

2021 Regional Telecommunications Review Secretariat
Department of Infrastructure, Transport, Regional Development and
Communications
GPO Box 594
CANBERRA ACT 2601

28 September 2021

Dear Madam/Sir

Regional Telecommunications Review 2021

We live at and run a small retreat / accommodation business in St Albans NSW in the Macdonald Valley. The location is rural, remote and isolated yet less than 100km from Sydney CBD and within Greater Sydney, being a part of the Hawkesbury LGA. We have resided here for nearly 10 years.

Whilst the location is picturesque and naturally idyllic we suffer from very poor and un-maintained infrastructure relative to the rest of our LGA and Greater Sydney. We are 'Digitally Excluded' and this has severely impacted on our ability to run a business or work from home. We had hoped to set up a small conference centre and have tried running NDIS carer retreats, but these have failed due to lack of working internet, no mobile coverage and regular power cuts. We have struggled acutely during lockdown as we have been unable to use zoom with any reliability or partake in any 2-way communication over the internet.

Mobile Service

There is no mobile reception in most of our 45km long valley. The valley was acknowledged by the Federal Government six years ago as a Mobile Black Spot. To date, Optus has failed to deliver on Round 2 Optus funded project (MBSP2- NSW-028) announced in 2017, meaning that for multiple fire seasons and flood events the community's isolation has continued.

Telstra has also now been granted funding for macro cell coverage in Lower MacDonald although, to date, nothing has been delivered. If delivered it will support only localised communications in an area with patchy existing network.

The closest macro-cell tower is at Wisemans Ferry with coverage extending along the Macdonald Valley for only a few kilometres and only then along the river banks. Beyond that, a small Telstra cell has recently been placed at the



Macdonald Valley Public School in Central Macdonald with an approximate 200m coverage. This also stops working during power cuts.

Landline Service

Telstra's landline infrastructure is unreliable, with poor maintenance of lines suffering abrasive destruction of protective sheathing by trees and branches, lines taken down during high winds, storms, fires and floods. Many lines have fallen off poles, sit on fences or on the ground (in some cases for years) and are regularly taken out by trucks. There is regular ongoing failure of the local exchange and lines in critical emergencies.

Landline services are provided from an exchange, some 2km to the north of St Albans Village gaining service from a microwave dish from Wisemans Ferry 24 km to the south. A fault with the repeater at either end will also cut landline services.

During power cuts Telstra land line services (and ADSL internet) now cease after 6 - 14 hours as Telstra has not maintained a back-up generator at the local 4568 exchange. Power failures are frequent and increasingly prolonged in duration. The entire valley lost power for 4-7 days during the 2020 and 2021 floods meaning that residents had no way of confirming their welfare status or calling for help.

In addition to power outages, other landline issues (to date unexplained by Telstra) have resulted in recent phone and ADSL internet outages of between 3 and 5 weeks.

The landline infrastructure also is not sufficiently reliable to support community safety and welfare in emergencies. Residents from higher up the Macdonald Valley sometimes have to drive 20-30kms to make emergency mobile calls when the landline infrastructure has failed them.

There have been 3 known incidents in recent isolation events where emergency triple 000 calls could not be made for 15 hours, resulting in one known death in the valley.

ADSL Internet

ADSL internet is limited by close proximity to the exchange and is also subject to the issues of Telstra's infrastructure mentioned above. Only properties within 2 – 4 km of the village can achieve useable ADSL. Telstra now refuses



to supply new properties beyond the village with ADSL because of its own acknowledged slow speeds and unreliability.

We are about 5km from the exchange and get typical speeds of 0.6 - 6 MB/sec download, 0.8 - 1 MB upload. We pay Telstra \$80 a month for this "service" which claims average speeds of 22 MB/sec. Other ISPs will not provide an ADSL service here

We currently have 4 people in our household working from home using zoom regularly. We can only use ADSL for that (due to satellite latency). If 2 people want use zoom, one of us must drive to Wisemans Ferry 20km away and tether their phone to 3G mobile.

During the day the ADSL regularly drops out for about 5 mins every 2 hours. It has done this ever since I have lived here.

Satellite Internet

The "NBN" (sic) solution in our valley has been via induvial property satellite connection to the Sky Muster satellite. This is only possible in areas where the valley is wide enough to allow satellite connection. In many cases the terrain prevents satellite connection or at least creates poor coverage allowing only intermittent connectivity. Smoke and/or clouds block the signal as well as weather events in other areas affecting bandwidth.

It also cuts out for other reasons, sometimes for days or weeks. We have had 3 NBN boxes and modems replaced in 2 years due to storms and power surges.

Satellite internet cannot be used for phones or any 2-way communication due to extreme latency (time delay) problems and increasing bandwidth problems (now providing slower speeds than ADSL) coming from the satellite with increased users. Satellite internet is also metered and is not affordable for many residents in the valley.

We get typical speeds of 4 - 14 MB/sec download over satellite, 800ms latency, 1 - 2.5 MB upload. We pay for 25 MB download.

The latency or ping (time delay) on satellite makes it impossible (for us) to use for any 2 - way communication (VOIP, Skype, Zoom etc).



We only use satellite to watch TV. It is good for that but, <u>NB</u> we have <u>never once</u> watched a program all the way through without having to regularly pause for buffering.

Satellite only offers metered pricing: A movie uses about 4GB. The internet cost of that is about \$10. A standard plan may give you 50GB a month so unlike the city, where everything is unlimited, we really can only use satellite sparingly here, when it works at all. All plans are metered and cost at least twice as much as a city wired plan.

We pay more than double for unreliable internet, marketed under the "NBN" banner, which operates at less than 20% advertised speeds and less than 10% city speeds.

Impacts on our home and business

We installed satellite internet 2 years ago assuming we would get promised "NBN" internet speeds and would no longer need our slow unreliable ADSL. Instead we now pay over \$200 a month to maintain two unreliable systems with frequent visits to Wisemans Ferry, 20km away, still necessary to use 3G for important zoom meetings.

Our business can not operate at full capacity as we can not provide internet or mobile connectivity to our quests.

Since COVID we have known of new residents buying into the valley, moving here permanently, only to have to move back to Sydney and sell or keep their property as a weekender. This is because it is not possible for them to work from home, particularly for designers, video editors etc.

We live in a potentially perfect location with opportunities for new businesses and business people working remotely, providing the potential for sustaining and growing the local economy. None of this is possible however whilst we remain a Digitally Excluded community.

Yours Sincerely

Lewis Adey