

15 May 2018

Renewal of rights in 1800 MHz and 2100 MHz bands

Radio Spectrum Management Policy and Planning

Ministry of Business, Innovation and Employment

PO Box 2847

Wellington 6140

**Renewal of 1800 MHz and 2100 MHz Management Rights discussion document – April 2018**

Dear Sir/Madam

Thank you for the opportunity for making a submission on the Renewal of Management Rights in the 1800 MHz and 2100 MHz bands discussion document. This submission is made from the Next Generation Critical Communications (NGCC) Programme perspective and is not intended to be a formal submission representing the views of the individual agencies (NZ Police, Fire and Emergency NZ, St John Ambulance and Wellington Free Ambulance) participating in the Programme.

**Overview**

The NGCC Programme is currently developing a business case to move the Emergency Services agencies<sup>1</sup> from their existing radio networks to critical communications provided over commercial cellular networks. Although the NGCC Programme proposes the use of commercial networks, and therefore the spectrum used by those commercial networks for delivering the NGCC services, there is a need for access to radio spectrum to facilitate itinerant coverage (e.g. vehicle-based portable cell sites) and to possibly address access constraints under severe congestion scenarios. For these scenarios, a dedicated spectrum allocation would be desirable to meet the needs of Emergency Services.

Earlier discussions have been held with Radio Spectrum Management regarding an exclusive allocation for mobile services in the 800MHz band. The responses in this letter to the current discussion document should be seen as a continuation of these earlier discussions.

**Questions**

***Section 3: Renewal Options (Q1-Q5).***

Emergency Services are particularly interested in the management of the 1800 MHz band as this band is likely to be the most commonly used band internationally for 4G and, in the future, 5G services. The popularity of this band will mean a wide supply of equipment for both commercial and Emergency Service use, lowering the cost of equipment and ensuring availability. To ensure the lowest possible cost of entry for Emergency Services, the NGCC Programme supports “**Option 2: Partial renewal of existing holdings to incumbents**”, with

---

<sup>1</sup> The Emergency Services agencies referred to in this paper are NZ Police, Fire and Emergency NZ, St John Ambulance and Wellington Free Ambulance.

the 3 incumbent users realigned to 2 x 20MHz management rights and the remaining 2 x 15 MHz bands allocated for Emergency Services (and potentially other government users) under an administrative licensing mechanism.

Emergency Services would use this allocation primarily for itinerant use, such as vehicle-based portable cell sites to provide broadband services in fringe network, rural and remote areas. Exclusive access would simplify the ability to deploy services immediately in response to operational needs, removing the need to coordinate frequency use. It would also be an option to ensure priority access can be reliably delivered in busy urban areas by using dedicated spectrum for signalling where RF competition could impact priority access on commercial networks.

The same principles apply to 2100 MHz and an allocation in this band would also suit the purposes above, however this band is less desirable due to lower popularity in other jurisdictions.

#### ***Section 4: Term of new management rights (Q6 & Q7)***

The NGCC Programme does not have a specific view on the term of any management right however the NGCC is intended to be a long-term solution for critical communications and given the time it takes to plan and invest, build, operate and eventually decommission this type of service, a longer investment timeframe (15-20 years) is considered more appropriate.


#### ***Section 5: Incumbent licences (Q8)***

The NGCC Programme does not have a view on this.

#### **Conclusion**

Our primary concerns are that future NGCC services can be successfully implemented in a manner consistent with other international jurisdictions to ensure the widest possible range of compatible equipment and most competitive participation cost for Emergency Services. The need to accommodate immediate itinerant access through vehicle-based and temporary installations can best be met through a separate band allocated for Emergency Services (and potentially other government agencies) and this would also provide a method for priority access to networks under severe radio frequency congestion scenarios.

Yours faithfully

A handwritten signature in blue ink, appearing to read 'Jevon McSkimming', with a large, stylized flourish at the end.

Assistant Commissioner Jevon McSkimming

New Zealand Police

NGCC Senior Responsible Owner