

# 2015 Fees Framework Review

## Submission by Warren Harris

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### Overview

The key objectives in covering costs fairly and proportionally is understandable in any commercial operation where costs need to be apportioned appropriately. However government agencies that manage a resource such as the radio spectrum should have other objectives. Such objectives should include

- Supporting communities to support themselves
- Encouraging scientific experimentation and research
- Encourage entrepreneurial solutions to abnormal problems

### Rational

RSM looks after a fixed radio spectrum that all parties within the community must share fairly and equally. Economics plays a significant role in how this resource is shared. If it is too expensive, only the affluent or cooperates get access. If it is too cheap, it loses efficiency.

Scientific research is a key to our knowledge economy. Having a system that encourages such research and experimentation fosters knowledge growth which will add value to industry, including the radio industry. This should be encouraged.

Entrepreneurs have the ability to solve real problems using unorthodox solutions. The framework should not be such that it restricts such solutions without good engineering cause.

## LR1 Multiple Licences

I currently hold licence number 230009 which is an LR1 type licence. This repeater is in fact a theatre comms link system which bridges wireless headsets to a hardwired full duplex communications network. It has been used for major events including Valarie Adams medal ceremony, national party conference, anzac 100 year ceremonies to school productions and motorbike rallies.

It is sited at many sites, mostly Greenfield sites with no other transmitters. Other sites have been added to protect the licence from being reused as sites may be added at a moment's notice to accommodate an event. This apparatus is an example of an unorthodox solution to an unusual problem. It is only 1 transmitter – a portable repeater if you will. It has been suggested that I tie 2 simplex frequencies together to do this task, however when the transmitter is engaged it is in broadcast mode with 100 % duty cycle. This is no good for simplex frequency operation where simplex frequencies are shared. As such it requires a fixed station licence. The protection this licence asks for is minimal in the fact that most of the locations are Greenfield. To remove the LR1 licence and force each site to pay an individual licence fee would be prohibitive and the licence would be removed, forcing me to find another solution.

### Proposal 1 (preferred)

Leave LR1 as a licence class No change.

### Proposal 2

Leave LR1 type licences but have them charged on a per commercial site arrangement where sites that require protection from such a licence. This could be achieved by only allowing sites >500 m to be added to the licence, while ones <500 m would require a separate licence

### Proposal 3

Have a GuRL option for such devices where they are offered no protection from interference but are able to operate in a commercial band. PRS is not suitable for such equipment as transmitters operated by untrained radio professionals would interfere and make the solution unworkable. The 750 kHz split and other rules surrounding repeaters in PRS band also make it unworkable

### Proposal 4

Have a month to month type licence fee for such transmitters so they can be established short term attracting a short term fee. Each establishment would attract a short term fee and would need to be engineered on each occasion. No one frequency could be guaranteed for any installation or for revisiting the same installation. The fee should be 1/12 the annual fee to fairly reflect the protection offered.

## Amateur fixed station licences

The amateur radio community in New Zealand is a vital resource in civil defence and search and rescue. It is a bunch of radio enthusiasts, who share a love of radio. This community fosters innovation, experimentation and research. But as a community it also has a bond that stretches across the entire country. Fellow radio enthusiasts communicate with each other regularly using various techniques and apparatus.

While we rejoiced when the annual radio licence was removed, we are concerned that the costs now appear to have moved to the fixed stations that once enjoyed no annual fee. The annual fee of \$44 was palatable, however still commands an annual income from apx 290 licences of about \$12760. This is a significant cost to the amateur community, where regulation prohibits us from passing on such a cost or using the assets in such a way that would create an income source. Increasing the annual licence fee to \$165 per year would raise the annual cost to 47850. As many amateur radio clubs are not GST registered, in real terms this cost would be more like \$55000 per annum. This would be totally unsustainable.

The amateur band is part of the radio spectrum, however because it is separate from commercial bands, its use does not contribute to congestion on commercial bands and as such does not impinge on the limited resource for commercial licences.

From Table 3 – several of the costs do not apply to amateur related licences

- Interference investigations. As amateurs we accept a level of interference. This is demonstrated by the re-engineering of our 430 – 440 MHz band to accommodate the GuRL for short range devices. These devices caused us interference, yet we bore the costs associated with re-frequencing the national system and inverting some stand alone repeaters. It is more true to say that amateur stations, currently enjoying no licence cost, are enjoying the free service of interference investigations while the cost is being recovered from repeaters. As there is no compulsion for an amateur operator to belong or support a club (be it a local or national club) there is no traceable method of fee recovery from the repeaters. It is thus unfair to lumber this cost onto the repeater owners.
- Standard setting. Transmitters within the amateur spectrum are not subject to type approval.
- Technical planning. This is done within NZART in accordance with IARU band plans.

From this it is fair to say that the costs borne by the amateur service do not equate to those born by other commercial organisations.

Community good. Radio Spectrum Management, as a government agency, should be encouraged to support the local communities in New Zealand. Amateur Radio has roots in many community groups.

- Civil Defence, where we played an important role in the Christchurch earthquake, using assets that attract licence fees, assisting the community by being part of the logistics team, passing messages within the civil defence CIMS structure where other communication channels failed. New technology including crowd sourcing sitreps is being deployed and has been used on 2 trial events with great success. This technology enables civil defence controllers to get a real time view of the situation in the field from multiple sources, including amateur radio operators peppered throughout the community.

- Search and Rescue. While police have their own radio equipment, our fixed assets are backup to these, where we can pass messages between search teams (yes hams get out and search too), search base and town base. The terrain is usually rugged and remote, so other forms of communication enjoyed in urban areas are ineffective.
- Tramping clubs. Some trampers are hams, some hams are trampers. This cross over is one example of our reach into community groups where we make use of our hilltop assets for more than a casual chit chat. Having the hilltop assets available for messages to be passed from our wilderness back to home is a useful tool that still has its place even with the extension of the cellular network.

Some repeaters are remote and are not often used so would not meet a cost to benefit analysis with the proposed fee structure, and would thus have to be decommissioned. Such assets have found to be invaluable in remote areas where other forms of communication do not exist.

#### Proposal 1 (Preferred)

RSM remove the annual licence fee from fixed station licences citing their inability to recover such costs acknowledging the role they play in the community

#### Proposal 2

RSM leave the amateur fixed station licence fees at \$44 citing their inability to recover such costs and the role they play in the community, and the lesser impact they have on the costs of RSM or the spectrum

#### Proposal 3

RSM remove the annual licence fee from fixed stations, and enstate a licence fee on each operator. This could be a nominal fee for a 10 year licence, that would serve as a truer and fairer method of cost recovery, while serving as a more efficient clean out tool for expired licences from deceased amateurs.

## LII

As a beneficiary of the LII scheme I believe it is appropriate that knowledgeable licence holders carry out their own investigation prior to seeking support from the RSM. To inflict this to all licence holders forthwith is a step too far. Many licence holders will not have the knowledge or skill sets to carry out such investigation. Many will believe this move to be an erosion of the interference protection offered and paid for as set out in table 3.

Proposal.

LII should be allowed to remain but should be encouraged more to licence holders who do have the technical ability to carry out such investigations. As such maybe it should be an opt out rather than an opt in system where licence holders can pay a premium for investigation insurance to protect their licences.

Thank you for the opportunity to comment on the proposed fee changes. I hope this can be taken into consideration before the changes are made.

Regards,

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