

Remote Telecommunications

Response to the call for
Submissions on broadband solutions for remote areas
by the
Northern Territory Government

June 2008

There are two key issues in the telecommunications sector in the Northern Territory that remain unattended.

Wholesale Competition

The lack of wholesale competition for broadband into the Northern Territory forces higher prices and restricts the telecommunication services available in all parts of the Territory. The large communications distances for businesses and householders to link with suppliers, customers and social contacts in other states combined with distance based telecommunications pricing, creates higher costs for all Territorians compared to other jurisdictions.

The solution options are;

1. Create competition through the installation of a fibre optic cable to an interstate jurisdiction owned by an entity other than the incumbent telecommunications provider. Given the market size in the Northern Territory such an investment will require Australian Government investment to ensure a strong ICT industry and sustainable wholesale competition. The estimated total investment required is approximately \$70m.
2. Regulate Australia wide standard charges for comparable wholesale bandwidth.

Closing the Gap in Remote Indigenous Communities.

A significant proportion of the Northern Territory's remote telecommunications infrastructure in indigenous communities is incapable of providing any service other than basic telephony. In addition the infrastructure in many remote areas is at full capacity, unable to provide any additional service to communities, such as mobiles and broadband.

The ongoing Federal government intervention in remote indigenous communities and intent with the NT government to 'Close the Gap' requires telecommunications infrastructure comparable with urban Australia to deliver on health, education and safety ambitions.

The estimated investment required to provide adequate services to 113 NT indigenous communities with a population greater than 100 is \$200m.

Next Steps

It is proposed that a joint Australian - Northern Territory government officer group be formed that reviews options and identifies priorities for the delivery of a competitive interstate optic fibre connection and improved terrestrial telecommunications infrastructure in remote areas of the Northern Territory.

The joint officers group will be required to consider funding options including contributions from governments, stakeholders and industry. The group will also consider priorities in consultation with stakeholders and the industry. The group may also consider regulatory issues associated with services in the remotest of communities. The officers group should begin its considerations in September 2008 with its first report to both governments in January 2009.+

Introduction

This is the second response from the Northern Territory Government to the Regional Telecommunications Independent Review Committee. This response largely repeats the content of the previous response in September 2007 but highlights a process for advancing the telecommunications requirements of the Northern Territory and includes updated information where appropriate.

Background

It is the view of the Northern Territory Government (NTG) that reliable and affordable telecommunications services provide significant social and economic benefits to the community. Suitable telecommunications services also underpin the delivery of health, education, social and business services.

The Northern Territory Government considers competition as a key element in ensuring a healthy and sustainable ICT sector. However market size has limited the development of competition in the Northern Territory to the extent that the Northern Territory is the last jurisdiction with a single provider of wholesale telecommunication services. The limitation in the wholesale interstate carriage for telecommunications has knock on effects to the extent of limiting negotiated wholesale communications contracts the limiting the diversity of the retail market. The lack of competition also impacts negatively on the sustainable economic development of the Northern Territory.

Developing affordable reliable and suitable telecommunications services in remote areas of the Northern Territory within an environment that lacks significant competition relies on strong regulation, government funding and the good will of the incumbent provider, particularly in those remote areas where the market is sparse and unprofitable.

The Northern Territory Government is of the view that telecommunications services, as an enabling technology, have a multiplier effect in the delivery of health, education, and social and business services in remote areas of the Northern Territory.

The environment within the Northern Territory is such that approximately one quarter of its population live in very remote areas and do not currently have reasonable and equitable access to affordable and appropriate telecommunications services. This is substantially an infrastructure issue.

The Australian Government's previous programs have not had a strategic impact on telecommunications infrastructure in the Northern Territory. The piece meal allocation of funding has been welcomed by recipients but does nothing for the underlying problem within the Northern Territory – that is the lack of terrestrial telecommunications infrastructure.

Competition

Effective competition in the Northern Territory is confined to a limited number of retail products that attract national pricing structures, such as ADSL and mobile services.

The lack of competition in the wholesale market results in costs for interstate telecommunications transmission (backhaul) being three to five times the costs associated with similar transmission requirements in other jurisdictions. Where competitive backhaul has been introduced in other jurisdictions the cost of backhaul has reduced substantially.

Competition must be effective in the wholesale market to drive competition in the retail market for the benefit of consumers. Currently the lack of wholesale competition results in competitors to Telstra providing a cut down version of its product suits. For example whilst Optus offer business grade ADSL services delivered from its own equipment Optus provides no consumer grade ADSL service in the Northern Territory, citing the margins as being too small after paying for backhaul. Very few telecommunication providers have installed ADSL equipment to provide consumer or business broadband services. Rather a significant number of ISPs are providing ADSL services using the wholesale requirements placed on Telstra.

The effect of the lack of wholesale competition and the subsequent cost of backhaul to deliver ADSL2+ will ultimately leave Telstra as the only provider able to deliver terrestrial based broadband at speeds greater than 8Mbps in the Northern Territory. Extrapolation of this into the future would leave the Northern Territory with no competitive options for the development of fibre-to-the-node or fibre-to-the-home.

Without further Australian Government funding in the future, the state of telecommunications in the Northern Territory will remain locked into the level achieved at the point of the last government funded program. Inevitably the cost for delivering the telecommunication services required in the future, enjoyed by other jurisdictions today, will cost substantially more than current market prices.

The solution is the development of an infrastructure program to deliver a fibre optic cable to connect the Northern Territory with other jurisdictions, owned by an alternative to the incumbent telecommunications provider. Given the market size in the Northern Territory such an investment will require significant Australian Government investment supported by the private sector and usage guarantees from government. The Northern Territory has estimated the total investment at \$70m, based on previous proposals.

Remote Infrastructure:

The remote areas of the Northern Territory are generally poorly serviced with telecommunications, on an urban parity basis. Of the 113 remote indigenous communities with a population greater than 100 only 13 have ADSL. ISDN is available in 73 communities but pricing structure and performance makes this product suitable only for government or corporate use. Mobile telephony is available in 33 remote communities. Mobiles are the product of choice in remote and particularly indigenous communities. Prepaid mobile service resolve issues of customers defaulting on payments and solves problems associated with indigenous cultural issues of 'resource sharing'. All communities have access to basic telephony.

The infrastructure issues fall into two categories. There is substantial infrastructure in remote areas incapable of providing any service other than basic telephony. Secondly much of the infrastructure in many remote areas is at full capacity, unable to provide any additional services to communities.

Telecommunications is a necessary part of economic development in any community. This is equally true of remote indigenous communities, and perhaps more so. Employment is problematic in remote communities with very few communities having the prospect of economic sustainability where there is very little opportunity for sustained industry or production on a scale substantial enough to support employment rates sufficient to develop a local economy.

In 2005 the Northern Territory government commissioned ACIL Tasman to examine the affects of economic and social impact of upgraded telecommunications services in remote indigenous communities in the NT. Whilst the report could not assign 'cause and affect' between broadband access and economic and social benefits, a position that is consistent with all economic models examining the benefits of broadband at all levels of the economy, it did determine that broadband as an enabling technology was necessary to 'normalise' a community and that normalisation would have a significant economic and social benefit. A copy of the report is attached.

Access to telecommunications and ICT education will provide skills allowing mobility for the younger generations providing them with greater choice for employment. In addition for those trained individuals there is the opportunity and choice to work within a broader economic base, whilst remaining within the bounds of their home community. That is, such individuals will have the capacity to travel beyond the physical bounds of their communities for employment, or reach beyond their community via broadband services to participate in the national or international economy.

The challenging targets for the NT and Commonwealth governments have set for "Closing the Gap" will be difficult to reach and costly if the traditional model of face-to-face delivery by highly skilled professionals is the only mechanism.

The ongoing development of electronic service delivery and support to remote staff is essential if the "Closing the Gap" targets of both the Commonwealth and NT governments are to be met. This approach of providing new and effective mechanisms for delivering government services will extend the capacity of existing resources and the scope of services able to be provided.

The primary requirement for electronic service delivery is access to reliable broadband services.

Currently health and police both experience issues with service delivery because of the lack of suitable communications. Electronic applications, such as health records and police checks that won't run successfully over satellite communications links cannot be delivered where terrestrial services don't allow for suitable broadband links. This is becoming more evident with the Australian Government's Intervention in the Northern Territory. The Intervention's legacy may be short lived without long term sustainable investment in enabling technologies such as the very necessary telecommunications infrastructure.

Extensive work has already been undertaken to identify and evaluate the cost of delivery to all communities with a population of greater than 100. This work is presented in the Northern Territory's Expression of Interest to the Australian Government's Broadband Connect program. A copy of the Expression of Interest is attached.

The Expression of Interest encompasses 113 communities and 40 000 people in the Northern Territory. The terrestrial infrastructure capable of providing broadband and other

telecommunication services to these communities is estimated to cost \$200m but the benefits to the younger generations in these communities is incalculable.

Next Steps

It is the Northern Territory's view that a phased infrastructure funding program needs to be put in place immediately.

Funding for the interstate fibre link should be targeted within the next 12 months. The Northern Territory proposes a joint Australian - Northern Territory government approach reviewing options for the delivery of a competitive interstate optic fibre connection. This should include the development of a feasibility study of the viability of a competitive link and the development of potential funding models. The joint approach would maximise the opportunities to identify potential funding sources and funding models.

The funding for terrestrial infrastructure in the remote areas of the Northern Territory will also require a joint approach between the Australian government, Northern Territory government and private sector. The Northern Territory government is currently considering a joint investment with the private sector for telecommunications infrastructure in remote areas. However the limited resources of the Northern Territory government will need to be supported by Australian Government funding to reach all communities with a population greater than 100.

A joint approach to formulate a phased implementation of terrestrial infrastructure in remote areas of the Northern Territory is required. Models for joint funding including private sector funding will need to be developed. This will include the conditions of funding and may require policy and regulatory changes to encourage private sector investment in the remote areas of the Northern Territory.

The Northern Territory also recognises that some of the more remote communities will rely on satellite broadband communications for many years. Terrestrial links capable of providing phone services only will also be a long term reality for many smaller communities and outstations. The ongoing maintenance of these services and associated customer charges need to be maintained at current levels, in real terms. The Northern Territory proposes that the regulation covering the Universal Service Obligation (USO) and the Untimed Local Calls in Extended Zones (ULCEZ) be extended and strengthened to protect the interest of the populations of the very remote areas of Australia. Additional regulation should also be considered to ensure that the population in these remote communities have a pathway that will provide improved services over time.

In order to progress this planned program it is proposed that an Australian and Northern Territory Government officers group be formed to formulate appropriate proposals for funding and prioritise options. The officers group should begin its considerations in September 2008 with its first report to both governments in January 2009.