### **Spectrum Submission Paper**

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### Introduction

Good Morning, my name is Toa Greening from Manurewa, Auckland. I have over 27 years of New Zealand Information Technology experience and have worked in a number of senior technical roles across the Government and Corporate sectors.

#### Overview

I have reviewed "5G Spectrum road map discussion document - March 2018 - 30th April.pdf" and noted that it will be treated as property that can be leased/sold for the exclusive use of a single entity.

Page 19. "This latter method is an unusual arrangement developed to encourage spectrum sharing. We do not consider a similar process would be relevant for national rights."

# Q17. Which allocation methodology should be used for allocating spectrum bands identified for use with 5G? Why?

## Q18. Should different allocation mechanisms be used for rights for regional providers and national providers? Why?

The answer to both Q17 and Q18 is a national Shared Spectrum. I have attached my "Spectrum Submission Paper 2012 - Toa Greening.pdf" as much of the conclusions are still valid.

I have attached a Shared Spectrum Synopsis.pdf as this demonstrates the standards, standards, implementations and innovations in the United States and the European Union. The objective is to encourage an innovative approach to New Zealand's up and coming 5G spectrum allocation.

### Conclusion

A shared spectrum model should be adopted for at least a portion of the upcoming 5G auction as that will put New Zealand into the forefront of this rapidly developing technology and provide the confidence for innovative companies to invest in New Zealand.

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