MINISTER FOR CORPORATE AND DIGITAL DEVELOPMENT

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Mr Brian Mitchell MP
House of Representatives Standing Committee on Communications and the Arts
PO Box 6021
Parliament House
CANBERRA ACT 2600

Dear Mr Mitchell

Thank you for your correspondence of 5 October 2022 to the Hon Natasha Fyles MLA, Chief Minister of the Northern Territory, inviting a submission to the House of Representatives Standing Committee on Communications and the Arts – *Inquiry into mobile infrastructure co-investment*. The Chief Minister forwarded your correspondence to me as telecommunications forms part of my portfolio of responsibilities as Minister for Corporate and Digital Development.

Telecommunications infrastructure remains the singular limiting factor across much of the Northern Territory (NT) and is the most important issue to address in establishing comparable services that will reduce remote disadvantage.

The NT Government has worked with telecommunications providers and stakeholders to maximise the Australian Government investment in developing telecommunications infrastructure in the NT. To help fill the growing gap in service provision, the NT Government has also invested heavily through co-investment programs to deliver remote telecommunications infrastructure.

In spite of these co-investment efforts, there remains at least 5,000 Territorians in more than 300 small remote Aboriginal communities and homelands without access to any form of telecommunications, and approximately 95% of main highways in the NT have no mobile coverage.

Digital connectivity is critical enabling infrastructure to help address disadvantage, enhance liveability, support job creation and prepare for future needs across the NT.

NORTHERN TERRITORY GOVERNMENT

This submission will be lodged online and a copy has also been attached for your interest. I invite the Inquiry to consider this submission and the importance of telecommunications infrastructure investment to the Northern Territory.

If you or the Inquiry require further information about the NT Government's submission, please contact [redacted].

Yours sincerely

[redacted]

NGAREE AH KIT
03/11/2022

House of Representatives Standing Committee on Communications and the Arts - Inquiry into Mobile Infrastructure Co-Investment

Northern Territory Government Submission

NORTHERN TERRITORY GOVERNMENT

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1. Introduction

On 12 September 2022, the Australian Government Minister for Communications asked the House of Representatives Standing Committee on Communications and the Arts to inquire into and report on the experience, opportunities and challenges for co-investment in multi-carrier regional mobile infrastructure (the Inquiry).

The Committee will inquire into and report on the experience, opportunities and challenges for co-investment in multi-carrier regional mobile infrastructure.

Terms of Reference for the Inquiry are:

1) Report on the costs, feasibility and public benefits associated with the deployment of
    a. infrastructure which supports a single mobile carrier, and
    b. the various models for infrastructure which supports multiple mobile carriers;
2) Report on community views on single carrier vs multi-carrier outcomes; and
3) Report on examples of successful multi-carrier outcomes and their applicability in the Australian context.

2. The Northern Territory Experience

The Northern Territory (NT) has an area of more than 1.3 million square kilometres yet is occupied by just over 232,000 residents[1]. The Australian Statistical Geography Standard (ASGS) Remoteness Structure classifies most areas in the NT outside of Darwin as "Remote" or "Very Remote".

While major centres in the NT have adequate telecommunications services, there remains approximately 50,000 people living in very isolated communities. This has posed a challenge in providing telecommunications services in some of the most sparsely populated and remote regions in Australia. There are more than 700 remote communities in the NT, many of which have a population consisting of only one or two families. Many are also not permanently occupied but remain as homelands in which people may periodically reside.

The sparsely and widely distributed population has resulted in the inability to introduce cost-effective competition with only one telecommunications provider (Telstra) able to invest in expanding its remote coverage, leading to a situation of market failure. In the remote areas of the NT, almost all telecommunications infrastructure, where it exists, is owned by Telstra.

It is for these reasons that this submission is restricted to commenting on item 1a. above as there is no current opportunity for multi-carrier solutions in the NT.

2.1. Telecommunications in the Northern Territory

With regard to telecommunications, the primary aim for the Northern Territory Government (NTG) is to ensure reliable, contemporary and affordable services are available to all Territorians,

[1] Australian Bureau of Statistics (ABS) 2021 Census

including mobile services. Telecommunications infrastructure remains the singular limiting factor across much of the NT, including in many remote communities, and is the most important issue to address in establishing comparable services that will reduce remote disadvantage.

The NTG has worked with telecommunications providers and other stakeholders to maximise Australian Government investment into developing telecommunications infrastructure in the Northern Territory through established funding programs like the Mobile Black Spot Program and Regional Connectivity Program.

To fill the growing gap between telecommunications needs and service delivery, the NTG has also invested heavily in telecommunications infrastructure. A lack of commercial scale and limited responses from the Australian Government have necessitated NTG investment to connect more remote Territorians with modern telecommunications.

Since 2009 the NTG has invested over $61 million in co-investment programs with major service providers, leveraging with these providers almost $150 million in new telecommunications infrastructure– of which under $8 million was Australian Government funding.

The vast majority of these co-investments have been with Telstra (due to the reasons outlined above). Co-investments with other telecommunications providers include the Tiwi Islands Optic Fibre Connection with Vocus connecting the islands with an undersea fibre optic cable and the project to extend NBN fibre-to-the-premise connectivity in Jabiru.

This co-investment has extended the reach of mobile phone services to an additional 48 remote communities across the NT. This is a significant contribution from the NTG's limited budget to provide digital connectivity to more Territorians. Digital connectivity is critical enabling infrastructure to help address disadvantage, enhance liveability, support job creation and prepare for future needs across the NT.

Economic opportunities have been enabled in remote areas and communities through the provision of telecommunications services, for example supporting remote and regional tourism and community art centres establishing an online presence.

In spite of the co-investment efforts of the NTG, there remain at least 5,000 residents in more than 300 occupied small Aboriginal communities and homeland locations in remote areas of the NT without access to any form of telecommunications. It is vital to achieving stated *Closing the Gap* targets for these communities to have access to the services most Australians take for granted. The level of disadvantage for remote residents is exacerbated where telecommunications is poor or non-existent.

While the NTG has entered into co-investment arrangements with more than one telecommunications company, for logistical reasons Telstra is the only company it has co-invested with to improve mobile phone coverage given its legacy dominance in the remote NT market.

The lack of available backbone infrastructure in the NT, other than that owned by Telstra, has put severe limitations on co-investment by any other telecommunications providers. The exception is Optus, which has provided some investment in remote tourism and remote road sites using stand-alone small cell satellite technology under the Australian Government's Mobile Black Spot Program. The vast distances, inhospitable terrain, climate and small population base challenge the provision of costly backbone terrestrial infrastructure required to connect a very remote community to the national network.

The low population density (and therefore low utilisation and minimal potential return on investment) and high costs of extending a mobile network in remote areas mean that there is not

a strong incentive for operators to build infrastructure in isolated locations, reducing effective competition in the telecommunications sector in the NT outside of the major population centres.

NT Position:

1. Co-investment is the only way to encourage companies to invest in such costly infrastructure in areas that are difficult to service and have very little prospects of a reasonable commercial return on investment.

   The Australian Government and telecommunications service providers must increase co-investment to provide essential telecommunications services to some of the most remote communities in Australia. Co-investments must allocate priority to very remote areas without any form of telecommunications.

   The NT Government continues its commitment to the existing co-investment programs to support the development of this critical infrastructure.

2.2. Further involvement/co-investment

In such a small, widely distributed and sometimes inaccessible environment it may be necessary for co-investment opportunities to be made available to other partners who would have an interest in delivering telecommunications services to remote residents.

In the NT this would include the Australian Government (acknowledging its contribution through the Mobile Black Spot Program and the Regional Connectivity Program), local authorities/councils, NT Aboriginal Land Councils, the National Indigenous Australians Agency and the Aboriginal Benefits Account.

This could be extended to an Australia-wide initiative involving those organisations that have an interest in improving telecommunications in very remote areas. It should be confined to areas defined as Very Remote in the Australian Statistical Geography Standard (ASGS) Remoteness Structure.

NT Position:

2. A co-ordinated and inclusive response to the challenges of telecommunications in very remote areas of the NT (and Australia) is required to identify and include potential new partners to co-invest in essential infrastructure.

2.3. Other commitments

A media release by the Minister for Infrastructure, Transport, Regional Development and Local Government on 16 October 2022 identified, among other projects, $332 million towards the NT Strategic Roads Package. As part of the safety component of the construction of roads in remote areas, consideration should be given to the provision of telecommunications services along key areas of new roads. Approximately 95% of main highways in the NT have no mobile phone coverage.

NT Position:

3. Telecommunications should be considered as essential infrastructure and should be included in any planning for new roads and rail infrastructure. A portion of allocated capital funding should be reserved for essential telecommunications infrastructure.

The 2021 Regional Telecommunications Review found that a step change in the ongoing demand for data warrants a step change in the policies and programs which support regional (and remote) connectivity.

Following on from this finding, during the 2022 Australian election, the Australian Government released its *Plan for Better Connectivity for Rural and Regional Australia*. This plan committed to undertake an independent audit of mobile coverage to better identify black spots and guide investment priorities. The Federal Budget 2022–23 provided $20 million for an independent national audit of mobile coverage to establish an evidence baseline to guide and better target future priorities. The NT Government would strongly encourage the Australian Government audit to capture data from remote regions to ensure a complete picture of mobile coverage nationally.

NT Position:

4. The NT Government applauds the allocation of funding in the Federal Budget for an independent national audit of mobile coverage. This audit needs to allocate priority to very remote areas of Australia without any form of telecommunications.

2.4. Reliability in remote communities

In the NTG submission to the Regional Telecommunications Independent Review Committee Inquiry 2021, the NTG identified that resilience needs to be part of any telecommunications solution. While this can be more easily addressed in populated areas where faults can be diagnosed and rectified relatively easily, in very remote areas this can be very problematic owing to lack of local expertise coupled with inaccessibility issues due to extreme remoteness.

As stated in the above submission, the impact of losing telecommunications in remote communities is more critical than for regional and urban areas. When a remote community loses telecommunications, residents are often unable to buy food, fuel or power because the mobile service providing EFTPOS or connection to the authorising server used to replenish these essential services is unavailable. For people that rely on a visit to the local store on a daily basis to buy food, loss of telecommunications can be devastating. And a trip to the next community is often not possible often due to long distances or impassable roads (remote roads are often not all-weather roads).

When an outage occurs in a remote location the time to repair can be extensive. As well as affecting residents, such prolonged outages impact the ability of remote businesses to trade or conduct other essential business. This would not be acceptable in urban areas and should not be considered acceptable for remote areas. Special consideration needs to be given to system resilience when co-investing in telecommunications services in very remote areas and may require involvement with maintenance and power supply organisations.

It is noted that the Federal Budget 2022–23 provided $400 million to expand regional mobile coverage and improve the resilience of communications systems.

NT Position:

5. The NT Government applauds the allocation of funding in the Federal Budget to improve the resilience of communications systems. Priority must be given to strengthening resilience in very remote communities that are at risk of isolation for many days due to unplanned telecommunications outages.

3. Further opportunities

The introduction of Low Earth Orbit (LEO) satellite technology via providers such as SpaceX and OneWeb is revolutionising the provision of services in very remote areas. Although these satellites currently provide data only (unless a ground WiFi solution has been deployed locally and a Voice-Over WiFi facility is available), LEO providers have begun research on the ability of the technology to provide a mobile phone signal directly from the satellite.

United States companies SpaceX and T-Mobile US have announced a technology alliance to build cellular connectivity into next generation Starlink satellites. At the same time, Apple has incorporated satellite communications into their latest smartphone models, which can now connect to satellite systems for emergency communications.

In North America, the latest version of the Apple iPhone (iPhone 14) will connect to the emergency SOS number via satellite to text emergency services when beyond the signal from a mobile phone tower.

In the future these developments could provide a possible solution for the provision of mobile phone services in very remote areas of Australia.

NT Position:

6. Governments need to examine the ability of LEO satellite technology (and other emerging technologies) to provide a direct mobile phone service in the future and explore co-investment opportunities with companies who will make this technology available.

4. Department Contact

Office of Digital Government

Department of Corporate and Digital Development

Northern Territory Government

[redacted]