

Radiocommunications Regulations (General User Radio Licence for Short Range Devices) Notice 2007

Pursuant to Regulation 9 of the [Radiocommunications Regulations 2001](#) (“the Regulations”) made under section 116 (1) (b) of the Radiocommunications Act 1989 (“the Act”), and acting under delegated authority from the Chief Executive, I give the following notice.

Notice

1. Short title and commencement

1. This notice is the Radiocommunications Regulations (General User Radio Licence for Short Range Devices) Notice 2007
2. This notice comes into force on 5 April 2007.

2. General user radio licence

A general user radio licence is granted for the transmission of radio waves for the purpose of Short Range Devices (SRD), also known as Restricted Radiation Devices (RRD), Low Interference Potential Devices (LIPD), or Spread Spectrum Devices (SSD), in accordance with the terms, conditions and restrictions of this notice.

3. Terms, conditions and restrictions

1. The ranges of frequencies, power of transmissions permitted within those ranges of frequencies, and designated uses of frequencies permitted pursuant to this licence are those prescribed in the Schedules to this notice.
2. Transmitters must conform to technical standards as prescribed in notices made under Regulation 32 (1) (b) of the Regulations.
3. Frequency use is on a shared basis and the chief executive does not accept liability under any circumstances for any loss or damage of any kind occasioned by the unavailability of frequencies or interference to reception.
4. Should interference occur to services licensed pursuant to a radio licence or a spectrum licence, the chief executive reserves the right to require and ensure that any transmission pursuant to this General User Radio Licence change frequency reduce power, or cease operation.
5. Transmissions for the purposes of broadcasting, as defined in the Broadcasting Act 1989, are not permitted.

4. Consequential revocation of licences

1. The Radiocommunications Regulations (General User Radio Licence for Short Range Devices) Notice 2004 dated 6th day of December 2004 and published in the *New Zealand Gazette*, 9 December 2004, No. 160, page 3976, is revoked.
2. Notwithstanding the revocation of a notice under subsection (1), every transmitter

compliant with the requirements of that notice on the commencement date of this notice is deemed to be compliant with the requirements of this notice.

Schedule 1

Frequency Range		Peak Power	Designated Use
From: (MHz)	To: (MHz)	e.i.r.p (mW)	
0.009	0.03	refer Note 1	Telemetry/Telecommand
0.03	0.19	10	Telemetry/Telecommand
6.765	6.795	10	Telemetry/Telecommand
13.55	13.57	100	Telemetry/Telecommand
26.95	27.3	1000	Unrestricted
29.7	30	100	Unrestricted
30.8	31.5	100	Model Control
35.5	37.2	100	Unrestricted
40.66	40.7	1000	Unrestricted
40.8	41.0	100	Unrestricted
72	72.25	100	Auditory Aids
72.25	72.50	100	Unrestricted
88	108	0.00002	Audio senders
107	108	25	Unrestricted
160.1	160.6	500	Unrestricted
173	174	100	Unrestricted
235	300	1	Telemetry/Telecommand
300	322	10	Telemetry/Telecommand
402	406	0.025	Biomedical Telemetry (refer Note 3)
433.05	434.79	25	Telemetry/Telecommand
444	444.925	25	Biomedical Telemetry
458.54	458.61	500	Unrestricted
466.80	466.85	500	Unrestricted
470	470.5	100	Biomedical Telemetry
471	471.5	100	Unrestricted
614	646	25	Audio/Video Senders
819	824	100	Unrestricted
864	868	1000	Unrestricted (refer Note 2)
869.2	869.25	10	Telemetry/Telecommand (refer Note 3)

915	921	3	Telemetry/Telecommand
921	929	1000	Unrestricted

Schedule 2

Frequency Range		Peak Power	Designated Use
From: (GHz)	To: (GHz)	e.i.r.p (mW)	
2.4	2.4835	1000	Unrestricted (refer Note 2)
2.9	3.4	100	Radiolocation
5.15	5.25	200	Wireless LAN – indoor use (refer Note 4)
5.25	5.35	1000	Wireless LAN (refer Note 5)
5.47	5.725	1000	Wireless LAN (refer Note 6)
5.47	5.725	100	Radiolocation
5.725	5.875	1000	Unrestricted (refer Note 2)
5.725	5.875	2000	Road Transport and Traffic Telematics
8.5	10	100	Radiolocation
10	10.6	25	Radiolocation - radar systems only
15.7	17.3	100	Radiolocation
24	24.25	1000	Unrestricted
33.4	36	100	Radiolocation
46.7	46.9	100	Field Disturbance Sensors
57	64	20000	Fixed point-to-point links (refer Note 7)
59	64	100	Radiolocation
76	77	1000	Field Disturbance Sensors
122	123	1000	Unrestricted
244	246	1000	Unrestricted

Note 1: In the band 0.009 to 0.03 MHz the maximum permitted field strength is $2400/f(\text{kHz}) \mu\text{V/m}$ measured using an average detector at 300 metres.

Note 2: Transmitters employing frequency hopping or digital modulation techniques in 864 - 868 MHz, 2.4 - 2.4835 GHz and 5.725 - 5.875 GHz bands may operate with gain antennas provided the peak power does not exceed 4 watts e.i.r.p.

Note 3: In the band 402 to 406 MHz and 869.2 to 869.25 MHz the maximum permitted duty cycle is 0.1%.

Note 4: In the band 5150 to 5250 MHz band the maximum permitted power density is

10 mW/MHz e.i.r.p. or equivalently 0.25 mW/25 kHz e.i.r.p.

Note 5: Indoor-Only Systems: In the band 5250 to 5350 MHz the maximum permitted mean power is 200 mW e.i.r.p. and the maximum permitted mean power density is 10 mW/MHz e.i.r.p., provided Dynamic Frequency Selection and Transmitter Power Control are implemented. If transmitter power control is not in use, then the e.i.r.p. values shall be reduced by 3 dB;

Indoor and Outdoor Systems: In the band 5250 to 5350 MHz, the maximum permitted mean power is 1 watt e.i.r.p. and the maximum permitted mean power density is 50 mW/MHz, provided Dynamic Frequency Selection and Transmitter Power Control are implemented in conjunction with the following vertical radiation angle mask where θ is the angle above the local horizontal plane (of the Earth):

Maximum permitted mean power density	Elevation angle above horizontal
-13 dB(W/MHz)	for $0^\circ \leq \theta < 8^\circ$
$-13 - 0.716(\theta - 8)$ dB(W/MHz)	for $8^\circ \leq \theta < 40^\circ$
$-35.9 - 1.22(\theta - 40)$ dB(W/MHz)	for $40^\circ \leq \theta \leq 45^\circ$
-42 dB(W/MHz)	for $45^\circ < \theta$;

Note 6: In the band 5470-5725 MHz the maximum transmitter power is 250 mW with a maximum permitted mean power of 1 watt e.i.r.p. and a maximum permitted mean power density of 50 mW/MHz e.i.r.p., provided Dynamic Frequency Selection and Transmitter Power Control are implemented. If transmitter power control is not in use, then the maximum permitted mean power shall be reduced by 3 dB;

Note 7: In the band 57 – 64 GHz, the average power density of any emission, measured during the transmit interval shall not exceed $9\mu\text{W}/\text{cm}^2$ at a distance of 3 metres and the peak power density of any emission shall not exceed $18\mu\text{W}/\text{cm}^2$ at a distance of 3 metres.

In the band 57 – 64 GHz, the peak total transmitter power shall not exceed 500 mW.

In the band 57 – 64 GHz, for emissions of bandwidths less than 100 MHz the transmitter peak power must be limited to $500 \text{ mW} \times (\text{bandwidth (MHz)} / 100 \text{ (MHz)})$.

Dated at Wellington this 5 day of April 2007.

SANJAI DEEPAK RAJ, Group Manager, Radio Spectrum Management, Ministry of Economic Development.

Explanatory Note

This note is not part of the notice, but is intended to indicate its general effect.

This notice prescribes that, pursuant to regulation-making powers of the Radiocommunications Act 1989, a general user radio licence is granted for the transmission of radio waves for the purpose of Short Range Devices (SRD), also known as Restricted

Radiation Devices (RRD), Low Interference Potential Devices (LIPD), or Spread Spectrum Devices (SSD), in accordance with the terms, conditions and restrictions of this notice.