



**NINTI** • **INNOVATION**  
**ONE** • **FOR REMOTE**  
**AUSTRALIA**

**Ninti One Limited**

**Submission – Regional Telecommunications Review**

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**Ninti One Limited**

**ABN: 28 106 610 833**

Ninti One Limited Contact:

Rod Reeve, Managing Director

Apolline Kohen, Senior Policy Adviser

## **Introduction**

Ninti One welcomes the opportunity to provide comments to the Regional Telecommunications Review 2015. Our ongoing work with the Broadband for the Bush Alliance (B4BA) to advance the digital capacity and capability for those who work and live in remote Australia has informed this submission.

## **About Ninti One**

Established in 2003, Ninti One is a not-for-profit, independent national company that builds opportunities for people in remote Australia through research, innovation and community development.

Ninti One manages:

- the current activities and partnerships of the Cooperative Research Centre for Remote Economic Participation (CRC-REP)
- the commercialisation of the Intellectual Property from CRC-REP and the legacy projects from the former Desert Knowledge CRC (DKCRC)
- consultancy services related to the delivery and commercialisation of research for the benefit of Australians living in remote areas.

CRC-REP has three goals:

- To develop new ways to build resilience and strengthen regional communities and economies across remote Australia
- To build new enterprises and strengthen existing industries that provide jobs, livelihoods and incomes in remote areas
- To improve the education and training pathways in remote areas so that people have better opportunities to participate in the range of economies that exist.

More information on our activities can be found at [www.nintione.com.au](http://www.nintione.com.au) and [www.crc-rep.com](http://www.crc-rep.com).

Ninti One is a founding member of the Broadband for the Bush Alliance (B4BA), which has a growing membership of organisations that are committed to the digital inclusion of remote and rural Australia. B4BA is dedicated to creating digitally connected and smarter remote communities, using a number of direct action initiatives. These include:

- influence government and policymakers through sustained and persuasive representation
- publish remote digital policies supported by research
- educate stakeholders on the digital challenges faced in the bush
- undertake projects to digitally advance remote Australia.

More information on B4BA, its policies and activities can be found at [www.broadbandforthebush.com.au](http://www.broadbandforthebush.com.au).

## General comments

The need for appropriate and reliable telecommunications in remote and rural Australia has been acknowledged in a number of recent Government draft strategies, reports and policies. This includes the *Pivot North* report and the *Draft National Remote and Regional Transport Strategy*.

In the *Pivot North* report, which was part of the process to develop the *White Paper on Developing Northern Australia* process, the Joint Select Committee on Northern Australia made two important recommendations:

**Recommendation 20:** The Committee recommends that the Australian Government improve access to, speed and reliability of high speed broadband in order to support the development of uses of digital communication technologies in Northern Australia, such as: tele-health; e-learning; and projects to improve social amenity.

**Recommendation 21:** The Committee recommends that the Australian Government develop a telecommunications and digital technology strategy specifically for Northern Australia.

It is disappointing that the *White Paper on Developing Northern Australia* does not acknowledge this need. Instead, the White Paper simply refers to the NBN and Mobile Black Spot Programme, with a clear assumption that the combination of these two programs will be sufficient to provide adequate telecommunications in the north.

In the *Draft National Remote and Regional Transport Strategy*, the Council recommends to Telecommunications Ministers as Action 5 'that a telecommunication plan based on key freight routes be developed for remote and regional Australia'. We strongly support this action. However, we believe it should be part of a broader telecommunication strategy for remote Australia.

Remote Australia remains largely disconnected from the digital revolution due to a lack of adequate infrastructure and affordable and reliable services, and, for most, poor digital literacy. It should be recognised that policies and strategies aimed at the majority of Australians who live in major cities are not appropriate for remote and rural Australia, where the market fails and there are very different circumstances. As a member of B4BA, we are calling for a targeted and well-resourced Remote Telecommunications Strategy (RTS) to ensure that remote Australians are not left behind. An RTS requires a multi-prong approach that addresses mobile coverage, appropriate infrastructure, affordability and capability issues. We encourage the Committee to acknowledge the need for such a strategy in their Review report. Ninti One and B4BA have capacity to assist in the development of such a strategy.

## Regional telecommunications Review 2015 responses

**Q1. Do people in regional Australia believe their reliance on telecommunications differs from those in urban areas? How does it differ and can you provide examples?**

Due to issues of distance and isolation in remote Australia, broadband has an elevated potential to positively impact service delivery and socioeconomic conditions in this region. Emerging broadband and telecommunications offer real opportunities to grow and strengthen remote economies and transform local businesses. Quality broadband can assist in overcoming vast distances from cities, reduces travel costs and opens up potential goods and services options that are not otherwise available in remote areas (i.e. in education and health). Additionally, in remote areas social networks are more dispersed and there is less opportunity for direct social interaction, so more communication is conducted online. As more services move to digital delivery, communities and individuals that are not online risk further social and economic exclusion.

Approximately 130,000 Aboriginal and Torres Strait Islander Australians live in over 1,100 remote communities across Australia. High levels of digital inequality still exist in many of these communities. Access to internet at home is still very low. Indeed, 75% of Aboriginal and Torres Strait Islander homes in remote Australia have no internet connection – less than in Sudan. Therefore, more community-wide and regional solutions are needed. This includes WiFi sharing to enable pre-paid services using mobile devices and shared models of access across regions. There is great demand for mobile services in remote and very remote areas as this enables voice, text and internet communications through smartphones.

It is well documented that residents of rural and remote communities continue to show poorer health outcomes and have lower incomes, employment rates and educational attainment than residents in metropolitan centres. The digital exclusion of remote Australians will inevitably contribute to the widening of inequalities between remote and non-remote Australians if we do not act now. This is why we are calling for a targeted and well-resourced RTS to ensure that remote Australians are not left behind. Such a strategy would address the specific needs of remote and rural Australians.

**Q2. *For those users already connected to an NBN network service, has the service met your expectations?***

We are not in a position to comment because remote Australia, the area that will most benefit from NBN infrastructure, has been left off the early rollout of NBN.

**Q3. *Having regard to the technical solution likely to be used in your area, do you have views on the adequacy of that solution in terms of meeting needs now and into the future?***

It is difficult to predict the adequacy of the Long Term Satellite Service (LTSS) without the ability to test its capacity to support high-bandwidth two-way applications for tele-health, education, videoconferencing, mobile, VoIP and other applications service. As a result, we are calling for more testing of both the infrastructure and applications likely to be adopted by remote users.

Technical solutions are only one part of the solution. Issues around affordability, billing mechanisms (i.e. lack of pre-paid mechanism for satellite internet similar to pre-paid for mobile phones), digital literacy and other customer service issues also need to be addressed.

**Q4. Irrespective of the adequacy of your local access, are there issues with backhaul or long distance carriage that impact on your use of telecommunications services?**

Restrictive backhaul in terms of bandwidth and competitive access are definitively having negative impact on the types of services offered, the range of service providers in the market and price/package options. We believe it also restricts innovation because those wishing to enter remote markets usually find the cost of backhaul and the types of backhaul options priced well above other markets. We recommend the Committee consider the use of high-speed microwave terrestrial backhaul and existing legacy fibre (through arrangements with Telstra) to extend NBN and mobile services into remote areas from existing nodes.

**Q5. For users living in areas without mobile coverage, what priorities, other than specific locations, do you consider should be recognised in future efforts to improve coverage?**

Establishing local internet and computing access, particularly in locations where there is no mobile phone coverage, should be encouraged. Indeed, computers or mobile devices with WiFi capability can provide an alternative option. However, issues of cost, billing mechanisms, administrative processes and digital literacy would need to be addressed when establishing community-based local internet access.

We acknowledge the recent outcomes of the Mobile Black Spot Programme that will deliver almost 500 new or upgraded mobile base stations around Australia. We welcome the further \$60M earmarked for the 2016 Mobile Black Spot Programme Round 2. However, given the scale of existing regional and remote mobile coverage scarcity, the Mobile Black Spot Programme needs to be a long-term initiative and be adequately funded.

Additionally, we suggest a program that includes (and funds) backhaul options other than fibre, such as via microwave and satellite, be investigated and the business case options be published. Mobile extension programs such as microwave links to enable local repeaters in nearby communities or homelands should also be considered.

**Q6. What opportunities do the mobile network industry see for extending coverage in regional Australia and increasing investment in mobile networks?**

We believe the mobile network industry will not further invest in mobile networks without support from Government. Indeed, given the limited markets in remote Australia, the corporate returns are simply too low for the industry to invest without Government incentives.

**Q7. Do you have any views on co-investment approaches that might help to improve the broadband technology outcome in your area?**

We are aware of a number of co-investment models that have been demonstrated to work, including the Northern Territory Government / Telstra mobile and ADSL rollouts to remote communities (2013,2015) and the \$110M mobile expansion program in WA (2012–13). However, reliance on co-investment in remote and very remote areas typically results in monopoly environments with limited product and service options, as well as affordability issues.

**Q8. How might new applications and services that utilise mobile networks for voice and data transform the way you live and work?**

For remote residents, accessing the internet to undertake what mainstream Australia considers to be ordinary everyday tasks – such as internet banking, online shopping and connecting to Government services – would provide a significant advance. Without reliable internet access in remote Australia, there is a real risk that remote residents will simply drop off-line and become further disadvantaged. Many applications, for example, in education, health, and agribusiness can already improve efficiency and productivity as well as liveability of remote areas. However, unless issues around equitable access and affordability are addressed, the potential benefits will go unrealised.

**Q9. What communications barriers have you experienced in expanding or operating your business or providing services, such as health or education? Have you been able to overcome these barriers and if so, how?**

Affordability, particularly of mobile services, is a real issue for remote Australia. Indeed, pre-paid mobile and internet services are the preferred option for Aboriginal and Torres Strait Islander and low-income people where coverage is available, as they enable people to manage usage costs. However, pre-paid mobile calls and data usage rates are significantly higher than for billed services. Mobile, data and pre-paid services are not covered under the Universal Service Obligation (USO), which only provides cost equalisation for fixed line services and public phones. The extended zones tariffing scheme introduced in 2001 to provide local call rates to neighbouring regions in remote areas has not been extended to mobile services, meaning that many calls are at STD rates. We recommend that the Government introduce a subsidised structure equivalent to the extended zones scheme for voice calls originating from mobile services registered at remote locations.

Slow speeds and lack of reliable connectivity remain key issues for delivering tele-health and education programs.

**Q11. Do we need to continue to guarantee the standard telephone service for all (or only some) consumers, and if so, to what extent?**

In remote Australia, there is still a need to retain a basic telephone service. Public phones need to be maintained in remote communities. For example, there are still many places in the Northern Territory where there is only a single community phone. If these locations no longer have a community phone, they will have no way of contacting the outside world without driving to a location with a phone or with mobile coverage. Clearly this is unacceptable, particularly in the case of emergencies. For many remote households and for many elderly and disabled residents, a standard telephone service may be their only realistic option.

**Q12. Are there new or other services, the availability of which should be underpinned by consumer safeguards?**

We support the previous Regional Telecommunication Reviews that have called on a reasonable level of broadband service and mobile service to be included in the USO. This is especially relevant to remote Australia, where an environment of market failure and near monopoly service provision exists.

**Q13. What standards should apply to your services? How might they best be enforced?**

We believe the USO and Customer Service Guarantee are still needed in remote areas.

In line with B4BA, we also recommend that the Government:

- commits to infrastructure upgrades and to maintenance programs in remote regions
- continues to invest in remote region black spot programs where commercial telecommunication companies require incentives to invest in priority new infrastructure
- commits to allocate assistance funding to connect remote towns and communities to the NBN where existing optic fibre routes are in close proximity.

**Contact:**

Should the Review Committee require further information or would like to discuss the points raised above, please do not hesitate to contact Rod Reeve, Managing Director, mobile: 0411 481 974, [rod.reeve@nintione.com.au](mailto:rod.reeve@nintione.com.au)