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Tara Morice
Directory, Infrastructure Regulation Division
ACCC

cc: Elyse Shelley, Assistant Director (a/g), Infrastructure Regulation Division, ACCC

27 March 2020

Dear Ms Morice and Ms Shelley,

NBN Co Limited submission on Allocation limits advice for the 26 GHz spectrum allocation

NBN Co Limited (**nbn**) welcomes the opportunity to provide feedback on the ACCC's Consultation Paper on 'Allocation limits advice for the 26 GHz spectrum allocation'.

nbn encourages the ACCC to take a holistic look across the industry's requirements for spectrum and ensure that the Government's Communications Policy Objectives of promoting competitive market outcomes for the long-term benefit of consumers is met across the 26 GHz and 28 GHz spectrum allocations.

In this submission, **nbn** will detail its commercial-in-confidence spectrum plans and requirements. These plans and requirements reflect **nbn**'s current spectrum strategy based on the information available to **nbn** today and reflect our purpose to build a nation-wide broadband network to lift the digital capability of all Australia whilst also ensuring an appropriate upgrade path for all technologies and relevantly those serving remote and regional Australia.

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nbn's spectrum requirements

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In order to meet increased customer demand and enhance the delivered customer experience, **nbn** needs to upgrade its Fixed Wireless network whilst also ensuring that the use of spectrum by 5G networks does not result in interference that compromises **nbn**'s existing satellite network and related upgrade path.¹ [C-i-C] [C-i-C] This spectrum will be used to support required upgrade paths for our Fixed Wireless network and to enable Retail Service Providers (**RSPs**) to offer higher bandwidth services to consumers and businesses across Australia. These higher bandwidth services will promote competition in downstream markets whilst ensuring regional and remote areas of Australia have long term access to a quality wholesale broadband network.

¹ In this respect, **nbn** supports the ACMA's 28 GHz band Planning Decision to exclude mobile networks given the importance of this band to satellite networks (both for **nbn** and industry generally).



- **[C-i-C] [C-i-C] nbn** is undertaking trials to validate the feasibility of using the 26 and 28 GHz band spectrum over very long ranges (approximately 10km). Our studies, and those of our technology partners provide high levels of confidence that the long-range use would allow **nbn** to have significant flexibility to maximise our deployment and upgrade options.
- This long-range approach is enabled by our unique network topology with 100% external CPEs, and largely line of sight deployment in regional and rural areas. **[C-i-C]**

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An allocation of [C-i-C] [C-i-C] contiguous spectrum to nbn will be in the long-term interests of end users

nbn is playing an important role connecting all of Australia to broadband services and enabling an uplift in the digital capability of Australia. **nbn**'s consideration of spectrum allocation in the 26 GHz and 28 GHz bands is driven by four main strategic factors:

1. Maximise customer experience in so far as possible on the **nbn** network;
2. Ensuring that it meets the Government's expectation that all Australians have access to fast broadband as soon as possible, at affordable prices, and at least cost to taxpayers;
3. **nbn**'s ability to ensure upgrade paths are available as required; and
4. The proposed allocation is the most economically efficient way to maximise use of the available spectrum and will promote downstream competition.

Allocation of spectrum to the national wholesale broadband network who are focussed on these four strategic factors will lead to an efficient use of spectrum that promotes social policy benefits for the outcome of regional and remote Australians. As a wholesale only broadband network provider, any allocation to **nbn** will necessarily facilitate competition between all **nbn**'s Fixed Wireless RSPs in downstream markets (currently numbering more than 20). In turn, competition will be enhanced and driven where we provide a quality Fixed Wireless network that efficiently uses spectrum and is upgradable where required. We anticipate that the outcome of our long-range trials will verify that **nbn** is able to utilise the acquired spectrum in an economically efficient manner.

nbn's use case **[C-i-C] [C-i-C]** will encourage investment and innovation in regional and rural Australia, ultimately promoting competing market outcomes for the long-term benefit of consumers. In terms of the economic benefits provided by the **nbn** network, AlphaBeta estimates that the **nbn** access network helped drive an additional \$1.2 billion in economic activity in 2017 alone, helped create new jobs and businesses, and improved productivity. If this continues, the GDP impact is estimated to increase to \$10.4 billion per year in 2021,² with the network expected to generate an additional \$5.3 billion a year in regional areas by the end of the rollout in 2020.³ In **nbn**'s view, if a conservative approach is adopted and an assumption made that just 5% of this additional economic activity is driven by connections to the Fixed Wireless network, this results in an estimated annual GDP increase of \$265m per year due to the Fixed Wireless network. Note this economic activity is in addition to other social and public benefits that are harder to quantify.

² <https://www.nbnco.com.au/content/dam/nbnco2/documents/connecting-australia-report.pdf>, methodology detailed at <http://www.alphabeta.com/wp-content/uploads/2018/04/AlphaBeta-Connecting-Australia-Project-Summary-methodology.pdf>

³ <https://www.nbnco.com.au/corporate-information/media-centre/media-statements/regional-nbn-rollout-on-the-home-stretch>

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For further information, please contact the General Manager – Network, Rural and Customer Service, Sarah Alderson on 0409 035 578.

Yours sincerely

A handwritten signature in black ink, appearing to read 'J. Crichton', written in a cursive style.

Jennifer Crichton

Head of Regulatory