



## **Public Information Brochure**

### **Personal Radio Service**

# **PUBLIC INFORMATION BROCHURE**

## **PERSONAL RADIO SERVICE**

### **IMPORTANT NOTICE**

The nature of radio spectrum management is such that the information contained in this document is subject to change without notice. The Crown does not accept any liability for damage or loss arising from reliance on any information contained in this document. Interested persons should contact the nearest Field Office of Radio Spectrum Management, Ministry of Economic Development for further information.

### **INTRODUCTION**

The purpose of this service is to improve options available to the public and provide an economical radio service for non-essential radiocommunications. Possible uses include sporting and community events, small businesses and hobby activities.

No use, or user, has priority in this service, requiring a responsible and cooperative approach by all persons sharing the service.

### **ABOUT THE PERSONAL RADIO SERVICE APPARATUS**

In radio spectrum terms, the Personal Radio Service (PRS) consists of 40 channels spaced at 25 kHz between 476.400 MHz and 477.425 MHz using frequency modulation (FM). A [General User Radio Licence](#) (GURL) has been issued for this service, meaning that possession and operation of approved radio apparatus on these channels does not require an individual licence.

If you are not certain whether particular radio equipment is approved by the Ministry as meeting the Standard, any Radio Spectrum Management field office can advise you appropriately or provide further information as necessary. Information is also available from the Radio Spectrum Management website at <http://www.rsm.govt.nz/>.

### **ABOUT PRS REPEATERS**

To extend the communication range achievable by users of this service, the establishment of “repeater” stations may be approved. Where a repeater station is established, communication through the repeater is available to all PRS users on an unrestricted basis without charge.

It is important to note that the General User Radio Licence does not apply to retransmission (repeater) apparatus, requiring that an application be made to the Ministry and a radio licence be obtained before a repeater station can be established.

## APPLYING FOR A PRS REPEATER LICENCE

A Radio 2 application form can be obtained from any Radio Spectrum Management office, or printed from the Ministry website (<http://www.med.govt.nz/rsm/licensing/radio2.pdf>).

- Applications must be correctly completed and submitted with the required application fee.
- Applications will be treated in “first time” order.
- Applications to link repeaters and/or connect to the Public Switched Telephone Network will be declined.
- Any application to vary the geographical spacing of repeaters within the minimum spacing distances outlined in the **Licensing** section below will need to be supported by written detail as to why this is necessary or desirable.

## LICENSING

- A repeater station may be accessed by any radio apparatus covered by the General User Radio Licence.
- While the purpose of the repeater is to re-transmit voice telephony (speech), the re-transmission of selective calling tones sent between personal radio apparatus is permitted.
- Only one channel will be licensed at any transmitter site location, with a minimum distance between transmitters of 20 kilometres.
- The minimum separation distance for co-channelled repeaters will be 100 kilometres.
- Any variation of these distances, which have been set to minimise interference between stations, will be at the discretion of the Ministry and will take into account topographical and channel re-use factors.

## TECHNICAL PARAMETERS

- Frequencies will be assigned on a shared basis.
- Any interference to the PRS service is to be accepted, i.e. this service is not protected from the effects of other radio services. However, interference must not be caused by PRS apparatus or PRS communications to any other radio service, whether existing or new.

The frequencies available for repeaters are as follows:

<u>Repeater Output</u>		REPEATER	<u>Repeater Input</u>	
CHL	MHz		CHL	MHz
Ch 1	476.425	PRS1	Ch 31	477.175
Ch 2	476.450	PRS2	Ch 32	477.200
Ch 3	476.475	PRS3	Ch 33	477.225
Ch 4	476.500	PRS4	Ch 34	477.250
Ch 5	476.525	PRS5	Ch 35	477.275
Ch 6	476.550	PRS6	Ch 36	477.300
Ch 7	476.575	PRS7	Ch 37	477.325
Ch 8	476.600	PRS8	Ch 38	477.350

Emission: 16K0F3EJN / 16K0G3EJN (retransmission of Voice telephony)  
16K0F2EJN / 16K0G2EJN (retransmission of Selective Calling information)

- Equipment Compliance: Schedule B, Table 2 (3. Land Mobile and Fixed Services) of [Radiocommunications \(Electromagnetic Compatibility Compliance\) Notice 2001](#)
- Power: 13.2 dBW (e.i.r.p) maximum
- Access to the repeater shall not be controlled by tones, or otherwise restricted.
- A remote control facility can be fitted to the repeater. However it must not be used to alter the technical operating parameters of the repeater other than to:-
  1. Allow deactivation / reactivation of the repeater for maintenance purposes only; or
  2. Initiate the transmission of status information; or
  3. Indicate an alarm condition at the repeater site.