

30 November 2018

Radio Spectrum Management Policy and Planning
Ministry of Business, Innovation and Employment
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Proposed Rules for IoT Testbed

We would like to thank the Ministry for the opportunity to submit on the *IoT VHF Testbed Rules*.

We agree with the general approach for the VHF IoT testbed, particularly the 200 kHz channel bandwidth, which is likely to be suitable for most IoT applications. However, we propose some changes to improve sharing of the band amongst multiple users:

1. The rules must not allow users to “bond” or aggregate multiple 200 kHz channels to create wider bandwidth services.
2. Frequency hopping should be allowed. This may need to be done by allowing a user to licence multiple 200 kHz channels in a single radio licence, but with a condition on the licence that transmission occurs on only one channel at any time.
3. Radio licences should have a condition limiting its duty cycle. While user devices could have a maximum duty cycle of perhaps 1%, the IoT base stations will require a higher duty cycle to accommodate many user devices. The condition must make it clear that the service must be discontinuous and that continuous “always on” systems are not allowed in this band.
4. To avoid channels in this band being used for point to point linking, each radio licence should have a condition requiring that the licence is only used for IoT point to multipoint solutions.
5. RSM should consider increasing the proposed -7 dBW EIRP to perhaps 3 dBW EIRP.

We also propose that a statement is added not allowing interference to potential future services in the reserved DAB block, so that IoT users are aware of their potential future spectrum neighbours.

Contact details for our submission are below:

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We would be happy to meet with the Ministry to discuss our submission further.