To Whom it May Concern:

I would like to contribute my view on the status of regional internet users in Australia. I have worked remotely for the past 11 years – of which the last four have been in a mid-sized town in regional NSW. My internet connection is through NBN Fixed Wireless, despite FTTP being available 1.2 km from my home.

During this time my NBN connection has been a constant source of frustration, with no end in sight. It is likely that I will re-evaluate my regional location soon if there are no improvements.

Below are some of the primary issues I'd like to call your attention to:

1. The Fixed Wireless Network is not Fit for Purpose

A significant proportion of regional/rural Australia connect to the Internet via NBN Satellite and NBN Fixed Wireless. Due to the nature of the technologies, these services become congested during busy hours and even more so on public and school holidays.

My service was heavily congested from the moment I connected four years ago. My peak up/down speeds were typically around 10Mbps/4Mbps. It took another two years before our tower saw any upgrades, which reduced congestion by a small amount. My typical speeds have since been 30Mbps/3Mbps. These speeds are often a fraction of the plan speeds that one pays for.

Despite every Australian being required to have access to a minimum 25/5 service, users on the Fixed Wireless service do not have the same privilege.

NBN commits only to achieving a minimum 6Mbps download speed on the Fixed Wireless network during any point in a 24-hour period. Typically, this minimum speed is achieved during the early morning hours when network usage is low. Consequently, any complaints about internet speed are immediately dismissed because the minimum 6Mbps was achieved at least once in the early hours of the morning. NBN refuses to investigate further.

Similarly, NBN considers minimum upload speeds of least 1Mbps to be acceptable.

This creates a clear digital divide between the Wireless and Fixed Line networks, despite everyone paying the same.

2. Reduction in Upload Speeds on NBN Fixed Wireless:

During early 2020, NBN reduced Fixed Wireless upload speeds from 20Mbps to 10Mbps. In practice this has resulted in many users receiving no more than 5Mbps for uploads. These speeds drop down to around 3Mbps during busy hours. My own upload speed never goes higher than 5Mbps during non-peak period.

Upload speeds are as critical as download speeds for most remote-based workers due to requirements for VPNs, online collaboration tools, etc.

These changes occurred at the start of the COVID-19 pandemic, right when millions of Australians started working from home. This has rather severely impacted my ability to work and run my business from home. As I am already on the highest offering available in my area, I can't even pay more to improve my service.

The 75% reduction in upload speeds I've experienced (from 20Mbps down to 5Mbps) is a serious drop. Despite reaching out to my RSP, NBN and my local representatives I have not been able to ascertain why I cannot reach anywhere near the advertised 10Mbps (and ideally higher).

3. Lack of Choice:

Only a handful of Retail Service Providers (RSPs) sell internet access on NBN Fixed Wireless and Satellite. Those that do often present average speeds from a minimum of 2Mbps!

Large retailers (such as Telstra and Optus) go through periods where they stop offering services to users on Fixed Wireless. Optus ceased selling NBN Fixed Wireless services in 2019 due to "no solution for congested cells." This limits choice, forcing users to purchase internet access from a limited number of companies and often at higher prices.

4. Poor Mobile Coverage and Unobtainable 4G Backup Connections

Mobile connectivity in regional and rural NSW is generally a forced "choice" between either Telstra OR Optus. Most regional areas have a better connection with one of these networks, while the other does not work at all.

While both networks offer 4G access, signal strength might not always allow access to mobile internet. Services become easily congested at peak times due to the number of people connecting to a limited number of towers.

Both Telstra, Optus and Vodafone offer routers with backup 4G mobile connections. Despite this, it is often impossible to access a backup connection (due to poor mobile coverage and lack of RSP choice.)

In my case neither Optus nor Vodafone will offer internet services on Fixed Wireless connections. This leaves Telstra as my only option. Unfortunately, Telstra's mobile reception at my home is not good enough to use mobile internet. Therefore, when my NBN connection fails, I have no backup connection. This means no emergency phone access and no backup internet access.

The Optus mobile connection at my home is reasonable - but they will not offer me service on the Fixed Wireless network.

5. Frequent and Long Outages:

The NBN Fixed Wireless service typically experiences multiple hours-long outages a year. It is not uncommon for connections to be down for 8 hours a day for multiple consecutive days while tower maintenance is undertaken. As explained above, I have no backup landline or internet service due to limited RSP choice and poor mobile connectivity.

The Fixed Wireless network is often daisy-chained, with 4 or 5 linked towers. The further down the link you are the more outages you experience. This is because maintenance on a tower upstream from yours results in downtime for your tower (and anyone further down from yours).

6. Expensive Fibre upgrades via the NBN Technology Choice Program (TCP):

A NBN Technology Choice Program upgrade to FTTP is often not even an option, despite being pitched as being available to everyone.

NBN has classed my home as a 'complex premises' and will not even quote for an upgrade. This is despite being only 1.2km from the nearest FTTP area and within 100m of a Telstra high-capacity fibre line (which apparently nobody can utilize for NBN connections.)

I don't know what makes my home "complex". I live in an ordinary residential suburb with paved roads, existing Telstra service ducts and nearby fixed line services. Nobody has been able to explain this.

Even more curious is that NBN Enterprise Ethernet is available for zero upfront build cost for a property 100m from me. Yet the upfront build cost for my property is north. of \$30,000.

I hope that this letter illustrates how poor infrastructure and limited choices have resulted in extremely restricted connectivity options for regional and remote Australians. There is indeed a very significant digital divide in Australia.

Yes, we do live in a vast country, but I don't live particularly remotely. My town has a population of 6,000 and is 10 minutes from a regional centre of 30,000+. There is no difficult terrain or landscape to contend with, yet I simply cannot achieve a reasonable internet connection to continue working from home. I enjoy feeling that I contribute to our regional economy, yet the lack of a reasonable connection means it is likely I cannot stay. I am not alone in this situation.

Please feel free to contact me for any questions or clarification.

Regards, Alistair