



29th September 2021

Regional Telecommunications Review

Background

Perenjori is a Western Australian rural shire situated on the traditional lands of the Badymia people of the Yamatji nation. In making this submission we acknowledge their elders, past, present, and emerging.

Pioneers discovered gold near Perenjori in 1894 and the first European settlement was established in 1905. This settlement was formalized with its declaration as a Town in 1916.

The district, comprised of approximately 8,600 square kms, is now constituted as a rural shire in the Mid-West region of Western Australia, located 370kms north of Perth and two hours drive east of Geraldton. Major industries in the area are farming, mining and tourism, based on the abundant wildflowers found throughout the area.

The current population is listed as 617, located largely in the two main townships – Perenjori and Latham. The trend has been towards a statistical decline since the 1980s and Council's strategic goal is to return the Shire to a population in the order of 1,000 residents.

The potential for this review to refocus the regional economic development agenda to deliver stronger regional opportunities through telecommunications is critical to many local governments which find that traditional notions of work and production are not enough to rejuvenate our rural locations.

“Embrace Opportunity” is the Council's motto, and this ethos drives us to make this submission.

Comment

This submission is framed sequentially, with direct response made to the questions in the Issues Paper, in the order in which they are posed. All questions have been responded to and can be discussed with the author should clarification be required.

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?*

Our first observation is the tendency for governments and metropolitan based interests to categorise non-metropolitan areas as simply “regional”, or possibly “remote”, as if all such locations have the same characteristics. Whilst this is true to the extent that these areas are not part of the urban sprawl of the Capital city, regional and remote communities can be very diverse, both within and between themselves. Anecdotally, the telecommunications issues in Busselton and Bunbury are technically regional in terms of geography but are likely to have far more in common with Mandurah and the Perth metropolitan fringe than the northern wheatbelt.

Put simply, everybody who doesn't have it, wants a reliable and contemporary 4G/5G network that allows their location the same access to internet and mobile networks as the metropolitan area of the Capital city.

Our second observation is that premium grade telecommunications are critical for regional economic development in the 21st century. The economy is increasingly geared for technology such that the production and delivery of almost any product is significantly impacted by the quality of telecommunications. Therefore, the ability of governments and communities to affect regional economic development hinges on their ability to provide telecommunications that are not only fit for purpose but are essentially a point of difference or the locational competitive advantage. This is also true for public services, and not just the private sector.

Regional development in places like Perenjori is compounded by the fact that there is not a bottomless supply of labour or expertise within the local community. The ability to recruit staff, maintain a qualified and experienced workforce and maintain a competitive team of human resources is often compromised by a lack of qualified and experienced candidates in the local labour force. In these circumstances, the capacity to utilise remote staff becomes pivotal to success, not only for the productivity of the local economy, but also for the maintenance of public and community services, such as basic health, community services and wellbeing support. All of these are technology dependant solutions, impacted by the quality of local telecommunications.

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 emphasis on market-based solutions for service delivery decisions means that population levels will determine business investment priorities. This inherently means that small, regional and remote populations will be in service-deficit as larger marketplaces with a stronger customer demand profile will always draw business investment away from these less profitable markets.

It is acknowledged that successive governments have had investment vehicles to address these situations – *at least in part* - however these will likely need expansion (*and possible prioritisation*) in future to achieve more equity.

Telecommunications technology is not just about business growth, agriculture and industry. It's also about tourism and most importantly, emergency service response to incidents, bushfires and natural disasters.

In emergency situations good telecommunications can be a matter of life or death for those involved especially if those visiting the area are unfamiliar with local circumstances. This is highlighted by the occurrence of disasters, such as bushfires and Cyclone Seroja. The challenge in these circumstances is to develop more resilient and less vulnerable infrastructure and delivery technologies so that telecommunications can withstand disaster events, or at least recover more quickly. Whilst it is acknowledged that there is no easy solution for these situations, telecommunications in Perenjori were severely impacted by Cyclone Seroja, through destruction of cabling, towers and other infrastructure, as well as the interruption to power supply and the failure of generators through a lack of fuel and maintenance.

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

There should be greater emphasis placed on shared infrastructure to maximise the efficient use of resources, and competition between service providers should be based on content and service offerings. The efficient use of collective infrastructure will ensure the maximisation of resourcing to innovative service provision and product diversity.

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

Please refer to comments @ Q.2 above re: barriers and challenges.

Service reliability is critical to the validity of any claim that rural and regional communities can make in terms of being viable work, business and lifestyle alternatives to the metropolitan region. Broadly speaking, power supply and telecommunications are the two key service areas that fundamentally undermine regional viability for commercial and residential choice.

In Perenjori, for example, interruption to power supply was a regular occurrence until the installation of the Battery Energy Storage System (BESS), a community micro-grid, in 2018. Supply volatility was caused by environmental factors impacting the long feeder line to the town.

Data shows that since the 1 MW/h network battery was connected and energised it was used more than 300 times to support power reliability and quality in 24 months. Whilst the township now has improved reliability in the continuance of its power supply, the data reveals that the traditional service was failing, on average, at least once every 3-4 days.

Now, instead of the lights going out, a fault on the feeder triggers the system to kick in, and customers receive a text message letting them know they have switched over to the microgrid which will supply the town for around four hours. This gives people a chance to save work on their computer, finish cooking meals, and business owners can keep operating. It also allows Western Power time to rectify the fault and restore mains power, providing a seamless and continuous service to consumers.

Power supply is also critical to telecommunications, as was demonstrated in the aftermath of Cyclone Seroja.

Mobile phone towers lost power due to the massive infrastructure damage caused by this weather event, which was eventually re-established using local generators. A logistics failure in keeping them fuelled caused further disruption to service and hampered community recovery.

Whilst nobody seriously expects telecommunications to be completely impervious to cyclone level disaster events, better planning and resourcing could minimise the impact.

In a world where we are trying to encourage the repopulation of our regions, service reliability is critical to convincing people to choose a regional lifestyle, business opportunity or investment.

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

Acknowledging the comments in response to previous questions, in a specific operational sense, solar based power supplies to phone towers would appear to be a better solution than fuel dependant generators.

The experience at Perenjori with its Battery Energy Storage System demonstrates the underlying weakness of the electricity distribution network in remote and regional areas. An expanded investment by governments in normalising the supply of power to regional townships would enhance the reliability of the telecommunications network, improve the liveability of rural locations, enhance the health and safety of rural residents and ultimately contribute to the broad regional and

economic objectives of the States, Territories and Commonwealth, which will ultimately relieve pressures on congested and dysfunctional metropolitan areas.

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?*

Generally, the COVID-19 pandemic undoubtedly accelerated the shift to a more mobile and decentralised office workforce. Specifically in Perenjori, we maintained staff in the office, largely because the natural isolation of our community and the protective and preventative approach of the State Government meant that the number of “lock down days” were minimal, meaning that normal modes of operation could continue.

Having said that, the Shire has invested in more mobile telecommunications equipment – laptops, IPADs, new generation telephones, etc, - and as a result has a more agile footing for its administration.

Local Government business continuity planning into the future should be required to address the capacity to operate core business and administrative functions remotely, given the acknowledged likelihood of continuing pandemic circumstances and the potential for new pandemic threats to evolve.

There should also be a revision of the investment vehicles for telecommunications which acknowledges the real deficit faced by rural communities. Rural areas should be prioritised for investment over and above metropolitan catchments, which have existing high quality infrastructure and market capacity.

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

As with all utilities, it is the responsibility of the government to structure its budget to allow connection to disadvantaged and low socio-economic users. Whilst the costs associated with the provision of utilities to remote indigenous, regional, and rural areas are often uneconomic in a market sense, these safety net obligations should be funded ahead of discretionary expenditures in stronger commercial markets, like the major metropolitan areas.

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

Firstly, all Commonwealth, State, and Territory governments need to have a definitive discussion at National Cabinet level to clarify and harmonise policy around regional and economic development. This conversation needs to be couched in terms of their acknowledgement of the prevalence of urban primacy (*the population dominance of Capital cities*) and the inherent congestion, environmental and social problems that ensue from it. This needs to result in a national commitment to population and investment decentralisation, which would then guide governments at all levels in their program and infrastructure decisions.

Having a decision framework that,

- Identifies the problems with continued Capital city urban sprawl,
- Supports regional development as a desirable alternative, and
- Commits to the priority decentralisation of resources to achieve it,

will make service, program, and infrastructure decisions, such as those associated with telecommunications, easier to make and successfully implement.

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?*

Successful innovation, by its nature, suggests that venture capitalists and entrepreneurs will be a part of the process, thereby bringing new resources to the telecommunications sector. Central governments can play a role in fostering that investment through taxation incentives, which enable the full utilisation of every investment dollar for the purpose for which it is made – innovative telecommunications solutions.

Governments can also encourage that development by contracting for the products that are produced as a result of the innovative process, establishing fledging markets for the goods and services produced and in turn, fostering new investment.

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?*

It is difficult to comment about new technologies in the absence of any knowledge of them. Any new technologies need to be developed to the point where they can be introduced prior to the phase out of the old technology, so that consumers are not left without adequate service in the interim.

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

See previous responses.

The full exploration of taxation and business incentives, informed by a policy priority for regional and economic development in the context of preventing/limiting urban sprawl, pollution and congestion in Capital cities.

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 policy hierarchy needs to be established to provide strategic clarity to all governments, the market providers, and the community.

As previously stated, National Cabinet needs to clarify and harmonise policy around regional and economic development. This conversation needs to acknowledge the population dominance of Capital cities, the inherent congestion, environmental and social problems that ensue from it, and its undesirability in terms of our national future. This needs to result in a national commitment to population and investment decentralisation, which would then guide governments at all levels in their program and infrastructure decisions.

Australia needs a strategic decision framework that,

- Identifies the problems with continued Capital city urban sprawl,
- Supports regional development as a desirable alternative, and
- Commits to the priority decentralisation of resources to achieve it,

thereby ensuring that service, program, and infrastructure decisions, such as those associated with telecommunications, easier to make and successfully implement.

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

Investment programs should encourage carriers to share infrastructure whilst competing on service delivery and programming. These funds should also be directed heavily towards regional communities based on a policy construct which seeks to minimise the compounding of urban disfunction by directing population and economic growth to non-metropolitan locations. Investment decisions should also be made (*within reason*) on the basis of best and most effective service outcomes, rather than cheapest cost.

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?

Whilst the carriers are arguably the most appropriate people to explain their product offerings, their capacity to objectively discuss and compare options across different providers suggests that informed and educated advice to consumers from an independent third party is more likely to achieve the best outcome. There also needs to be the capacity to interrogate the service claims against the service delivery reality, to be sure that what is promised is actually delivered.

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 issues raised in this question demand investigation and report by an independent technical auditor. The informed, educated and independent third-party advice to consumers suggested in the previous question response is also relevant to this question.

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

In summary, the main contention of this submission is that telecommunications should not be viewed in isolation, but rather seen in the more important context of regional and economic development.

The Committee should be encouraging Commonwealth, State and Territory governments to establish strategic regional and economic development policy parameters in which telecommunications programming can be established with the aim of contributing to achieving big-picture outcomes.

Telecommunications should be seen as a means to an end – *better regional and economic development* – and as such, the committee should give consideration to this end as an important outcome of the review.

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