Regional Telecommunications Review 2021 – Issues Paper

Berrigan Shire Council Response



1. What telecommunications services are required in regional Australia to meet current and future needs?

The COVID-19 pandemic has not only accelerated the digitisation of our daily life, but has moved it from a convenience to a necessity.*

People in regional, rural and remote areas simply need equitable access to the necessity of telecommunications, including reliable and fast internet at bandwidths that can cope with the increasingly data-intensive requirements of today's society. That access must be affordable and not require people in these areas to accept old technologies as part of the price they pay to live and work in these areas. As urban drift increases and those people now sick of being "locked down" are moving to regional, rural and even remote areas, they are expecting the same provision of services at the same levels of accessibility and that is certainly not the experience of those living in these communities.

It is telling that Telstra's CEO, Andrew Penn notes, in the report, *Measuring Australia's Digital Divide* – *The Australian Digital Inclusion Index 2020* that "...it is Australians with low levels of income, education, employment and those living is some regional areas, that are on the wrong side of the digital divide." It is also telling that those with the lowest levels of income, education opportunities, employment etc are also those living in the regional areas he is no doubt referring to. These are unacceptable outcomes and ones that need to be addressed urgently.

So what do regional, rural and remote areas need to meet current and future needs? They need to be included. They need for government to understand that leaving roll out of these technologies to companies who answer to shareholders mean that the social and economic requirements of regional, rural and remote communities will continue to go unmet.

Rather than rolling out old technologies to these areas, install current and emerging technologies. Educate people as to when access to technologies such as LEOSat will be available in their areas and understand that movement to those technologies will mean the share price of Australian businesses will decrease because those technologies can only be accessed through companies like SpaceX (through StarLink) and Amazon. Australian technology companies are doing as they have always done, and are reacting to technologies long after they are embedded around the world and refusing to be part of the early adoption groups. Accessing technology offerings of other countries will at least force the likes of Telstra and Optus to consider more seriously their responsibilities to the entire population of Australia, not just the convenient 90%.

Are there any things regional communities and businesses need to do, but can't, on their existing services?

Often for people in regional, rural and remote communities access to online services such as MyGov, Centrelink and Medicare are impossible as affordable and reliable internet is not accessible. How then can access to thins like internet banking and telehealth be seen as viable options across these areas of Australia? Initially people in these areas would simply like access to those. The things the rest of Australia take for granted.

^{*} ADIA – A National Digital Inclusion Roadmap – Published October 2020

Telehealth was and is being pushed as the "great solution" to the medical professional shortage in regional, rural and remote Australia. The requisite technology infrastructure however is in such a poor state telehealth has no real chance of ever delivering on the promised that have been made to these communities.

What do we need though? To actually converse with and successfully engage with today's society people in regional, rural and remote Australia. These areas need access to sufficient internet services to allow Voice over Internet, Internet of Things (IoT) applications and 5G. People in regional, rural and remote Australia are trying to run businesses that need to allow on farm management systems such as Farm Gate Access (run through the Farm Gate Access Program), water management functionality, stock management functionality and many, many other applications that would be possible were access reliable and of acceptable bandwidth. Currently these areas are artificially limited as to their ability by the limits placed on them by lack of, or poor, digital connection.

For now, in these areas we hear about the things we would like to implement – Smart Cities projects, working from home, virtual and augmented reality (especially in the education sector), blockchain advancements, cloud computing etc. All are out of the reach of areas that have been so long neglected by telcos whose eyes are on the financial gains they need to make, and not on the social responsibility to ensure equitable access is provided to all areas of Australia.

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

For regional areas it is imperative to understand how they are determined to be defined as regional, rural or remote. The implementation of the Modified Monash Index in January 2020 has changed the determination of many areas including that of Berrigan Shire. As such we have a disparity between service provision between each of our communities. For example, both Barooga and Tocumwal have access to NBN fibre optic cable due to their designation. 20 kms away in both Finely and Berrigan this is not the case. Finley has fibre optic accessibility to the eastern half of the township but not the western and Berrigan has been relegated to the slow lane with Fixed Wireless connection only.

The poor connectivity effectively rules out private investment in townships like Berrigan for anything other than primary agriculture and even that will become increasingly more difficult as technologies in that sector are also advancing far more quickly than either of our current telco suppliers would like the government to believe. Not providing adequate connectivity is making a decision for townships like Berrigan that it and its community will not be permitted to develop and prosper.

For Berrigan Shire Council to be able to allow staff to work from home as per the various Public Health Orders, we will need to find more than \$200,000 to upgrade our digital service. This is out of reach for any individual in this community and a stark example of the disparity being faced in this area alone.

Having a transparent plan to ensure equitable access to all Australians will be essential to ensuring all Australians are able to plan for their future and to grow businesses and ensure our children at least return to these communities as there will be increased opportunities for them to do so.

It should be pointed out that the concept of the "tyranny of distance" is not new to Australia. Distances have existed in Australia before written record. It is however regularly used as an excuse for sub-par service provision to regional, rural and remote communities. It is incumbent on the

Australian government to understand these issues and to provide for increased cost of delivery when budgeting for the provision of equitable services to these areas. High cost and low population is a very tired and old excuse that is no longer relevant to a mobile and digitally connected world – except that it is being artificially enforced by poor policy making that focusses solely on city centric delivery models.

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

Unfortunately, Australia's approach to telecommunications services, particularly in regional and remote areas has been reactionary rather that strategically linked with current and future needs of those communities. As a result, regional and remote Australia has been marginalised into what is commonly known as the "second land of the two speed economy". There are those who have fast and reliable internet and those who simply do not.

In essence this is the result of the Australian government's determination to allow the roll out of access to telecommunications to be held by private investors. Those investors do not see the financial value in providing adequate service to regional, rural and remote areas and as such cheaper and far less reliable options are the only choice in these areas.

The Australian Digital Inclusion Alliance have provided significant research to show the direct "relationship between isolation, service breakdowns and deepening mental health issues" and the "importance of digital social connection in managing mental health".*

Of course, the increasing instance of mental health issues are but one factor which highlight the outcomes experienced by those in regional, rural and remote Australia, however they are indicative of the disparity experienced across the spectrum (or lack thereof) of services those in these rely on through digital technologies. Where the only option for many remains ADSL or Fixed Wireless, digital connection is unreliable and slow making things like telehealth, Internet of Thing (IoT) applications and simply working from home, essential services we can only dream of.

Does the Mobile Blackspot Program help? Yes and no. It assists in filling in areas where no services have previously existed but it is regularly filled with old technology that is cheaper to roll out, therefore providing something that is better than was there but not something that remains inequitable across the population. Why should people who live in these areas continue to accept marginalisation as the acceptable price to pay?

*Anthony McCosker, Deputy Director at Swinburne Social Innovation Research Institute, Mental Health & Digital Inclusion – Joining the Dots, published 30 March 2021.

How can these be improved?

Accept that delivering quality services to those people in regional, rural and remote communities will cost more. Overcoming those barriers is perhaps not as difficult as would be expected however where partnerships with local communities is actually sought and transparently managed. These communities want input into their future. They are not big on handouts but they are innovative and they are more than capable of finding and sourcing their own solutions. Actually engaging, on ground

in these areas will go a long way to solving the tired excuses that have let to decreased and disparate service levels as being an acceptable option for these communities

4. How do service reliability issues impact on regional communities and businesses?

How would service reliability issues impact any community or business? They are the same impacts as those felt by metro and urban communities and businesses. Regional, rural and remote Australian communities are just more used to having to deal with them.

The impacts are loss of revenue, poor education outcomes, low investor confidence, loss of trade opportunities, narrowing of markets and market share. They are no different to anyone else except they are the regular experience of those in regional, rural and remote communities.

For example, a real estate business in Finley moved from one side of the street to the other. They have had literally no landline phone, nor internet for almost 6 months. They have moved to the side of the street that does not offer fibre to the premises. How would that affect any business? How would that affect any community?

A further example is an employee who lives just outside the town boundary of Tocumwal. In flood periods (which generally happen at least once per year) the landline becomes inoperative due to water inundation. For these people landline is the only service that is generally reliable in their areas. Most have purchased very expensive satellite booster antennas so they have mobile and internet service as a backup. The issue however is that due to cloud cover at times of flood etc, access to even these services is intermittent at best. I ask, is it valid for any citizen of Australia in 2021 to be completely cut off from society for any period of time due to something as regular an occurrence as flood?

The question points more to a lack of knowledge about business in regional, rural and remote communities, and the needs of each of those communities than to any real want to understand.

How do outages, including in natural disasters, impact on communities and businesses?

Natural disasters are a part of life in Australia, and increasingly so. The difference between metro and urban areas and the experience of those in regional, rural and remote communities is the response times between when services go down and when they are restored again – if they are restored again. There are numerous examples throughout Australia of regional, rural and remoted communities who have experienced significant natural disasters and services have not been reinstated – some dating back decades. Communication is critical to mitigate the effects of natural disasters; on businesses and the communities dependent on these businesses.

Again, government will point to the distances required to be travelled. Our communities will point to the withdrawal of services that enforce the requirement to travel and the concern about 'the numbers' rather than the people of the areas affected.

The truth is when regional, rural and remote communities lose services due to the effect of natural disasters they are without those services for days and weeks, not the hours experienced by those in larger centres with larger population bases. The effect of that is concerning.

Again, already isolated communities and the individuals in outlying areas become more isolated. The link between isolation and lack of access to digital equity has been demonstrated earlier. It is only increased in the days, weeks and months following any natural disaster and if that natural disaster is drought, then the time period is months and years.

The importance of these services being accessed equitably cannot be underestimated and the social changes possible as a result of equitable access would change the communities in these areas exponentially.

The question regional, rural and remote communities really want answered is why are only these communities asked to be "resilient" in the face of natural disasters? Where natural disasters occur in metropolitan and urban areas, they are not told to be resilient. There needs are met immediately and effectively by Federal, State and Local organisations to deliver the assistance they need to recover quickly. Regional, rural and remote communities are told to be "resilient" and are funding for "programs" aimed at improving their resilience rather than anyone addressing the real issue. Strengthening the infrastructure available to these communities would vastly reduce the need for "resilience" in the face of disaster. To those communities living in these areas the word "resilience" has been over used and to us really feels like we are having to provide solutions for ourselves because, frankly, the matter is too difficult for those in metropolitan and urban areas to want to assist with finding solutions to because they have never been told to be anything but reliant on governments to fix stuff for them.

5. How might such impacts be addressed to ensure greater reliability?

Whilst NBN Co SkyMuster and like technologies are appreciated in these areas to fill in the gaps, it highlights that these things can be done. They just aren't politically useful nor economically viable in a for profit environment. Communities in regional, rural and remote communities need the same reliability of service as that offered to 90% of the population.

Reliability can be attained by working with these communities, not rolling out old technologies to them and by looking to the future for models that will allow wider coverage at costs that are manageable by both the provider and the user.

Greater reliability is often achieved on a user pays basis, however regional, rural and remote communities are already paying more for an unreliable services than their metropolitan and urban counterparts. The issue of greater reliability will therefore, require leadership on the part of telecommunications stakeholders to socialize the cost of greater reliability including demonstrating to the general public how and why this is in the national interest.

How can the network resilience be addressed in regional areas?

Resilience of network will come with a decreased reliance on old and aging infrastructure and the continued roll out of old technologies. The fact that some areas are only recently receiving 3G would suggest that are not worthy of 5G — or leapfrogging entirely and moving to LEOSat technology for example. There are options out there. Government has to be bold in their investigation and develop partnerships with providers and communities to assist in the delivery of services that are equitable across the entire population.

Resilience needs to be embedded in the technologies not the people of the areas in question. It is the quality of the technology that matters here. Access to current technologies should not be viewed as an "add on". Augmentation does not increase resilience, its purpose has and always will be to prolong basic functionality. This question displays a singular lack of knowledge about the inter-relationship between policy development and the technical understanding about network functionality in regional, rural and remote areas of Australia.

6. How did the use of digital services change for regional consumers and businesses during the response to the COVID-19 pandemic?

The COVID-19 pandemic has not only accelerated the digitisation of our daily life, but has moved it from a convenience to a necessity.*

In regional, rural and remote areas the disparity of digital service between metro and urban areas and regional, rural and remote areas were simply highlighted. Where those in larger population centres could move easily to working from home, online bookings, access through reliable apps and digitising product, this was either limited or not possible for our areas.

If the Australian government is serious about enforcing things like stay at home rules, work from home requirements or even just equity of access, then a change in the way digital services are delivered to regional, rural and remote communities is well past due. Continued reliance on old service models and methods of delivery have proved to be ineffective time and again. COVID-19 showed regional, rural and remote communities how poorly these areas have been serviced in the past.

Digitalisation increased frustration, lowered productivity and increased the sense of isolation experienced by regional consumers. Offers of increased data by telcos are useless when you cannot even get online. In our border communities, Council library services were inundated with requests to assist with border passes as many could not access even this basic service.

The gap in education attainment between metropolitan / urban and regional/rural/remote students is well recognised and documented as is the disparate access to digital technologies. Digitalisation of services (education – free to air communication etc) has and is imposing additional social and economic costs for regional consumers; costs that are not experienced in more densely populated areas. Costs include installation of additional infrastructure on private housing to allow for home schooling. These costs are often astronomic, require long wait times and are far beyond the economic capacity of parents who have been forced to provide them.

What insights for future service delivery does this provide?

More needs to be done. It is that simple. Current and past service delivery has been woefully inappropriate and measures must be taken to allow these areas to "catch up" with the rest of the nation.

Communication needs to be regarded as a public good; a basic human necessity. It needs to be recognised that marketed based service provision has failed a considerable section of the Australian population. Quasi-market models recognise public and private partnerships may prove to be part of the solution; there are however, no guarantees that rural and remote regions will be the beneficiary as has been clearly demonstrated across multiple service deliveries.

^{*} ADIA – A National Digital Inclusion Roadmap – Published October 2020

The role of government is to establish policy settings to incentivise investment in communications technologies. The role of government, when there is evidence of market failure or sub-standard service of a 'public good', is to not just incentivise its supply but to invest in the delivery of that technology, and if needed government should be the provider of that 'good'.

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

Unfortunately, we are not able to comment on this area as there is no collective experience that would allow us to make a qualified statement. BSC would however imagine many of the issues faced by regional, rural and remote communities are those felt in indigenous communities with the added disparity of neglect added on top.

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

A whole of government strategy should be developed that includes all levels of government. This will ensure business, not for profits, federal, state and local governments can work towards the same goal whilst presenting the needs and aspirations of each sector. Accessing national and international partners should be a strong feature of any strategy to ensure any solutions offer the most affordable, reliable and accessible options for each segment of the community.

Again, this is another poorly considered question. Economic development in regional and rural communities does not need to be encouraged. What needs to be encouraged in that policy makers and government invest in these communities. The people who live and work in regional, rural and remote Australia are reliant on telecommunications infrastructure and are invested in their communities and therefore active contributors to the economic development or regional, rural and remote Australia.

Regional and rural businesses in particular have transitioned to digital technologies. For example, agriculture is globalised and productivity is dependent on telecommunications infrastructure as a result. The effectiveness of any program or policy response is therefore dependent on the efficacy, reliability and functionality of telecommunications infrastructure. If, as tis the current experience for regional, rural and remote Australia, we move into the third decade of the 21st century with technologies that remain rooted in the 20th century then any investment programs and services that are aimed at 'encouraging economic development' are quite simply bound to fail.

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

Innovation and new models by their nature encourage investment. Innovation and new models, alternative investors and new ways of doing business will not, as strategies or tools, encourage investment in regional telecommunications infrastructure particularly while ever market-based and for profit values dominate the provision of regional telecommunication infrastructure.

The decision to innovate or invest in new models is driven by return on investment in market-based, for profit business. Social investors do value a monetise return on investment however they tend to place a premium on social return on investment. This is clearly also the role of governments.

What are the barriers?

The barriers social investors or alternative investors have is essentially access to research and development funds. Banks are in the business of generating a capital return for their investors. Research institutes require sufficient funds to provide for the ongoing delivery of graduate education and post graduate research.

Political barriers include a lack of will and insight by policy makers about the consequence of market failure and the use of market based incentives as the key policy lever and driver of investment in telecommunications infrastructure. Ideology, politics and just plain ignorance on the part of key decision-makers contributes to, and continues to be, the barrier to be overcome to ensure that research and development funds are available to support innovation, new models, alternative investment and new ways of doing business so that investment in regional telecommunications infrastructure is just not encouraged but is in fact what happens and is what is delivered.

10. To what extend will new technologies enable significant change to the delivery of telecommunications services in regional Australia over the next 5-10 years?

These matters have been adequately addressed above.

Are there any barriers to accessing these technologies?

These matters have been adequately addressed above.

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

The provision of investment incentives to ventures and emerging tech providers in regional, rural and remote communities in particular will go a long way to ensure equitable access to telecommunications solutions in rural, regional and remote communities.

Investment incentives need to be backed by institutional support and access to financing options. The risks for such investment should not be borne by the communities nor investors willing to attempt to find solutions for regional, rural and remote technology inadequacies.

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

The Commonwealth has a constitutional responsibility to lead the co-ordination, planning, funding and development of telecommunications in Australia; not just regional Australia. If the efforts of other levels of government, industry and regional communities are unco-ordinated, this is a consequence of 'failure' of the Commonwealth Government and previous government's leadership and its willingness to transfer of its constitutional responsibilities to other agents. Leadership that is non-partisan and apolitical is needed to facilitate the efforts of other levels of government, industry and regional communities. Achievement of that outcome requires institutional change as the laissez-faire approach toward telecommunications infrastructure planning, investment and provision in regional Australia has clearly failed. In the absence of leadership, the Commonwealth should at least 'get out of the way' when regional communities and other levels of government broker local solutions and facilitate access to the network by fast tracking the approvals required to engage directly with new technologies.

Statements such as there is "limited consumer demand" in regional, rural and remote communities in not helpful. There is high demand on a percentage of population basis. The issue is really that there is a low population base. This is not the same however as low demand. The reasoning posited here is circular. There is low demand so the telecommunications providers don't provide the requisite services. The service therefore doesn't exist so people living in regional, rural and remote Australia can't use it and the people who need it won't move to where those technologies are not provided. The statement of "limited consumer demand" is one therefore that justifies the decision not to provide the service, and one that will continue to allow them to not provide the needed infrastructure (which is actually the solution).

Whilst Australia continues to hold to its only option for the provision of digital access being private industries, the inequities being experienced in digital provision will continue. Until government is able to become a partner in when and how digital connectivity reaches the entire community, that disparity will not be addressed.

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

Actual engagement with each community would be a fantastic start. Where there is understanding of the required usage of each community, then the provision of digital access can be tailored to meet the current needs of that community and take into account its future needs. Working closely with Local Governments will and can provide State and Federal agencies with access to this information and the ability to fully understand the unique needs of the businesses and individuals in these areas.

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?

As per the above.

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

Consumer protections need to be strengthen in the area telecommunications provision. This is a State and Federal responsibility.

Penalties for telecommunication providers need to recognise that telecommunications providers are multi-million dollar enterprises and there therefore needs to be enforceable standards governing public information and advertising about connectivity, coverage and speeds.

You have to be able to access this data digitally so for some areas, the information currently available is inaccessible and therefore useless.

An Australian Standard should be developed outlining minimum digital speeds, latency requirements and bandwidth as well as suitable minimum delivery modes for various areas. Consideration needs to be given to issues such as satellite latency which are major impediments to services like telehealth and cloud computing. Standards will also allow consumers access to cost effective legal redress for social and economic harms suffered. Standard contract allowances such as a minimum a 30 day trial period so regional, rural and remote consumers can determine they are getting what they expect via their plan. Consumers should not have to put up with paying for services that cannot be delivered (such as promising data upload or download capacity that is simply not available over Fixed Wireless) and the lengthy dispute resolution processes telecommunication providers currently rely on when consumers discover the service they have paid for is not fit for purpose.

What other information is needed?

Unbiased information regarding who is undertaking current research (such as Australia's Digital Connectivity Report) and how that information might be influenced by the outcomes required of the research provided.

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

I believe the submission above covers all areas the Committee should consider in its review and articulates why each of the areas is important. Please feel free to contact me though should you require any further comment.

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