

RAPAD

Incorporating Central Western
Regional Organisation of Councils



9 December 2011

**RTIRC Secretariat
GPO Box 2154
CANBERRA ACT 2601**

Email: secretariat@rtirc.gov.au

Subject: 2011 - 2012 Regional Telecommunications Review

Dear Ms Sinclair

Please find our attached submission regarding the above-mentioned matter.

Further information relating to this submission can be obtained from

David Arnold
RAPAD
PO Box 592
Longreach 4730
61 7 46525600
www.rapad.com.au

Yours Sincerely

A handwritten signature in black ink, appearing to read 'D Arnold'.

David Arnold
General Manager



Contents

1. ABOUT RAPAD	1
1.1 Central Western Queensland	1
1.2 RAPAD and Telecommunications Policy	2
2. TELECOMMUNICATION AND THE DIGITAL ECONOMY	3
2.1 Barcoo and Diamantina Shires	3
3. THE TELECOMMUNICATION INFRASTRUCTURE IN THE REGION	6
4. MOBILE INFRASTRUCTURE AND SERVICES	7
5. NBN – CLARITY AND CONSULTATION	8
6. THE 2008 REGIONAL TELECOMMUNICATIONS REVIEW	9
7. DIGITAL ECONOMY SKILLS	9
8. REGIONAL DIGITAL TELEVISION LESSONS	10

RAPAD

Incorporating Central Western
Regional Organisation of Councils



Document Control

This Regional Telecommunications Review submission Paper has been prepared for RAPAD by Ray Heffernan, Aston House Consulting Services. In preparing the paper Aston House undertook consultation with key regional stakeholders and published government materials

Printed copies of this document are uncontrolled



RAPAD

1. About RAPAD

The Remote Area Planning and Development Board (RAPAD) is a not for profit, regional economic development agency and regional organization of councils, owned by and representing the seven local governments of Central Western Queensland. Governance and strategic direction of RAPAD is via a Board of Directors who is elected by the member local governments. Currently the Board consists of the seven Mayors of the member local governments: Cr Palmer, Cr Warren, Cr Ross, Cr Britton, Cr Scott, Cr Chandler and Cr Dare.

The region covered by RAPAD encompasses an area of some 385,000km², with 19 towns in seven local government areas including: Barcaldine Regional Council, Barcoo Shire Council, Blackall-Tambo Regional Council, Boulia Shire Council, Diamantina Shire Council, Longreach Regional Council, and Winton Shire Council.

The regional population is approximately 12,256 people spread between townships and approximately 1,300 rural properties which in turn represent approximately 58% of the regions registered businesses. Agriculture (fisheries and forestry) accounts for approximately 30% of the RAPAD regions employment. The composition of nominal gross value added (GVA) for the RAPAD region is also dominated by agriculture (fisheries and forestry) which accounts for 41.4 per cent of nominal GVA. The other major industries in the region are tourism, government related services and mining exploration, which if current public information suggests, will convert into significant developments over the coming years.

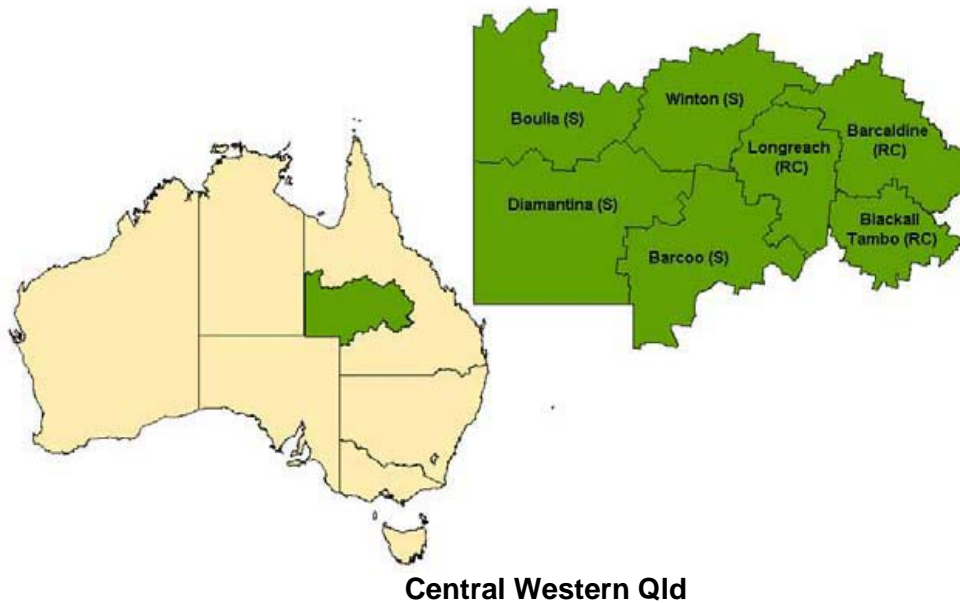
1.1 Central Western Queensland

The RAPAD region consists of nineteen medium to small communities, being:

- | | |
|---------------|----------------|
| 1. Windorah | 11. Boulia |
| 2. Jundah | 12. Urandangi |
| 3. Stonehenge | 13. Blackall |
| 4. Longreach | 14. Tambo |
| 5. Ilfracombe | 15. Barcaldine |
| 6. Isisford | 16. Alpha |
| 7. Yaraka | 17. Jericho |
| 8. Winton | 18. Muttaborra |
| 9. Birdsville | 19. Aramac |
| 10. Bedourie | |



RAPAD



1.2 RAPAD and Telecommunications Policy

RAPAD has developed expertise and insight into the issues facing remote and rural communities on telecommunications due to its research and consultation to prepare submissions to various government papers, presentations to Ministers, commitment to broadband infrastructure investments and as a leading voice in remote Queensland amongst local government associations, infrastructure and digital economy. RAPAD's advocacy has raised the economic and social impacts to communities with no or inferior broadband infrastructure and reduced digital services to rural and remote regions. International studies on the impacts of access to improved broadband across developed nations have shown a clear and strong connection between telecommunication investments and economic growth

Most of the Central Western region of Queensland will be part of the seven percent of Australia denied metropolitan equivalent NBN speeds and potentially access to services and telecommunications (and ISP) competition enjoyed by most Australians. The performance of the proposed satellite and wireless networks for Australia's seven percent is unknown at this stage as limited public information is available.

In addition to this Regional Telecommunications Review submission, RAPAD wishes bring to the Committee's attention previous RAPAD submissions to telecommunications and digital economy reviews¹. This submission should be read in association with the comments contained in the submissions.

RAPAD notes that of the of the \$400M identified by the Government to respond to the recommendations of the previous Regional Telecommunications Review, the Glasson Review, only 10-15% has been allocated to programs. The government should develop programs to extend the reach of the national broadband network optic fibre network, beyond the targeted policy percentages, to improve and expand telecommunication services to towns designated as remote

¹ See <http://www.rapad.com.au/web/guest/policy-and-submissions> for submissions.

and rural. A number of recommendations throughout the RAPAD submission provide guidance to the review Committee and the government on target areas.

2. Telecommunication and the Digital Economy

The independence between modern telecommunications infrastructure and the ability of communities to grow and prosper has finally been recognized by governments. The NBN policy and digital economy program clearly articulates government responsibility to sustainable infrastructure in order to foster improved economic activity and global competitiveness. Sadly for those living in remote and rural communities the quality and flexibility of the proposed broadband telecommunication infrastructure will not lessen the struggle for metropolitan equity in terms of telecommunication services.

RAPAD is advocating that optic fibre terrestrial telecommunications infrastructure to towns where basic government services are centred, health, education, local government and emergency services, be mandatory. It is not advocating fibre connecting to all rural homesteads. But underlining fibre telecommunications infrastructure is essential to support the social fabric of rural and remote communities. This position is consistent with the Queensland State telecommunications government policy². The Australian Government, in its response to the Glasson Report, states it is committed to a prosperous and sustainable regional Australia; one that enables families, businesses and schools in regional communities to actively participate in Australian society.

Two RAPAD remote local governments have identified telecommunications infrastructure as critical to their sustainability and growth. The current telecommunications infrastructure fails to meet government, business and community expectations of communications service in modern society. No mobile infrastructure and broadband in towns being restricted to satellite services are inhibiting factors. The NBN will not provide the underlining infrastructure for future services or improve choice and quality. Government programs such as subsidized broadband services, through the Australian Broadband Guarantee program should not be considered as an appropriate response for broadband to towns where core government services are stationed.

Satellite infrastructure has a history to poor quality, lower service levels and higher cost. The community has no confidence that the proposed NBN satellite services will address these issues. The communities' disappointment over the government's digital television policy, from its failure to thoroughly analyze and respond compassionately to their concerns is inherent in the perceived risks associated with a satellite based NBN service.

Of the 73 councils in Queensland 71 the have a robust and scalable telecommunications backbone that allows for the availability of complex services, such as 3G mobile, and exchange-based broadband services.

2.1 Barcoo and Diamantina Shires

To stimulate optic fibre investment to service their towns, the Diamantina and Barcoo Shires have set aside \$2.8M to bring optic fibre infrastructure to the towns of Bedourie, Birdsville, Windorah, Jundah and Stonehenge. The Queensland Government has committed matching funds. Work is currently underway to fully cost optic fibre connection to all towns. With an optic fibre backbone

² http://www.qgcio.qld.gov.au/SiteCollectionDocuments/Strategies/Queensland_Telecommunications_Strategic_Framework.pdf
The NBN needs to service: all bounded localities and hub towns; • every school, health, public safety facility (i.e. police, ambulance, SES and Fire services)

the towns will have the connectivity to support services available to metropolitan towns and the infrastructure to deliver future telecommunications services.

A copy of the Barcoo and Diamantina proposal for optic fibre to their towns can be found in **Attachment A**.

RAPAD recommendation. That the Regional Telecommunications Review recommends that the balance of the \$400M telecommunication fund be available for investment in optic fibre backbone infrastructure to remote and rural towns and review the premises access technology for these towns.

Small town sustainability and growth in a modern society is placed at severe risk due to poor telecommunications services. It creates a societal gap towards retention and attraction of employees. For example:

- How are these communities expected to attract young government staff (teachers, police, nurses) if there is no mobile broadband for social media (Facebook, twitter etc) and the fixed broadband service is slow, of patchy quality and offered at non-competitive (metro-comparative) prices?

Generation Y and most staff expect to maintain contact with friends and relatives via services such as Skype. Not only is it their preferred methodology but can be access at a significantly lower cost to telephone calls. They also do not have the opportunity to make VoIP voice calls (at reduce call costs) because this type of service is unsupported over satellite.

RAPAD recommendation. That the Regional Telecommunications Review recommends that all towns (with police, health, education and local government facilities) regardless of population be connected via fibre optic backbone to the national broadband network to ensure evolving broadband services are available and affordable to business and the community and thus make smaller towns more attractive to government (and other) professional staff.

- How will e-government services be delivered? For example, currently teachers can not take advantage of curriculum and support materials because the telecommunications infrastructure (satellite) is inferior. For example, websites slow to open, degraded responses as more students logon, multiple drop outs and software support hampered by low/slow bandwidth. See **Attachment B** for detailed information. The Queensland Education Department uses Blackboard and Elluminate as a technology to deliver enriched curriculum and educational experience. Educators report they are unable to utilize the department's systems because of drops outs, long refresh times and failure to connect.

The Glasson report recommended that the Australian Government work with state, territory and local governments to ensure that schools in regional Australia have the same access to broadband and information and communications technology services that will be delivered by the Digital Education Revolution and the Fibre Connections to Schools Initiatives to urban based schools. The government stated it recognises the importance of schools in regional Australia having access to adequate information and communications technology services, including broadband. The Digital Education Revolution (DER) suite of initiatives, apply to all schools in all sectors irrespective of their geographic location.

RAPAD recommendation. That the Regional Telecommunications Review recommends that all schools be urgently be connected to the NBN via optic fibre, inclusive of the customer access network and backbone infrastructure.

- How will staff productivity be improved and moral maintained when staff have no access to mobile broadband (when travelling) and terrestrial broadband services (in non-staffed locations) are slower and service quality inferior? Many professional staff are located at arms length from their colleagues with no confident nearby to consult. They need to maintain contact with peers and be contactable. Broadband service and applications give staff the means to maintain regular and ad hoc interaction with trusted colleagues.

The North and West Queensland Primary Health Care staff travel many kilometers to provide clinical services. The move to electronic databases and sharing of information (referrals, diagnoses, Xray, ultra sounds) over secure messaging requires robust and universally available quality telecommunications services. Poor broadband restricts nursing staff from doing their job more effectively as clinical data is slow, not transmitted or is lost. Travelling staff can not simply plug in a computer and begin work. Lack of mobile coverage affects patient contact management because travelling nurses can not update patients on appointments.

RAPAD recommendation. That the Regional Telecommunications Review recommends additional regional broadband mobile infrastructure be funded by the government to service small towns and for emergency and/or natural disaster operations. As part of the process the government should consult with the elected local government of the region.

- Regional businesses, located in regional towns, do not have access to the same e-business tools available to their metropolitan equivalents?

A primary producer in Birdsville reports that the current Telstra mobile broadband (connected via satellite backhaul) is an unsuitable service to hold video conference meeting with its many offices and agents stationed in Australia and globally. The restrictions place severe limitations on business activity to organize (for example) its participation in the Gulf Food Fair (Dubai). For example file sizes over 15MB can not be downloaded (the system freezes) making interaction on brochure presentation and layout with the New York based graphic designer difficult (more expensive and time consuming).

RAPAD recommendation. That the Regional Telecommunications Review recommends that NBN fibre optic backbone be used to connect all towns, regardless of town size, to ensure equivalence in access to digital economy tools by those business operating in regional towns.

Note: In 2007/8 Bedourie the Diamantina Shire Council experienced a loss of 51 staff over 52 weeks – out of a total of 70 staff. Council research identified built environment, technology being a factor, as the reason staff left the community.

The comparative cost of telecommunications to rural/remote users and those enjoyed by metropolitan users should receive more attention. Metropolitan customers are offered very attractive bundled telecommunication packages because of higher competitive tension between market players and/or the availability of a more complex product set. For example the Optus Fusion package (Broadband ADSL 2+ 1TB, phone access and all calls) for \$129/month. This type of product bundling is not available to remote/rural consumers because of limited competition or limited infrastructure to support certain service types. Greater assistance (tax concession, virtual

packaging, etc) should be available to give regional users the financial advantage that service bundling provides to metropolitan users.

3. The Telecommunication Infrastructure in the Region

The RAPAD region is served by a mixture of optic fibre, copper, radio technology and satellite.

Under the Australian Government NBN policy the presence of existing optic fibre backbone to a town is not considered in the NBN infrastructure decision. For example, Ilfracombe has optic fibre backbone from two suppliers (Telstra and NextGen, via the Regional Backbone Blackspots program) but publically available information indicates that the Ilfracombe businesses and residents will be broadband connected via satellite infrastructure. NBN Co representatives state that the cost of an optic fibre premises is \$8,000 per premises connection and \$10,000 - \$12,000 per wireless premises. The national broadband policy should be changed and/or NBN Co a directive to encourage connection of towns with existing optic fibre backbone to that fibre for NBN services. The town premises reticulation connection should, at a minimum, be via wireless infrastructure.

Other smaller towns in the RAPAD region (e.g. Isisford) are in a similar situation to Ilfracombe.

RAPAD recommendation. That the Regional Telecommunications Review recommends where fibre optic backbone (regardless of carrier ownership) traverses a town, that the town be connected to the NBN via optic fibre, regardless of the town size. Furthermore NBN connection to the premises within the town be by the most affordable means.

RAPAD is concerned on the interoperability of multi-technology nodes with respect to certain broadband applications. For example, will the performance of web video conferencing applications (Skype, Elluminate, WebEx) be degraded as a result of conference parties being simultaneously connected via optic fibre, wireless and satellite. Will education delivery and business interaction be inferior because regional communities have multiple NBN technology for connection? Regional communities are embracing the digital economy (or government service delivery methods means it is being forced on them) and should not be disadvantage because of it.

RAPAD recommendation. That the Regional Telecommunications Review develops a strategy (and programs) that minimizes end-user impacts from different NBN broadband technologies on key web applications used to deliver core government services.

RAPAD is concerned on the issue of aging radio technology used to deliver the universal telephone service. Many towns in the region are connected via Digital Radio Services (DRS) and premises linked to the High Capacity Radio Concentrator technology. With the government investment in the NBN and the establishment of the Telecommunication Universal Service Management Agency (TUSMA) will appropriate priority and funding be focused on maintaining and upgrading the Universal Service regional infrastructure to ensure a quality? Furthermore will that service quality be equivalent or inferior to that enjoyed by customers whose universal telephone service is connected via NBN optic fibre?

Over time opportunities will exist to connect a number of these premises to NBN broadband infrastructure and for their USO service to be delivered over this infrastructure as is the case for metropolitan premises. Opportunities to transfer to NBN broadband infrastructure should be explored with vigor.

RAPAD recommendation. That the Regional Telecommunications Review requests the Australian Government to publish a full business plan on regional USO infrastructure and assets,

decision criteria for maintenance, and decision criteria for upgrades and the funds reserved to ensure quality and operability of the end user services. Exchange or infrastructure specific fault reports should be published annually to assure communities of ongoing reliability and quality.

RAPAD is aware that network resilience has been an issue in the 2011 Queensland flood and Cyclone Yasi. When natural disasters strike telecommunications (voice, broadband and mobiles) is a vital service. Generator failure and contractor response times have been cited as examples of areas needing improvement.

RAPAD recommendation. That the Regional Telecommunications Review recommends that telecommunications infrastructure providers (e.g. NBN Co and Telstra) have robust and auditable processes to maintain services in times of natural disaster or national threat. Separate contract numbers for the public to report natural disaster telecommunications issues should be advertised as a means for quick identification of problems areas and to segregate natural disaster public reports from normal business activities.

4. Mobile Infrastructure and Services

A number of communities in the RAPAD region have no mobile services or have mobile coverage that requires significant expansion. The towns with no coverage are: Bedourie, Windorah, Jundah, Stonehenge (limited coverage from the Ban Ban repeater), Muttaborra, Yaraka and Urandangi.

The Glasson Report "Recommendation 2.1.1(a) - Australian Government programs to improve mobile services in regional parts of Australia should incorporate: if necessary, once the new framework is implemented, hand-held coverage in community service centres and towns and well-used roads and industries or regions specifically targeted according to the criteria (priority, criterion and description thereof)" recognized the importance of mobile infrastructure to regional communities and interconnecting roads. The Government response was that, the Government considers that recommendation 2.1.1(a) should also not be addressed until after the completion of the National Broadband Network process. This process is now completed however no action has been taken.

The rationale that mobile services (including mobile broadband) operates in a competitive market and hence does not require government intervention fails to recognize that rural and remote locations have low population density, low or seasonal/event travelling population and little commercial site leverage. Mobile infrastructure providers are agreed that the commercial business case to justify calls for mobile services and investments of up to \$400,000 per base station does not exist. Furthermore access to adequate backhaul often magnifies the case against investment. Many localities identified by the above should be considered natural monopolies, thereby qualifying for government investment.

RAPAD argues that tax payer investment will be necessary to install mobile facilities in many remote and rural areas. Mobiles are a safety net for travelers and emergency responders. On a GDP per capita basis no attempt is being made to invest equally in remote/rural telecommunications infrastructure to the investment being made in more populist areas.

RAPAD recommendation. That the Regional Telecommunications Review recommends that the Australia Government allocates funds to build new mobile telecommunication infrastructure. Priority should be given to those communities without mobile services. The second priority should be the extension of coverage to service regional transport corridors. Nomination for priority localities should be sought from regional local government authorities as representatives to these communities. From those publically funded mobile sites carriers must

provide a wholesale access service (or similar competitive arrangement) to other mobile carriers/service providers.

The RAPAD approach is consistent with the Glasson Report Recommendation 1.6.1: The Australian Government facilitates greater involvement of local governments in the design and delivery of initiatives to promote greater access to telecommunications infrastructure in their area. The Australian Government in its response agreed with this recommendation. Individual approaches to local government authorities is needed to create a priority list and funds reserved to fast track mobile infrastructure expansion.

5. NBN – clarity and consultation

RAPAD is concerned at an apparent lack of consultation on detailed information on the national broadband infrastructure technology to service rural and remote towns. Whilst the policy position is that 7 per cent of Australian will be serviced by wireless and satellite precise details of the towns to receive satellite service is required. NBN Co should publish that list now not indicative lists. Based on this information RAPAD may make appropriate representation of alternates based on its local knowledge and regional expectations. The recent experience by the region with respect to the Australian Government digital television policy and program is an example of poor consultation by government, incomplete and misleading information, untimely responses and a lack of knowledge of how rural and remote communities address infrastructure and service issues.

RAPAD is concerned that cost pressures to increase the number of satellite connections, to realize a mythical economical satellite connection cost (optic fibre projected cost is \$8,000 per premises and wireless \$10,000 to \$12,000 per premises), is driving the justification for the NBN satellite. Towns with 50, 100, 200, 300 and 400 premises will have satellite dishes on every roof when optic fibre backbone is current available (or possible) in that town.

RAPAD would argue that cost per premises connection on economic grounds is outside the policy position of the government. The strategic position should be that the NBN telecommunication investment should source the best underlying infrastructure to meet the 20 to 40 year needs of the RAPAD towns. Satellite is not considered suitable for the long term interests of these communities.

As referenced previously in this document RAPAD places high priority on telecommunications infrastructure and services and implement co-operative and sustained actions, including co-investment, to improve services.

RAPAD recommendation. That the Regional Telecommunications Review recommends that NBN Co publish a definitive list of towns to be serviced by satellite. Furthermore that a process of consultation and negotiation be developed whereby local governments can access the business decision the inclusion of a town on that list and can present material to support a conversion from satellite to wireless or optic fibre connection in rural and remote towns.

An issue RAPAD has identified, subsequent to the conversion of 93% of Australian premises to optic fibre, is the reduction of the workforce proficient in copper cable maintenance and repair. Will this workforce be a contractor workforce or will Telstra retain viable expertise and staff. If a skills shortage is realized, it is likely to have a more pronounced effect in regional areas leading to extended service restoration times. In times of natural disaster, Telstra has temporarily relocated trained staff to areas where local staff are overloaded. If Telstra has limited staff with copper experience or uses only contracted staff how will universal services be restored in times of natural disaster?

RAPAD recommendation. That the Regional Telecommunications Review examines that skills mix position of the industry post NBN implementation to ensure no deterioration in the delivery of universal services under normal and natural disaster situations.

RAPAD seeks clarity on the technical performance and service quality of the NBN satellite service with respect to internal switching within the satellite to avoid double hops and the inherent delays this will involve. The impact on end user experience is on concern. Will IP traffic be internally switched within the satellite? Will IP voice packet be given prioritization? If internal switching is inherent in the design it is expected that NBN satellite customers could take advantage of IP voice calls and thus reduced voice costs. If double hops are involved then RAPAD is concerned on the impact this will have on web based application. What guarantees can NBN Co and Retail Service Providers provide on service quality and performance of satellite broadband services to a standard equivalent to other NBN services? It appears that consumers are being asked to have faith in the NBN CO engineering. Greater disclosure is sought on impacts now and on future applications, identifying areas on non-equivalence to fibre connected premises.

RAPAD recommendation. That the Regional Telecommunications Review recommends IP switching and voice prioritization on the NBN satellite service and that NBN Co publish more information on satellite performance.

6. The 2008 Regional Telecommunications Review

The 2008 Regional Telecommunications Review report notes the inadequacy and underinvestment of telecommunication services in regional, rural and remote Australia over the past decade, and makes recommendations aimed at:

- improving voice telephony services, including the strong desire that Australians living and working in regional areas have access to reliable mobile telephony services across Australia's landmass
- increasing the accessibility of broadband services for people and businesses in regional Australia
- providing increased investment in and more affordable access to 'backhaul' infrastructure to support the delivery of terrestrial mobile and broadband services
- raising consumer awareness and facilitating competition in the telecommunications sector, and
- improving customer service standards for key telecommunications services.

Furthermore the Glasson Report suggests that the Government respond to a number of its recommendations only after the outcome of the NBN process is known. The government response states that it will revisit 17 recommendations and part-recommendations once the outcome of the NBN process is settled

The Glasson Report recommended 10-15% of the \$400 million identified by Government as being available for developing targeted initiatives to respond to Report recommendations. Subsequently the government allocated \$61.1M to 3 programs.

7. Digital Economy Skills

RAPAD is concerned that regional communities will fail to take full advantage of the benefits of the NBN because their locality means access to retail outlets, skills networks and everyday exposure is less intense than those in metropolitan cities.

Regional business must be educated on the potentially disruptive impact a society with an imbedded digital economy represents on business activity and opportunities. The risks of regional businesses not being aware and engaging could be catastrophic for regional economies.

Communities must gain confidence to participate in the digital economy. This can only be achieved through familiarity with digital tools and its use.

The recent RAPAD ICT Blueprint report³ published details of a project that confronted this lack of awareness. The community identified that digital awareness rather than formal digital literacy training was required as a first step. A digital awareness day was held in Longreach to expose the community to major online social media and digital issues such as security, Skype and mobile data. The sessions gave business and the community an understanding of the digital economy characteristics and potential role in their businesses and daily lives. Formal training, mentor programs, targeted assistance and establish networks for improved skills should be the next step.

Our emphasis should be on how identify opportunities the NBN will offer (make money from it), how to imbed web tools into the business activity (efficiency and effectiveness) rather than the digital economy causing loss of local business (market loss).

The Glasson Report Recommendation 1.6.2 stated that: The Australian Government work with state, territory and local governments on promoting greater access to training in information and telecommunications technologies for people in regional and remote areas. The Australian Government response was the Digital Regions Initiative and its National Digital Economy Strategy has a number of quality initiatives. However most National Digital Economy initiatives are restricted those localities that were NBN first and second release sites. No remote or rural communities can participate. The focus and learnings may not have direct applicability to remote/rural community expectations and desire.

RAPAD recommendation. That the Regional Telecommunications Review recommends that the Australia Government directly engage with a number of remote/rural communities on digital economy applications and trials.

8. Regional Digital Television lessons

RAPAD and LGAQ (Local Government Association of Queensland) prepared supporting material (and made numerous representations) that documented to the federal government and Communications Minister, Senator Stephen Conroy, that small regional and remote communities were being treated very unfairly by their current policy. That is the policy forced people in these communities to accept a partly subsidised DTH (direct-to-home) satellite service, instead of a terrestrial rebroadcast service which people in cities and larger communities of above 500 in population will enjoy.

Local government have a long history of investing in and maintaining analog self-help television retransmission sites to enable communities to receive television via a standard television aerial. Local governments in the RAPAD region were prepared to make further investment to enable the rebroadcast the new VAST (Viewer Access Satellite Television) digital service.

Self-help licensees received communication from Minister Conroy that stated: “Should communities with self-help services elect not to take up the Government funded DTH satellite

³ http://www.rapad.com.au/c/document_library/get_file?uuid=737a18fe-b07c-41ae-9ecb-7bcfe900678c&groupId=17366

service, they will have the option of converting existing self-help retransmission services to digital themselves". Whenever a rebroadcast option was ready to progress, another hurdle presented to Councils.

RAPAD is concerned that aspects of the NBN program will follow a similar path to the digital television experience. That is, untimely and inadequate consultation, being presented with variations that introduce extra costs, uncertainty on government processes and regulatory impediments.