

24th January 2017

Department of Communications and Arts
via email: telco.reform@communications.gov.au

Submission in response to: Exposure Draft of the Telecommunications Reform Package

To whom this may concern,

I thank the Government and the *Department of Communications and Arts* for the opportunity to comment on the Telecommunications Reform Package. I would like to offer my in-principle support of the reforms.

Competing rollouts of super-fast broadband infrastructure such as TPG's Fibre to the Basement network has threatened the ability for NBN Co to internally cross-subsidise its non-commercial fixed wireless and satellite networks.

The proposed reforms reduces the risk of NBN Co's business case, ensuring that services for Australians living in rural and regional areas can be funded. It also clarifies how non-NBN providers can continue infrastructure-level competition.

However, I did have concerns regarding the scope of the Rural Broadband Scheme subsidy charge and payments. I've outlined these in more detail in my submission, but in short, these include:

1. Whether non-NBN providers should be exempt from the Rural Broadband Scheme charge if their fixed-line superfast broadband services are delivered to premises within or proposed to be within NBN Co's fixed wireless or satellite footprints.
2. Clarity on whether or not the Rural Broadband Scheme subsidy can be used to subsidise the delivery of non-regional broadband services such as for the delivery of on-board Wi-Fi on commercial aircraft.

I hope these concerns will be considered and addressed in the final legislation.

Regards,
Kenneth Tsang

1. Expanding regional fixed-line superfast networks

1.1 Background into the regional broadband funding arrangement

1. NBN Co's fixed wireless and satellite networks are expected to be loss making operations for the company (*non-commercial*). This is because services delivered over these networks are unlikely to recover its original capital costs and ongoing operational costs within the operational lifespan of the networks.¹
2. According to the exposure draft "Explanatory Notes", Bureau of Communications Research (BCR) found that the services will "*generate a net cost of \$9.8 billion over thirty years*".

The purpose of the Regional Broadband Scheme is to:

*"provide sustainable funding for regional fixed wireless and satellite broadband services [...] through an industry charge on superfast fixed-line (nbn(sic)-comparable) broadband providers"*²

3. The scheme consists of an industry charge and subsidy model whereby providers with superfast fixed-line broadband services subsidise NBN Co's non-commercial Fixed Wireless and Satellite networks.
4. This replaces the existing internal cross-subsidy arrangement within NBN Co where services delivered in cheaper metropolitan areas would be priced the same as regional services to help offset losses in more expensive fixed wireless and satellite services.

¹ Explanatory Notes, Exposure Draft of the Telecommunications Legislation Amendment (Competition and Consumer) Bill 2017.

² Explanatory Notes, Exposure Draft of the Telecommunications Legislation Amendment (Competition and Consumer) Bill 2017.

1.2 Reducing non-commercial services through competition

1. By encouraging providers to roll out superfast fixed-line infrastructure in areas otherwise serviced by NBN Co's fixed wireless or satellite network, NBN Co may be able to reduce the number of non-commercial services it operates.
2. For example, the suburb of Queenstown, Tasmania had originally been planned to be serviced by fixed-line technology up until July 2015.

However, the area was re-designated to the satellite footprint after detailed designs had commenced.³

3. NBN Co had attributed the July 2015 re-designation to network design limitations and the prohibitive cost of rolling out redundant transit fibre to the area.⁴
4. However, other telecommunications providers already own network infrastructure assets potentially capable of delivering superfast fixed-line networks to the area, namely:
 - a. Telstra currently provides ADSL2+ services and 4G mobile connectivity to the suburb of Queenstown using microwave links to the region; and
 - b. an existing fibre link, owned by TasNetworks, already exists in the area.⁵ However, since the fibre was not owned by Telstra, it was not covered under NBN Co's existing dark fibre lease arrangements.
5. A network provider other than NBN Co may have been a suitable candidate to rollout superfast fixed-line infrastructure in the suburb.
6. An election promise during the 2016 Federal Election has meant that the suburb and the surrounding townships of Rosebery, Zeehan and Strahan have now all be re-designated to a fixed-line or fixed wireless connection.⁶

³ Queenstown business owners worry about their future if NBN is not rolled out via fibre, *ABC News* (3 June 2016)

<<http://www.abc.net.au/news/2016-06-03/queenstown-businesses-worry-about-satellite-nbn/7473372>>

⁴ Commonwealth, *National Broadband Network Select Committee*, Senate, 15 March 2016 (Mr Bill Morrow).

⁵ Commonwealth, *National Broadband Network Select Committee*, Senate, 15 March 2016 (Mr Bill Morrow).

⁶ NBN commits to fibre-to-the-node rollout on Tasmania's west coast, *ABC News* (19 July 2016)

<<http://www.abc.net.au/news/2016-07-19/nbn-commits-to-west-coast-rollout/7640722>>

7. It remains that providers other than NBN Co may be able to rollout fixed-line infrastructure in rural and regional communities at a lower cost than NBN's fixed wireless or satellite networks using their existing infrastructure and flexibility in network architecture.

For example, a third party may be able to utilise the existing fibre transit link and augment the link with microwave backhaul for redundancy.

8. Even with existing infrastructure and increased flexibility in network architecture, the costs in building out infrastructure to communities designated to NBN Co's fixed wireless and satellite footprints will likely be higher than in typical inner suburban and metropolitan areas.
9. Exempting areas currently designated to NBN Co's fixed wireless and satellite footprints from the Regional Broadband Scheme charge may potentially encourage non-NBN providers to examine opportunities for competing in regional areas.

1.3 Impact of exemption

1. Exempting areas currently designated to NBN Co's fixed wireless and satellite footprints from the Regional Broadband Scheme charge could encourage expanding the overall superfast fixed-line footprint beyond what is commercially viable for NBN Co.
2. In cases where an non-NBN provider rolls out superfast fixed-line infrastructure to an area currently designated to the NBN Co satellite network, NBN Co could re-provision the satellite capacity to areas of greater need.

If capacity is able to be substantially increased, NBN Co could relax its strict Satellite Fair Use Policy (FUP)⁷ to allow for a greater monthly download allowances per service.

1.4 Concluding suggestions

1. Encourage non-NBN providers to explore opportunities to rollout superfast fixed-line infrastructure by exempting areas currently within or proposed to be within NBN Co's fixed wireless and satellite footprint from the Regional Broadband Scheme charge.

⁷ Fair Use Policy - Wholesale Broadband Agreement, *NBN Co Limited* (7 April 2016) <http://www.nbnco.com.au/content/dam/nbnco2/documents/sfaa-wba2-product-catalogue-fair-use-policy_20160407.pdf>

2. Primary purpose test for satellite subsidy

For the purpose of this section of the submission:

non-regional satellite services refers to satellite services where the primary purpose of the service is not to deliver broadband services to rural or regional premises. For example, a satellite broadband service on a commercial aircraft or a backup broadband service in a metropolitan location.

2.1 Background into non-regional satellite services

1. The Bill should take into consideration whether payments made to NBN Co, the eligible funding recipient for the delivery of fixed wireless and satellite services, can be used for purposes other than delivering broadband services to rural and regional communities.
2. NBN Co has expressed strong interest in enabling **non-regional satellite services** to use its satellites.

The company completed consultation on its “Satellite Mobility” product in June 2016 which includes, but is not limited to, the delivery on in-flight Wi-Fi on planes.

3. NBN Co’s October 2016 Integrated Product Roadmap describes its “Satellite Mobility” product (PR120) as:

“A mobility solution for RSPs to support a wide range of applications such as emergency services, health and education, transport industry and in-flight Wi-Fi.”

PR120 is currently scheduled for commercial launch in the second half of 2017⁸.

4. NBN Co and Qantas has recently signed a proof-of-concept agreement allowing the two companies to trial satellite services on test aircraft.⁹

Qantas intends to launch its on-board Wi-Fi product through service provider ViaSat using NBN satellites in 2017.¹⁰

⁸ Integrated Product Roadmap, *NBN Co Limited* (1 October 2016)
<<http://www.nbnco.com.au/content/dam/nbnco/documents/Integrated-Product-Roadmap.pdf>>.

⁹ Qantas to sign trial satellite product with NBN for Wi-Fi, *jxeeno blog* (16 January 2017)
<<http://blog.jxeeno.com/qantas-sign-trial-satellite-product-nbn-wi-fi/>>

¹⁰ Qantas to bring fast, free inflight Wi-Fi to Australian Skies, *Qantas News Room* (23 February 2016)
<<http://www.qantasnewsroom.com.au/media-releases/qantas-to-bring-fast-free-inflight-wi-fi-to-australian-skies/>>

5. The **Exposure Draft of the Telecommunications Legislation Amendment (Competition and Consumer) Bill 2017** does not explicitly limit the funding to regional satellite services only.

While it may not be NBN Co's current intention, this could result in NBN Co utilising the payments to subsidise the development or delivery of non-regional satellite products and services:

- a. The proposed addition of s80, subsection (1), paragraph (d) of the **Telecommunications (Consumer Protection and Service Standards) Act 1999 (Cth)** states that:

"financial assistance" may be granted to *"the supply of eligible services to a carriage service provider in order that the carriage service provider can provide [...] satellite broadband services to an end-user at premises"*¹¹
- b. For the purpose of this Bill, the definition of an *"eligible service has the same meaning as in section 152AL of the Competition and Consumer Act 2010"*¹²
- c. An eligible service as described in s152AL of the **Competition and Consumer Act 2010 (Cth)** includes *"a listed carriage service (within the meaning of the [Telecommunications Act 1997](#))"*¹³
- d. A listed carriage service, as defined in s 16 of the **Telecommunications Act 1997 (Cth)**, includes *"a carriage service between a point in Australia and one or more other points in Australia"* where *"a point includes a mobile or potentially mobile point, whether on land, underground, in the atmosphere, in outer space, underwater, at sea or anywhere else"*¹⁴.
- e. It could be reasonably concluded that satellite services delivered to, for example, commercial aircraft can be eligible for the subsidy under the current exposure draft of the Bill.

¹¹ Exposure Draft of the Telecommunications Legislation Amendment (Competition and Consumer) Bill 2017. p 137

¹² Exposure Draft of the Telecommunications Legislation Amendment (Competition and Consumer) Bill 2017. p 93

¹³ Competition and Consumer Act 2010 (Cth) s 152AL.

¹⁴ Telecommunications Act 1997 (Cth) s 16

6. Further, the proposed addition of s 80, subsection (7), paragraph (b) of the **Telecommunications (Consumer Protection and Service Standards) Act 1999 (Cth)** states that no meaning is given to the word “Regional” in the in the title of the Bill:

“To avoid doubt, the use of the word “Regional” in:

(a) the short title of the Telecommunications (Regional Broadband Scheme) Charge Act 2017; or

(b) the name of the Regional Broadband Scheme Special Account;

does not limit subsection (1) of this section.”¹⁵

2.2 Public interest in subsidising non-regional satellite services

1. The initial intention for the NBN Co “Sky Muster” satellites is to deliver broadband services to premises beyond the fixed-line and fixed wireless footprints.

The Satellite Mobility product offering is intended to increase revenue streams to help reduce the overall loss in the delivery of the Satellite Service.¹⁶

2. The purpose of the Regional Broadband Scheme, as outlined in the Explanatory Notes included in the Exposure Draft is to:

“provide sustainable funding for regional fixed wireless and satellite broadband services [...] through an industry charge on superfast fixed-line (nbn(sic)-comparable) broadband providers”¹⁷

3. With the existing internal cross-subsidy model, NBN Co is solely responsible for the allocation of funds within the company. This allows them to invest funds in developing products to gain additional revenue streams for its satellite product at their own discretion within their equity funding envelope.

Under this proposed charge and subsidy model, industry contribution is expected to form a significant portion of payments made to NBN Co for the provisioning of fixed wireless and satellite services.

¹⁵ Exposure Draft of the Telecommunications Legislation Amendment (Competition and Consumer) Bill 2017. p 138

¹⁶ Commonwealth, *National Broadband Network Select Committee*, Senate, 15 March 2016 (Mr Bill Morrow).

¹⁷ Explanatory Notes, Exposure Draft of the Telecommunications Legislation Amendment (Competition and Consumer) Bill 2017.

4. This places NBN Co in a potential conflict of interest. NBN Co stands to benefit from additional revenue streams through leveraging its satellite network for purposes other than providing broadband connectivity for regional communities.
5. NBN Co could also gain commercial advantage through this industry subsidy by offering non-regional satellite services at a substantially lower cost compared to its competitors.
6. It would be inappropriate and not in the general public interest for the industry-contributed subsidy from the Regional Broadband Scheme to be applied to services where the primary purpose is not to deliver broadband connectivity to a location or application in a regional community.

For example, it is not in the interest of the industry and fixed-line consumers broadly to subsidise the provision of on-board Wi-Fi on commercial aircraft.

7. Financial assistance for these services would fall outside the intended purpose of the subsidy as outlined in the Explanatory Notes of the Exposure Draft.
8. Ensuring that the funds raised through the industry charge is only used towards the provisioning of services to regional communities is paramount, especially since NBN Co may not be the sole eligible funding recipient in the future.

2.3 Distinguishing primary purpose of service

1. If the purpose of the service is to deliver broadband services to areas outside of NBN Co's fixed-line and fixed wireless footprints, then the service should be eligible for the subsidy.
2. There are applications of the Satellite Mobility product where the broadband service is not delivered directly to a premises in a regional community but could still be eligible for the subsidy.
3. For example, these may include:
 - a. a farming vehicle receiving a broadband service through the Satellite Mobility product for agricultural automation purposes; or
 - b. an emergency vehicle servicing rural and regional communities receiving a broadband service through the Satellite Mobility product

4. It may also be appropriate to allow the subsidy payment to be made if the service is available to passengers intending to travel to or from regional areas. For example:
 - a. a regional train or coach service stopping primarily at regional locations
5. However, services without direct implications to regional communities should not be subsidised. For example:
 - a. a flight between Sydney to Melbourne should not be subsidised since its primary purpose is not to deliver broadband connectivity to a regional community.

2.4 Concluding suggestions

1. The Bill should make clear that the funding made available through the Regional Broadband Scheme is not available for services where the primary purpose is not to deliver broadband to regional communities.

The subsidy could be excluded from these services by requiring that the full non-subsidised cost be charged to the customer or by some other means.

2. The strict Fair Use Policy (FUP) imposed by NBN Co on its Satellite network means the quality is still not directly comparable to fixed-line super-fast broadband services.

As a condition of the Rural Broadband Scheme funding, the funding recipient should prioritise upgrades to the capacity and service reliability of rural and regional customers over the development of supplementary products like the Satellite Mobility product.

3. Ensure similar protection is afforded to services delivered by means of the NBN Fixed Wireless network.

References

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