Radiocommunications (Low Interference Potential Devices) Class Licence 2000

The AUSTRALIAN COMMUNICATIONS AUTHORITY makes this Class Licence under sections 132 and 135 of the *Radiocommunications Act 1992*.

Dated 29 June 2000

A.J SHAW
Chair

R HORTON
Deputy Chair

Australian Communications Authority

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1 Name of Class Licence

This Class Licence is the *Radiocommunications (Low Interference Potential Devices) Class Licence 2000*.

2 Commencement

This Class Licence commences on gazettal.

3 Revocation

The following instruments are revoked:

(a) the *Radiocommunications Class Licence (Low Interference Potential Devices) 1997*[1];

(b) the *Radiocommunications Class Licence (Low Interference Potential Devices) Variation 1998 (No. 1)*[2].

NOTE

A radiocommunications device supported under this Class Licence can be expected to be operating in radiofrequency spectrum also used by other radiocommunications devices (that is, it shares the spectrum with them). Devices supported under this Class Licence are typically used for communications over short distances.

By placing appropriate limits on parameters such as device type, radiated power levels and frequencies of operation, the interference potential of a low interference potential device (***LIPD***) may be held to a sufficiently low level that enables sharing the spectrum with other radiocommunications devices on an uncoordinated basis in most circumstances.

It is recognised that interference arising from the operation of a LIPD is still possible, although under less likely circumstances. As an aid to interference resolution in those circumstances, it is a condition of the operation of a device under this Class Licence that the device not cause interference to other radiocommunications devices; as well, a device will not be afforded protection from interference caused by other radiocommunications services (see paragraph 5 (1) (b) and Note 3 of this Class Licence).

NOTE *(continued)*

Should interference occur, the onus is on the user of a LIPD to take measures to resolve that interference, for example, by re-tuning or ceasing to operate the LIPD. Some LIPDs are designed so that they are able to be re-tuned, to assist the user in avoiding interference locally.

Some of the frequency bands mentioned in this Class Licence cover bands designated for industrial, scientific and medical (***ISM***) applications. ISM applications generate radio frequency energy and use it locally for non-radiocommunications applications (eg. microwave ovens). Radiocommunications services operating in ISM-designated bands may experience interference from ISM applications. In accordance with the internationally-recognised arrangements for interference resolution that apply in such bands, this Class Licence notes that radiocommunications devices operating in ISM-designated bands are not afforded protection from interference that may be caused by ISM applications (see Note 4 of this Class Licence).

LIPDs are sometimes used for radio applications with commercial or safety of life implications. Users of such applications are encouraged to have particular regard to the suitability of operating under this Class Licence for their radiocommunications needs.

Manufacturers and suppliers of radiocommunications products able to be supported under this Class Licence are encouraged to have regard to the information in this note when forming advice about the suitability of their products for the intended application of the products by customers.

4 Class Licence

(1) This Class Licence authorises a person to operate a transmitter included in a class of transmitters mentioned in an item in Schedule 1, subject to the following conditions:

(a) the transmitter must be operated:

(i) on a frequency, or within a range of frequencies, mentioned in the item; and

(ii) at a radiated power that does not exceed the maximum EIRP mentioned in the item; and

(iii) within the limitations (if any) mentioned in the item;

(b) the transmitter's operation must not cause interference to the operation of radiocommunications services.

(2) The frequency, or range of frequencies, and the maximum EIRP mentioned in an item in Schedule 1 must be construed in accordance with the interpretative provisions (if any) mentioned in the item.

Note 1 For the definitions of other expressions used in this Class Licence, see section 5 of the *Radiocommunications Act 1992* and the *Radiocommunications (Definitions) Determination 2000.*

Note 2 A radiocommunications device that complies with the conditions set out in this Class Licence is known as a low interference potential device.

Note 3 A low interference potential device will not be afforded protection from interference caused by other radiocommunications devices. A low interference potential device operated under this Class Licence is generally not expected to suffer interference. However, an individual low interference potential device may experience, from other radiocommunications devices, interference arising from the particular circumstances of the device's operation.

Note 4 In accordance with the requirements of footnote AUS 32 and footnote 150 to the Table of Allocations in the Australian Radiofrequency Spectrum Plan, a low interference potential device will not be afforded protection from interference that may be caused by ISM applications in the ISM bands 13.553 MHz – 13.567 MHz, 26.957 MHz – 27.283 MHz, 40.66 MHz – 40.70 MHz, 918 MHz – 926 MHz, 2 400 MHz – 2 500 MHz, 5 725 MHz – 5 875 MHz and 24 000 MHz – 24 250 MHz.

Schedule 1 Transmitters

(section 5)

Item	Class of transmitter	Permitted operating frequency band (MHz) (lower limit exclusive, upper limit inclusive)	Maximum EIRP	Limitations
1	All transmitters	0.000 – 0.014	200 µW	
2	All transmitters	0.014 – 0.01995	50 µW	
3	All transmitters	0.02005 – 0.07	7.5µW	
4	All transmitters	0.07 – 0.16	3 µW	
5	All transmitters	1. 0.16 – 0.285 2. 0.325 – 0.415	500 nW	
6	All transmitters	3.025 – 3.155	7.5 nW	
7	All transmitters	3.5 – 3.7	30 pW	
8	All transmitters	1. 3.7 – 3.95 2. 4.438 – 4.65	7.5 nW	
9	All transmitters	13.553 – 13.567	100 mW	
10	All transmitters	24 – 24.89	10 mW	
11	All transmitters	26.957 – 27.283	1 W	1. Separation of the operating frequency from the centre frequency of any adjacent citizen band radio channel must be at least 5 kHz. 2. The emission bandwidth must not exceed 10 kHz.
12	All transmitters	1. 29.7 – 29.72 2. 30 – 30.0625 3. 30.3125 – 31 4. 36.6 – 37 5. 39 – 39.7625 6. 40.25 – 40.66	100 mW	
13	All transmitters	40.66 – 41	1 W	
14	All transmitters	54 – 56	2.5 mW	

Item	Class of transmitter	Permitted operating frequency band (MHz) (lower limit exclusive, upper limit inclusive)	Maximum EIRP	Limitations
15	All transmitters	1. 70 – 70.24375 2. 77.29375 – 77.49375 3. 150.7875 – 152.49375 4. 173.29375 – 174	100 mW	
16	All transmitters	1. 225 – 242 2. 244 – 267 3. 273 – 303.95 4. 304.05 – 328.6 5. 335.4 – 399.9	10 µW	
17	All transmitters	433.05 – 434.79	25 mW	
18	All transmitters	915 – 928	3 mW	
19	All transmitters	2 400 – 2 463	10 mW	
20	All transmitters	1. 10 500 – 10 550 2. 24 000 – 24 250	100 mW	
21	Wireless audio transmitters and auditory assistance transmitters	88 – 108	10 µW	1. Emission must be frequency modulated and have a maximum bandwidth of 180 kHz. 2. Transmission in a radio channel must not originate in the licence area of a radio broadcasting station (including a repeater or translator station) operating in the same channel.
22	Wireless audio transmitters	1. 174 – 230 2. 520 – 820	3 mW	1. The emission must be frequency modulated and have a maximum bandwidth of 330 kHz. 2. Transmission in a TV channel must not originate in the licence area of a TV broadcasting station (including a repeater or translator station) operating in the same channel.

Item	Class of transmitter	Permitted operating frequency band (MHz) (lower limit exclusive, upper limit inclusive)	Maximum EIRP	Limitations
				3. When in an unused TV channel, but in the licence area of a TV broadcasting station (including a repeater or translator station) operating in an adjacent TV channel, the channel centre frequency of the wireless audio transmitter must be at least 200 kHz above the upper edge of the adjacent TV channel, or 400 kHz below the lower edge of the adjacent TV channel.
23	Biomedical telemetry transmitters	174 – 230	10 µW	
24	Biomedical telemetry transmitters	520 – 668	3 mW	Transmission in a TV channel must not originate in the licence area of an analogue TV broadcasting station (including a repeater or translator station) operating in the same channel.
25	Telecommand or telemetry transmitters	472.0125 – 472.1125	100 mW	
26	Telecommand or telemetry transmitters	1. 2 400 – 2 450 2. 5 725 – 5 795 3. 5 815 – 5 875	1 W	
27	Telecommand or telemetry transmitters	5 795 – 5 815	2 W	
28	Auditory assistance transmitters	3.155 – 3.4, with a carrier frequency of: (a) 3.175 MHz; or (b) 3.225 MHz; or (c) 3.275 MHz; or (d) 3.325 MHz.	60 µW	

Item	Class of transmitter	Permitted operating frequency band (MHz) (lower limit exclusive, upper limit inclusive)	Maximum EIRP	Limitations
29	Auditory assistance transmitters	1. 41 – 42, with a carrier frequency of: (a) 41.55 MHz; or (b) 41.65 MHz; or (c) 41.75 MHz; or (d) 41.85 MHz; or (e) 41.95 MHz. 2. 43 – 44, with a carrier frequency of: (a) 43.05 MHz; or (b) 43.15 MHz; or (c) 43.25 MHz; or (d) 43.35 MHz; or (e) 43.45 MHz.	1.3 mW	
30	Radiofrequency identification transmitters	1. 1.77 – 2.17 2. 2.93 – 3.58 3. 7.2 – 10.01	100 pW	
31	Radiofrequency identification transmitters	1. 13.553 – 13.567 2. 918 – 926 3. 2 400 – 2 450 4. 5 725 – 5 795 5. 5 815 – 5 875 6. 24 000 – 24 250	1 W	
32	Radiofrequency identification transmitters	5 795 – 5 815	2 W	
33	Alarm transmitters (including security and personal safety transmitters)	303.60 – 304.05	100 µW	
34	Home detention monitoring equipment	314.075 – 314.325	200 µW	In a 10-second period, a single transmission must not exceed 10 milli-seconds.
35	Radio-determination transmitters	24 000 – 24 250	1 W	
36	Radio-determination transmitters	60 000 – 61 000	20 mW	

Item	Class of transmitter	Permitted operating frequency band (MHz) (lower limit exclusive, upper limit inclusive)	Maximum EIRP	Limitations
37	Transmitters used for underground communications	1. 31 – 32 2. 33 – 34 3. 35 – 36 4. 37 – 38 5. 42 – 43 6. 44 – 45 7. 70.24375 – 74.8 8. 75.2 – 77.29375 9. 77.49375 – 84.69375 10. 149.25 – 149.9 11. 150.05 – 151.39375 12. 152.49375 – 156 13. 157.45 – 160.6 14. 160.975 – 161.475 15. 162.05 – 173.29375 16. 403 – 406 17. 406.1 – 420 18. 450 – 500.99375 19. 504.99375 – 510.99375 20. 514.99375 – 520	3.5 nW	The maximum EIRP applies at an above-ground opening associated with the underground communications.
38	Transmitters used for underground communications	1. 0.5265 – 1.605 2. 87.5 – 108	10 µW	The maximum EIRP applies at an above-ground opening associated with the underground communications.
39	Aquatic-animal-tracking transmitters	48 – 49	10 mW	
40	Radio-determination transmitters operated in radiofrequency-shielded enclosures	24 050 – 26 050	75 nW	The maximum EIRP applies outside the shielded enclosure.
41	Personal alarm transmitters	27.500 – 27.510	100 µW	
42	Transmitters used with personal alarm transmitters operating in the frequency band 27.500 – 27.510 MHz	27.500 – 27.510	500 mW	Each transmission must not to exceed 4 seconds over a 60-second period.

Item	Class of transmitter	Permitted operating frequency band (MHz) (lower limit exclusive, upper limit inclusive)	Maximum EIRP	Limitations
43	Alarm transmitters	344.8 – 345.2	1 mW	The average EIRP must not exceed 100 µW: (a) if the length of a pulse train does not exceed 0.1 second — in the length of one complete pulse train; or (b) if the length of a pulse train exceeds 0.1 second — in the 0.1 second period during which the EIRP is at its maximum value; or (c) if a transmitter operates for more than 0.1 second — in the 0.1 second period during which the EIRP is at its maximum value.

Notes

1. Made by the Acting Spectrum Manager, on behalf of the Spectrum Management Agency, on 13 June 1997 and published in the *Commonwealth of Australia Gazette* on 25 June 1997.

2. Made by the Australian Communications Authority on 21 December 1998 and published in the *Commonwealth of Australia Gazette* on 24 December 1998.