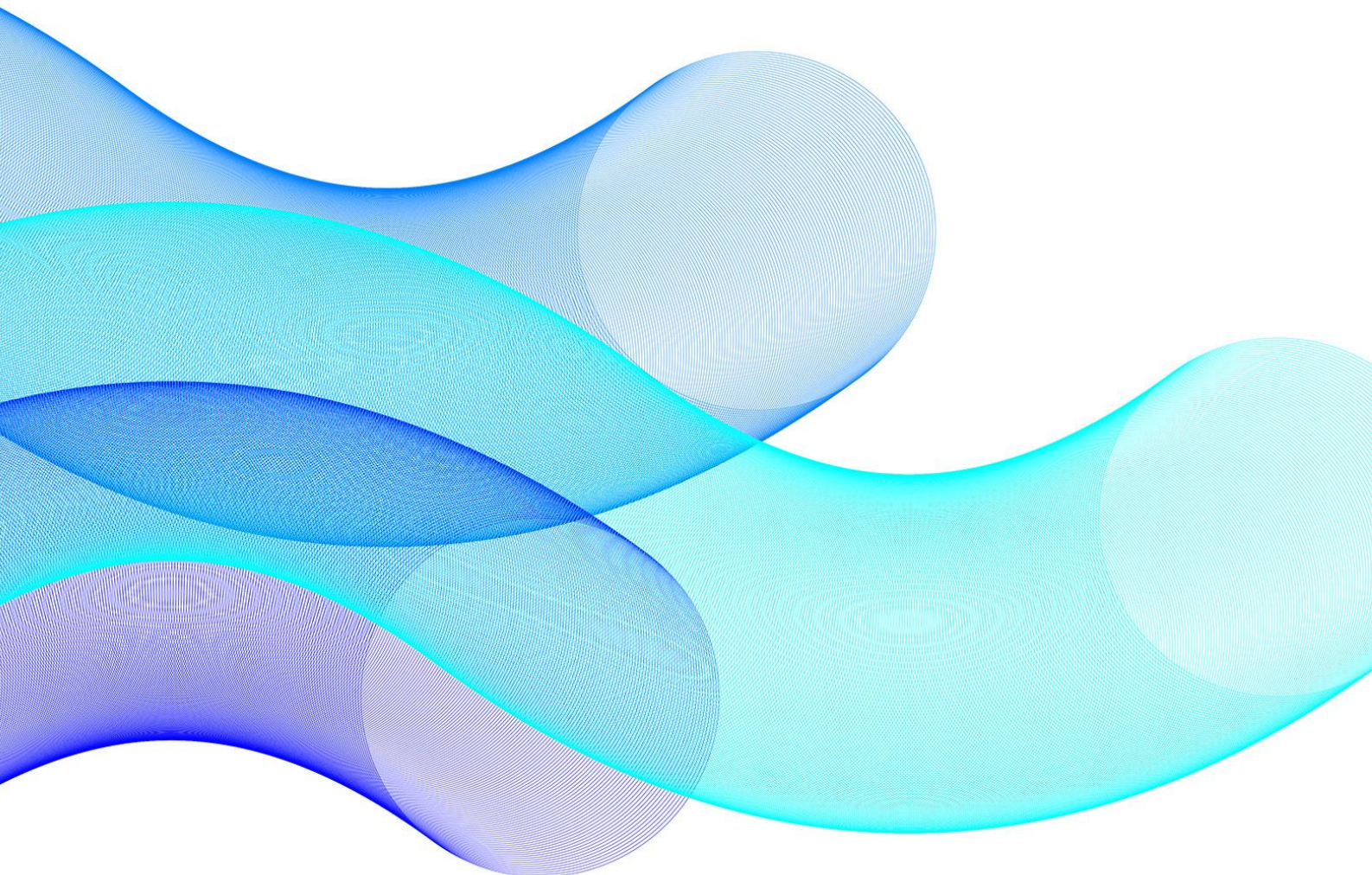

Vocus submission

First Nations Digital Inclusion Program Draft Guideline Consultation

December 2024



About Vocus

Vocus, Australia's specialist fibre and network solutions provider, owns and operates c. 27,000km of secure, high-capacity fibre connecting all Australian mainland capitals with New Zealand, Asia, and the USA. Vocus' network includes the Australia Singapore Cable (ASC) from Perth to Singapore and the North West Cable System (NWCS) from Darwin to Port Hedland, which together form the combined Darwin-Jakarta-Singapore Cable system (DJSC) with landing points in Darwin, Port Hedland, Perth, Christmas Island, Indonesia and Singapore.

Vocus' national fibre backbone also provides the foundational infrastructure for Starlink's Low Earth Orbit (LEO) satellite service – enabling revolutionary high-speed connectivity to 100% of Australia's landmass, no matter how remote. Vocus owns a portfolio of well recognised brands catering to enterprise, government, wholesale, small business and residential customers across Australia.

As we deploy this new digital infrastructure, Vocus has a community investment strategy focussed on areas where we can make a difference with our partners – the #1 goal of Vocus' First Nations Commitment is to 'partner to strengthen digital and social connectivity with First Nations communities'. For more information, visit vocus.com.au.

Executive Summary

Vocus welcomes the opportunity to respond to the Department of Infrastructure, Transport, Regional Development, Communications and the Arts (the Department) draft grant opportunity guidelines for its First Nations Digital Inclusion programs.

Overall, Vocus supports the draft grant guidelines and sees it is important to identify which remote and very remote First Nations communities are eligible. This will help ensure a more targeted approach across industry in achieving the aims of the First Nations overall Digital Inclusion programs.

It also commends the intended outcomes of the grant opportunity by highlighting the needs for a technology agnostic approach, to include services like low earth orbit satellites and that "proposed solutions must deliver new or improved connectivity (not duplicate) existing government" and "would deliver a demonstrable and substantive improvement in service quality, coverage, affordability, reliability and/or speed compared to the existing services."

As stated in Vocus' submission to the First Nations Digital Inclusion Roadmap, efforts to close the gap should focus on three measures: access, affordability and ability.

Services and deliverables

For eligible communities that have NO existing services as well as those WITH existing services

These guidelines, along with any future focus on regional telecommunication investment reform such as the Universal Services Guarantee (USG) and the Regional Broadband Scheme (RBS) should focus on technology neutrality, contestability, affordability, reliability, and eligibility. Guidelines should look at:

1. **Technology neutrality:** Should not mandate any technology, rather focus on outcomes – namely a reliable voice service (within the ITU's recommended maximum latency of 150ms), and a broadband service consistent with the Statutory Infrastructure Provider (SIP) requirement of speeds of the least 25/5Mbps.
2. **Contestability:** Any provider capable of offering the minimum service standards described above should be able to access grants and/ or subsidies
3. **Affordability:** Should be mindful of the competitive options available and avoid price 'caps' as a condition of access to subsidies – if subsidies are made available to end-users (e.g., a voucher-style arrangement) rather than service providers, the user can then choose to put that subsidy towards a more affordable service, or choose to pay the 'gap' to purchase a higher-priced service.
4. **Reliability:** Should consider minimum reliability standards for voice and broadband services.
5. **Eligibility:** Grants and subsidised services should only be available to premises that are not 'competitively served' – meaning they lack access to multiple competitive options for both voice and broadband.

For example, LEO-backed community Wi-Fi networks should be established with a minimum throughput (i.e. speed and download quotas) based on the number of people in the community, with central management portal controlled

by community leaders. Aligned to the key principle of First Nations representation, this management portal would allow for the local community to manage times of access (i.e. services switched off by a certain time at night) and content controls (i.e. blocking of certain content types) to minimise the risk of harm to community members.

This model would also enable voice services using Wi-Fi calling, a standard feature of all three Mobile Network Operators (MNOs) and automatically enabled on standard smartphones. Wi-Fi calling via a local Wi-Fi network with LEO backhaul would provide the technological equivalent of community-wide mobile coverage – all users would require is a standard smartphone and SIM (noting that pre-paid and post-paid products from all MNOs include unlimited national voice calls).

While Vocus supports the efforts of NBN deploying Sky Muster-based community Wi-Fi networks, Wi-Fi calling via Sky Muster does not meet the latency requirements of reliable voice services (with a round-trip time of ~600ms, versus a <150ms standard for voice services). For this reason, traditional geosynchronous satellite services will not help to close the gap when it comes to voice. In contrast, LEO satellites are capable of delivering voice services well within the recommended latency limits, along with far higher data speeds and capacities.

LEO-backed community Wi-Fi networks should not be deployed as a 'one size fits all' solution. Aligned to the principle of place-based approaches, they should be customised to meet the specific needs of the community. Larger communities may require mesh Wi-Fi networks with multiple 'bonded' Starlink terminals to provide a broader coverage range and sufficient throughput. Some may even require Starlink terminals on individual premises, which could still be centrally managed by a service provider as part of a community network.

First Nations Communities needs and support

While telecommunications operators are well positioned to address the 'access' and 'affordability' measures of digital inclusion, 'ability' is an area where telcos can't do it alone. Vocus agrees with the Department that industry will need to work in partnership with local communities and organisations with a local presence to help uplift the digital literacy of First Nations people.

Engagement between carriers and First Nations partners/technology providers – such as Kali-Tech Aboriginal Corporation, a partner of Vocus – helps foster support and provide communities with a sense of ownership of their connectivity arrangements. For example, Vocus and Kali-Tech recently announced the Rapid Satellite and Edge Compute Pod, built by Kali-Tech, which is a custom-designed shipping container pre-fitted with multiple bonded Vocus Satellite – Starlink terminals and edge compute hardware. The Pod is self-contained and constructed in a warehouse then shipped directly to remote sites, ready to be switched on and used straightaway.

A practical measure which could be implemented by industry to improve 'ability' would be greater sharing of local resources, including partnerships with not-for-profit operators like Kali-Tech, to build, maintain, and operate telecoms infrastructure in community. For example, programs by NBN Co and Telstra to establish 'digital champions' – trained local community members with technical skills to fix technology issues – could be leveraged and contributed to by the broader industry. This would give local communities greater control over their network infrastructure, upskill community members, and simultaneously reduce requirements on operators' field staff to perform fly-in, fly-out maintenance work in remote areas.

Aligned to the principle of 'moving from Closing the Gap to innovation and excellence', uplifting the digital skills of local community members will provide the foundation for First Nations communities and people to move beyond basic connectivity towards greater levels of digital literacy and capability.

Another practical measure would be the establishment of a shared database of community organisations seeking to work with telcos to uplift digital ability. There are many community organisations doing outstanding work in the regard – from the provision of refurbished computer equipment, to online education and training, and more – which are often community-based and have local contacts and resources available. Telcos would benefit from increased visibility of, and cooperation with, such organisations to work in partnership to improve the digital literacy and ability of First Nations communities and people.

Co-funding contributions

Connectivity in regional and remote First Nations communities is not a problem the market should be left to solve, and affordability is part of this equation. As such, Vocus welcomes the Departments draft grant guidelines that co-funding is not a mandatory requirement. Community Wi-Fi networks should be free for community members and entirely Government-subsidised, with consideration given to 'premium' user-pays services being made available to those willing to pay for higher download quotas or faster speeds. But everybody should have access to a basic

¹ [Vocus fast tracks LEO satellite service deployment](#)

minimum standard. Noting the FNDIAG report's finding that First Nations consumer preferences tend towards pre-paid services rather than monthly (post-paid) plans, the introduction of free community Wi-Fi would help to alleviate the price premium consumers pay for pre-paid mobile data. Pre-paid and post-paid services include unlimited national calls, so with free Wi-Fi available, community members would be able to use operator-based Wi-Fi calling for voice services at no additional cost – and would remove (or reduce) the need to purchase mobile data. Alternative app-based call options (i.e. WhatsApp, Skype, Messenger, etc.) are also available and can be used without a SIM or pre-paid credit. An analysis of Telstra plans shows the price per Gigabyte (GB) difference between pre-paid and post-paid services (noting that Telstra has the largest mobile network in regional and remote areas).

The amount of data capacity available for a community should be set to a standard allowance per person. For example, a community with 50 residents and a business-grade Starlink service with 1,000GB of priority data would provide 20GB of priority data per person, per month, at a cost of \$0.37 per GB of data (noting 4 that this only refers to priority data – residents would then have access to unlimited standard data above this quota). A 2,000GB service would provide 40GB of priority data per person, per month, again at a cost of \$0.37 per GB. While Vocus proposes that these costs should be borne by the Government and provided free to residents, the price per GB remains more affordable than the above pre-paid and post-paid mobile plans (bar one). Starlink's business-grade LEO services offer download speeds of 40-220Mbps and uploads of 8-25Mbps, with latency in the range of 25-60ms. A high-performance business-grade antenna capable of serving a community costs \$3,740 – around the same price as two or three premium smartphones.

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