

EXPLANATORY STATEMENT

Issued by the Authority of the Australian Communications and Media Authority

Radiocommunications (Low Interference Potential Devices) Class Licence Variation 2007 (No. 1)

Radiocommunications Act 1992

Purpose

The purpose of the *Radiocommunications (Low Interference Potential Devices) Class Licence Variation 2007 (No. 1)* (the Variation) is to extend existing arrangements in the *Radiocommunications (Low Interference Potential Devices) Class Licence 2000* (the LIPD Class Licence) to allow for the introduction and use of new technology.

Legislative Provisions

Section 134 of the *Radiocommunications Act 1992* (the Act) allows the Australian Communications and Media Authority (ACMA), by notice published in the *Commonwealth Gazette*, to vary a class licence.

As a class licence variation is a legislative instrument for the purposes of the *Legislative Instruments Act 2003* (the LIA), subsection 56(1) of the LIA ensures that the requirement in the Act for publication in the *Commonwealth Gazette* is satisfied by registration of the instrument on the Federal Register of Legislative Instruments.

BACKGROUND

It is generally a 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 is employed, and equipment is operated under a common set of conditions. A class licence sets out the conditions under which any person is permitted to operate any device to which the class licence is applicable; it is not issued to an individual user, and does not involve the payment of licence fees. The licences are issued by ACMA as legislative instruments and are registered on the Federal Register of Legislative Instruments (FLRI). They involve minimal licence administration by ACMA.

The LIPD Class Licence authorises the operation of a wide range of low power radiocommunications devices in various segments of the radiofrequency spectrum. The LIPD Class Licence sets out the conditions under which many types of short range devices may operate. These transmitters do not require individual frequency coordination because of their low interference characteristics. Examples of equipment covered by the LIPD Class Licence include garage door openers, radiofrequency identification transmitters and personal alarms.

Operation

This Variation makes a number of changes to the LIPD Class Licence, including the incorporation of the substantive elements of the *Radiocommunications (Infrared Devices) Class Licence 2002* (the Infrared Devices Class Licence). The inclusion of those elements of the Infrared Devices Class Licence into the LIPD Class Licence has resulted in several, incorporative changes in the main body of the instrument (Items 1 through 5 of Schedule 1 to the Variation). The other, individual changes introduced by the Variation are:

1. Addition of a new 'all transmitter' class in the 5.725 - 5.875 GHz band

Insertion of new item 19A in the LIPD Class Licence enables the operation of short range low power transmitters using analogue modulation techniques in the 5.8GHz Industrial, Scientific and Medical applications band with a maximum equivalent isotropically radiated power (EIRP) of 25 mW.

2. Wireless audio transmitters

The system technical characteristics of datacasting and broadcasting service stations operating in this band are similar, although other requirements such as content are different. The changes to item 22A reflect the requirement to distinguish between datacasting and free-to-air broadcasting services.

3. Biomedical telemetry transmitters

Biomedical telemetry transmitters (item 24 on the LIPD Class Licence), which are used in hospitals and other medical facilities, operate in the UHF band (520-668 MHz) with a maximum EIRP of up to 3 mW. The Variation increases the maximum EIRP for these transmitters from 3 mW to 11 mW. This allows for a broader range of equipment that is used overseas to be offered in Australia.

4. Transmitters used for underground communications

The LIPD Class Licence at item 38 allows the underground operation of transmitters in the AM and FM radio broadcasting bands to extend coverage of broadcasting services in those bands. Under the variation, coverage is extended into underground tunnels for above ground broadcasting by adding the bands 174-230 MHz and 519-820 MHz. Additional wording reflects that the use of these bands is to extend coverage of above-ground broadcasting services. The change facilitates the introduction of new digital radio services.

5. Radiocommunications transmitters operated in radiofrequency-shielded enclosures

The addition of three frequency bands, 5250-7000 MHz, 8500-10600 MHz and 75000–85000 MHz into item 40 of the LIPD Class Licence will provide for a greater range of tank level probing sensors used in industrial processes. The bands are part of the spectrum identified internationally in ITU-R 1538 and adopted in the harmonised European Standard EN 302 372-1.

6. Medical implant communications systems transmitters

Medical implant communications systems transmitters are very low power transmitters used to provide control links between medical devices implanted in the human body such as pacemakers and defibrillators and external medical equipment used by doctors to monitor or adjust settings of the implanted medical device.

The change to item 49 is to increase the band from 402-405 MHz to 401-406 MHz. This increase provides for greater international harmonisation.

7. Medical implant telemetry systems transmitters

Medical implant telemetry systems transmitters transmit one-way radiocommunications transmissions from a device implanted in a patient to an external monitoring receiver. The changes to item 50 increase the bands available for the operation of these devices to include 401-402 MHz and 405-406 MHz, in line with changes in the USA and Europe.

8. Changes to the arrangements in the 60 GHz band

Data communications transmitters are commonly used for mobile phone back haul links and temporary high capacity short haul links. The LIPD Class Licence limits the operation of these devices in the 59.4 - 62.9 GHz band to a maximum EIRP of 150 W and a maximum transmitter output power of 10 mW.

The Variation authorises the operation of two types of wireless services in Australia in the 57-66 GHz frequency band. Item 51 is amended by increasing the frequency band of operation from 59400-62900 MHz to 59000 - 63000 MHz.

A new item, item 51A, is added to support the operation of wireless personal area networks (WPANs) for indoor use that typically have to support non line of sight (LOS) operation with a range of 10 metres.

9. Addition of infrared transmitters

The Infrared Devices Class Licence authorises the operation of devices that transmit infrared energy for radiocommunications purposes over short ranges. The infrared transmitters operate in the 187.5–420 THz frequency band, with a maximum output power of 125 mW.

To reduce the number of radiocommunications class licences in operation, thereby easing the regulatory burden on the community, the provisions contained in the Infrared Devices Class Licence are to be incorporated into the LIPD Class Licence.

Accordingly, the insertion of the new item 57 into the LIPD Class Licence substantially does this and so takes into account the revocation of the Infrared Devices Class Licence.

Consultation

Notice of ACMA's intended variation to the LIPD Class Licence was published by special notice in the *Commonwealth Gazette* on 31 October 2007, inviting public submissions until 1 December 2007. Notice of the Variation and an invitation for public submissions was also provided on ACMA's internet site from 2 November through to 1 December 2007. Four submissions were received including one from the Bureau of Meteorology. Due consideration was given to these submissions when preparing this Variation.

In addition, ACMA met with the Bureau of Meteorology to further discuss its submission opposing a proposed change to item 46 of the LIPD Class Licence. As a result, ACMA has withdrawn the proposed change to item 46 of the LIPD Class Licence in order to undertake further consultation.

Regulation Impact

ACMA obtained advice from its SES contact officer for the Government's regulation impact analysis arrangements that the Variation has no or low impact. For those reasons under the self-assessment regime administered by the Office of Best Practice Regulation, ACMA has determined that there is no need to produce a Business Cost Calculator report or to prepare a Regulation Impact Statement. The ACMA RIS exemption reference number is 038.

Documents incorporated into this Variation by Reference

This Variation incorporates information from the ETSI EN 302 372-1 standard developed by the European Telecommunications Standards Institute. This standard can be downloaded from www.etsi.org

Attachments

Details of the Variation are in Attachment 1.

NOTES ON SECTIONS

Section 1 Name of Variation

Section 1 provides for the citation of the instrument.

Section 2 Commencement

This section provides for the Variation to commence on the day after it is registered.

Section 3 Variation of the *Radiocommunications (Low Interference Potential Devices) Class Licence 2000*

This section provides that Schedule 1 varies the *Radiocommunications (Low Interference Potential Devices) Class Licence 2000*.

Schedule 1 Amendments

[1] Section 3A

Item [1] inserts a definition of *Act* meaning the *Radiocommunications Act 1992*.

[2] Section 3A

Item [2] inserts a definition for *infrared device*.

[3] Section 3A, note 1

Item [3] substitutes the note, as a consequence of the insertion of the definition of *Act* in Item [1].

[4] Section 4, after note 2

Item [4] inserts a new note, note 3, refers to the Australia/New Zealand Standard, AS/NZS 2211.10:2004, which details the requirements necessary to protect persons from laser device radiation.

[5] Subsection 5(2), including notes 1 and 2

Item [5] substitutes subsection (2) and the accompanying notes, to include the compliance day for an infrared device.

[6] Schedule 1, after item 19

Item [6] inserts new item 19A, for an all transmitters class, with operating frequencies and conditions.

[7] Schedule 1, item 22A

Item [7] substitutes item 22A to include references to datacasting service station.

[8] Schedule 1, item 24

Item [8] increases the maximum EIRP for biomedical telemetry systems from 3mW to 11mW.

[9] Schedule 1, item 38

Item [9] extends the coverage into underground tunnels for above ground broadcasting services by adding the bands 174–230 MHz and 519–820 MHz and new limitation 2.

[10] Schedule 1, item 40

Item [10] adds three new frequency bands to this item (5250–7000 MHz, 8500–10600 MHz and 75000–85000 MHz) to provide for a greater range of tank level probing radar sensors used in industrial processes and applies the ETSI 302 3720-1 standard to transmitters operating under this item.

[11] Schedule 1, items 49, 50 and 51

Item [11] increases the frequency bands in items 49 and 50 in relation to medical implant devices.

Amends the permitted operating frequency band and limitations for item 51, data communications transmitters used outdoors.

Inserts a new item, item 51A, for data communications transmitters used indoors.

[12] Schedule 1, after item 56

Item [12] inserts new item 57 and associated limitations to authorise the use of infrared transmitters.