

Submission to 2011-12 Regional Telecommunications Review

Karen Stokes
Oodnadatta SA 5734

The following information is submitted to the review committee as regards the adequacy of telecommunications services in Oodnadatta - a small community in far north South Australia.

I make this submission from the standpoint of a personal consumer of telecommunications services as a resident of 6 years in Oodnadatta, as a parent of a school student in Oodnadatta, as a university student using external / internet services and as a teacher and the ICT coordinator of Oodnadatta Aboriginal School.

I am a teacher and I hold a Bachelor of Business, Graduate Diploma of Teaching and Learning, and am currently completing a Masters of Educational Computing. The quality of telecommunications services in our community impacts me on both a personal and a professional level, and is of great concern to residents, businesses, health and education services in this town.

My submission will address the questions raised in the Regional telecommunications Review issues paper. I provide firstly, an executive summary, followed by short answers to each of the 21 questions in the issues paper, and then a more expanded submission incorporating local examples and further discussion.

I trust that the committee will consider this submission, and that the NBN roll out will greatly enhance life in our small remote community.

My contact details:

Karen Stokes

c/- post office

Oodnadatta SA 5734

Ph: 08)86707823 (BH)

Fax: 08)86707808

email: [REDACTED]

Table of contents

Introduction.....1

Table of contents.....2

Executive summary.....3

Issues paper questions – short answers.....5

General Discussion

Local context.....8

The digital economy9

Delivery of government services and programs10

Regional health and education outcomes.....11

Communication needs of Indigenous people and communities12

Mobile phone coverage.....13

Satellite mobile phones.....14

Cybersafety14

Appendix A (price comparison ADSL / Cable to Satellite)16

Executive Summary

Oodnadatta is a remote community, hoping to benefit in significant ways from the introduction of the NBN. Internet and telecommunications access are especially important for those living in remote areas, and can provide improved education, health and employment outcomes.

Oodnadatta Aboriginal School recognises the importance of ICT and has invested significantly in technology and expertise in order to give our students comparative advantages in the digital economy and to improve health, employment and social outcomes for our students in the future. The school hosts a free internet café providing internet access and education / support for people in the town, and we encourage people in all ways to engage with the digital economy and government online.

However, Oodnadatta is truly “the town that telecommunications forgot”. Our terrestrial telephone / internet services are so poor as to be unable to support video conferencing and downloads of essential education updates. Satellite services which some people access in their homes, are so expensive for very limited download capacity as to effectively restrict face to face communications or image rich internet site browsing. The high cost of internet access through the existing NBN process is prohibitive to many consumers in this community. Services such as Skype, iView (online television viewing) and even you-tube take so long to download, and provide such stilted and jerky results, that people’s access to even these basic forms of communication or contact are extremely restricted. Our local phone exchange, serviced by “radio phone” from Marla, does not even have sufficient capacity for everyone in this community to have a landline number.

The price difference between our satellite options, and regional or metro based ADSL / cable internet options is huge (see Appendix A).

The impact of such poor internet and telecommunications services is great, and the corollary is that improved services through the NBN will have the capacity to provide significant benefits to our town by overcoming many of these disadvantages.

- Lack of access to video conferencing negatively impacts:
 - telehealth services,
 - face to face remote education options
 - access to professional development
 - educational experiences (offered through DECS) to regional school students

- our school's ability to deliver quality state-wide training programs through our trade training centre
- The high cost of satellite services and limited download availability at reasonable prices :
 - prevents many people from accessing the internet at home
 - restricts peoples ability to engage with government services, online shopping options and many image rich internet sites
 - impacts on the quality of face to face online communications with family and friends
- Poor internet and communications services have a wider impact on the town as a barrier to attracting and retaining quality professional staff in a remote community.
- Lack of mobile phone coverage impacts on the ability to access wireless internet.
- No pre-paid internet options are available to people and pricing plans are prohibitive and preclude some people from accessing the internet.

Issue Paper Questions – short answers

1. use of ICT is expanding exponentially. People are more likely to look online first , and to interact with government agencies, retail outlets, companies etc in an online environment. People also frequently access ICT for face to face communications, and email far more than traditional voice only and paper methods of maintaining social contact.
2. in this town, we need better technology. Fibre to the door or high speed, cheap satellite services.
3. our lack of appropriate technology restricts people in this town from accessing video conferencing, tele health options, face to face distance education services. We are also restricted from business development options using these services, and young people are restricted from potential job opportunities.
4. Living in remote areas, access to government (and non-government) services online is critically important. When the nearest bank, government office etc is 900kms away, accessing these services online is more productive, safer and far more convenient.
5. Access to high speed broadband should provide people in regional and remote areas with improved productivity and efficiency for local business and industry. Access to health and education options will also reduce costs and improve overall economic and social wellbeing for people in these areas.
6. The main barrier in this town is the lack of effective technology and the inflexibility of pricing and download options (see Appendix A).
7. High speed broadband would allow for doctor consultations in between our fortnightly visits from the RFDS doctors, would reduce the cost of patient travel, and would minimise the risks associated with travelling for health appointments from remote locations. Additionally, people in this town being able to access face to face education delivery at the tertiary level would improve retention and success rates and would greatly enhance the

overall economic wellbeing of the community. Finally, high speed broadband would enable the local school to improve the services it currently offers through the trade training centre to deliver the cattle station management program more successfully on a statewide basis, having flow on benefits for the town and local industry.

Access to high speed broadband services is also a selling point for attracting and retaining skilled professionals and new people to the community. As with most remote communities, attracting new people and then retaining them is a significant factor in the provision of effective services. High speed broadband by providing communication options, can in many ways minimise the perceived drawbacks of a remote location.

8. I am currently undertaking a Masters degree through external access university. The high cost of internet downloads, and the lack of face to face communications options due to the poor satellite services available make this a difficult and challenging task.
9. Our local internet café hosted by the school in Oodnadatta provides a clear example of indigenous Australians using the internet to maintain social and cultural contacts and obligations. Access to social networking decreases people's need to travel and reduces the impact on employment and other obligations.
10. Some of the barriers to indigenous people's access to home internet are systemic and related to housing and other issues. However, in our community some of the things that the NBN may be able to address are similar to some of the issues previously seen in mainstream Australia relating to mobile phone access and use by young people. They include:
 - Access to competitive pricing structures (see Appendix A)
 - The ability to access pre-paid broadband internet
 - Non-plan / non lock-in pricing options
 - Improved education options (local, indigenous delivery)

- Subsidies for computers and in-home technology
 - Access to wireless networks for using mobile broadband devices (ie i-phones / i-pods / smart phones)
11. see 10
 12. see 10
 13. Our community has no mobile phone coverage, but access would improve the availability of flexible wireless internet options, including prepaid services and mobile device access.
 14. no
 15. satellite phones are used here as emergency communications devices for people travelling long distances over dangerous roads.
 16. no
 17. yes, but more indigenous focussed information would be good.
 18. Indigenous focus, local delivery
 19. the government should expand its existing cyber-safety strategies to include an appropriate indigenous focussed education strategy, aimed at indigenous parents. This strategy should have local delivery strategies built in, and should aim to educate indigenous parents on simple strategies for monitoring children's internet access, as well as explaining types of inappropriate content, and technological and non-technological means to manage these situations.
 20. see 19
 21. no

General Discussion

Local context

Oodnadatta community currently has no mobile phone coverage (and therefore no access to wireless internet connections such as Telstra 3G mobile). Additionally, this town does not have fibre to the door, even fibre to a local exchange technology. Our telephone services (and therefore all terrestrial internet services – including those at the school) are delivered via “radio phone” from Marla (200kms away) to our exchange, where an old copper network takes the lines to the door. Our telephone exchange does not even have sufficient capacity for everyone in this town to have a landline number.

Our telecommunications services are inordinately affected by the weather. Even a small amount of rain is enough to cause significant disruption to terrestrial internet services, and any electrical or thunderstorm activity can have a negative impact on satellite internet services.

Many Oodnadatta community residents are confident and competent users of telecommunications technology. More than 50% of the community uses Facebook to maintain social and cultural contacts, and mobile technology such as smart phones, ipods and netbooks are common.

Oodnadatta Aboriginal School hosts a free internet café service, providing internet access for residents and visitors to the town. This service is funded by the federal government (DFEEST), and provides computers and wireless access to the internet through a satellite link. This service is useful and valued by the town, but provides very slow connectivity.

Several residents in Oodnadatta have taken advantage of the government’s National Broadband Guarantee. However, this does not provide metro comparable speeds, pricing or download limits (see

Appendix A for price comparison). Additionally, people with NBN services have not in the past had the option to change providers.

The new interim satellite service available to people in this location from 1/11/2011 may address some of these inequity issues.

The Digital Economy

Oodnadatta residents like the rest of Australia have been impacted by the general shift to a digital environment by business and government departments. Almost every aspect of life now has an online component, and when you live in a remote location, online access is critical. Simple things such as filling out forms, accessing information and shopping are all made easier and faster by internet access.

Many people in our town do a significant portion of their shopping online, accessing basic consumer goods this way. Even groceries are purchased by many through accessing an online specials catalogue, followed by an email to a supermarket.

However, in an environment where bandwidth is limited, internet is slow, and very small download limits are available at affordable prices, any image rich internet pages are a high cost to download. Downloading a supermarket specials catalogue each week in this environment is a significant cost, yet essential for the purchase of basic living necessities.

Teleworking is a potential option for skilled people living in rural and remote areas, yet for anyone living in our town, the limited broadband availability would significantly reduce the capacity of individuals to work in this way. Services such as video conferencing, Skype or Centra are either unavailable or too distorted to be effective. **Oodnadatta Aboriginal School has full video**

conferencing technology available, but it cannot be used as the terrestrial internet link is too poor for it to be effective. For example DECS often organises statewide video conferencing events for students using Centra. We have on occasion tried to participate in these events (or other streaming events such as Music Count Us In) as a whole school. However, the sound and image quality is so poor, interrupted by constant buffering, that students get little or no benefit from these sessions. Additionally, our internet connectivity is so low that we are unable to participate in live talks at these events. **The educational capacity of ICT, to reduce geographic distance, and bring some of the world to our students is lost through poor telecommunications.**

A trip to Port Augusta or Adelaide for a one day professional development opportunity can take up to 4 days. Even Coober Pedy is a full day or 2 away by car (assuming the roads are open). Clearly business efficiencies and educational opportunities could be delivered with video conferencing, yet these are unavailable to our town because of our poor access to telecommunications.

I can also envisage that health consultations could be managed using a video conferencing facility at the local health clinic, saving time and significant cost of transport for patients and the health service.

Tertiary education including TAFE could be provided through this service, rather than allowing students to struggle on their own, or by telephone link. This may potentially improve educational outcomes and retention rates at a tertiary level.

Delivery of Government services and programs

Much of the activity in the Oodnadatta internet café, centres around accessing government programs and information available online. For example, car registration, e-tax, census lodgement and licence transactions among many others. The ability to access the internet is useful to many people in their

government interactions, and like all other aspects of our economy **people's ability to engage with government programs and services would be significantly improved by access to broadband internet at home, and by better and faster internet access generally within the town.** Additionally, whilst we have many competent and confident internet users, **free, friendly, accessible and local training and development opportunities would be a great benefit** to enable people to engage more fully with government programs and requirements.

Local training and development opportunities, combined with improved access to broadband would increase the likelihood of people being able to engage with the digital economy. If our telecommunications services were better, it is possible that job opportunities would exist for local residents and school leavers, that are not available now.

Regional Health and Education outcomes

Obviously developments such as tele-health and education services would be a major benefit to residents in remote communities such as ours. However, our video conferencing facilities won't work because of the poor terrestrial communications technology, and satellite internet connections are so expensive as to be prohibitive, so **this community will not get great benefit from these developments unless the NBN roll out makes major changes to our internet access.**

Imagine the benefit to our town if TAFE students could get access to on-line face to face support on a regular basis. This could greatly improve retention rates, and significantly reduce the cost to TAFE of sending lecturers out on a regular basis. As a remote, external university student, I am personally unable to access online face to face support. School terrestrial internet services are limited and my home satellite plan is so expensive for this kind of face to face option that I am prohibited from

participating. Even downloading the articles required to prepare an essay is almost prohibitively expensive.

Oodnadatta Aboriginal School is a joint partner and lead school in a trade training centre providing education to students around the state in cattle station management. This initiative has the potential to be of great benefit to local industry, local and state-wide students, and the local community generally. Much of this course will be delivered on-line, using our school Moodle site. However, the delivery of this program will be somewhat compromised by our inability to offer video conferencing opportunities to students and teachers in other parts of the state. Once again, educational outcomes, and overall community benefits are compromised by poor telecommunications services.

Communications needs of indigenous people and communities

Indigenous people in our community are by and large, competent users of telecommunications technology. As with many other communities, young people in this town are adept at understanding and applying digital technologies, and our school has a significant focus on this aspect of education. Internet access for indigenous people in remote Australia is important for maintaining social and cultural links. **The ability to access friends and family on social networking sites such as facebook greatly enhances peoples social and emotional wellbeing, and reduces the necessity to travel long distances, thus compromising employment, health and other obligations.**

Some of the barriers to indigenous people's access to home internet are systemic and related to housing and other issues. However, in our community some of the things that the NBN may be able to address are similar to some of the issues previously seen in mainstream Australia relating to mobile phone access and use by young people. They include:

- Access to competitive pricing structures

- The ability to access pre-paid broadband internet
- Non-plan / non lock-in pricing options (see below)
- Improved education options (local, indigenous delivery)
- Subsidies for computers and in-home technology
- Access to wireless networks for using mobile broadband devices (ie i-phones / i-pods / smart phones)

As an example of the prohibitive costs and plans for people accessing Telstra satellite services, all satellite plans have 18month minimum terms (the minimum cost on the cheapest, slowest plan with the least download – 500MB per month at 256kbps – is \$2987.10). Telstra’s cancellation policy is:

If you cancel your contract before the end of the 18 months, the cancellation fee will be pro-rated for the amount of the contract term left to run.

Our base cancellation fee is \$699, so if you cancel with 6 months left on your contract, you will be charged $\$699 \times 6/18 = \233 .

If you reconnect your BigPond Satellite service after it has been temporarily disconnected for non-payment, we will charge you \$108.90 (provided your satellite equipment is still in place and mounted/aligned).

Source: <http://go.bigpond.com/satellite/?ref=Net-Head-Int-Satellite>

Mobile phone coverage

Oodnadatta Community has no mobile phone coverage. Many people, including local business owners would like this to change, and I am aware that some lobbying of Federal and State MPs has been undertaken.

The major benefit of mobile phone coverage in terms of telecommunications access would be the flexibility of these options. For example, when not in Oodnadatta, I live in remote areas without

landline options, but with Telstra NextG phone coverage. In this environment I have access to much faster and cheaper internet services and prepaid phone and internet plans.

Many people in this community (in common with other remote indigenous communities) have mobile devices, smart phones etc which they switch on and use for voice and data communications as soon as they are within range (ie Coober Pedy, Marla, Port Augusta or Alice Springs). **Access to this technology in our community would increase indigenous people's engagement with online services significantly.**

Satellite mobile phones

The common perceptions as outlined in the RTRC issues paper are also common in this town. Satellite phones are kept for emergency use. People travelling for work or recreation purposes may take satellite phones in case of emergency, as all travelling from here requires difficult and dangerous driving. **However, satellite phones are not used commonly for general communications.**

Cybersafety

Increased risks of exposure to inappropriate content are inherent in the expansion of online technologies. Particularly the expansion of mobile broadband access, and its ready take up by children and young people. It is important that individual freedoms are maintained, and censorship is minimised. However, reducing the risk of inappropriate exposure is important specifically for children. With the roll out of the NBN, and the greater access this brings, the government should expand its existing cyber-safety strategies **to include an appropriate indigenous focussed education strategy, aimed at indigenous parents.** This program should have local delivery strategies built in, and should aim to educate indigenous parents on simple strategies for monitoring children's internet access, as

well as explaining types of inappropriate content, and technological and non-technological means to manage these situations.

APPENDIX A

Pricing plan comparison

The following is a comparison of internet access costs between Oodnadatta (satellite broadband) and areas with ADSL / Cable, using Telstra price plans as an indicator.

Satellite plans

<i>Download limit</i>	<i>Speed</i>	<i>Price per month</i>
500MB	512kbps	\$104.95
1GB	512kbps	\$159.95
2GB	512kbps	\$249.95
4GB	800kbps	\$499.95

Source: <http://go.bigpond.com/home/index.jsp>

ADSL / Cable plans

<i>Download limit</i>	<i>Speed</i>	<i>Price per month</i>
5GB	20Mbps	\$29.95
50GB	20Mbps	\$49.95
200GB	20Mbps	\$69.95
500GB	20Mbps	\$89.95

Source: <http://go.bigpond.com/broadband/?ref=Net-Head-Int-Plans-Broadband>

So, for the price we pay for 500MB of download, if we had ADSL / cable we could get 500GB with change!

Additionally, on the satellite plans, each MB over the monthly limit is charged at 15c/MB, whereas on ADSL / Cable plans, there is no additional charge, merely a slowed speed, which on the max plan of 500GB, means a slowed speed to 256kbps - not much slower than the satellite norm.

The **maximum** available MB satellite plan is **4GB**, at a cost of **\$499.95** per month.

The **minimum** available ADSL broadband plan is **5GB** at a cost of **\$29.51** per month