EXPLANATORY STATEMENT
Issued by the Australian Communications and Media Authority
Radiocommunications (Low Interference Potential Devices) Class Licence Variation Notice 2010 (No. 1)
Radiocommunications Act 1992

Purpose

The purpose of the *Radiocommunications (Low Interference Potential Devices) Class Licence Variation Notice 2010 (No. 1)* (the Variation Notice) 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 (the 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), the Variation Notice will be registered on the Federal Register of Legislative Instruments (FRLI) and will be gazetted in the Commonwealth Gazette in order to satisfy the requirements in the Act and the LIA.

Section 136 of the Act requires ACMA, before varying a class licence, to publish a notice in the *Commonwealth Gazette* inviting persons to make representations about the proposed variation and providing those persons with at least one month from the date of publication in which to make those representations.

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 the ACMA as legislative instruments and are registered on the FRLI. They involve minimal licence administration by the ACMA.

The LIPD Class Licence authorises the operation of a wide range of low interference radiocommunications devices in various segments of the radiofrequency spectrum. The LIPD Class Licence sets out the conditions under which the devices itemised in Schedule 1 of the LIPD Class Licence 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 Notice makes a number of changes to the LIPD Class Licence. The individual changes introduced by the Variation Notice are:

Amendment of section 3A definition

The definition of ‘maximum Equivalent Isotropically Radiated Power’ (EIRP) in section 3A of the LIPD Class Licence is varied to clarify the definition of “maximum” by relating it to peak power and to expand the definition to include emissions from “an opening” in the case of underground communications or from “a surface” in the case of a shielded enclosure or building.

Item 20 – all transmitters in the 61-61.5 GHz

Item 20 of Schedule 1 of the LIPD Class Licence currently authorises all transmitters in the 10.5-10.55 GHz and 24-24.25 GHz bands to operate at 100 mW. This amendment will allow all transmitters in the 61-61.5 GHz band, which is an internationally recognised ISM (Industrial, Scientific and Medical) band to operate with an EIRP of less than or equal to 100 mW. This band is generally suitable for short range applications and is currently used overseas for radio-determination devices and to facilitate digital video connections between set top boxes and flat panel displays.

New Item 25A – telecommand or telemetry transmitters in 0.07-0.119 MHz and 0.135-0.160 MHz bands

The insertion of new item 25A into Schedule 1 to the LIPD Class Licence is to authorise the operation of telecommand or telemetry transmitters in the 0.07-0.119 MHz and the 0.135-0.160 MHz Low Frequency (LF) bands at higher maximum EIRP levels than currently permitted for transmitters in the 0.07-0.160 MHz band. The proposed increase to EIRP is from 3uW to 10mW.

"Telecommand" transmitters use telecommunications for the transmission of signals to initiate, modify or terminate functions of equipment at a distance. "Telemetry" refers to the use of telecommunications for automatically indicating or recording measurements at a distance from the measurement instrument. A variety of low power devices use telecommand and telemetry including Radio Frequency Identification (RFID) and wireless sensors among others. This amendment will provide coverage for a range of equipment available overseas including medical telemetry and other systems.

New Item 25B – telecommand or telemetry transmitters in the 0.119-0.135 MHz band

The insertion of a new item 25B into Schedule 1 to the LIPD Class Licence is to authorise the operation of telecommand or telemetry transmitters in the 0.119–0.135 MHz Low Frequency (LF) band at higher maximum EIRP levels than currently permitted for transmitters in the 0.07-0.160 MHz band. The proposed increase to EIRP is from 3uW to 1.5W. The main impetus for this amendment is to accommodate the use of telecommand and telemetry equipment used for Radio Frequency Identification (RFID) and for a specific medical monitoring device that operates at 0.1325 to 0.134 MHz. While the increase in EIRP is relatively significant, it is anticipated that the potential for interference to devices that already use this frequency band will remain acceptably low.

Item 51A – harmonisation of arrangements for the use of Indoor 60 GHz communications

Item 51A of the LIPD Class Licence relates to data communications transmitters used indoors and within the 57-66 GHz frequency band. There is considerable international overlap in relation to the use and regulation of radiocommunications in the 60 GHz band. The large bandwidth enables wireless applications that transmit high quantities of data. Some examples of applications that are adapted for use in this band are wireless HDTV, wireless laptop docking stations and wireless broadband technologies among others. The high level of international regulatory overlap facilitates global interoperability for many of these devices. This amendment will update Australia's limitations on the use of these transmitters to harmonise them with regulatory approaches overseas.

New Item 60 – Addition of a new class of transmitter – 79 GHz vehicular radars

The Insertion of a new item 60 into Schedule 1 of the LIPD Class Licence is to authorise the use of 79 GHz vehicular radars in Australia. Vehicular radar systems are designed to provide additional safety to occupants of motor vehicles by pre-arming or activating other safety systems. The 79 GHz band has been opened in Europe to provide long term support for vehicular radar systems that are currently allowed to operate in the 24 GHz band. Short range radar technologies are important for present and future safety and comfort functions in vehicles. The use of these devices in Australia will be subject to the limitation that they are not to be used within the nominated distance of a specified Australian radio-astronomy site and that the device complies with relevant industry standards. In this case the applicable industry standard is the European Telecommunications Standards Institute standard, ETSI EN 302 264-1 as it applies from time to time.

Consultation

In accordance with section 136 of the Act, notice of the ACMA's proposed variation to the LIPD Class Licence was published in the *Commonwealth Gazette* on 16 June 2010, inviting public submissions until 16 July 2010. Notice of the proposed variation and an invitation for public submissions was also provided on the ACMA's internet site from 16 June 2010 through to 16 July 2010.

Four submissions were received in response to the invitation for public comment, with two from the same stakeholder. Of those four, one was supportive of all the changes, and the other three raised concerns in relation to new item 25B and new item 60. The ACMA acknowledged all submissions it received and gave due consideration to all submissions received.

The concern in relation to item 25B related to the size of the power increase for telecommand and telemetry transmitters that can operate in the 0.119-0.135 MHz band. Specifically, the concern was that the increase would result in a "flooding" of this frequency band that may result in significant interference to devices already using this band. The respondents were informed that the proposed increase would only be used by specific telecommand and telemetry equipment and that the ACMA anticipated that the potential for interference to devices that already use this frequency band will remain acceptably low. The ACMA noted that the increase was also mirrored overseas and the ACMA is not aware of any substantial interference problems that have resulted. As a result the change was included in this Variation Notice. Any reports of substantial interference in the band will be addressed as part of future variations to the LIPD Class Licence.

The concern in relation to item 60 concerned the industry standard referenced in the Variation Notice. The respondent was concerned that the reference to ETSI EN 302 264-1 would unduly limit the modulation methods that could be used in the development of sensors that can be deployed in vehicular radars. Specifically, the respondent requested that reference also be made to the relevant Japanese standard. Once the Japanese Standard is finalised, the ACMA will consider any request to reference the standard in future variations to the LIPD Class Licence.

Regulation Impact

ACMA obtained advice from the Office of Best Practice Regulation (OBPR) that the Variation will have minor and machinery impacts. For those reasons, the OBPR has determined that there is no need to prepare a Business Cost Calculator Report or a Regulation Impact Statement. The exemption reference number provided by OBPR for this Variation is ID 116678.

Attachment

Details of the Variation Notice are in the Attachment.

ATTACHMENT

NOTES ON SECTIONS

Section 1 Name of Notice

Section 1 provides for the citation of the instrument as the *Radiocommunications (Low Interference Potential Devices) Class Licence Variation Notice 2010 (No. 1)*.

Section 2 Commencement

This section provides that the Variation Notice commences on the later of the day after it is registered or the day on which it is published in the *Gazette*.

Section 3 Amendment of *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 Variations

[1] Section 3A, definition of *maximum EIRP*

Item [1] amends the definition for *maximum EIRP* to clarify the existing definition and to expand the definition to include the surfaces of an enclosure containing the antenna and the opening to an underground environment where this is mentioned in an item in Schedule 1 to the Notice.

[2] Schedule 1, item 20

Item [2] substitutes item 20 of Schedule 1 to the LIPD Class Licence to include transmitters in the 61 – 61.5 GHz band.

[3] Schedule 1, after item 25

Item [3] inserts new items 25A and 25B to Schedule 1 to the LIPD Class Licence to allow for the use of telecommand and telemetry equipment at higher EIRP than previously permitted.

[4] Schedule 1, item 51A

Item [4] substitutes item 51A to allow for the use of indoor 60 GHz data communications transmitters.

[5] Schedule 1, after item 59

Item [5] inserts item 60 to authorise the use of 79 GHz vehicular radar devices.