



29 September 2021

The Hon Luke Hartsuyker
Chair
2021 Regional Telecommunications Review
Department of Infrastructure, Transport, Regional Development and Communications
GPO Box 594
CANBERRA ACT 2601

Dear Mr Hartsuyker

Thank you for the opportunity to provide this submission to the *2021 Regional Telecommunications Review*.

About TCICA

TCICA is a membership-based alliance of local governing authorities from the Torres Strait, Cape York and Gulf region of Far North Queensland. 11 of Queensland's 17 Indigenous local governments are members of TCICA, representing one of the largest formal and regular gatherings of Indigenous Mayors across the country. We operate as a collaborative partnership to represent the common interests of local governing bodies in the region. Our members are committed to working together with the Queensland and Australian governments to help shape place-based responses and solutions to the challenges and opportunities in front of us.

Our region encompasses 13 per cent of the total land area of Queensland and is home to 0.6 per cent of Queensland's total population, or around 30,000 residents. More than 65 per cent of people living in our region are Aboriginal or Torres Strait Islander peoples, compared to just four per cent for the whole of Queensland. Our entire region is classified as Remote or Very Remote Australia and 71.1 per cent of people are in the most disadvantaged quintile for relative socio-economic disadvantage.

Good telecommunications and digital connectivity is fundamental to people's lives, underpinning the economic and social development of communities. Lack of digital and mobile connectivity has been an ongoing issue for businesses and communities across the entire region.

In an effort to address these issues, TCICA commissioned The Cairns Institute at James Cook University (JCU) to develop a telecommunications and digital connectivity strategy to outline a

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strategic direction to fix the digital divide across Cape, Torres and Gulf region. The *TCICA Regional Telecommunications and Digital Connectivity Final Report 2021* (referred hereafter as TCICA Digital Report 2021) found a range of key challenges such as infrastructure gaps, service quality and social infrastructure gaps, and limited digital skills, but that some progressive investments are being made into the region. The report concluded that a lack of regional-scale planning is leaving communities to resolve complex digital planning and service development issues. A copy of the report is attached.

This submission draws in a large part directly from this work to respond to the following questions in the Issues Paper.

Responses to questions

Question 1 part 1: What telecommunications services are required in regional Australia to meet current and future needs?

The TCICA Digital Report 2021 identified a number of telecommunications services that are needed in the Torres, Cape and Gulf region to meet current and future needs. Below are some key recommendations.

Improved mobile coverage

Mobile coverage in the TCICA region is mainly via Telstra providing 3G and 4G network coverage. There is no 5G service in the region. The majority of the region is not covered and is considered to be very remote, including key arterial roads and the fringes of townships.

Communities

The following tables provide a place-based summary of the desktop mapping of mobile/broadband coverage and infrastructure, supported by ground-level insights about infrastructure and services from interviews and focus groups.

Northern	LGA	Telstra mobile	Optus mobile	NBN broadband
1	Torres Strait Island Regional Council	C: non-uniform 3/4G coverage focused on townships	C: non-uniform 3G only coverage focused on townships	Z: satellite or legacy ADSL
2	Torres Shire Council	C: non-uniform 3/4G coverage focused on townships	C: non-uniform 3G only coverage focused on townships	Z: satellite or legacy ADSL
3	Northern Peninsula Area Regional Council	C: non-uniform 3/4G coverage focused on townships	C: non-uniform 3G only coverage focused on townships	Z: satellite or legacy ADSL



Central				
4	Mapoon Aboriginal Shire Council	B: uniform 3/4G in township, limited on arterials and elsewhere, 3G has greater footprint	D: no coverage	Z: satellite or legacy ADSL
5	Napranum Aboriginal Shire Council	B: uniform 3/4G in township, limited on arterials and elsewhere	B: uniform 3/4G in township, limited on arterials and elsewhere	Z: satellite or legacy ADSL
6	Weipa Town Authority	A: uniform 3/4 G coverage in all areas	A: uniform 3/4 G coverage in all areas	Y: fixed line in Nanum, Trunding, and Rocky Point. Satellite or legacy ADSL elsewhere
7	Lockhart River Aboriginal Shire Council	C: non-uniform 3G only coverage in township, limited on arterials and elsewhere, no 4G coverage	D: no coverage	Z: satellite or legacy ADSL
8	Aurukun Shire Council	C: non-uniform 3/4G coverage focused on townships	D: no coverage	Z: satellite or legacy ADSL

Southern				
9	Pormpuraaw Aboriginal Shire Council	B: uniform 3/4G in township, limited on arterials and elsewhere	D: no coverage	Z: satellite or legacy ADSL
10	Kowanyama Aboriginal Shire Council	B: uniform 3/4G in township, limited on arterials and elsewhere	D: no coverage	Z: satellite or legacy ADSL
11	Cook Shire Council	B: uniform 3/4G coverage in Cooktown, Coen, and other townships, limited on arterials and elsewhere	C: uniform 3G only coverage in Cooktown and surrounds, 4G in Cooktown centre, limited on arterials and elsewhere	Y: fixed line in Cooktown centre, fixed wireless in outskirts. Satellite or legacy ADSL elsewhere
12	Hope Vale Aboriginal Shire Council	B: uniform 3/4G in township, limited on arterials and elsewhere	C: non-uniform 3/4G only in township, limited on arterials and elsewhere	Z: satellite or legacy ADSL
13	Wujal Wujal Aboriginal Shire Council	C: non-uniform 3/4G across region	D: no coverage	Z: satellite or legacy ADSL
14	Mornington Shire Council	C: uniform 3/4G coverage in township, no coverage on 4/5ths of the main island	D: no coverage	Z: satellite or legacy ADSL



Roads and transport routes

According to data held by the Department of Infrastructure, Transport, Regional Development and Communications, there are more than 50 reported blackspot locations on the Peninsula Development Road (PDR) alone, and more than 200 reported across the whole region, including in the Torres Strait. With an ever increasing number of vehicles travelling up to the tip of Cape York each year, there is an urgent need for improved mobile phone coverage along the PDR and on community access roads to ensure the safety of tens of thousands of travellers.



Source: National map of reported mobile blackspots, accessed 20 May 2021.

NBN Fixed Service Enablement

NBN fixed services are not available in most parts of the TCICA region. With the prospect of dark fibre options, it may now prove practical for NBN Co to reassess the viability of enabling townships with fixed NBN technology options.

Investment in redundant fibre pathway

Investing in a redundant fibre pathway via Northern Australia to Gove/ Darwin would address the vulnerable and aged fibre optic cable that currently services Cape York Peninsula and the Torres Strait. The single fibre optic cable is vulnerable to flood and cyclone damage and multiple outages have occurred due to damage to the cable. There is no alternative backup if the cable is damaged and due to the remoteness of the region and susceptibility to natural disasters, repairs to the cable can be delayed with outages lasting weeks.



Brokerage of last mile connectivity

Connecting local consumers to independent advice and brokerage support for acquiring suitable and affordable last mile mobile and broadband solutions for the home, business, or organisation. This can be achieved through education about existing support, such as the Regional Tech Hub established in 2020. At a community level, brokerage could be undertaken by civic organisations, with appropriate education, support, and funding from the Queensland and Australian governments, and major service providers in the region.

Question 1 part 2: Are there any things regional communities and businesses need to do, but can't, on their existing services?

103 stakeholders from across the TCICA region participated in focus groups to explore and understand the nature of the digital connectivity issues experienced. Stakeholders included community members, council employees, businesses, and essential service providers such as health, police and education. The selection of responses below highlight just some of the challenges experienced by many communities, businesses and essential service providers due to existing digital services.

- Lack of options for online education and professional development. Staff have to leave community and travel to Cairns or Brisbane for training as they are unable to capitalise on online options due to lack of internet bandwidth capacity (both volume of data and speed) (Lockhart River, Mornington Island).
- Primary health centres are closed for half day to catch up on paperwork due to reliance on manual systems. Clinicians cannot get connectivity in the building and need to go outside to use satellite phones (Torres Shire).
- Many councils in the Cape York, Torres and Gulf region have staff based in Cairns so important tasks such as payroll are not hindered by poor connectivity.
- Significant work stresses such as inability to upload reporting data (e.g. for health), cannot access shared cloud base data sharing arrangements, cannot use virtual meeting platforms such as zoom/teams; cannot undertake online professional development, cannot link into teams based elsewhere for staff meetings. (Lockhart River).
- Unreliable service impacts on liveability and productivity outcomes. Difficult to attract professional and skilled staff to the region and this further perpetuates to fly-in-fly-out cycle. (Mornington Island).
- Internet is identified as slow to download and cannot do basic functions such as printing, e.g. print to Weipa office for one agency, emails are slow to open. (Mapoon).
- A range of difficulties of engaging with government online processes in individual or work situations. Examples were provided of the challenges at the individual level such as trying to use Centrelink portals on their mobile phones and going to Council to seek technical support as they do not have any other point of call. In work situations, difficulty of agencies to do government reporting, trying upload or download data, dropping out during uploading and size of documents creating challenges. (Pompuraaw).



Question 2. What changes in demand, barriers or challenges need to be addressed when it comes to telecommunications services in regional, rural and remote Australia?

Findings in the TCICA Digital Report 2021 suggest a whole range of barriers and challenges need to be addressed to improve telecommunications and connectivity in Indigenous communities in Far North Queensland, at least to the same standard as Queensland as a whole. These include:

- Unreliability of internet and mobile services, slow speeds, drop outs, short range of towers, and blackouts.
- Weather impacts on satellite services.
- Aging and/or poorly maintained infrastructure (fibre and copper networks).
- Multiple ad-hoc connectivity options with limited inter-operability.
- 2-speed internet service delivery (eg government vs community services).
- Last mile issues of connectivity.
- Lack of capacity of local communities to raise investment or co-contribution for infrastructure developments.
- Reliance on generators for telecommunications network energy supply.
- Affordability, especially when consumers rely on mobile phones for connectivity
- Few choices of retail service providers.
- Limited options for mobile/broadband bundles due to small number of providers.
- Long service times for connectivity installation and maintenance.
- Lack of on-ground technical expertise.
- Poor customer service and misinformation.
- Lack of consumer knowledge and confusion about options for connectivity.
- Limited localised support for capacity building and skills development.

Arguably, **the lack of equitable access to telecommunications is a human rights issue**, given the socioeconomic characteristics of Indigenous and remote communities in Far North Queensland and policy imperatives such as 'Closing the Gap', which now includes a target of achieving equal digital inclusion for Aboriginal and Torres Strait people by 2026 (Target 17).

Governments need to view the provision of telecommunications in line with other critical services in communities, such as roads, power, and water, and allocate funding accordingly.

Question 3. How have the Government's policies and programs affected telecommunications service outcomes in regional, rural and remote Australia?

Investments by the Government have helped to improve telecommunications services in the TCICA region and the **prioritisation of remote Indigenous communities** in several federal initiatives is welcome. Programs such as the Mobile Black Spot Program and the Regional Connectivity Program have helped to deliver new mobile base stations and other telecommunications infrastructure projects across the region.

TCICA also welcomes the Government's commitment to support communities to **improve the resilience of telecommunications networks** and services through initiatives such as the Strengthening Telecommunications Against Natural Disasters (STAND) program and other general funding schemes associated with disaster response and recovery.



There are perceptions across the region that the **Universal Service Guarantee (USG)** is not being met by service providers, and suggestions that the USG is not reflective of the needs and expectations of consumers. Despite Telstra's commitment to invest in repairing and replacing aspects of its network to reduce faults and improve reliability following the *2018 Regional Telecommunications Independent Review*, there is little evidence to suggest the company has done so in Cape York. Earlier this year the Lockhart River community experienced landline and internet outages for two weeks because of Telstra's inability to source replacement parts. Questions have to be asked about the serviceability of ageing infrastructure and **loopholes in the Telecommunications (Consumer Protection and Service Standards) Act 1999** that allow companies such as Telstra to escape responsibilities to provide equitable standards of service and reliability to remote regions.

Questions 4. How do service reliability issues impact on regional communities and businesses? How do outages, including natural disasters, impact on communities and businesses?

Service reliability issues and outages impact communities and businesses in many different ways, with the following examples reported during focus group research:

- Instances of health and emergencies and lack of connectivity e.g. lack of mobile reception has resulted in untimely response and death of a person; seeking help during domestic and family violence and during disasters. (NPARC).
- Police often experience dropouts and rely on satellite phones, which can have poor reception. "It can be scary when you can't call for back up". (Pormpuraaw).
- Frequent outages, unreliability, coverage and slow speeds impact on many aspects of economic and social life eg. could not use ATM at supermarket, bowser for service station, cannot process credit cards, cannot pay staff, unable to do online sales at arts centres, cannot do online tourism bookings, unable to fill online orders, difficulties accessing government services such as Centrelink, My GOV and telehealth (Lockhart River).
- In the Torres Shire, there are 120 National Disability Insurance Service clients whose only support is provided through telehealth. Due to poor connectivity therapy sessions are often missed with clients missing 3-4 sessions due to connectivity challenges. If you have booked into and cannot get on you are still required to pay for the session.
- When systems are down, they stay down for long periods as it takes time to bring crews to remote communities. Infrastructure has been variously damaged by fire and flooding events, causing major outages for long periods of time.

Outages in the region are common. The Western Cape region has suffered 13 major outages in the past 12 years, for up to five days at a time. This year alone, Lockhart River has experienced three outages. An outage in February lasted nine days and was caused by intermittent power failures at a solar powered site. An outage in April lasted four days due to heavy cloud cover. In 2018, the community lost phone and internet for six weeks after lightning struck a Telstra tower.

An outage in Pormpuraaw lasted five days. Pormpuraaw Aboriginal Shire Council had no option but to give elderly people \$200 each as they could not use cards or get cash from an ATM. This effectively breached local government regulations and created audit problems but Council felt it had no other choice but to support community in this way.



Below is the outage log from the Weipa Town Authority Local Disaster Management Group showing a history of outages over 12 years. Quite a number of these outages occurred during the cyclone season, when cyclones had formed or during the development of tropical lows.

1. July 4 - 5 2009 - Unknown reason
2. Feb 2012 - Mini Cyclone unknown reason
3. Sept 2013 - Unknown reason
4. Jan 24 - 29 2013 - Ex TC Oswald damaged fibre at Rockhampton
5. Feb 7 - 8 2014 - Damage from Ex TC Fletcher 40km South of Moorehead River
6. Feb 9 - 10 2014 - Damage from Ex TC Fletcher
7. July 21 - 22 2019 - Exposed cable from erosion and burnt through in fires near Coen
8. Sept 29 2019 - Telstra only contacted Rio Tinto and not the WDMG and advised them that there were IT network repairs all over the Cape.
9. Feb 19 2020 - Cut fibre optic near Ingham and IT issue at Freshwater
10. Jan 27 - 28 2021 - Catastrophic failure at Batavia booster set.

Natural disasters like cyclones and floods, as well as bushfires, impact the region frequently. As noted earlier, **a disruption to one essential service can trigger failures in dependant services**. For example, a damaged powerline can cause a power outage at a mobile telecommunications tower, which can then cause an outage in mobile telecommunications coverage. This then has a flow on effect causing outages to fuel stations, ATMs and EFTPOS services. These cascading failures cause significant difficulty to remote communities.

Importantly, telecommunications outages can prevent communities from receiving timely information, advice or warnings about an oncoming disaster or other threat. **Outages also prevent communities from making informed decisions** about how best to ensure their own safety, or the safety of those in their care (e.g. when to evacuate).

Question 5. How might such impacts be addressed to ensure greater reliability? How can the network resilience be addressed in regional areas?

As noted in the response to question 1, **investing in a redundant fibre pathway** would help to address the vulnerable and aged fibre optic cable that currently services Cape York Peninsula and the Torres Strait. Investing in a redundant fibre pathway will create a safety net so that if damage occurs to the primary fibre cable, services to the region will not be interrupted. Other infrastructure solutions are also discussed at question 1.

Developing on the ground technical capacity will help to address issues at the individual, business and agency level by minimising down time. Local expertise will also support the **development of innovative solutions** to build resilience and reliability.

Question 6. How did the use of digital services change for regional consumers and businesses during the response to the COVID-19 pandemic? What insights for future service delivery does this provide?

The TCICA Digital Report 2021 identifies several examples of the impact on consumers and businesses due to COVID-19, rather than a change in use of digital services in a region where digital take-up is limited due to infrastructure, accessibility, affordability, and capability issues.



Instead, **major deficiencies** in reliable connectivity **impeded the ability to support important social services** like the delivery of remote education and telehealth.

Many schools were unable to move to online learning because of connectivity issues, and a lack of access by students to computers and laptops. Instead, schools prepared resource packs to be sent home or collected, or delivered by teachers. In a number of the communities it was reported that the work was not completed and so there were periods where no school-based learning took place. Schools and parents also indicated concerns as to how the National Assessment Program – Literacy and Numeracy (NAPLAN) would be delivered online.

Other barriers communities continue to face include not being able to comply with COVID requirements, for example the **inability to move to online transactions**. Businesses and other organisations also **struggle to comply with digital COVID check in laws**, forcing them to hand-record details which can have a significant business cost and create data privacy issues.

Question 7. What can be done to improve the access and affordability of telecommunications services in regional, rural and remote Indigenous communities?

The TCICA Digital Report 2021 identifies a major issue impacting the access and affordability of telecommunications is the **availability of data plans** that meet the needs of regional consumers, most of whom experience significant socio-economic disadvantage. The **cost of data plans** is the same as for metropolitan areas, imposing a disproportionate impact on household budgets, while at the same time the level of service is lower.

Focus group participants also reported additional key affordability issues, such as:

- Fewer choices of retail services providers (for mobile in particular) to provide competition.
- Lack of affordability of satellite service plans for individuals, services and businesses as many have identified that they cannot afford SkyMuster Plus or the business-grade plans.
- Consumers in some areas are charged international mobile roaming rates (for example, those in the outer islands of the Torres Strait).
- Limited options for mobile/broadband bundles due to small number of providers.

There is a need for the design of different service plans to match the demand patterns of remote consumers, with **more choice options** for plans, and different data and cost structures suited to remote locations and low income families.

Question 8. How can investment in telecommunications infrastructure work with other programs and policies to encourage economic development in regional Australia?

Ongoing investment in telecommunications infrastructure is fundamental to increasing economic opportunities for remote communities in the TCICA region. Digital innovation goes hand in hand with Federal Government initiatives including the National Roadmap for Indigenous Skills, Jobs and Wealth Creation, and programs such as the Indigenous Tourism Fund. For example, the Cape, Torres and Gulf Economic Opportunities Plan identifies wifi availability across the region as a key enabler of tourism, not only as a way for the tourism industry to connect with potential tourists and showcase Indigenous culture, but for visitors to



share their experiences with the world through social media. Further, the success of business development and support programs and corporate governance training and education programs, such as those offered by Indigenous Business Australia and the Office of the Registrar of Indigenous Corporations respectively will be underpinned by reliable access to digital technologies. Connectivity is also critical to support small businesses and other commercial enterprises to leverage the benefits of e-commerce and to engage equitably in the digital economy.

Question 9. What role could innovation, including new models, alternative investors or new ways of doing business, play to encourage investment in regional telecommunications infrastructure. What are the barriers?

The TCICA Digital Report 2021 provides commentary on several models for infrastructure provision and service delivery that improve competitiveness and provide public good outcomes, such as:

- Regional organisations like TCICA as internet service providers or a shared services model that leverages the co-placement of telecommunications infrastructure with providers such as QCN Fibre.
- Establishment of regionally-based social enterprises in information communication technologies and internet service provision.
- The attraction of international, domestic and philanthropic investors looking to fund digital infrastructure to meet corporate social responsibility goals.

The primary barrier is the lack of strategic investment planning and the funding to support it.

Question 10. To what extent will new technology enable significant change to the delivery of telecommunications services in regional Australia over the next 5-10 years? Are there any barriers to accessing these technologies?

New technologies will enable significant change. Service providers such as AirBridge Networks are already working with remote communities across the TCICA region to improve connectivity across some of the most remote parts of Cape York and the Torres Strait through long range point to point and multi-modal communication technologies.

The key barrier to accessing these technologies is lack of awareness of the technology solutions available, and, as noted above, the lack of a regional strategic investment plan.

Question 11. How can Government better support the rapid rollout of and investment in new telecommunications solutions in regional areas?

The Government should **partner with regional organisations** such as TCICA to **develop and implement regional strategic investment plans**. Without direct funding and support from Government, communities will continue to be left on their own to address connectivity issues.



Question 12. How can different levels of government, the telecommunications industry and regional communities better co-ordinate their efforts to improve telecommunication in regional Australia?

The establishment of **regional telecommunications infrastructure planning and coordination committees** that bring together governments, industry and communities would enable region-wide planning, while taking into account locally specific needs. Regional Development Australia committees could play a formal facilitation role in bringing partners together. Economies of scale can be gained through joint efforts in infrastructure development, for example by leveraging investments in roads and energy projects.

Question 13. What changes to Government investment programs are required to ensure they continue to be effective in delivering improved telecommunications?

New investments should continue to **focus on community-led approaches** to addressing telecommunications and digital connectivity issues, as opposed to meeting critical infrastructure needs with an industry-driven approach based on business and profit models. Community-led Strategic Regional Investment Plans should be developed to provide direction to Government decision-makers.

Question 14. How can regional consumers be better supported to identify, choose and use the best connectivity options for their circumstances, as well as to understand and use their consumer rights?

The **Regional Tech Hub** is an important initiative to help consumers navigate often confusing phone and internet options, and technical issues. Additional support for the Regional Tech Hub would help the hub reach more consumers across rural, regional and remote Australia, including Indigenous communities in Cape York, the Torres Strait and Gulf region.

Question 15. To what extent is public information on connectivity options, including predictive coverage data and speeds, sufficient to help regional customers make informed decisions? What other information is needed?

The general lack of availability of options means this public information has limited benefit to people in remote communities.

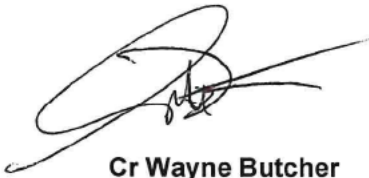
Question 16. What other matters should the Committee consider in its review and why are they important?

As noted in the response to question 3, the Committee should consider making recommendations around strengthening penalty provisions in the *Telecommunications (Consumer Protection and Service Standards) Act 1999* and Customer Service Guarantee as it relates to timelines for repairing faults or problems. As evidenced throughout this submission, Telstra appears to be regularly breaching its obligations yet it is not compelled to respond to or address the issues.



Thank you again for the opportunity to provide this submission to the *2021 Regional Telecommunications Review*. Should the Committee require any clarification, please contact TCICA's Executive Officer Melinda Eades on [REDACTED] or by email to [REDACTED]

Yours sincerely



Cr Wayne Butcher
Chair

Encl.

