30 July 2018

secretariat@rtirc.gov.au

Dear Sir/Madam,

Regional Telecommunications Review 2018

Please find attached an amended submission in regards to the above mentioned inquiry.

Yours sincerely

Claire Wiseman
Chief Executive Officer

SUBMISSION FOR THE REGIONAL TELECOMMUNICATIONS REVIEW 2018

The Far North SA Region

The Far North region of South Australia, as per Regional Development Australia Committee boundaries, covers approximately 80% of South Australia. The area has a land mass of just under 800,000km^2 with a population of [1]27,500 and incorporates the Anangu Pitjantjatjara Yankunytjatjara Lands. The region takes in the iconic Flinders Ranges and Outback region, popular and well visited tourism destinations in the State. The Flinders Ranges is also now recognised as a National Landscape.

The main townships in the region include (but are not limited to) Port Augusta, Quorn, Hawker, Leigh Creek, Copley, Lyndhurst, Marree, Innamincka, William Creek, Oodnadatta, Marla, Mintabie, Coober Pedy, Glendambo, Pimba, Woomera and Roxby Downs. Some of these remote townships are between 800 - 1,000 kilometres from Port Augusta, the largest city in the region (population of [1]13,808).

A region's comparative advantage can stem from various resources, such as its geographical location, availability of natural resources, the existence of industry clusters, access to infrastructure or the skill profile of the local population. These underlying attributes influence the types of economic activity that are likely to be successful. They also have implications for development initiatives, which are generally more effective where they build on an existing strength.

History of RDA Far North and NBN

In 2012 Regional Development Australia Far North (RDAFN) in partnership with Regional Development Australian Yorke and Mid North was successful in gaining $50,000 funding under the Funding for Regional Development Australia committees to maximise the benefits of a digital economy enabled by the National Broadband Network (NBN), NBN Readiness Projects Round Two, for the development of localised websites and supporting roadshows.

The development of the localised websites was focused on providing a more 'cut-through' content. They were central hubs of NBN information and resources which featured rich video content for educational and instructional elements of the NBN rollout, directories of NBN service providers, service provider registration forms, news and comments features, local stories and case studies, categorized online tools and software, roadshow calendar and event registration. Websites were created for each township that was part of the program e.g. portaugustanbn.com.au, roxbydownsnbn.comau etc. The websites proved very popular as a central portal to go access to seek localised NBN information and was heightened by businesses/service providers having access to upload their own profiles and keep the information up to date. Unfortunately, due to the unavailability of ongoing funding, the websites were shut down 12 months after they were launched.

---

[1] ABS Census Data, 2016

Roadshows, which were conducted with RDAFN staff, Stellar Digital (website developer) and nbn co staff were rolled out around the Far North and Yorke and Mid North Regions in the following townships:

- Coober Pedy
- Roxby Downs
- Port Augusta
- Port Pirie
- Kadina
- Clare

The roadshows proved very popular with very good attendance numbers at each session and the added bonus of having nbn co as a presenter enabled businesses and residents to ask questions about the rollout in the early stages.

RDAFN and nbn co Partnership in 2016/17 and 2017/18

RDAFN has kept in close contact with nbn co staff in the last few years, as NBN has been rolled out in the Far North region. In the 2016/17 financial year the following promotion of NBN has been carried out in conjunction with nbn co:

- nbn co had a stall at the Augusta Markets event on 26 November 2016
- RDAFN held a Flinders Ranges Business Forum on 3 April 2017, of which nbn was a key presenter
- In addition to the forum above, nbn co had a presence in the township of Quorn over a couple of days to answer any queries from residents and businesses. RDAFN assisted in the majority of the promotion for this initiative.
- nbn co travelled to Coober Pedy and Roxby Downs from 23-25 May 2017 and held information sessions with local businesses and residents. RDAFN accompanied nbn co staff on this trip and also carried out the majority of sponsorship and organisation of the sessions
- nbn co carried out roadshows in the region, in conjunction with RDAFN, which included visits to Coober Pedy on 21 May 2018, Roxby Downs on 22 May 2018 and Hawker on 23 May 2018. RDAFN is currently working with nbn co to organise a roadshow for the Yunta area and further far north.

In mid-2017 RDA Far North carried out a survey of the Far North SA region to gain an understanding of the experiences of residents and businesses with the NBN. Attached is a summary of that survey (Attachment 1).

Issues Paper
Key areas of interest
(RDA Far North carried out a survey of Far North SA businesses and residents in mid 2018 in relation to questions arising from the Issues Paper. Whilst the response to this survey was very disappointing (only 13 responses received), the respondents are a good geographical representation of the region and some of the answers are referred to in the following response to the Issues Paper key areas of interest.

1. **What are the main barriers to people in regional communities increasing their use of digital technologies and possible solutions for overcoming these barriers?**

   One of the main barriers to people in regional communities increasing their use of digital technologies is access to these technologies and the knowledge to use them to their best advantage. Whilst the majority of the remote and regional communities now have access to the NBN via different types of technology, this doesn't always mean that the technology is suitable for their usage. Some of the businesses and residents who rely on these technologies for education and business purpose are hindered by the slow download speeds or congestion on the network. The reliability of these services is also key with users experiencing continual "drop outs" as well as the service becoming too expensive to maintain. Some of the responses to the abovementioned survey were "continual drop outs, expensive plans, data speeds", access to telecom technicians to fix issues", "The main barrier is internet speed, cost and provision, no question. For a household of five who use the internet, 140GB of on peak data for $200 a month is daylight robbery" (from a very remote SA station).

2. **How are people in regional communities currently using their broadband service and how might they increase the benefits of using this technology?**

   Many people in regional and remote SA use their broadband service for business, general communications, education, health services, keeping in touch in the community, weather reports, banking, news, fire alerts, road closures and other emergency notifications. One survey respondent said "with the move to paperless technologies, internet banking and online databases, the internet is used heavily in our business. Two out of three kids here do School of The Air, so they need it for schooling. My mother in law uses it daily for health services – online Occupational Therapy."

3. **What data-intensive activities are occurring in regional, rural and remote Australia? What digital technologies are needed for these?**

   As outlined above, many remote and regional residents and businesses are performing data intensive activities such as education (e.g. School of the Air), health services, banking etc all which rely on uninterrupted streaming. Due to the location of these residents and businesses, they have no choice but to use satellite broadband.

4. **How can regional businesses better utilise digital technologies to maximise economic benefits?**

   Some businesses and residents said they were interested in being able to use VoIP service, however, with the unreliability of connections this service is not viable. Some are also unaware of what else if on offer or available for them to use therefore education and training on alternatives, if they are in fact available, would be a way forward.

5. **What can be done to improve access to and uptake of telecommunications services in remote Indigenous communities?**

   The language barrier is an issue when communicating with remote indigenous communities as many of them are not fluent in English with [2]65.6% of residents in the Anangu Pitjantjatnara Lands speak Pitjantjatjara and 57.4% of households where a non English language is spoken. An article titled Pukatja: access to the internet available at http://www.papertracker.com.au/archived/pukatja-access-to-the-internet/ outlines issues with communities in the APY Lands gaining access to adequate telecommunications. Access to the technology and education about use of the

---

[2] ABS Census Data 2016

technologies available to improve telecommunications in remote Indigenous communities is key to improving the uptake. One of the survey respondents from a remote school mentioned "At the moment, students at the school cannot even access 'google.com' 60% of the time, let alone check their emails, which is important to keep up to date with their work tasks. Everything is so internet dependant or 'cloud-based' these days, and the students in rural areas miss out on so much due to the inadequate internet connectivity and bandwidth".

6. **Are there practical examples of how communications services can improve the well-being of people in remote Indigenous communities?**
On [3]12 May 2017, the South Australian Department for Education announced an $800k investment in enhanced internet for APY Lands Schools. This was due for completion in June 2018 and a review of the success of this rollout will be a good platform to gauge the benefits of improving access.

7. **What skills do people need to get the most from their digital technologies, and where can they learn these skills?**
The NBN Sky Muster vehicle which travels around Australia offers a great interactive chance for people to see how the NBN works and to 'have a play' so to speak. It has been suggested from a few survey respondents that practical on the ground demonstrations are needed e.g. trial sites, and this mobile vehicles offers that opportunity. Digital skills were also highlighted, however, some respondents were also unsure where to source the training required.

8. **Have you had any ongoing issues affecting your satellite of fixed wireless broadband service? If so, how have you overcome these issues?**
Please see Attachment 1 which outlines a summary of the NBN Survey that RDA Far North carried out in 2017. Please note that some of these issues have now been resolved, however, some are still relevant.

9. **If you are in an area with access to the Sky Muster satellite service and you have not taken it up, why not?**
Some areas, such as Hawker, have only recently been given access to Sky Muster however, there is still an option for people to retain their ADSL connection and some are choosing to do this rather than make the transition to Sky Muster.

10. **What economic or social indicators could be used to guide investment to further improve mobile coverage?**
Capturing the results e.g. success rates of any program or initiative rollout is key to determining what works and what doesn't. However, this is easier said than done. In relation to the effect of the rollout of the NBN on businesses in improving their efficiency, some businesses are reluctant to provide information on this or do not track it to the detail required. A lift in business confidence in terms of the positive effects may be an indication or success, but once again, this is difficult to track. More investment in a region may indicate that the required infrastructure is available which includes transportation, roads, electricity, telecommunications etc and therefore investors are willing to invest in a region that has these readily available. If we refer to the South [4]Australian Centre for Economic Studies Economic and Social Indicators, an increase in any or all of these would indicate a regional confidence and therefore attraction of more

---

[3] https://www.education.sa.gov.au/department/media-centre/news/800k-investment-enhanced-internet-apy-lands-schools
[4] https://www.adelaide.edu.au/saces/economy/

investment into a seemingly growing and/or sustainable region. RDA Far North has partnered with the Outback Communities Authority and Telstra in preparation of two funding applications for improving telecommunication in Far North SA. One of these projects, Telstra mobile phone coverage upgrade – Wonoka Hill - Stage 1 received $500k ($1m total project cost) under the National Radioactive Waste Management Facility Community Benefit Fund. Another project which focuses on the rest of the Far North SA region has been submitted for funding consideration under the Federal Regional Growth Fund, with total project cost being in excess of $22m.

11. **Is information readily available regarding how to use devices to improve mobile reception in areas with poor coverage? E.g. Information about external antenna equipment?**

Access to information on how to improve mobile reception in areas with poor coverage is available, however, some residents and businesses don't know where to source this information from or they work with a certain provider, private or corporate, and the information they provide is limited to their preferred products. It would be beneficial for information on many different products or initiatives to be available in a central spot for easy access as well as ensuring that the technology is suitable for the area that it is enquiring e.g. what works in a city may not work in a remote area. The cost of some of these improvements is also out of reach of most residents and businesses, depending on what their needs may be.

12. **What emerging digital services will be of most benefit to regional businesses and what are the data needs of these services?**

The majority of respondents to the survey did not respond to this question or provided a "don't know" answer. This highlights that most people may not know what these emerging digital services area and what they can be used for. If considering education, health services and agriculture services, the data needs would most likely be high to very high, therefore if they were made available, with existing service delivery, they may not be able to be used or accessed as data and service provision is not adequate.

13. **What broadband services are people using other than those available through the NBN?**

It is understood that most residents and businesses are utilizing broadband services through the NBN with the majority being by satellite as this is the only technology available to the majority of the residents and businesses in remote areas.

14. **How can more competition be encouraged in the provision of broadband services in regional Australia?**

There are already many different providers that people can access to provide NBN services, however, some residents in the remote areas feel that they do not have critical mass to encourage more competition. Suggestions were also made, through the survey, that service providers need to be offered subsidies to provide services to these remote areas to encourage this competition.

In addition to the above responses, please see Attachment 2 for RDA Far North's submission into the Telecommunications Universal Service Obligations inquiry. RDA Far North was also involved in the panel discussions for both this inquiry and the NBN Rollout inquiry.

Summary

- Many users in the Far North SA feel that they are still being overlooked in service delivery in terms of receiving what they perceive to be sub-standard data and download speeds and reliability of connections. These slow speeds and frequent "drop-outs" mean disruptions to business, learning and access to health services and other vital information, which can result in feeling of increased vulnerability.
- Barriers such as access to training and information and language need to be addressed in order for many remote communities to take advantage of the telecommunications services that are available to them.
- Limits in options available to remote areas means that they have very little choice in choosing technologies that are actually suitable to their needs.
- Readily accessible information on technologies to improve telecommunications services is required, including ensuring that these are affordable for the majority of families and small businesses, or are subsidised in a way to make them affordable.
- RDA Far North will continue to have a strong relationship with nbn co staff and to continue the tours around the vast region to promote the services available.

We invite and would welcome the Committee to visit the Far North Region and undertake a tour and to provide an opportunity for further input via presentation to this submission.

NBN Survey
Summary of Responses

56 responses

Residents were the highest responders with 42.86%, with business and resident next on 32.14%, business on 17.86% and other (schools) on 7.14%.

In terms of technology 27.27% were unsure of the technology used, 20% reported fibre to the house, 25.45% fibre to the node, 3.64% fixed wireless and 16.36% are connected to nbn via satellite.

Of the respondents where NBN is available to connect 71.7% reported themselves as having connected with 26.42% not connected and 1.89% currently in progress.

Telstra is top of the providers with 52.17%, followed by 'other' at 39.13% (made up of Spintel, Harbour ISP, Activ8, ACN, Skymesh), followed by Internode at 6.52% and iinet at 2.17%.

56.25% of respondents who are connected reported that they know what plan they have signed up for with 43.75% not knowing.

Of the respondents that reported knowing what plan, 22.2% of them were happy with their connection speeds with 77.8% not being happy with their speeds with them not being up to standard, reliable, or as promised. Of the ones that didn't know 33.3% were satisfied, 28.6% were not happy and 38% made no comment. This data shows that whilst the majority reported being unsure of what plan they were connected via, the ones that do know are closely monitoring the upload and download speeds.

Township
Port Augusta   17
Innamincka   1
Quorn   14
Woomera   2
Roxby Downs   9
Coober Pedy   2
Andamooka   2
Billa Kalina Station   1
Stirling North   2
Beltana   2
Blinman   1
Leigh Creek   1

Summary via Towns

Woomera

1 was connected and 1 was unsure when they were able to access it. The one that had connected (which is a school) is not satisfied as the band width is too small for their needs, the speed is very slow and they can only have a few people on at once. The Education Dept is following this up.

Roxby Downs

Some areas are connected whilst other report not being connected and not knowing when it will be available. One was told that they could connect and they told they couldn't but they were unable to go back to ADSL connection and took 5 weeks to resolve. Some are happy with service others are very unhappy with what they are getting compared to the plans they signed up for. Very slow speeds reported as well as it taking too long to resolve issues when they arise. Some are not happy that it isn't fibre to the house connection as the township is only 27 years old therefore conduits should have been suitable etc. Some have followed up issues with Ombudsman, Local MHR and State MP. Some are connecting due to the backlash from those that have.

Note: Aware that Telstra has since visited Roxby Downs with a view to resolving the speed issues.

Coober Pedy

Not many respondents from Coober Pedy but the two that did respond having issues with booking connection with Telstra and the speed not consistent with the plan they signed up for (e.g. 100/40 plan but receiving 30/10).

Quorn

The majority of respondents are very unsatisfied with their connection speeds (lots of expletives used). Installation was relatively easy but service providers not meeting the plan speeds.   Telstra once again seems to be a common thread with people reporting issues and taking a long time to resolve and not responding to enquiries. Some have taken the issue further with the Ombudsman. Generally not happy with speeds and service and others haven't connected due to bad feedback from those that have.

Innamincka

Respondent relatively happy with connection however, multiple trips made for installation when they could have been arranged all at once.

Andaomooka

Connections via satellite with one being satisfied and the other one not satisfied, reporting continuous dropouts and speed not matching what they signed up for (e.g. 25/2 plan but receiving 5/1) and off-peak only available 3-7am. Concerns that ok at the moment as long as platform isn't oversold.

Billa Kalina Station

Happy with satellite connection however various trips made for four connections 100km from each other. In the beginning service went out after a windy day and took 10 weeks to fix issue and taken to Ombudsman and local MP but didn't get resolved.

Stirling North

One respondent didn't have issues with the connection whilst the other one has had great difficulty connecting and has taken their issue to the ombudsman. However, both stated that difficult to contact Telstra or get action/response from them.

Beltana

Once again one has had a positive experience whilst the other hasn't. The one that hasn't stated issues with nbn co and difficulty in arranging installation and property not left in a safe state and comments that rural and remote areas being disadvantaged due to political sides etc.

Blinman

Concerns around satellite service reliability and remote/outback disadvantage but once again installers travelled to destination twice to do two connections.

Port Augusta

A few respondents haven't connected due to it either not being available yet or one where their correct address cannot be verified and they are still following this up (this respondent is a business owner and has concerns about the amount of time taken with issue still not resolved and disruption to business whilst this is happening and loss of communications etc). Some are happy with the service provided whilst others are reporting "flakey" unreliable or not up to standard service and speeds. A school has had issues with confusion created with three schools on one site. One customer misunderstood and now has two packages and cant cancel one of them due to early termination fees. Once again Telstra is in the limelight and customers not happy.

Glendambo

One respondent didn't know when NBN would be available therefore haven't connected yet and no idea when it will be available *(SkyMuster available?)*

Marree

Respondent had trouble free connection and all working well.

Leigh Creek

Respondent was a school and once again issues with connection e.g. connected to the wrong building and it doesn't work and is plugged into a network switchboard with the issue currently trying to be resolved.

Summary
There seems to be a common theme with schools and difficulties in connecting or not being able to have enough service for their needs. The plans are limited e.g. 100/40 the highest, and this is not necessarily suitable for schools and especially in remote areas.

Multiple trips by nbn co installers is also a common theme with remote/outback destinations. Is there some way to plan ahead and do these in one trip?

Due to a number of people holding off on connecting due to people publicly displaying their displeasure with the service, there is a need to advertise/promote when issues are resolved so others may be encouraged to connect.

Education is still needed around plans and what people actually sign up for and around the installation process, including who is responsible for what etc.

As a main provider Telstra are going to cop a fair bit of flack and some good stories but the negative ones stand out and the use of expletives by respondents points towards the frustration.

9 February 2017

Mr Paul Lindwall
Presiding Commissioner
Telecommunications Universal Service Obligation
Productivity Commission
GPO Box 1428
CANBERRA ACT 2601

Re: Telecommunications Universal Service Obligation Inquiry

Dear Mr Lindwall,

Please find following submission in regards to the above mentioned inquiry.

Regional Development Australia (RDA) Far North is part of a network of 55 RDA's across Australia. We are an incorporated not for profit organisation governed by a volunteer Board and supported by Commonwealth, State and Local Government in South Australia.

The RDA Far North region has around 28,000 people, which is approximately 2% of South Australia's total population. However, the region covers an area of approximately 800,000 square kilometres, making it by far the largest in South Australia by land mass. The region takes in the Anangu Pitjantjatjara Yankunytjatjara Lands, the Council areas of Port Augusta, Flinders Ranges, Roxby Downs, Coober Pedy and the Outback Communities Authority.

We facilitate access to a full range of government and non-government support programs and provide a range of services offering business, Economic, Tourism and Workforce Development assistance to businesses and individuals throughout the Far North region.

We commend the Commission for this inquiry, like any program/service review, it is important to keep it relevant and ensure it is meeting the outcomes it was designed for and we appreciate the opportunity to provide input to the inquiry.

Yours sincerely

Claire Wiseman
Chief Executive Officer

Regional Development Australia (RDA) Far North

Submission to the Productivity Commission inquiry into the Telecommunications Universal Service Obligation Draft Report, November 2016

Efficient and effective infrastructure underpins economic activity and is fundamental to a prosperous regional economy. It includes 'physical' infrastructure (like roads, airports, information technology and telecommunications, power and water) and quality 'community' infrastructure (like recreation and leisure facilities, cultural services and facilities and community services and facilities).

Together these elements should offer good physical and functional links that support social, cultural and economic interaction and exchange in the community.

Quality connections to information and communications technology (ICT) networks are an important enabler of economic and community development.

One of RDA Far North's aims is that these fundamentals for investment and economic development are addressed by identifying the region's infrastructure challenges and shortfalls. Identifying the region's infrastructure investment priorities is essential if economic development opportunities are to be strategically pursued and to ensure any critical gaps can be addressed.

We recognise that the telecommunications landscape has changed over time, and for the majority of the Australian population. However, there are areas in our region where current services remain substandard, and are substandard to a very high level.

Telephone service provision differs across the region; they are fit for purpose and reliable in major centres, however some of our more regional and remote areas have unreliable service.

Information and communications technologies vary across the region with a heavy reliance on satellite communications. Mobile telephony and ADSL broadband are limited to the major towns and spot mobile phone coverage along the major highways, e.g. alignment with the rail line on the Stuart Highway. Most towns have dial-up internet access while major mines have comprehensive ICT networks to meet operational needs.

Total removal of the TUSO would be a major disadvantage to our region. There needs to be a system/program in place which meets and addresses regional and remote challenges prior to any removal of this program. Unfortunately, the NBN will still fall far short of meeting these needs, as outlined later.

Mobile Coverage

Within our region there are 74 mobile blackspots, which is significant when looked at from a geographical perspective (approx. 96% of our region's landmass).

Some of these blackspots cover townships as well as stretches of major arterial roads and highways. Round two of the mobile blackspot program will see new towers erected at Rawnsley Park, Beltana, Parachilna, Blinman, Marree, William Creek, Innamincka and Coward Springs. Whilst this is a positive move forward, it will have a minimal impact on the region from a geographical coverage perspective. The new towers are local cell only covering the town boundaries. They are all Optus and whilst we commend Optus for this service we recognise their coverage limitations in the region, which doesn't make them a preferred supplier for regional residents.

Access to mobile coverage goes beyond those who reside in regional and remote areas; half a million tourists pass through and stay in the Far North region every year and the majority of these visitors expect the same standard of service they currently receive in the metropolitan and urban areas. Travelers keep in touch with their families and friends to let them know they've arrived at their destination safely. This is either done via a phone call, text or other messaging platform available through a vast array of social media. This has an added benefit of being a great marketing tool for the tourism industry with travelers using social media platforms to upload pictures of their adventures. With travelers at times being unfamiliar with long distance driving and outback road conditions, mobile coverage is also import from and emergency services perspective.

This draft report of findings states[i] that 99.3% of the population are covered by at least one mobile network. Only considering population when looking at mobile phone coverage areas disadvantages regional Australia which often has greatest area but with small populations, and arguably, greatest need. We encourage that the conversation reflects geographical coverage as well as population based coverage statistics.

National Broadband Network

The emergence of the digital economy has increased the propensity for individuals and businesses to use information and communications technologies to interact and trade with suppliers, partners and customers anywhere in the world. Broadband has become a fundamental enabler of regional economic development. Given the significant areas of remoteness of the Far North region, accessibility to ICT is critical.

Improved ICT networks, particularly broadband, will be critical to sustaining the pastoral industry and supporting the expansion of mining and tourism and delivering services to remote communities in the region. As well as facilitating access to new technologies and global markets, ICT can reduce the time and cost of travel as well as the cost of accessing finance, health, education and other government services.

Productivity gains through cost savings (e.g. in the provision of primary and preventative health services that decrease emergency and chronic health problems) must therefore also be taken into account as part of the equation of measuring benefit.

In terms of NBN, the majority of our region will be covered by the SkyMuster Satellite, however, there are many existing challenges with this service. The TUSO Productivity Commission's draft report clearly states[ii] that this service will fall short of the quality of those offered under the current TUSO, in terms of latency and service repair timeframes, with up to 90,000 premises solely dependent on this for voice calls. A sub-standard service such as this will have a major impact on residents and businesses in regional and remote Australia.

The region currently lacks high-speed broadband infrastructure, limiting the capacity of local businesses and individuals to interact with the global economy. For businesses in the region to remain competitive and for the communities of the region to remain connected, the rollout of high-speed broadband must be extended to all communities as a priority.

The current communications systems and coverage in the area pose many challenges for business operators with the biggest being reliability. There are a number of operators in our region who experience service dropout on a regular basis. This is disruptive and costly to a business's trading when their communication systems cannot be relied upon, thus putting their business at risk. A reliable service for business owners is required for the general running of the business and is crucial for meeting regulatory requirements related to business operation; to maintain contact with, and provide an online service for their customers including financial transactions, online booking systems, social media interactions and responding to enquiries via electronic mail etc.

Education is the key to success in Australia's economy for individuals and regions alike. Achieving more equitable education outcomes across regional Australia is our nation's greatest challenge in realising the potential of regional Australia. [iii]

Rural, regional and remote Australia face significant economic, health and other disadvantages, as a result of distance, lack of infrastructure and poor educational access. Some 24 regional LGAs have NO high performing high school students. Only 6 of the 100 most "technologically ready" LGAs are non-metropolitan.[iv]

The current systems also pose challenges for regional education via School of the Air and other virtual classroom based systems. Students and teachers experience regular service drop outs, latency and capacity issues, which is challenging for the student, their families, educators and fellow students. When one student is experiencing these issues it affects the entire virtual classroom, delaying lesson as their service

clicks in and out or catches up.   Reliable access for education does not stop in the classroom with the students also needing this at their homes in order for them to succeed in their studies.

Summary

People in who live in remote and regional areas are aware that they may not have access to exactly the same level of services as their urban counterparts, however they do expect to have a reasonable and fit for purpose level of service.

For businesses, families and communities in regional areas the removal of the TUSO immediately following NBN roll out will leave them without an adequate service and they will be worse off than they currently are.

A full and independent review should be undertaken of the existing level of information and communications technology services in regional and remote Australia. Following this a regional and remote areas ICT program should be designed that concentrates on providing an adequate, fit for purpose and equivalent level of service to all remote and regional Australia. This will ensure that true to the original purpose of the TUSO, all do in fact, have access to a standard service, particularly where those services might not be commercially viable.

This should be publicly funded and rolled out; the age old response of "you choose to live there so deal with it", is naive and shows a lack of understanding of regional Australia. Regional areas are very important and are significant contributors to the nation's economy. Low populations (resulting in very little political 'power to persuade') and high service cost due to tyranny of distance are factors which limit the regional and remote voice in discussions of service adequacy.

We thank you for the opportunity to provide input into the inquiry and hope that our submission has broadened understanding of the challenges our region is experiencing, and that serious consideration is given to the disadvantage our region would be placed in with removal of TUSO without a program in place addressing the needs of our regional businesses, students, families, and communities.

---

[i] Telecommunications Universal Service Obligations – Productivity Commissions Draft Report Overview November 2016 – Summary, page 3
[ii] Telecommunications Universal Service Obligations – Productivity Commissions Draft Report Overview November 2016 – Draft finding 6.2, page 22
[iii] Regional Australia Institute
[iv] Meeting the economic challenges of regional and rural Australia: Leveraging community capacity to foster innovation in VET By Dr Don Perlgut, CEO, Community Colleges Australia