Pastoralists' Association
of West Darling Inc.

Registered under NSW Government Fair Trading

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2021 Regional Telecommunications Review Secretariat
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Submission to the 2021 Regional Telecommunications Review

The Pastoralists' Association of West Darling (PAWD) has been representing the interests of pastoralists residing on isolated properties in far west NSW since 1907. As the peak representative body in the area, PAWD is well credentialed to provide comment on telecommunications issues faced by our members.

Pastoralists in far west NSW receive voice and data services from a network of widely dispersed telecommunications towers operated by Telstra. These towers replaced original 'party line' telephones and/or Royal Flying Doctor Service Transceivers as the only way of communicating with the outside world. In time towers were upgraded from DRCS to CDMA or HCRC, then most sites to NGWL and most recently some sites now co-host 4G. Initially, these towers offered telecommunications services that were a tremendous step forward in communications for isolated pastoralists, but over time maintenance and upgrades has not kept pace with the demand for voice and data services or community expectations.

PAWD has been receiving reports about service interruptions from many Telstra operated towers in the far west of NSW for a number of years. Six towers that have been repeatedly identified as delivering degraded services are Mount Dering (50kms north of Broken Hill), Coombah and Netley (halfway between Broken Hill and Wentworth), Glen Lyon (between Broken Hill and Wilcannia, south of the highway), Mount Shannon (south west of Tibooburra) and Andersons Hill (between Broken Hill and Wilcannia, north of the highway). By way of highlighting telecommunications issues faced by our members and addressing questions put by the Regional Telecommunications Review, we offer the following personal accounts from PAWD Councillors who have experienced problems with the towers they rely on for their telecommunications services.

Mount Dering Tower - Sam Beven (Sturts Meadows Station).
I am located 70kms north of Broken Hill. I use the Mount Dering tower for mobile and internet reception. There is a breakdown of phone and data service from the Mount Dering tower that occurs on a regular basis. On a number of occasions after severe weather events (such as rain or strong winds) the back-up power for the tower has failed and we have been left without the capacity to contact emergency services. This has been a major safety issue at least once, when I had a bad motorbike accident, fracturing my skull and sustaining heavy bleeding. I was lucky that my brother witnessed what happened and he was able to get me to the Broken Hill Hospital, but his phone didn't come back online until he picked up mobile signal within a few kilometres of Broken Hill.

Coombah and Netley Towers – Luke Reynolds (Middle Camp Station).

In windy weather we have no data service at all, and on occasion in these conditions disjointed phone calls render it almost impossible to hold a conversation. Data signal availability is inadequate during school holidays and times like the reopening of the NSW - Victorian border following COVID lockdowns. Data usage is so high that internet banking logins, etc time out. This makes it hard to run a business.

There is over 100kms of the Silver City Highway (between Wentworth and Broken Hill) with no coverage whatsoever. As a major general freight, livestock, local traffic and tourism thoroughfare, this seems ludicrous and unsafe. During the 2019 Nanua Picnic Races the Netley tower was down for most of the Saturday. In the case of a potential medical emergency amongst the 500+ competitors and spectators emergency services could not have been contacted.

Glen Lyon Tower – Terry Smith (Scarsdale Station).

I have resided at Scarsdale station for the last 20 years and in the first instance we were very fortunate to be in the shadow of the Glen Lyon tower. Having phone coverage across the property is an advantage. However, in recent years the reliability of the tower has been at times questionable. After heavy rainfall events the tower often goes offline. This generally happens with the loss of mobile and data first, then fixed line services shortly after. In my situation all three (mobile, data and fixed line) are supplied through this tower, so I have no communications at all. The longest interruptions have been for 6 days, but a 2 or 3 day outage is not uncommon.

Access to the tower is via 34kms of station track, parts of which are maintained by private landholders and parts that are not maintained at all. Generally speaking, the sections of track that are not maintained become severely rutted or inundated and impassable. In the last 20 years there has only been one attempt to maintain the access track. This was by a third party wishing to place a communication installation at the same site. The tower is often slow in the evenings and mornings at peak traffic times, as bandwidth is used up. In times of high wind or rain mobile and data service is very patchy or non-existent, with 7 or 8 attempts to log onto an online banking site is not uncommon under these conditions.

Andersons Hill Tower – Graham Turner (Grasmere Station).

The mobile and data network service provided by Andersons Hill Tower is severely lacking in its current state. My house is in direct line of sight of the tower, with the tower being clearly visible to the naked eye. I have to use a Telstra Cel-Fi GO with a Yagi antenna to boost the signal from the tower to make mobile reception sufficient to use 'Blue Tick' mobile phones. My landline phone and internet connection also feeds off the Andersons Hill tower. The phone connection is intermittent and drops out regularly, and the data connection is so slow that it is unusable for approximately 40% of the time. Bank websites cannot be loaded.

There have been numerous faults logged over many months with Telstra regarding these issues. Telstra is unable to permanently rectify the home phone problems. The fault is either ongoing, or rectified and cleared, only for it to resurface again weeks or even only days later. In the meantime, I have to run a business with the only means of voice communication being through this unreliable service.

A summary of the issues with the home phone/internet connection fed from Andersons Hill tower:

- Phone calls not coming through/ringing
- Unable to call out- line busy/number not connected - have to try numerous times to get a call out
- Internet very slow and unusable about 40% of the time (<25kbps - can't load a webpage)
- Internet connection drops out continuously, making secured sites such as internet banking unusable as it keeps logging out
- As a result of these issues we have had to drive 150kms to Broken Hill to utilise a better data network to complete time sensitive documents, for example paying bills and submitting BAS. We also have had to drive 80kms to utilise a neighbouring tower to make phone calls

A summary of the issues with mobile service from Andersons Hill tower:

- 'Fake Signal' - full or near full signal depicted on the mobile but unable to make a call - 'no network available'
- Calls dropping out
- No data available from the tower even with full signal and less than 2km from the tower (it is about 150m high)
- These issues also happen when using a mobile Cel-Fi GO device

The serviceability problems associated with these towers and the issues that they cause are unacceptable. Unreliable phone and Internet communications puts lives at risk. The issues highlighted in the case studies are occurring throughout the region wherever telecommunications are routed through towers that have not been maintained or upgraded appropriately.

PAWD is aware that some of the towers identified in this submission have been upgraded to carry 4G as part of the planned shutdown of the 3G network and 4G upgrades for other towers have been announced. **Given that these towers are in very remote areas and frequently constitute the only way of communicating with business partners and emergency services, PAWD recommends that these upgrades should be fast tracked.** The Andersons Hill tower must be the number one priority for an upgrade, as the faults associated with this tower are frequent and of extended duration. PAWD notes that Telstra has installed 4G small cells at Packsaddle, Silverton and Tilpa, and that other small cells in this region have been announced. Whilst small cells are useful in the immediate vicinity of the cell, their extremely limited range will never make them a suitable alternative for voice and data services provided by the large Telstra towers in far west NSW.

Duration of back-up power supplies for towers remains a major problem for our members. Mount Dering tower goes offline within six hours of a grid power supply interruption, well short of the target 12 hours service from the back-up power supply. Glen Lyon and Mount Shannon Towers also go offline soon after interruption to their grid power supply. **PAWD recommends that towers in remote locations should have a minimum of 48 hours of back-up power supply. PAWD further recommends that access tracks to some towers require maintenance and/or upgrades to improve accessibility during times of wet weather.**

PAWD has engaged with Telstra on a number of occasions regarding the issues identified in this submission. On more than one occasion a response has not been received. Despite highlighting these issues with Telstra and our elected representatives by way of correspondence or submissions over a long period of time, it has proved to be very difficult to actually get Telstra to rectify faults.

Questions from the Review Issues Paper:

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?

A: Appropriate upgrades to existing terrestrial infrastructure to ensure it is reliable and has sufficient capacity to handle the demand for voice and data services.

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

A: The greater use of smart devices and remote telemetery is requiring greater bandwidth and signal strength.

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

A: Policies mandating reliable and fit-for-purpose service from towers in far west NSW are either absent or not enforced.

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

A: Family pastoral businesses become much harder to run and safety systems (ie: contacting emergency services) break down when communications services go off-line.

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

A: Upgrade towers to 4G, improve back-up power supply and maintain access tracks into towers.

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?

A: Data service interruptions made it impossible for small businesses using cashless transactions to trade. The take-home message is that reliability has to be improved.

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

A: Build a permanent macro tower with plenty of capacity to service Wilcannia and surrounds.

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

A: Improved service from telecommunications infrastructure will facilitate the adoption of remote telemetry to monitor waters and livestock, so this potentially fits with agricultural programs and policy.

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?

A: The barriers are the return on investment for the telecommunications industry, so possibly offering seed funding for innovative ideas will help them get off the ground.

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?

A: 4G is not new technology, but many pastoralists in far west NSW cannot access it. Let's get the basics right and facilitate access to 4G before worrying about new technologies.

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

A: 4G and reliable power supply to towers is hardly 'new', but Government should support the rapid rollout and investment in 4G and power supply by way of a 'carrot and stick' approach to dealing with telecommunications companies before worrying about new telecommunications solutions in remote areas.

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

A: Join and support the Regional Tech Hub.

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

A: Whatever changes are required to ensure that telecommunications services are reliable and fit-for-purpose.

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?

A: Grow and promote the Regional Tech Hub.

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?

A: Beyond the Regional Tech Hub, public information on connectivity options is hard to find. Again, growing and promoting the Regional Tech Hub would be a good outcome.

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

A: Why the pace of 4G upgrades in far west NSW is glacial at best. Why back-up power supply duration for towers in far west NSW is unsatisfactory.

PAWD hopes that the issues it has been raising in regard to unreliable telecommunications in far west NSW for more than ten years will be addressed as a matter of priority. Reliable voice and data services, coupled with reliable back up-power, shouldn't be too much to ask for.

Thank you for the opportunity to contribute to the 2021 Regional Telecommunications Review.

Lachlan Gall.
Councillor.