



Inquiry into the rollout of the NBN in rural and regional areas - Joint Standing Committee on the National Broadband Network

Submission by Aussie Broadband

March 2018

About Aussie Broadband

Aussie Broadband is a small, high quality internet service provider based out of the Latrobe Valley in Gippsland, Victoria.

To date, we are the only ISP outside the big four to build a network to all 121 NBN POIs across Australia. We provide services via all NBN technologies other than satellite with a focus on a congestion-free, high quality network and all-Australian support. We are the fifth largest provider of new fixed wireless NBN services.

Whilst our services can and do cover nearly all Australians, we have a particular affinity with rural and regional Australia. Many of our leadership team and staff – including our Managing Director Phillip Britt – receive their home NBN via fixed wireless.

Summary of submission

Aussie Broadband has significant concerns about the quality of fixed wireless services delivered by NBN.

We believe NBN's definition of congestion on fixed wireless towers is inadequate, particularly compared with the expectations of customers.

It is our firm view that the rollout of fixed wireless program needs to be paused, similar to the pause recently applied to HFC technology, whilst NBN addresses issues of congestion on fixed wireless towers.

Adequacy of service reliability for fixed wireless services

Issue one: definition of congestion

There are a range of definitions of congestion within the industry, which cause confusion.

We know from a question on notice (portfolio question number 218) at the Senate hearing in October 2017 that NBN considers 3Mbps during the busiest hour of the day to be an “unacceptable level of congestion” on a fixed wireless tower cell.

Bill Morrow also suggested in his address to the Senate last year that this 3Mbps level has been lifted to 6Mbps (judged by measuring the average throughput of all end-users in a cell in the busiest hour, averaged over a month).

On an operational level, we are told regularly by NBN that a 25Mbps service that regularly slows down to 13 Mbps is acceptable.

Our concern is that none of these thresholds – even the highest one of 13 Mbps – would be acceptable to customers.

The ACCC now defines a 40% evening speed slowdown as acceptable (ie, 60Mbps in a 100Mbps plan etc).

We find that consumers will generally accept a 15-25% slowdown in speeds during peak hours but beyond that, will consider their service congested or faulty.

We are also concerned about the confusion around peak hour definitions – which could be either one hour (“busiest hour”) or peak hour (who knows) or ACCC’s definition of residential evening speeds (7-11pm).

The fact that there is no agreed industry standard on what constitutes “congestion” leads to confusion for customers and stakeholders.

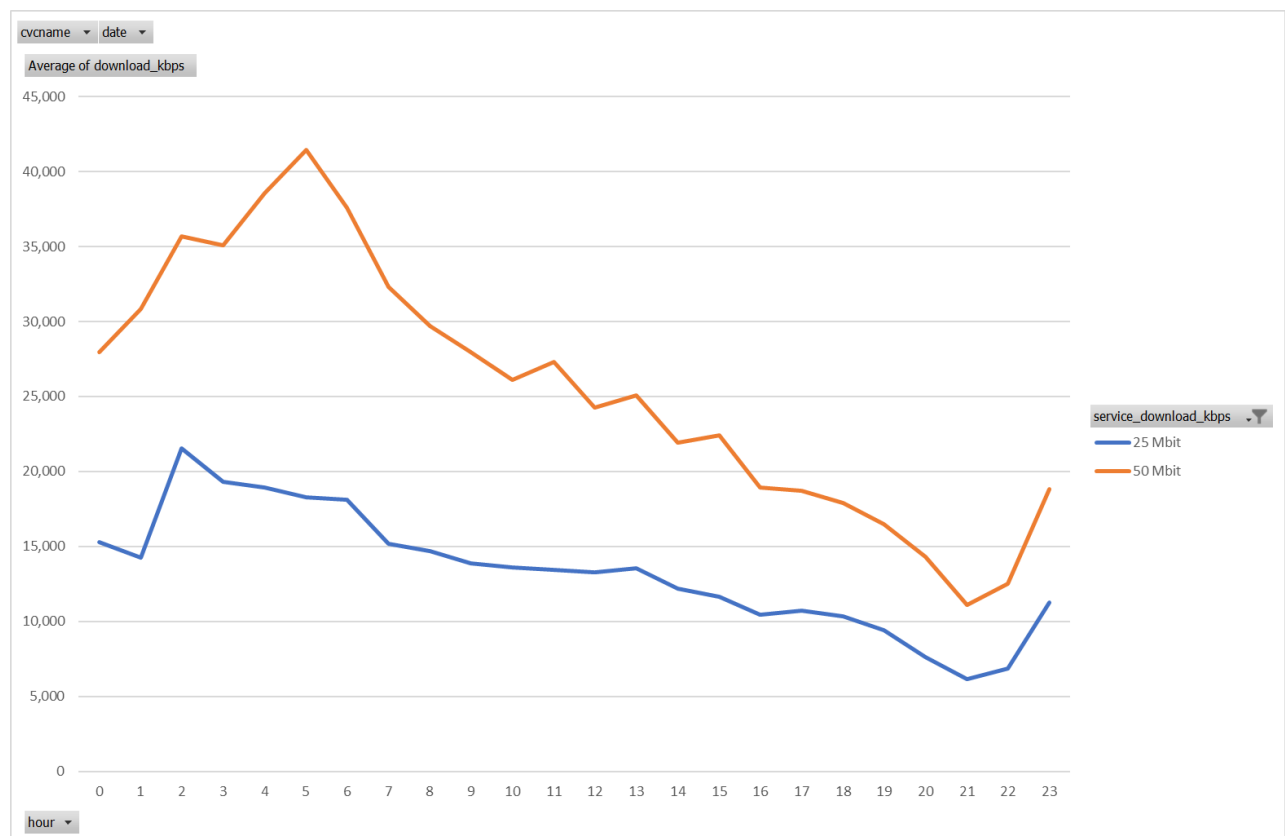
We contend that the industry should adopt these definitions (or similar):

- **severe congestion** - averaging less than 50% of ordered speed for 12 hours or more per day
- **congestion** - less than 40% of ordered speed during evening hours (7-11pm), as per ACCC standards
- **light congestion** - between 20-40% of ordered speed during evening hours (7-11pm)

Issue two: fixed wireless performance

Aussie Broadband conducted analysis during February 2018 of 29,000 business-as-usual speed tests submitted by 1600 Aussie Broadband fixed wireless customers.

Our analysis shows that customers on both 50/20 and 25/5 plans **averaged less than half their ordered speed for half the day**. The only time they were likely to experience close to full speeds was somewhere between 2 and 5am.



Given these customers represent about 16% of our fixed wireless customers, and there would be another cohort who are experiencing the same thing but not submitting speed tests, we conservatively estimate that at least 18% of NBN’s fixed wireless network is experiencing what we call – if adopting the terminology above - severe congestion.

We have been liaising closely with NBN for more than 12 months on these issues but despite assurances from NBN that fixed wireless towers are being upgraded, we believe the situation is becoming worse.

Anecdotally, our customer support team say they have yet to see any customer whose tower cell has been through an upgrade receive a significantly better service. We believe this is because of the rate that new customers are being added to congested tower cells, and the increasing demand for data across all customers (sometimes known colloquially as the Netflix Effect).

Issue three: wholesale cost models

At the time of writing, we are still unsure whether fixed wireless will be included in NBN's new wholesale costing models, due to be released in March.

NBN foreshadowed in December that fixed wireless would be excluded from the new wholesale bundled pricing, which includes a certain amount of CVC per user at a lower cost than current pricing, as well as lowering the price of additional bandwidth for these bundled products.

The bundled prices will encourage ISPs to adequately provision enough bandwidth to prevent congestion in their part of the network.

If fixed wireless is excluded from this model – possibly because of prolonged tower congestion on the NBN side of the network – many customers in rural and regional Australia will most likely be paying more for a lower-quality service when compared to their city counterparts.

Solutions

Our recommendations are that NBN:

- adopt the definitions of congestion above (or similar)
- put a “stop supply” on fixed wireless on any cell experiencing severe congestion until that congestion is rectified
- make publicly available information on all cells experiencing severe to light congestion so customers can make informed decisions about switching to NBN fixed wireless
- pause the rollout of the fixed wireless program until its underlying performance issues are fixed, similar to the recent pause on HFC technology
- ensure that fixed wireless services are included in any new wholesale cost models