

## Background

I live in the Hills Shire in Sydney, in a rural area (mostly 2 Ha blocks) where residents include tradespeople, small business people and professionals. The geography has many areas which are not straightforward for mobile phones. We are at risk from bushfires and many residents are active in the Rural Fire Service.

In my area we were, according to NBN, ready to connect from January 1, 2021. Since then NBN have made 3 appointments to install at my premises. The outcomes were 2 assessments that the “ready to connect” network needed remediation because the fibre roll-out had not been completed (project management!) and one no-show. In the subsequent 5 months NBN have said via a phone call and email that

- (a) they would “continue to monitor and be in contact when an update becomes available.”
- (b) new Planned Redamation (sic) Date for 8<sup>th</sup> June 2021. (No word 3.5 months later)
- (c) any further queries relating to your appointment or connection order, please liaise with your Retail Service Provider

But they do not reply to the RSP queries so end customers are unable to plan or make informed decisions.

My situation is that

- no-one will inform me about my future NBN connection (despite claims by the Minister that NBN is complete) and
- the NBN website suggests it could still be 12 months or more away.
- Telstra will no longer connect ADSL in my street.
- Mobile broadband is available with an antenna and a modem installed (at my initiative and expense) on the antenna. No support is provided by Telstra for such a connection. Planned mobile outages are not announced.
- A tower planned by Telstra that would have improved reception over a significant area is not going ahead

The basic attitude projected (by NBN, Telstra and Government) is that customers should be grateful when they have a connection of any quality and something better will come sometime.

With that experience, and a background as a researcher and research manager with an interest in data science, information technology and delivery of services I submit the following.

### 1. What telecommunications services are required in regional Australia to meet current and future needs? Are there any things regional communities and businesses need to do, but can't, on their existing services?

Reliable basic services at a reasonable speed. A security update to a basic Microsoft application currently requires 1Gb or more. Not viable on many connections. Any business needs Zoom-type meetings and the ability to upload and down load large data files to customers and “the cloud”. In my area, for example, residents have businesses uploading architectural and engineering plans and maps that need fast, reliable network links. Residents are both suppliers and recipients of telehealth services.

Management of bushfire risk and the fighting of bushfires will need, increasingly, real time flow of video and other data from firefighters to operational headquarters and the flow back to firefighters of information about changing risks and responses. This is just a pipedream with currently available telecommunications in the Hills District.

2. What changes in demand, barriers or challenges need to be addressed when it comes to telecommunications services in regional, rural and remote Australia?

The main challenge is a policy of total opacity by NBN, Telstra and Government to enable proper planning by users.

3. How have the Government's policies and programs affected telecommunications service outcomes in regional, rural and remote Australia? How can these be improved?

NBN rollout is highly political so that "victory" (completion) was declared in June 2020 and again in December 2020 when it was not true. NBN have focused on achieving artificial milestones – some percentage of premises "ready to connect," rather than ensuring that premises are ready to connect. This has led to project management focusing on Government milestones rather than project completion.

It seems that there is little checking on contractors to ensure that when they move away from a site that the work is completed. As a result there is much waste through rework and duplication.

The strategy of "multi-technology mix" was principally a political toy rather than a thought-through approach to addressing national needs. Yes, multiple technologies are needed, but the politics led to a Federal Minister arguing that 12Mbps was good when mobile phone service providers were arguing for and offering 10 times that speed.

4. How do service reliability issues impact on regional communities and businesses? How do outages, including in natural disasters, impact on communities and businesses?

Our area is at risk of bushfires. Firefighters do not have reliable systems alerting them to firecalls.

5. How might such impacts be addressed to ensure greater reliability? How can the network resilience be addressed in regional areas?

Better coverage with landline and mobile internet. More repeaters, including temporary repeaters in times of emergency. These should be seen as essential utilities (like electricity and water) rather than 'nice to have' luxuries. Outages should be widely announced ahead of time and updates provided on progress and likely time an outage will end.

6. How did the use of digital services change for regional consumers and businesses during the response to the COVID-19 pandemic? What insights for future service delivery does this provide?

Demand increased significantly for those carrying out business from home and providing home schooling. Many were unable to access school work projects. Local telecommunications did not cope and individuals had to invest in technology to access information and services.

We need better digital support for local libraries and better information and support provided to potential users. The principal approach currently is word of mouth.

7. What can be done to improve the access and affordability of telecommunications services in regional, rural and remote Indigenous communities?

8. How can investment in telecommunications infrastructure work with other programs and policies to encourage economic development in regional Australia?

Remote service provision – especially education and telehealth are crucial. These can be 2-way – from regions to urban communities as well as the other way.

Run demonstration projects to stimulate ideas and innovation. How many doctors use telehealth (video as well as voice) to interact with patients who live away from population centres.

9. What role could innovation, including new models, alternative investors or new ways of doing business, play to encourage investment in regional telecommunications infrastructure? What are the barriers?

10. To what extent will new technologies enable significant change to the delivery of telecommunications services in regional Australia over the next 5-10 years? Are there any barriers to accessing these technologies?

Faster and broader coverage will be important. A key barrier is that in many areas where there is a national benefit in providing better coverage there is not a commercial benefit for service providers

11. How can Government better support the rapid rollout of and investment in new telecommunications solutions in regional areas?

Government needs to provide more thoughtful and strategic project management, contractor monitoring and transparency. The current system is being gamed too frequently. Education and customer support is critical.

12. How can different levels of Government, the telecommunications industry and regional communities better co-ordinate their efforts to improve telecommunications in regional Australia?

Local and State Government have key roles to play in educating users and ensuring suppliers deliver for customers. Public libraries are particularly important. In the past agricultural extension officers had a key role in supporting small (agricultural) businesses. Telecommunications have advanced very rapidly, but support for users – business and residential – is often provided by word of mouth which is very inefficient.

13. What changes to Government investment programs are required to ensure they continue to be effective in delivering improved telecommunications?

Focus on needs of end users, not just supporting the needs of the large telcos.

14. How can regional consumers be better supported to identify, choose and use the best connectivity options for their circumstances, as well as to understand and use their consumer rights?

Local demonstration projects undertaken in collaboration between State and local Governments and local businesses. Articles in local publications. Highlight the benefits of good connections – eg telehealth, libraries, ...

15. To what extent is public information on connectivity options, including predictive coverage data and speeds, sufficient to help regional customers make informed decisions? What other information is needed?

The information is not reliable and is provided at the end user's risk with no support from telcos. For example, Telstra coverage maps claim that I should get 4G reception inside my house and 5G is even better. The 4G claim is demonstrably false. Who will accept a returned 5G phone or modem if I experiment and the 5G claim is false?

16. What other matters should the Committee consider in its review and why are they important?

1. Telecommunications is a complex area evolving quickly. There is not an information balance between suppliers and consumers. Many potential consumers are unaware of the benefits to be gained from effective use of better telecommunications. There is little information directed at consumers. Most information is gained by word of mouth. The more remote the area the greater the need for customised information.
2. The suppliers rightly focus on areas and services where there are the best returns for them, not necessarily on areas with low population densities or difficult reception areas, where there are economic, environmental and social benefits from good telecommunications. Government needs to fill the gaps in supply and consumer information.