



2024 Regional Telecommunications Independent Review

Submission - Shire of Victoria Plains



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Responses

1. What initiatives or tools could be implemented by the telecommunications industry or the Australian Government to improve connectivity literacy and make it easier for regional consumers and businesses to understand their connectivity options and help them to choose affordable services that meet their needs?

A key solution regarding helping consumers and businesses understanding their connectivity options is the development of a telecommunications toolkit. This toolkit can then be provided to or accessed by consumer groups, business networks and local governments.

The toolkit could consist of a fact sheet, social media tiles, a short presentation and even a webinar (live and recorded). These tools can then be distributed and also published on websites and social media pages.

2. What further initiatives can be implemented to support First Nations communities in developing and leading their own digital inclusion solutions while ensuring cultural appropriateness?

The Shire of Victoria Plains has promoted digital literacy training to seniors through the [Be Connected](#) program supported by the Good Things Foundation. This approach has seen the Shire receive grants to roll out a tailormade digital inclusion program through obtaining e-tablets for training purposes and a Shire staff member providing weekly targeted training to seniors using the Be Connected resources.

A similar approach could be undertaken in First Nations communities. The advantage here is that the e-tools can be tailored to suit the users, used time and again, as needed.



There is no doubt that the best solution shaping up in terms of digital access is satellite based technology (LEOsat and D2D).

3. How can government and industry address any misleading and inaccurate information surrounding telecommunications services in regional, rural and remote areas, to ensure consumers and businesses have access to reliable and unbiased information when making decisions about their connectivity options?

This could be as simple as strengthening the communications toolkit mentioned in the response to question one. Consumer groups and business networks can actively promote the toolkit and act as a starting point for those who need reliable and unbiased information.

4. Deploying and maintaining telecommunications infrastructure in remote areas requires a skilled workforce. What initiatives can be implemented to ensure there is a skilled workforce in regional and remote Australia capable of supporting the construction, maintenance and operation of future proof telecommunications infrastructure?

The matter of ensuring a skilled workforce in regional and remote Australia is very much an attraction and retention issue.

Fiona Haslam McKenzie (UWA, 2011) in her paper [Skilled and Professional Staff in Remote Locations of Australia](#) highlights the following successful attraction and retentions strategies:

- Public policy investments in better training and ensuring standards are consistent across State borders;
- Local community programs that work to make newcomers feel welcome or grow and nurture the people already living in remote locations;
- Corporate organisations recognising they have a role in properly preparing employees for remote service and that their presence can be both an advantage when there is local investment;
- Increased commitment to local infrastructure that encapsulates housing, health and education (which can be a disadvantage when affluent corporates compete for housing and local labour, subsequently marginalising local businesses and people not employed in the corporate sector). These are 'big ticket' government responsibilities and it is very important that their influence on the social viability of remote communities is understood.

It was found that lifestyle and a sense of community cannot be underestimated. A community with housing and infrastructure but no sense of community or social capital is likely to struggle to retain a workforce, whereas a remote community with a sense of place and inclusiveness but limited infrastructure will keep people for much longer (Haslam McKenzie, 2011).

Victoria Plains would also include flexibility. It would be fair to say that many Australians are used to mobility because of distance issues. Technology and the pandemic have also put front and centre for any skilled worker the need for flexible working arrangements whether this is in terms of working hours, being based at "home" or increased leave arrangements and paid trips per year to and from a location etc. It isn't always about the income.

5. Could the NBN fixed wireless network or other alternative networks be used to provide reliable and affordable voice services in remote areas? Are there any consumer safeguards or guarantees that need to remain or be changed under reformed universal service arrangements?

Based on the current, and future, improvements to digital technology there is no reason why the NBN fixed wireless network or other alternative networks cannot be used to provide voice services in remote areas.

Consumer safeguards do need to be maintained and USOs seem adequate in this regard.

6. In modernising universal service arrangements, should access to public phone infrastructure continue and are there particular areas of need? Could technologies beyond traditional payphones be explored to meet this need?

Research would tend to suggest that there is still a place for payphones, providing their battery life can be extended so that they remain operational during an emergency.

The Shire's Telecommunications Experience

The existing telecommunications infrastructure across the Shire includes hardwired (cable), mobile phone towers and satellite solutions. Satellite options (typically Starlink, Skymuster) have generally been implemented by users as the hardwired infrastructure and mobile phone towers, including the support provided to them is inconsistent. This becomes apparent during the normal work day, during emergency situations and even during recreational activities.

Like in many places, the failure of electrical power provision to telecommunications infrastructure during the January 2024 Storm Event saw a wide range of impacts across the Shire (and the State for that matter). Some communities had no power for up to a week including Bolgart, others had intermittent power including Mogumber, while others such as Calingiri had power, but no communications – including no landlines. Gillingarra was without communications for many weeks.

With Calingiri itself, the Shire had not long converted from a satellite solution to 5G hardwired one, when the exchange failed. To cap it all off, there was a major fire incident on the same day. Despite the loss of communications, the Shire administration was able to implement a work around that included conducting notifications to and from the community at its emergency services facility as this has Starlink in place. However, it took some time to realise this was an option.

Further to the above, some of the Shire's communities did not have access to 000 emergency calls for the best part of a week or more. That being said, Telstra was able to keep the Shire updated on the status of repairs and 000 outages, which was greatly appreciated.

However, during the April 2024, the Shire was down to one telephone line and Telstra is clearly struggling to deal with this issue as it keeps pushing back the completion time for the necessary repairs.

In addition to the above, the January Storm Event highlighted an issue regarding business continuity as it highlighted for the first time a situation that no one anywhere expected would ever happen and to the extent it did. This event has prompted the need to include such occurrences into the Shire's business continuity plan.

The above has also seen the Shire now look at the issue of power resiliency from the point of investigating the implementation of dedicated power hubs, microgrids, additional generators or community batteries to help ensure the provision of power so that there is still access to communications. The Shire is also in the process of obtaining mobile Starlink units to help provide some certainty when the next telecommunications outage occurs. The above aside, blackouts are not unusual.



7. What should the minimum internet speed guarantee be (currently a peak speed of 25/5 Mbps) to meet modern needs? Should minimum data download/upload allowances be regulated? What other factors are important, like latency, reliability and affordability?

In 2023, more than 86.5% of Australians were online. In today's world, as it is for Victoria Plains, the issue around speed is more to do with upload speed rather than download. Data reliability re upload speed when using software such as Office 365, participating in on-line meetings (Teams, Zoom) or banking (to name a few) is essential.

8. How can we achieve equity with respect to mobile services (voice, data and SMS) in regional, rural and remote communities and on regional and remote roads?

The nation's economy rests on the output from the regions. This means that it is entirely reasonable to expect there is mobile services available to those who contribute to this outcome.

D2D, LEOsat technology and WISPs would appear to be the solution re ensuring such equity.

9. How can we ensure regional, rural and remote areas have access to the networks, equipment and capacity they need for improved household connectivity and to foster innovation and efficiency across regional industries, including for IoT applications?

The main barrier to network operators providing access to networks in regional, rural and remote appears to be cost. The 5G rollout has the potential to create a divide once more between high density population areas and low density population areas.

IoT, D2D, LEOsat and WISPs seem to be lower cost solutions that will assist with household connectivity and industry applications. The OECD paper [Rural Regions of the Future: Seizing Technological Change](#) (OECD Library, 2024) tends to support this view.

10. The cost of building and maintaining telecommunications infrastructure in rural and remote areas can be a barrier to offering better services. What can be done to improve the fixed broadband options available to regional, rural and remote Australians?

Although satellite solutions tend to be firming up as the answer to this question, the Issues Paper raises some concerns. The paper [Low Earth Orbit Satellite Security and Reliability: Issues, Solutions, and the Road Ahead](#) (Yue et al, 2023) reinforces the appeal of LEOsats and the concerns. Further, this paper discusses security concerns and mitigation (solutions) for each factor e.g. confidentiality, integrity, availability, accountability, reliability, attacks and matters of production re financial pressures, the issue of quality and the rate of defects due to the rapid output of low orbit satellites.

A simple solution is to encourage telcos and satellite/wireless operators to be in harmony, which we are starting to see, but the public space interacting with the private space can be like mercury and water.



11. Have you had experience with new or alternate service providers such as Starlink or WISPs? If not, why not? What additional measures would persuade you to consider new technologies?

The Shire of Victoria Plains is expanding its Starlink experience over the next 12 months.

The January 2024 Storm Event proved Starlink's value in very trying circumstances.

12. What can be done to maximise access to multiple connectivity options in case of outages?

The Shire, like many local governments, has both fire response and recovery in place and liaises with St John Ambulance regarding volunteers who provide vital accident response and the transportation of patients.

To help ameliorate the impact of blackspots or poor coverage in many parts of the Shire, it has installed satellite services on the CEM and Emergency Management Officer response vehicles. This is so that these vehicles can act as an incident response facility within any part of the Shire. This would not be possible through the existing and traditional infrastructure.

As highlighted in the response to Question 6, the Shire had to do a work around, and was fortunate it could do this, regarding matters in and around the January 2024 storm event.

13. What can be done to increase capacity and improve the reliability of telecommunications services in regional, rural and remote Australia?

This comes down to encouraging local solutions.

14. How can the energy and telecommunications sectors work more effectively, especially with respect to redundancy?

The key is both sectors working with local governments regarding the development of dedicated power hubs, microgrids, additional generators or community batteries.

15. What innovative solutions can be explored to ensure telecommunications infrastructure remains operational during and after natural disasters? How could partnerships with local communities improve the maintenance, security and availability of infrastructure?

See the responses to Questions 6, 12 and 14.



16. What lessons can be learned from private sector investment in regional telecommunications in closing the digital divide in regional and remote areas?

Localised solutions such as WISPs are evident within Western Australia. This is a good solution as local communities get to have input into the design of the wireless system and the outcomes can be delivered promptly. The [NEWROC Telecommunications network](#) is a good example of this.

17. What has been your experience as a consumer of Australian Government programs aimed at improving regional communications? What improvements would you suggest?

The key issue is understanding what programs are available. The Issues Paper is the first time we have seen the various programs brought together in one place. There really needs to be a resource that can be brought back through the RDAs so that local governments can clearly identify what program they can access and also one that clearly identifies the providers of the different communications solutions.

Our general experience is with the Mobile Black Spot Program. Although it has delivered some good results, the roll out of the program has been confusing and “clunky” – too bureaucratic.

Any funding program should operate more like the Roads to Recovery (RTR) process i.e. to say: the applicant can nominate a solution they need and then funding is provided over a particular timeframe to deliver the project without a complex business case and so on. Ideally, it should require a basic plan over a five year period, map and audited statements each year or at the end.

18. What changes to Australian Government investment programs are required to ensure they are successful, efficient and effective in delivering improved, reliable and equitable telecommunications for regional, rural and remote consumers?

See the response to Question 17.

19. How could Australian Government programs better align with state, territory and local government planning and funding processes in delivering telecommunications services and infrastructure?

The timeframe re funding programs is unrealistic. For local government, once a plan is “shovel ready,” it still takes 12 months or more for all the “ducks” to be lined up, then a further 12 – 24 months to deliver the project (generally the latter).

The election cycle with a potential change in government tends to get in the way of this. If there is a change in government, often there will be a change in policy and then flowing on from this, a change in funding programs.

That’s why a program similar to RTR is important as this program has successfully crossed many election cycles.

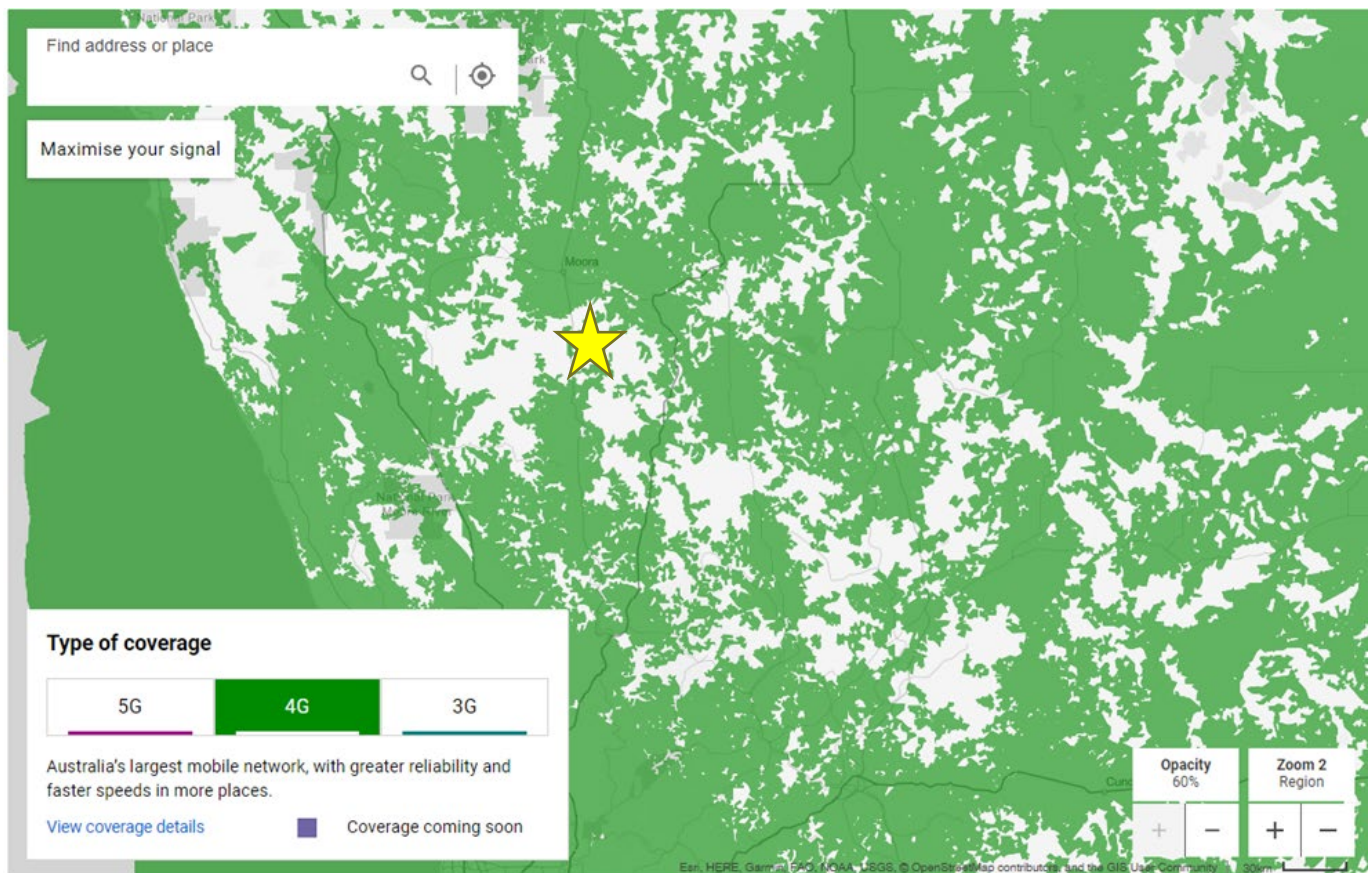
20. What other matters should the Committee consider in its review and why are they important?

The Committee should consider how important local governments are in the telecommunications space.

In essence, they are the key regarding providing viable solutions. Although communication is not a local government responsibility, the issues that arise from a lack of connectivity fall in their lap as they are on-the-ground “government” in local communities.

Many communities see the Commonwealth, the States and Local Governments as one entity. Local government often gets told it should fix the problem. This is fine, providing there are the resources, or the means, to do so.

We know from experience many local governments are keen to work together to provide solutions. However, it must be made easy for them to do so. There are so many competing priorities for local governments that a key one such as telecommunications should be made much more simple to access and develop a solution for their respective communities.



Central Coast, Central Midlands (Victoria Plains★), Central East, Avon Sub-Regions