosing and treating patients by medical professionals. They are designed to be deployed indoors within healthcare facilities and patients’ homes. The use of these transmitters must align with the international standard from the European Telecommunications Standards Institute (**ETSI**) Standard EN 303 203. This Standard lists two values for the EIRP and duty cycle levels (defined as the ratio, expressed as a percentage of the maximum transmitter "on" time monitored over one hour, relative to a one hour period), and the limits are:

* for MBANs operating within a healthcare facility, the maximum EIRP is 1 mW with no more than
10 % duty cycle over a maximum emission bandwidth of 3 MHz; and
* for MBANs operating within a patient’s home, the maximum EIRP is 10 mW with no more than 2 % duty cycle over a maximum emission bandwidth of 3 MHz.

Item 35B authorises the use of low power active medical implants in the 2483.5-2500 MHz band. Active medical implant communication systems are intended to provide high-speed communication capability between individuals with implants, and medical practitioners, for the purpose of diagnosing and delivering therapy to individuals with various illnesses. The use of these transmitters must conform to the international standard from ETSI Standard EN 301 559. The maximum EIRP for these devices is limited by a compliance requirement with the ETSI Standard EN 301 559 which is specified in Column 4. The Standard limits the maximum EIRP to 10 mW and duty cycle to 10% in a period of one hour.

**Item 5 Schedule 1, item 65, Column 1**

**Item 6 Schedule 1, item 65, Column 4 - Limitations**

These two items effectively remove the indoor restriction from item 65. This item authorises the operation of digital communication transmitters in the 57000-66000 MHz frequency band. This limitation was originally put in place to encourage the development of multi-gigabit millimetre-wave wireless radio local area networks, operating mostly indoors, in the 57000-66000 MHz band. However, international technological development is currently focused on other compatible services in this band, supporting outdoor wireless point-to-point and point-to-multipoint links, providing broadband connection to customers..

These items also remove the other limitations on this class of radiocommunications transmitter, and insert a new limitation that requires that these transmitters must conform to the FCC Rules contained in the United States CFR Title 47 Part 15 Section 255 – *Operation within the band 57-71 GHz*.

**Item 7 Schedule 1, *Note 2***

This item removes replaces Note 2 to Schedule 1, the new text of which refers to items 33, 34, 34A, 35A and 35B. The Note recognises that, at the time the instrument was made, the items listed require marketing approval from the Therapeutic Goods Administration.

**Item 8 Schedule 1, immediately following *Note 2***

This item inserts Note 3 into Schedule 1. The note states that a transmitter that complies with ETSI Standard EN 303 520 will meet the requirement not to exceed the Limitations (Column 4) specified at item 34A.

**Item 9 Schedule 2, after item 5**

This item inserts two new items in the table titled “Instruments that apply to a transmitter” in Schedule 2 to the LIPD Class Licence, in relation to Medical Body Area Network Systems and Low Power Active Medical Implants transmitters.

The first new entry lists the ETSI Standard EN 303 203: *Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices (SRD); Medical Body Area Network Systems (MBANSs) operating in the 2483.5 MHz to 2500 MHz range*.

The second new entry lists the ETSI Standard EN 301 559: *Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices (SRD); Low Power Active Medical Implants (LP-AMI) operating in the 2483.5 MHz to 2500 MHz range.*

**Item 10 Schedule 2, item 16**

This item replaces an outdated reference in the table titled “Instruments that apply to a transmitter” in Schedule 2 to the LIPD Class Licence. The FCC Rules contained in the United States CFR Title 47 Part 95 Section 2573 – *MedRadio authorised bandwidths* apply to medical implant communication system transmitters.

**Item 11 Schedule 2, item 17**

This item replaces an outdated reference in the table titled “Instruments that apply to a transmitter” in Schedule 2 to the LIPD Class Licence. The FCC Rules contained in the United States CFR Title 47 Part 95 Section 2579 – *MedRadio unwanted emission limits* apply to medical implant communication system transmitters.

**Item 12 Schedule 2, immediately after item 17**

This item inserts a new item in the table titled “Instruments that apply to a transmitter” in Schedule 2 to the LIPD Class Licence. The FCC Rules contained in the United States CFR Title 47 Part 15 Section 255 – *Operation within the band 57-71 GHz* apply to data communication transmitters.