



Proposed IoT VHF Testbed Rules

Metrix Submission

30 November 2018

1 Introduction

Metrix welcomes the opportunity to provide feedback on Radio Spectrum Management's rules for the trial testing an allocation of spectrum in VHF Band III.

We have provided comments below on the information provided in the consultation document.

2 Comments on specific topics

Security of Tenure

We note that the spectrum is under trial for the next three years on a yearly renewal of license. We assume this is not intended to restrict us from planning for a 3-year trial, and that provided the terms of the trial (and any agreed exceptions) are adhered to that the license renewals over the three years will not be unreasonably withheld.

Background & Types of Technology Permitted & Channel Plan

The descriptions relating to technologies and restrictions imply that certain features using multiple channels will be acceptable at least during the trial:

- Frequency hopping as used in mesh radio communication networks; and
- Devices leveraging multiple simultaneous channels to improve bandwidth and / or resiliency.

It would be appropriate to understand during the trial if at any time these types of usage or other technological characteristics are identified as problematic or non-compliant and will not be allowed in subsequent trial periods or longer term. This will enable us to trial other compliant technologies to achieve the outcomes required.

Power

Given the 5Mhz guard frequencies either side of the proposed allocated spectrum, we don't see why a higher maximum power could not be allowed for, up to 1 watt might be acceptable and the ability to test this should be considered as part of the trial. This brings several benefits:

- Better coverage to more remote areas; and

- The ability to use more generic omni-directional aerials which can leverage multiple communication paths rather than more situational specific bi-directional type aerials.

It may be appropriate during the trial for the use of non-complying technologies to be allowed under certain approved conditions to validate key technical outcomes and the result to be used as supporting material to requests to change any current trial or proposed final restrictions. This approval process should not be onerous for the trial, but expect that any party looking for an exception has clearly defined what they are doing and for how long, and that other trial participants that might be impacted are informed.

Licensing

The need to define a single TLA for each license may create an overhead for any party looking to deploy a national solution, or a solution covering a significant area. Given the nature of the frequency in question, the services in question are likely to cover a reasonably large geographic region. This should not be a problem for the purposes of the trial provided as we expect these to be geographically constrained.

3 Conclusion

Overall, we see that the rules do not represent a significant hurdle to any initial trial. This spectrum especially lends itself to enabling connectivity in rural and remote New Zealand for technologies that may not be viable in current spectrum allocations. As such, we look forward to participating in the trial.

Signed: Lesley Walmsley

Date: 30/11/18

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