



Review of options for allocating spectrum in VHF Band III

Metrix Submission

27 May 2016

1 Introduction

Metrix welcomes the opportunity to provide feedback on Radio Spectrum Management's Review of options for allocating spectrum in VHF Band III.

We have provided answers and comments on the questions posed in the consultation document below.

2 Comments on specific options

Q1. Should spectrum in Band III be allocated for radio microphones? If so, how much spectrum would satisfy demand in this area?

No fixed position on this particular use. If this is to be included it should be part of the SRD GURL. If digital techniques are used, rather than analogue, this could be included in a band for Internet of Things devices (Section 3.4).

Q2. Should spectrum in Band III be allocated for DAB? If yes, why? If not, why not?

No fixed position on this particular use.

Q3. Would an allocation of 14 MHz in the form of eight 1.536 MHz frequency blocks be an appropriate spectrum allocation for DAB in New Zealand? If not, how many multiplexes would be more appropriate for current demand?

No fixed position on this particular use.

Q4. Should spectrum in Band III be allocated to LMR? If yes, how much spectrum would satisfy demand in this area?

No fixed position on this particular use or size of allocation. There are LMR bands in use overseas and New Zealand should reflect those to ensure that existing technologies can be used. Allocations that allow a wider bandwidth than 12.5 kHz could be desirable for utility SCADA and other utility M2M communications.

Q5. If spectrum is allocated to LMR, should there be technological requirements around the use of this spectrum? If yes, why? If not, why not?

Yes. The Ministry should consider some wide bandwidth channel allocations (25 and 50 kHz) specifically for digital technologies to allow for SCADA and other M2M communications in any LMR allocations within Band III. This should cover both simplex and duplex communication modes.

Q6. If spectrum is allocated to LMR, is it appropriate to charge a fee for this use or transfer the spectrum to the management rights regime? If yes, why? If not, why not?

No fixed position on these options.

Q7. Is there a demand for exclusive spectrum in Band III, either now or in the future, for IoT technologies? If yes, which IoT technologies are demanding this spectrum?

Yes. Spectrum in this band has desirable propagation characteristics that would make it suitable for long range low-to-medium bandwidth IoT applications, especially in areas with limited existing communications infrastructure such as rural, back country or in conservation areas. The Ministry should investigate overseas uses that would match an allocation within Band III to ensure that existing technologies can be employed in New Zealand.

Q8. If spectrum is allocated to IoT, how much spectrum would satisfy demand in this area?

10-15 MHz, depending on demands for the other proposed applications within Band III.

Q9. Which type of licensing framework is most appropriate for spectrum allocated to IoT?

Licensing for IoT devices should follow the SRD GURL as shared use under an existing framework should create the most benefit for the community.

Q10. Is there demand for exclusive Band III spectrum for utility companies? If yes, what types of uses are driving this demand and how much spectrum do these uses require?

Yes. A small pair of blocks of 50 kHz spaced LMR channels exclusively for utilities (e.g. 2 x 2 MHz blocks). This allocation should fall under the licensing regime so that users have recourse to the Ministry for interference resolutions.

Q11. Is there demand for NZDF use of spectrum between 225–230 MHz?

No fixed position on this particular use.

Q12. Should spectrum in Band III be allocated to NZDF? If yes, why? If not, why not?

No fixed position on this particular use.

Q13. Should New Zealand consider PPDR uses in Band III? If yes, why? If not, why not?

Metrix and Mighty River Power are in favour of any use of technology that will improve the safety of the New Zealand public. The use of Band III for PPDR is a decision that needs to be made by the various Ministries and organisations operating in this space. Matching the approaches other countries have taken around implementing PPDR ensures that New Zealand can access pre-existing technologies and should be considered.

Q14. If there is demand for PPDR in Band III, how much spectrum would satisfy this demand?

No fixed position on this particular question.

Q15. Are there any other uses of Band III that should be considered? If yes, please describe.

Nothing to add.

3 Conclusion

The options presented can lead to significant developments for industry and for New Zealand as a whole. 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 the outcome of the review.

Signed: Lesley Walmsley

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Lesley Walmsley

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