

# **General User Licence for Low Power FM broadcasting**

## **Radiocommunications Regulations (General User Licence for Low Power FM Broadcasting) Notice 2010**

Pursuant to Regulation 9 of the Radiocommunications Regulations 2001 ("the Regulations") and acting under delegated authority from the Chief Executive, I give the following notice.

### **Notice**

#### **1. Short title and commencement**

- (a) This notice is the Radiocommunications Regulations (General User Licence for Low Power FM Broadcasting) Notice 2010. This notice comes into force on 17 June 2010.

#### **2. General user licence**

- (a) A general user licence is granted for the transmission on the frequencies specified in the licence by means of radiocommunication transmitters intended for local-area broadcasting and known as "Lower Power FM Broadcasting" or LPFM broadcasting, in accordance with the terms, conditions and restrictions of this notice.

#### **3. Terms, conditions and restrictions**

- (a) Within a 25 km radius of any broadcast transmitter there must be no more than one low power FM transmitter broadcasting substantially the same programme (including simulcast or re-transmission) as that broadcast transmitter. Broadcast transmitter means a low power FM transmitter or any broadcast transmitter licensed pursuant to section 48 of the Radiocommunications Act 1989.
- (b) Low Power FM transmitter operators must broadcast the contact details of the person responsible for the transmissions at least once every hour.
- (c) Only transmissions that are broadcasting, as defined in the Broadcasting Act 1989, are permitted.
- (d) Transmitter emissions must conform to Schedule 1 of this notice and the requirements prescribed in notices made under Regulation 32 (1) (b) of the Regulations.
- (e) Transmitters are not permitted to be operated in the locations and at the frequencies described in Schedule 2 of this notice.
- (f) 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 degradation to reception from other transmissions.
- (g) Should interference occur to services licensed pursuant to a radio licence or a spectrum licence, including wireless public address systems, the Chief Executive reserves the right to require and ensure that any transmission pursuant to this general user licence change frequency, reduce power or cease operation.

#### **4. Transitional provisions**

- (a) Transmissions authorised under the General User Radio Licence for Low Power FM Broadcasting Short Range Devices Notice 2003 No 2, published on 26 June 2003, which are not authorised under other provisions of this notice are permitted to continue at a maximum power of 0.5 Watt e.i.r.p until 19 July 2010 and must cease thereafter.

## 5. Revocation

- (a) The Radio Regulations notice General User Radio Licence for Low Power FM Broadcasting Short Range Devices Notice 2003 No 2, published on 26 June 2003 in the New Zealand Gazette is revoked on 17 June 2010.

### Schedule 1

#### Transmitter emission requirements

- (a) The permitted transmitter carrier frequencies are:

87.6 MHz	87.7 MHz	87.8 MHz	87.9 MHz
88.0 MHz	88.1 MHz	88.2 MHz	88.3 MHz
106.7 MHz	106.8 MHz	106.9 MHz	107.0 MHz
107.1 MHz	107.2 MHz	107.3 MHz	107.4 MHz
107.5 MHz	107.6 MHz	107.7 MHz	

- (b) The permitted designations of emissions are 180KF3EGN (mono), 256KF8EHF (stereo) and 256KF9EHW (stereo and multiplex data).
- (c) The maximum radiated power shall not exceed 0 dBW (1 W) e.i.r.p.
- (d) Notwithstanding the provisions of (c), the field strength shall not exceed 95 dB $\mu$ V/m based on a measurement at a distance of 100 metres from the transmit antenna.
- (e) External controls that enable transmitter power to be increased above the maximum radiated power are not permitted.
- (f) Emission polarisation shall be vertical.
- (g) Transmitter carrier stability (frequency tolerance) must be maintained within +/- 5 kHz.
- (h) Unwanted emissions shall not exceed the limits as follows;

Unwanted Emission Limits - in the resolution bandwidth	Frequency Range from carrier	Spectrum Analyser Resolution Bandwidth
-25 dBW	128 to 240 kHz	Not to exceed 10 kHz*
-35 dBW	240 to 600 kHz	Not to exceed 100 kHz*
-56 dBW	> 600 kHz	100 kHz

\* The spectrum analyser shall be set for 5 minute maximum hold.

### Schedule 2

#### Locations and frequencies where use of this licence is not permitted

- (a) Locations required for the protection of aeronautical services are as follows;

Location Description - based on NZ Topo50 Series map references	Frequencies not to be used in MHz	Area Description
Any location within a polygon whose vertices are BB32 600033, BB32 647067, BB32 658031, BB32 603023	107.5, 107.6 and 107.7	Auckland International Airport
Any location within a polygon whose vertices are BQ31 500363, BQ31 500313, BQ31 550348 BQ31 550363	107.0, 107.1, 107.2 & 107.3	North Wellington

(b) Between 17 June and the 1 October 2010 use of this licence is not permitted within 50 km of the locations and at frequencies as follows;

<b>Location Description - based on NZ Topo50 map references</b>	<b>Frequencies not to be used - in MHz</b>	<b>Main Populated Areas in the Protected Location</b>
Normandale BQ32 593390	87.6, 87.7, 87.8	Wellington, Hutt Valley, Porirua, Paraparaumu
Tauakira BK33 897041	87.6	Whanganui, Raetihi, Ohakune, Hunterville
Rangitoto BF34 110510	87.7, 87.8, 87.9	Te Awamutu Otorohanga, Tokoroa, TeKuiti,
Mangatoetoe BC35 514607	87.6, 87.7, 87.8, 87.9	Waihi, Tauranga, Paeroa
Mt Campbell BP25 890481	87.6, 87.7, 87.8	Nelson, Motueka, Takaka
Mt Grey BW23 633257	87.6, 87.7, 87.8	Christchurch, Cheviot, Culverdon, Sheffield
Mt Shrives CA18 358513	87.6, 87.7, 87.8	Timaru, Waimate, Oamaru
Rudd Rd CE17 033204	87.8, 87.9, 88	Dunedin, Milton, Palmerston
Mokoreta CG13 022618	87.9, 88, 88.1	Gore, Balcutha, Invercargill
Blue Mountains CE13 216145	87.7, 87.8, 87.9	Gore, Balcutha, Roxbrugh
Hokonui CF12 799931	87.6, 87.7, 87.8	Gore, Invercargill, Lumsden

Dated at Wellington this, the 11th day of June 2010

SANJAI 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 on the frequencies specified in the licence by means of radiocommunication transmitters intended for local-area broadcasting and known as "Low Power FM Broadcasting", or LPFM Broadcasting devices, in accordance with the terms, conditions and restrictions of this notice.

Transmissions under this licence must not cause interference to services in adjacent landmobile, broadcasting and aeronautical bands. To assist LPFM operators understand the potential causes and mitigation of that interference, and the related terminology, the Ministry has provided information on the RSM web site, [www.rsm.govt.nz](http://www.rsm.govt.nz). The information includes maps of the proposed LPFM exclusions zones that identify frequencies on which transmissions can cause interference.