



## **WIA Repeater and Beacon Licence Recommendation Policy – August 2014**

### **Background**

The WIA provides a repeater and beacon licence recommendation service under a long-standing agreement with the ACMA.

Individual radio amateurs and radio clubs are encouraged to apply for a repeater or beacon licence through the WIA Repeater and Beacon Coordination service. The WIA does not charge for this service.

WIA appointed volunteer repeater and beacon coordinators will evaluate a licence application, assign frequencies in accordance with the amateur radio bandplan and other site related factors, and will pass the applications together with their recommendation to the ACMA for licence processing. Under this agreement for undertaking preliminary coordination, the ACMA has agreed to charge a reduced application fee, currently \$28.

The typical time for the WIA to process a complete application is 28 days.

This policy primarily covers repeater and beacon licence applications. IRLP and APRS services in many cases do not require individual licensing. However, due to the varying ways in which these services are operated, individual licensing may be required, especially for unattended operation.

Due to the increasing limited amount of spectrum available for repeaters and in some cases beacons, the WIA will apply the same principals regarding frequency allocation and spectrum reuse to IRLP and APRS systems. The WIA

will work with individuals, clubs and the ACMA to ensure that when licensing is required it is done so in the most practical and cost effective way.

WIA coordinators may contact an applicant for further information or seek permission to vary a licence application in order to ensure compatibility with this policy. If permission is not granted by the applicant, the Coordinator will submit the licence application in its original form together with a negative recommendation from the WIA to the ACMA.

*Applications for a repeater or beacon licence may also be made directly to the ACMA. It should, however, be noted that the ACMA may charge a different application fee for processing these applications*

### **Policy Considerations**

#### **1. Limited Spectrum and the need to optimise frequency re-use.**

The WIA wishes to ensure that amateur spectrum is used efficiently, and that it is available to as many groups as possible. "Sensible" power limits are applied to amateur repeaters to maximise spectrum re-use, particularly in urban areas and on the Australian east coast where unused spectrum is scarce.

#### **2. Co-existence with Commercial Services**

Many amateur repeaters are located on shared-sites close to commercial services. The WIA generally applies land mobile standards to such amateur repeater applications, with the concession that antenna gain is not restricted.

#### **3. EMR Compliance**

Existing EMR standards require a higher level of documentation and assessment once a transmitter exceeds 100W.

#### **4. Self education and experimentation**

The WIA wishes to encourage self education and experimentation through all facets of amateur radio. The WIA adopts a technology neutral approach to repeater and beacon applications, but the application will be assessed based on its compatibility with existing services.

#### **5. Flexibility**

The WIA applies a flexible policy, recognising that one size does not fit all, especially in rural and remote areas where spectrum reuse is not an important consideration.

#### **6. Beacons**

Beacons need rather different treatment from repeaters, as the aim is for them to be received as far away as possible, and not be confined to a particular service area. Additionally, as their purpose is to provide an indicator of propagation into an area where radio amateurs are located, most beacons are located close to major population centres.

#### **7. Portable repeaters**

Portable repeaters are operated by some community service groups such as WICEN. Portable repeaters pose significant risk to licensed services as there is no way that potential interference can be predicted with certainty. Accordingly, the ACMA may impose further licence conditions on a “non interference, no protection” basis.

## The Policy

- 1. Definition of high, low and remote density areas:** Spectrum density areas referred to in this policy are defined by the ACMA in spectrum density maps, which are available at:  
<http://www.acma.gov.au/theACMA/About/Making-payments/Apparatus-licence-fees/apparatus-licence-fees-acma#maps>
- 2. Access** – The WIA will provide a repeater and beacon licence recommendation service to all radio amateurs and radio clubs holding an Australian Advanced or Standard grade amateur radio licence. WIA membership is not required.
- 3. Processing** – The WIA will process complete applications on a first come-first served basis. Applications may not be passed to the ACMA in the order they are received, as complex or problematic applications will require additional work.
- 4. Bandplans** – The WIA will make recommendations in accordance with the amateur radio bandplans in force at the time. An application for a repeater or beacon in high or low density areas may be held over if the relevant bandplan is in the process of revision.
- 5. Power of repeaters** - The WIA will generally apply land mobile standards to repeater applications in high density areas or if the repeater is to be located close to non-amateur radio services.  
  
If the repeater is to be located in a remote density area in NSW, Queensland, or Tasmania, or in a low or remote density area in other states or the Northern Territory, and not close to non-amateur radio services, a power level higher than 50 Watts peak may be supported.
- 6. Spectrum availability** – The applicant will be notified if spectrum is not available for their proposed repeater or beacon.
- 7. Portable repeaters** - Portable repeaters will only be recommended for licensing when the proposed application justifies their use, (ie. short-term community service), and if the nominated frequency is available throughout the proposed coverage area. Portable repeaters

will generally be limited to 10 Watts peak power, except when a higher power is a demonstrated requirement.

8. **Amateur Beacons** – Beacon licence applications will be evaluated on a case by case basis, considering the spectrum availability, environmental factors (co-location near other services), and the purpose of the beacon.
9. **IRLP and APRS services:** If an IRLP or APRS service requires individual licensing, the repeater and beacon coordinators will work with stakeholders and the ACMA on a case by case basis.
10. **Technical innovation:** This policy is not intended to limit experimentation and technical innovation. Applications using emerging technologies which will not interfere with existing single fixed frequency services will be evaluated on a case by case basis.
11. **Appeal:** An applicant who does not agree with a recommendation of the repeater and beacon coordinators may appeal to the WIA Board, stating the particulars of the case and the grounds for appeal.