

**Productivity Commission Inquiry –
Telecommunications Universal Service Obligation (USO)**

**Submission by the
Northern Territory Government**

September 2016

Summary

Given the national advances made in telecommunications infrastructure and technology since the commencement of the standard telephone service and payphones Universal Service Obligation (USO), it is clear that the USO is no longer fit for purpose and requires amendment to cater for user requirements in 2016 and beyond.

Introduction

In the Northern Territory Government's submission to the 2015 Regional Telecommunications Independent Review, it was highlighted that the lack of basic telecommunications infrastructure is the major issue faced by many remote communities in the Northern Territory. These communities are mostly Indigenous communities but also include many pastoral and tourism enterprises.

The Northern Territory Government recognises that reliable and affordable telecommunications services provide significant social and economic benefits. This is a basic tenet of the United Nations resolution on *The promotion, protection and enjoyment of human rights on the Internet*, which states on page 2:

“...the spread of information and communications technology and global interconnectedness has great potential to accelerate human progress, to bridge the digital divide and to develop knowledge societies”.¹

Telecommunications services have become increasingly critical and underpin the delivery of essential health and education services, social interaction and business and economic development. The Northern Territory Government believes that remote communities and businesses in the Northern Territory will gain the most from delivery of reliable high-speed broadband services at a cost equivalent to urban customers. It is therefore essential that access to the internet is available to all Australians and maintained to a level that creates no disadvantage wherever access is required.

The Northern Territory Government supports the Australian Government's Mobile Black Spot Programme which is currently being rolled out throughout Australia to improve mobile phone coverage in regional and remote areas of the country. In addition, in 2015 the Northern Territory Government entered into the latest co-investment agreement with Telstra with a three-year, \$30 million program to provide mobile phone and fixed line broadband coverage to many remote communities in the Northern Territory. This program follows three prior successful jointly-funded remote telecommunications infrastructure programs over the past eight years.

The case for a new USO

The communications infrastructure that saw copper providing predominantly voice communication infrastructure successfully for decades, and lately data provision, was not designed to handle the massive quantities of data required to run industry, business and government services in the 21st Century. Neither can it provide the data capacity and speed necessary for a society in which data devices outnumber people.² There are many telecommunications customers that have no need for fixed copper voice communication, preferring to use mobile-only technology.

There must be no disadvantage in accessing the internet for any Australian citizen in an age where an online connection is vital to business development, education, prosperity and community and individual wellbeing. It is also vital that the needs of distance education students in very remote areas are considered. Many are reliant on connection to the internet and are disadvantaged by inadequate telecommunications infrastructure and are subject to high consumption costs owing to data plans that are much more costly than those available in urban areas.

Many government services to the community are now almost exclusively provided online and governments are moving to 'digital by default' positions. This has enabled ease of access for members of the public who need these services, but makes it more difficult for people in remote areas

¹ *Promotion and protection of all human rights, civil, political, economic, social and cultural rights, including the right to development*, 27 June 2016, Human Rights Council of the United Nations General Assembly, https://www.article19.org/data/files/Internet_Statement_Adopted.pdf

² *Communications Report 2014-15*, Australian Communications and Media Authority, p.17 <http://www.acma.gov.au/~media/Research%20and%20Analysis/Report/pdf/ACMA%20Communications%20report%202014-15%20pdf.pdf>

to access necessary services where there is no online infrastructure nor traditional government to client interfaces, eg customer service centres.

National Broadband Network

When complete, the National Broadband Network will undoubtedly transform the Australian economy, open new capabilities and provide the capacity to deliver new services. The NBN aims to provide the reach to deliver high quality services to every Australian.

Nowhere would the effect of this be felt more nor will the benefits be greater than in the remote communities of Australia, particularly the Northern Territory. In the debate about a new USO, transition to a broadband connection alone as the minimum requirement simply is not workable or suitable for remote communities and inclusion of a reliable voice service over existing telephony infrastructure must be retained in an appropriate form.

With the advent of a superior broadband connection via the NBN, Voice-over-Internet-Protocol (VoIP) allowing users to communicate through an internet connection rather than an analogue connection, will reduce the demand for traditional telephone services. However, because VoIP technology uses the data network, rather than existing telephone systems, the reliability of VoIP service can be negatively affected, particularly when the data service has no quality of service guarantee or is provided over satellite.

The current rollout of the NBN infrastructure will impact the framing of regulatory reform of the provision of telecommunications services. Owing to differing methods of delivering the 'last mile' technologies and processes to connect the end user to the network, defining minimum data allowances and speeds in any customer service guarantee will be challenging. A technology agnostic, catch-all approach may not be possible and service guarantees may need to be 'graded' dependent upon geographic location and last mile delivery.

The provision of a guaranteed service level based on the lowest common denominator must be avoided so that the same service guarantee that applies in metropolitan areas should also apply in remote areas with allowance for the logistical problems encountered.

A broadband connection in isolation as the guaranteed connection in any future USO will not be adequate across the nation.

The Northern Territory

The current USO has been invaluable in the development of the Northern Territory. The vast distances, inhospitable terrain and climate, and small population base would normally mitigate against the provision of costly telecommunications infrastructure. The USO, in providing a guarantee for voice communications, has ensured that many very remote communities have the opportunity to develop despite it not being commercially viable to provide a service. The improvements in safety, health and social connections attributed to enabling communications in remote areas cannot be overstated.

Many remote communities are outside any mobile phone footprint and may remain so for decades. This impacts the ability to maintain consistency and adequacy of telecommunications services.

The Australian Government's current position is that all remote communities in the Northern Territory will be connected to the NBN via the technically inferior satellite service rather than fixed broadband infrastructure. This position is to be applied even where the communities have existing terrestrial telecommunications connections.

The well-known idiosyncratic nature of satellite technology makes it difficult, costly or impossible to ensure delivery of some applications. The time delays (latency) in satellite communications exclude some applications from operating successfully and renders voice communication impractical.

The nature of extreme weather conditions common within the Northern Territory, especially in the coastal regions, makes satellite unreliable due to rain fade and loss of signal. This means that inclusion of a broadband only connection in any USO could not guarantee service delivery by satellite to the same extent that fixed line broadband would. In a natural disaster satellite communications are likely to fail precisely at the time a community needs them the most.

The unreliability and inferior nature of satellite services precludes the substitution of existing terrestrial voice services with satellite delivery. Rather, the existing voice services must be assured under a new USO and service guarantee.

Furthermore, the fair use policy enforced by NBN Co on users of the satellite service unfairly discriminates against customers in remote areas who can only access the internet via this technology. Similar restrictions are not placed on the majority of Australians in urban locations who access the internet via fixed line services on the NBN. This policy would render a USO unworkable if minimum data allowances and/or speeds were included and intended for all users.³

Given the Australian Government's stated position to the reuse of existing telecommunications infrastructure, a guaranteed broadband service at the levels provided by the NBN should be delivered over existing infrastructure, wherever possible, at the same price points as NBN Co. The substitution of satellite as the network platform for broadband delivery where existing infrastructure is available must be avoided in order to provide a USO broadband service.

For example in remote communities where mobile services are in place, but the provision of ADSL is problematic and expensive due to the lack of cabling, a service over 3G or 4G should be guaranteed at NBN Co price points and data allowances. The 'last mile' media for the delivery of a guaranteed broadband service would then be irrelevant.

Summary of NT Government's position

- Access to the internet via a reliable broadband connection should be guaranteed to all Australians, regardless of location at the same service quality and price points as NBN Co services.
- The reuse of existing telecommunications infrastructure regardless of media for last mile delivery should be the first preference, subsidised as required; allowing the use of 3G and 4G to provide a guaranteed broadband service in remote communities at standard NBN Co price points.
- A provider of last resort be designated to deliver a suitable universal service. This may necessarily be the infrastructure provider/owner rather than obliging a single retail service provider to be responsible for the costly provision of such a service in very remote areas of the Northern Territory and elsewhere in Australia.
- In areas serviced by satellite alone, consideration be given to maintaining the current USO and Customer Service Guarantee to ensure telephone services for all Australians. For these remote areas a guaranteed base level of reliable voice communications remains essential and must be stipulated in a revised USO.

³ *Fair Use Policy*, nbn co, 1.3 Unfair Use regarding the NBN Co Satellite Network, p.4
http://www.nbnco.com.au/content/dam/nbnco2/documents/sfaa-wba2-product-catalogue-fair-use-policy_20160407.pdf