

Australian Government National Indigenous Australians Agency



Indigenous Digital Inclusion Plan

Discussion paper - September 2021

Working with Aboriginal and Torres Strait Islander peoples

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Introduction

This discussion paper provides a basis for stakeholder consultations supporting development of the Australian Government's Indigenous Digital Inclusion Plan (the Plan). It provides an overview of issues relating to digital inclusion for Indigenous Australians, including identification of barriers to digital inclusion and the role of existing programs and services.

Digital inclusion is about ensuring all Australians are able to access information and communications technology to benefit from the resulting socio-economic opportunities. In 2018, the Regional Telecommunications Independent Review Committee presented the *2018 Regional Telecommunications Review – Getting it right out there* (the Review). For Indigenous Australians, the report highlighted the need for those living in remote communities to have better access to phone and Internet services. Recommendation 8 called for a targeted Indigenous Digital Inclusion Program, with a focus on access, affordability and digital ability, to be developed in partnership with Indigenous communities.

In response to the Review, the Australian Government agreed in-principle to Recommendation 8, and committed to develop an Indigenous Digital Inclusion Plan. The National Indigenous Australians Agency (NIAA) is developing the Plan, with support from the Department of Infrastructure, Transport, Regional Development and Communications (DITRDC). The Australian Government will work with relevant members of the Coalition of Peaks and other Aboriginal and Torres Strait Islander organisations and businesses to develop the Plan.

Scope of the Plan

The Plan will focus on three elements of digital inclusion: access, affordability and digital ability. It will also consider the need for better data to measure improvements in Indigenous digital inclusion.

As the Plan is a response to the 2018 Regional Telecommunications Review it will focus on the needs of Indigenous Australians living in regional and remote areas. However, comments and evidence regarding Indigenous digital inclusion in urban areas are also welcome to provide understanding and comparative perspective to issues.

The Plan will take a broad approach to digital access, considering access to mobile phone, Internet, landline telephone and public telephone services, as well as devices such as mobile phones, tablets and computers. Whilst related, Indigenous broadcasting will not be addressed in the Plan as it does not directly account for



low levels of digital inclusion in remote Indigenous communities. However, the Indigenous broadcasting sector may have a role in supporting improvements in Indigenous digital inclusion.

Structure of the discussion paper

The discussion paper has four sections:

- Access
- Affordability
- Digital ability
- Data on Indigenous digital inclusion

Each section explores known issues and includes questions prompting stakeholders to provide further information on the issue or related issues. The questions are intended as an aid to prompt and guide discussion and submissions to the discussion paper.

Responding to the discussion paper

The discussion paper provides background to support the consultations including a series of virtual roundtable workshops the NIAA will host in October 2021.

The NIAA will also accept written submissions on the discussion paper. Further information about providing a written submission is available at www.niaa.gov.au. Submissions can focus on any or all of the outlined areas of digital inclusion, and do not need to address the prompting questions. Submissions will be considered during the development of the Plan.

Stakeholders are also invited to meet with the Digital Inclusion team to discuss issues raised in the discussion paper.

Contact details: For further information about the virtual roundtable workshops, submissions or to arrange a discussion, please email <u>digitalinclusion@niaa.gov.au</u>

What is digital inclusion?

Advances in digital technology have revolutionised the way Australians live, work, study and interact with each other. The Australian Government is increasingly delivering government services on digital platforms.

Unfortunately, not all Australians have the same opportunities to use digital technologies. Digital inclusion is about ensuring all Australians are able to access information and communications technology to benefit from the resulting socio-economic opportunities.

The discussion paper is structured around the three elements of digital inclusion identified in the Australian Digital Inclusion Index (ADII). The ADII is a key source of data measuring digital inclusion across Australia.¹ Using data collected by Roy Morgan, the ADII has been developed through a collaborative partnership between RMIT, Swinburne University of Technology and Telstra. There are limitations to the ADII in relation to Indigenous Australians related to sample size and limited data collection in remote Indigenous communities.

The ADII's areas of digital inclusion

1. **Access** – includes access to the internet, technology and data

2. **Affordability** – includes expenditure on internet access, devices and data allowance

3. **Digital ability** – includes attitudes, basic skills, and types of activities undertaken.

Indigenous digital inclusion

Digital connectivity is central to participating in the economy and society. Digital inclusion has the potential to support and improve quality of life by:^{2, 3, 4, 5}

- supporting business and enterprise development;
- enabling opportunities for learning and skills development;
- facilitating more efficient delivery and uptake of critical services, including healthcare; and
- supporting new ways to strengthen cultural identity, traditions and activities and enhance connections to community and country.



Figure 1: 2020 ADII digital inclusion gap between Indigenous Australians and the national average. Maximum 100 points.⁶

Indigenous Australians have a relatively low level of digital inclusion – 7.9 points below the national score (Figure 1). The digital inclusion gap between Indigenous Australians and non-Indigenous Australians is evident across the three elements of access, affordability and digital ability.⁷

Role of governments

Each level of government plays a role in supporting improvements in digital inclusion for Indigenous Australians.

Australian Government	Under the Australian Constitution, telecommunications policy and program delivery is primarily a Commonwealth responsibility. The Universal Service Guarantee (USG), incorporating the Universal Service Obligation (USO), ensures universal access to broadband and voice services. The USO ensures reasonable access to fixed voice and payphone services. The USG ensures access to broadband services.
	The Australian Government continues to invest in the construction of telecommunications infrastructure, including investment in the National Broadband Network (NBN) and a range of grant programs.
	The Australian Government also invests in activities to make telecommunications services more affordable and to improve the ability of all Australians to develop their digital ability.
	The Australian Government is increasingly delivering key services online, including those relating to employment, health, social services, taxation and access to government payments, such as childcare. It is important that government online service delivery mechanisms are designed for ease of access and functionality to support inclusion of all Australians.
	Released in May 2021, the Digital Economy Strategy sets out how Australia will secure its future as a modern and leading digital economy and society by 2030.
	The Australian Government has also established the eSafety Commissioner as Australia's national independent regulator for online safety. Its core objective is to minimise harm to Australians online.
	The Australian Cyber Security Centre (ACSC) leads the Australian Government's response to cyber security. It provides advice and information to all Australians to protect against cyber threats.
State and territory governments	State and territory governments have collectively recognised that many Australians are unable to take advantage of the opportunities that digital technology provides. As such, they are delivering programs to support equitable access to the benefits of digital transformation and services within their jurisdictions, including initiatives which relate to the improvement of digital ability, access and affordability, such as provision of public Wi-Fi.
	Recognising the need for a national approach to enhance capability, service and protocol issues relating to digital technology, the Data and Digital Ministers' Meeting (DDMM) was announced in 2020 as a regular, ongoing Ministers meeting under the new federal relations architecture. Previously known as the Australian Data and Digital Council, the DDMM is led by the Commonwealth and includes ministerial representation from all Australian states and territories.
	The DDMM will continue to focus on improving outcomes for Australians by driving cross-government collaboration on data and digital transformation to drive smarter service delivery and improved policy outcomes.
Local governments	In some cases local government organisations provide digital infrastructure in response to community needs and demand. These can include projects that provide publicly accessible computers and free Wi-Fi hotspots, as well as delivering digital programs to local community members. Some local councils have developed their own digital strategies.

Non-government organisations also play a key role in supporting digital inclusion, principally focused on improving digital ability, including advocacy, cyber-safety and digital literacy. Depending upon the project, these may be universal services or be targeted to Indigenous Australians.

Examples of government and non-government initiatives relevant to the three areas of digital inclusion are listed in <u>Appendix A</u>.

National Agreement on Closing the Gap

The National Agreement on Closing the Gap has been developed through a partnership between Australian governments (Commonwealth, state and territory and local governments) and the Coalition of Aboriginal and Torres Strait Islander Peak Organisations.

The National Agreement on Closing the Gap includes four Priority Reforms, directly informed by Aboriginal and Torres Strait Islander people. These reforms are central to the National Agreement and will change the way governments work with Aboriginal and Torres Strait Islander people and communities.

In particular, Priority Reform 4 aims for Aboriginal and Torres Strait Islander people to have access to, and the capability to use, locally-relevant data and information to set and monitor the implementation of efforts to close the gap, their priorities and drive their own development.

The National Agreement on Closing the Gap includes digital inclusion as part of the Access to Information target (Target 17) – by 2026, Aboriginal and Torres Strait Islander people have equal levels of digital inclusion.

The outcome of the *Access to Information* target is for Aboriginal and Torres Strait Islander people to have access to information and services enabling participation in informed decision-making regarding their own lives.

The Minister for Communications, Urban Infrastructure, Cities and the Arts, the Hon Paul Fletcher MP, is responsible for the Commonwealth's role in achieving the target.

ACCESS



- How and where telecommunications services are accessed and the reliability of these services
- Type of devices and access mechanisms used
- Access to sufficient data allowances

Australian Digital Inclusion Index - access score



Figure 2: 2020 ADII access gap between Indigenous Australians and the national average. Maximum 100 points.⁸

The 2016 Census identified that 75.3 per cent of Aboriginal and Torres Strait Islander households are accessing the Internet, compared with 85.8 per cent of all Australians – this level of access diminishes with geographical remoteness.⁹ Whilst telecommunications coverage and digital connectivity has been improving over the past decade, the ADII access gap between Indigenous Australians and the national average has been widening (5.2 points in 2018; 7.3 points in 2019; and 7.8 points in 2020).¹⁰

Network coverage

Significant improvements in telecommunications coverage and digital connectivity throughout Australia over the last ten years, have been driven by:

- fixed line National Broadband Network (NBN) roll-out, which has provided connections to around 92 per cent of
 premises across Australia including around 73 per cent of premises outside major urban areas; ¹¹
- roll-out of NBN fixed wireless and Sky Muster satellite services mainly in rural and remote areas, although also in peri-urban areas^a; and
- expansion of Asynchronous Data Subscriber Line (ADSL) and mobile broadband services.

National Broadband Network

The NBN is a high speed broadband network constructed by the Australian Government and owned by NBN Co. NBN Co is the default provider of fixed broadband services in Australia. The NBN includes a mix of fixed line, fixed wireless and satellite technologies. Fixed wireless and satellite, via the Sky Muster satellite, are used in difficult-to-serve locations including regional and remote Australia.

Mobile phone

Mobile carriers claim to provide mobile coverage to more than 99 per cent of Australians – however, this represents around 30 per cent of the Australian land mass.^{12,13} Smaller markets in regional and remote areas make these areas less commercially attractive to mobile carriers. In response, the Australian Government provides incentives through co-investment programs for mobile carriers and infrastructure providers to expand mobile coverage in these areas, including the Mobile Black Spot Program, the Regional Connectivity Program and Peri-Urban Mobile Program. The Australian Government is also working with industry to secure an effective commercial rollout of 5G networks.

Fixed voice and payphone services

Under the USO, Telstra is required to provide voice services on reasonable request to premises in Australia. In urban areas, Telstra generally provides voice services over NBN Co's fixed line network. In areas outside NBN Co's fixed line footprint, services continue to be delivered through the Telstra copper network or radio systems such as High Capacity Radio Concentrator (HCRC) and Next G Wireless Link.

Where a premises does not have an existing connection, Telstra charges consumers a proportion of the costs associated with extension to the existing network, such as some of the costs associated with cabling. These additional costs may exceed the financial means of households or whole communities in remote areas.¹⁴ Further, much of this infrastructure is ageing, and some regional stakeholders have raised issues regarding repairs and maintenance.¹⁵

There is a need to identify cost-effective alternative approaches for the delivery of fixed voice services in rural and remote Australia. Announced in August 2020, the Australian Government's \$2 million Alternative Voice Services Trials Program is funding organisations to trial alternative voice service technologies across regional and remote Australia.

Public payphones provided by Telstra under USO arrangements continue to have an important role to play in many remote Indigenous communities. Given strong uptake of mobile phone services, the Australian Government is examining the ongoing need for payphone services. However, the Australian Government has indicated Telstra payphones that service Indigenous communities and those outside mobile coverage would generally be quarantined.¹⁶ Beyond USO payphones provided by Telstra, the Australian Government maintains a network of up to 245 community payphones and 301 Wi-Fi satellite phones in around 460 remote Indigenous communities through the Remote Indigenous Community Telecommunications activity.

^a Major urban areas include Sydney, Melbourne, Brisbane, Perth, Adelaide, Darwin, Canberra, Hobart, NSW Central Coast, Newcastle, Gold Coast/Tweed Heads, Wollongong, Geelong, Cairns, Sunshine Coast and Townsville.

Other networks

Particular regions in Australia have developed localised digital connectivity networks to meet community needs. Examples of this include:

- The Cape York Digital Network (CYDN) in Queensland that has enabled remote Cape York communities' access to online computer services and internet connectivity.¹⁷
- The Ngaanyatjarra Lands Telecommunications project in Western Australia is a fibre optic network connecting six remote desert communities and includes a broadband satellite solution to connect the remaining six outer communities and community-wide Wi-Fi in all sites.¹⁸

Regional and remote challenges

Despite continued improvements in telecommunications services, underservicing of regional and remote areas is an ongoing issue. Commercially focused private carriers are reluctant to invest in telecommunications infrastructure in rural and remote locations as lower population density and higher capital and operational costs reduce financial returns.¹⁹

The 2021 Regional Telecommunications Independent Review Committee has released an issues paper, which seeks to examine the adequacy of telecommunications for Indigenous Australians in regional, rural and remote areas.²⁰

The Australian Government's USG provides baseline access to fixed line broadband and voice services. In addition, the Australian Government's Regional Connectivity Program has been designed to target investment in place-based telecommunications infrastructure projects that respond to local priorities and maximise economic opportunities and social benefits for communities and businesses in regional, rural and remote Australia. Funded solutions complement the NBN and the Mobile Black Spot Program by delivering new and improved access to broadband and mobile connectivity in areas of high economic and social value outside the NBN fixed line footprint.

Other challenges include:

- Fixed wireless and satellite technologies provided in some remote areas tend to be slower than fixed line services provided in more densely populated areas.²¹
- Limited choice of telecommunications providers.²²
- Reliability of telecommunications in rural and remote locations with many installations experiencing power supply issues.^{23, 24}
- Concerns with access to timely repair and maintenance of services in remote communities compared with urban centres.²⁵

Service delivery models

NBN Sky Muster to the premises

Connecting to the NBN satellite service requires a fixed satellite dish and an account tied to a particular premises. Satellite connections also require installation of an NBN supplied modem.

The 2018 Regional Telecommunications Review identified consumer concerns about the fixed data allowances available through the NBN Sky Muster service. When data limits are reached speeds are shaped, limiting certain online activities.²⁶ As a result of consumer concerns, NBN Co created the Sky Muster Plus product. Sky Muster Plus provides broadband plans that allow up to 300 GB of data download and unmetered access for most applications, except video streaming and Virtual Private Networks, with some top ups possible. This has enabled consumers to have ongoing access to online services such as banking and weather information after their data allowance is exhausted. During the COVID-19 pandemic, NBN Co released new temporary measures to support increased data for standard NBN satellite services in regional and remote Australia.

In some cases, Indigenous Australians in remote communities are choosing not to enter into satellite services, preferring pre-paid mobile broadband when mobile coverage is available due to consumer preference for pre-paid billing and

difficulties associated with internet connection.²⁷ Additionally, at present, Australia's largest telecommunications retailers do not sell residential NBN Sky Muster services.

Stakeholders have also raised concerns that weather conditions can make satellite delivery unreliable due to rain fade and loss of signal.²⁸

Mobile-only use

Indigenous Australians are more likely to exclusively use a mobile device to access the Internet: 35 per cent of Indigenous Australians are mobile-only compared to 19.9 per cent of the general population.²⁹ Research indicates Indigenous Australians may have a wide range of reasons for choosing mobile-only use including:^{30, 31, 32, 33,34}

- a preference for pre-paid billing;
- high cost of fixed line services and their absence in remote communities;
- sharing of devices among family members; and
- mobility of residents.

For people frequently travelling long distances in remote contexts, a mobile device can offer a relatively cheap and portable form of connection.³⁵ Residential mobility within and outside communities can make it challenging for people to manage the administration and payments associated with fixed telecommunications connections.³⁶

Mobile-only use can lead to people being excluded from the advantages of fixed broadband services available through the NBN, including satellite options. Mobile-only use also reduces data allowance, as mobile plans commonly have lower data allowances compared with fixed broadband.

There is also a higher prevalence of Indigenous Australians using pre-paid mobile phone plans, which in turn generally have lower data allowances than post-paid mobile plans.³⁷ Many Indigenous Australians opt for pre-paid mobile phones in response to affordability concerns.³⁸

Shared public facilities

Shared public facilities provide Internet services through dedicated public computer facilities or making computers available in public spaces. These facilities can provide community members with affordable access to digital technology, with learning support for peer and self-guided learning. Shared public facilities also provide potential local employment opportunities.³⁹

However, the operational costs of facilities can be high, including rental of a suitable space and employment of facility staff. Research in Central Australia found that many facilities had limited functionality in terms of working computers and access to appropriate supervision.⁴⁰ Additional issues include limited opening hours, limited number of computers, lack of ownership of communal assets, staff control of access and rules around usage.⁴¹ Equitable access to shared facilities has also been identified as a concern, with access restricted due to kinship protocols, gender, or age.^{42, 43, 44} The use of facilities in shared public spaces may restrict an individual's likelihood to access online support and reporting services due to privacy concerns.

Community Wi-Fi

A community Wi-Fi model distributes Internet services via Wi-Fi from a single point and requires consumers to access the service using their own device. For communities without mobile coverage, this provides relatively affordable access to online services without monthly bills and can be provided free of charge or managed with a voucher system.⁴⁵

There are limitations to the use of community Wi-Fi. Unless the community has a small population, a single service is unlikely to provide sufficient broadband speed for simultaneous use by multiple consumers, which can lead to congestion and slower speeds.^{46, 47} There are also limitations regarding distance from the access point and physical obstacles that may affect coverage.

There are numerous examples of community Wi-Fi projects in remote Indigenous communities. The Australian Government maintains up to 301 Wi-Fi satellite phones providing community Internet access and voice services in small Indigenous communities in Western Australia, Northern Territory and Queensland.

NBN Co is providing support for about 100 Indigenous communities to access services over the Sky Muster satellite through its Public Interest Premises program.⁴⁸ The program supports public Wi-Fi through community centres and enables purchase of data by users through a voucher system.

Free Wi-Fi hotspots, are increasingly being delivered throughout Australia, particularly in major cities.

Access adoption

While telecommunications infrastructure may be available in particular locations, there are a variety of reasons why Indigenous Australians are not connecting to the available digital services, including administrative and other barriers to accessing service packages.

Getting connected

The extensive process to get connected to Internet services can be a barrier to access, particularly in regional and remote areas. These include:^{49, 50, 51}

- determining which Internet service providers operate in the area;
- difficulty setting up accounts if people do not have an email address, street address, home phone number, or lack of identify documentation;
- issues around being contactable by phone for service set up; and
- negotiating plans for people with English as a second language.

This can be further complicated if customers have limited consumer knowledge or access to independent advice on how to get connected.⁵²

The Regional Tech Hub, launched in December 2020, provides Australians in regional, rural and remote areas access to advice and assistance on telecommunications issues. In March 2021, Telstra established its First Nations Connect contact centre dedicated to enquiries or reporting of faults from Indigenous communities around Australia.⁵³

Self-exclusion

In remote communities, some Indigenous Australians are self-excluding from technology due to privacy concerns and affordability issues.^{54, 55} Some communities have rejected mobile infrastructure and there have been calls for bans on particular digital platforms.⁵⁶

Questions on access

- 1. What are the major factors that reduce digital access for Indigenous Australians? Are they different in remote, regional and urban areas?
- 2. Whilst coverage of telecommunications services and digital connectivity has improved, the access gap has widened. What are the barriers to accessing existing telecommunications and digital services for Indigenous Australians?
 - a. Are there issues in connecting to or using available satellite services in regional and remote areas? Are there issues with satellite latency?
 - b. Is there a preference for how telecommunications services are accessed, for example at the community level or at the individual premise level? If so, why?
- 3. Are there initiatives that have successfully addressed access issues? Why were they successful?
- 4. Are there other initiatives that could address barriers to access?

AFFORDABILITY



 Considers the financial barriers to accessing digital technology, including access to service connections, data allowances and devices

Australian Digital Inclusion Index - affordability score



Figure 3: 2020 ADII affordability gap between Indigenous Australians and the national average. Maximum 100 points.⁵⁷

For the general Australian population telecommunications services are becoming more affordable, although low-income households have continued to spend disproportionately more of their income on these services. Market developments improving affordability include decreasing prices of mobile and fixed line plans; increasing data inclusions including for pre-paid services; similar pricing for pre-paid and post-paid plans; and the availability of free data content. However, cheaper low data pre-paid plans continue to have a higher cost per unit of data than plans with larger inclusions.⁵⁸

Despite these improvements, Indigenous Australians continue to record lower ADII affordability scores, and receive less data for each dollar of expenditure, as indicated by their Value of Expenditure component score, notably 12.7 points lower than the national average.⁵⁹ This may be due to the prevalence of mobile-only and pre-paid service use amongst Indigenous Australians.

It is also important to consider people's overall household budget when examining telecommunications affordability. The price of goods and services in remote Australia is high compared to capital cities, which may affect the prioritisation of spending even in the circumstance where access is affordable.^{60, 61}

Pre-paid mobile services

There are many reasons for the preference of pre-paid mobile use by Indigenous Australians, including lower and unreliable incomes.⁶² The Bureau of Communications, Arts and Regional Research compared access conditions for pre-paid, post-paid and fixed line broadband and outlined reasons pre-paid mobile services may be preferred by people with lower incomes:⁶³

- Pre-paid mobile plans provide individuals with better control over expenditure and commitment periods compared with post-paid mobile or fixed line broadband post-paid plans.
- Some low-income consumers may not qualify for post-paid plans if they are unable to pass a credit check, may not have a reliable physical address or require permission from the landlord to get a fixed line connection.

The average costs for pre-paid and post-paid mobile plans are broadly similar for plans with data inclusions of 75 GB or less. This indicates that those using pre-paid services are not unduly disadvantaged. However, there are fewer options available in the pre-paid market compared to the post-paid market.⁶⁴

Pre-paid plans may reduce financial vulnerabilities by enabling more direct expenditure management. However, they can exacerbate other aspects of affordability related to expenditure value – mobile data is more expensive than fixed line data per gigabyte^{.65}

There may also be cultural and family factors relating to the management and sharing of resources that contribute to the higher incidence of pre-paid plans amongst Indigenous Australians.⁶⁶

Equipment and ancillary costs

The upfront cost of digital hardware and software presents a barrier to the uptake of digital technology.^{67, 68, 69} In remote communities the cost of devices, such as iPads, laptops and other mobile devices can be prohibitive. Devices are more expensive if purchased at a community store rather than stores in regional centres and cities.⁷⁰

Increased availability of free data content

The provision of unmetered data content for particular types of services is a mechanism that can enable affordable access to critical services. Some mobile phone providers offer free data services for selected content, including music and video content in order to gain a competitive advantage in the market. From April 2020, NBN Sky Muster Plus began offering unmetered access to all applications except for video streaming and Virtual Private Networks.

There are efforts to encourage free access to data for educational services. On Telstra mobile phone plans, certain educational institutions and resources have their IP addresses unmetered so that study will not contribute to reaching the data limit. Other programs and services are facilitating study in regional areas including the NBN Sky Muster service and the Australian Government Department of Education's Regional Study Hubs.

Lack of competition and choice in regional and remote areas

While telecommunications providers apply nationally consistent pricing, the range of mobile products offered varies across locations due to different coverage of mobile network operators and mobile virtual network operators. Lower cost providers are less likely to offer services in regional and remote locations due to the lower population density.⁷¹ Reduced competition and fewer choices in remote and regional areas has resulted in consumers often facing higher costs for communications services.⁷²

Australian Government programs such as the Mobile Black Spot Program and the Regional Connectivity Program include objectives to encourage competition amongst mobile network operators and infrastructure providers, and increase the level of choice for consumers in regional and remote areas.

Debt, financial hardship and consumer safeguards

Difficulty in navigating and managing bills and maintaining funds to support monthly payments, resulting in telecommunications debt, is a significant issue for Indigenous Australians.^{73,74} Failure to manage payments can result in temporary loss of Internet access, and unexpected large withdrawals when the accrued fee is debited. In 2020, research into rural and remote Indigenous communities in Central Australia found a total debt of approximately \$1.1 million amongst 221 clients.⁷⁵ This research noted issues around the sale of multiple mobile devices on premium post-paid contracts to low income and commercially illiterate Indigenous consumers, accruing debt through excess data charges. It also suggested that Indigenous people are unaware of or unable to access hardship options.

There are a number of actors in the telecommunications regulatory environment. The Australian Competition and Consumer Commission (ACCC) is responsible for the economic regulation of the communications sector, including telecommunications and the NBN. The Australian Communications and Media Authority has a number of regulatory mechanisms, including the Telecommunications Consumer Protections (TCP) Code. The TCP Code applies to telephone and Internet service providers and provides community safeguards in sales, customer service, contracts, billing, credit and debt management, financial hardship and changing suppliers. The Telecommunications Industry Ombudsman provides a fair, independent and accessible external dispute resolution service for unresolved complaints about phone or Internet services. As suggested, Indigenous consumers may be less likely to be taking advantage of these protections and resources.

Questions on affordability

- What are the major factors that affect digital affordability for Indigenous Australians? Are they different in remote, regional and urban areas?
- 2. How can affordability be improved for Indigenous Australians living in urban, regional and remote areas to ensure equitable outcomes?
- 3. Are there initiatives that have successfully addressed issues? Why were they successful?

DIGITAL ABILITY



- A person's capacity to engage with digital technologies depends on skills, attitudes and confidence with technology

Australian Digital Inclusion Index - digital ability score



Figure 4: 2020 ADII digital ability gap between Indigenous Australians and the national average. Maximum 100 points.⁷⁶

Recent ADII outcomes in the case study remote communities of Ali Curung (2018) and Pormpuraaw (2019) recorded digital ability scores higher than the national average. This demonstrates the importance of the Internet for people in remote communities to access information and services and to maintain social connections.⁷⁷

Digital ability varies depending on demographics – for example, among Aboriginal people living in the Northern Territory, digital literacy is at a reasonable level for women and young people, but generally poor among adult males.⁷⁸ In remote Indigenous communities, older people have been found to have a relatively basic level of digital technology usage and often struggled with learning new skills.⁷⁹

Impacts of access on digital ability

Digital literacy levels generally correspond to Internet availability – those with greater access to the Internet tend to have high levels of digital literacy.⁸⁰ This suggests a person's inability to access and use digital technologies reduces their capacity to attain knowledge, skills and support to improve their socio-economic circumstances.⁸¹

Mobile-only use and low digital ability are also considered inter-related as mobile devices lack the technical capabilities of desktop or laptop computers.⁸² This may help explain why data suggests Indigenous Australians living in non-remote areas have lower levels of basic skills and abilities.

Literacy levels

Digital literacy and basic literacy are interconnected.⁸³ Limited English literacy and concerns around difficulty reading content is a significant barrier to computer use.⁸⁴

Learning preferences

Improving digital ability for Indigenous Australians requires consideration of diverse learning preferences in the design of programs and services.

In remote communities, it was noted people who had no computer experience generally perceived it to be difficult to learn and feared learning more than participants with some experience. It was also found Indigenous Australians in remote communities expressed a preference for learning individually or in pairs in a private space, rather than in a group training environment. Familiarity with surroundings, equipment and people appeared to be important.⁸⁵

People also learn by doing and learn from other people; the propensity to use technology is linked to informal learning and experimentation.⁸⁶

The development of learning programs needs to consider Indigenous cultural norms and the social and cultural relationships between different groups.⁸⁷ Culturally competent service structures involve community members in both the planning and implementation of training services.

Cyber-safety and online safety concerns

Cyber-safety is a key concern for Indigenous Australians. Some remote communities choose not to accept telecommunications infrastructure due to concerns around cyber-safety and potential impacts on cultural and social cohesion.⁸⁸ Research suggests that building digital ability across all age groups in a community can empower community members to manage cyber-safety issues.⁸⁹

In 2013, the Joint Select Committee on Cyber-Safety tabled its report *Issues Surrounding Cyber-Safety for Indigenous Australians*.⁹⁰ The Committee noted that cyber-safety incorporates a wide range of issues including cyber-bullying, protecting sensitive cultural information and online financial security. The Committee noted that Indigenous Australians, with support of key government and community stakeholders, are proactive in developing cyber-safety initiatives. However, it was also found that rapidly changing technology and lower levels of digital literacy amongst older Indigenous Australians makes it harder for Elders and community leaders to respond to cyber-safety issues and to develop and implement culturally appropriate strategies.

Digital literacy is an important protective factor in mitigating online harm and risks. Research highlights the unique online challenges faced by Aboriginal and Torres Strait Islander communities, who are at increased risk of online abuse, cyber-bullying and image-based abuse. For example, Aboriginal and Torres Strait Islander peoples:

- are twice as likely to experience image-based abuse as non-Indigenous Australians; ⁹¹ and
- experience online hate speech at more than double the national average.⁹²

Moreover, Aboriginal and Torres Strait Islander women also experience amplified impacts of technology-facilitated abuse compared to other women. Social barriers, such as low digital literacy, makes it more difficult to access support.⁹³

Sharing of devices can also lead to privacy issues and financial security issues if accounts and phones are not password-protected.⁹⁴

Questions on digital ability

- 1. What are the major factors that affect digital ability, including attitude and confidence, for Indigenous Australians? Are they different in remote, regional and urban areas?
- 2. What is needed to encourage greater understanding and use of digital technologies?
- 3. How can digital ability be improved for Indigenous Australians living in urban, regional and remote areas?
- 4. Are there initiatives, including international initiatives, that have successfully addressed digital ability issues or improving digital skills, particularly for older Indigenous Australians, and why were they successful?
- 5. What organisations or agencies could support and improve digital ability levels?
- 6. What is needed to help address online safety issues experienced by Indigenous Australians?

Data on Indigenous digital inclusion

Existing data sources on Indigenous digital inclusion are limited.

While the ADII is useful in providing high level information, it is based on relatively small sample sizes; it does not capture data specifically for Indigenous Australians; and has limited information regarding those living in remote communities. The National Aboriginal and Torres Strait Islander Social Survey, last conducted in 2014-15, generated data on digital access, use and training, but has not been undertaken recently. Capturing data on digital inclusion for Indigenous Australians in the three focus areas of access, affordability and digital ability will inform policy-decision making, and program and resource design. Working toward capturing a balance of quantitative and qualitative data is ideal in providing deeper insights given the limited availability of qualitative data. Where possible, data should be disaggregated into remote, regional and urban areas, and by gender and age group.

Questions on data

- 1. Are there any additional existing data sources regarding Indigenous digital inclusion or other data sources that are being used to measure Indigenous digital inclusion?
- 2. What data needs to be captured for the ongoing measurement of Indigenous digital inclusion?
- 3. How can data on Indigenous digital inclusion be better captured and utilised?
- 4. What could be data proxies in the absence of specific data sources on digital inclusion?

Appendix A

Access programs

Name/Activity and short description	Universal/ Targeted Indigenous (target audience)
Australian Government	
5G network : the Australian Government is working with industry to secure an effective commercial rollout of 5G networks.	Universal
Alternative Voice Services Trials Program: aims to identify new ways to deliver voice services, including by new providers, assess their effectiveness, and raise awareness of alternative solutions to provide better services and functionality.	Universal
Digital Economy Strategy : sets out how Australia will secure its future as a modern and leading digital economy and society by 2030.	Universal
Mobile Black Spot Program: delivers telecommunications infrastructure projects that address mobile black spots and improve mobile coverage and competition across regional and remote Australia. Total investment to date is more than \$836 million.	Universal
National Agreement on Closing the Gap Access to Information target (Target 17): developed through a partnership between Australian governments and the Coalition of Aboriginal and Torres Strait Islander Peak Organisations. It includes digital inclusion as part of the Access to Information target – by 2026, Aboriginal and Torres Strait Islander people have equal levels of digital inclusion.	Targeted
National Broadband Network: the National Broadband Network (NBN) is now complete apart from connections to a small number of complex premises.	Universal
Regional Connectivity Program : delivers place-based telecommunications infrastructure projects which respond to local priorities and maximise economic opportunities and social benefits for communities and businesses in regional, Australia.	Universal
Regional Tech Hub : provides independent and factual information to help people in regional and rural Australia to get connected and stay connected.	Universal
Remote Indigenous Community Telecommunications program : maintenance and monitoring of 245 community payphones and 301 Wi-Fi telephones, generally located in communities with less than 50 permanent residents that do not have reasonable access to a public telephone.	Targeted
Telecommunications Reform Package : delivering a regulatory framework that promotes investment and competition in the telecommunications market and improves access to broadband services across the nation.	Universal
Universal Service Guarantee: ensures all Australians have access to voice and broadband services, regardless of their location.	Universal
New South Wales Government	
NSW Department of Education Distance and Rural Technologies team: assists students and schools with technologies to improve rural and distance education schooling.	Universal
Northern Territory Government	
Digital Territory Strategy : maps out a plan that will enable Territorians to get the most out of the digital opportunities and challenges now and into the future	Universal

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Name/Activity and short description	Universal/ Targeted Indigenous (target audience)
Queensland Government	
QCN Fibre : jointly owned by Powerlink and Energy Queensland, provides Internet and Retail Service Provides increased transmission capability. Operations improve regional connectivity through increasing competition and supporting new investment and jobs in regional Queensland.	Universal
Indigenous Knowledge Centres: a Queensland public information hub and library owned and operated by Indigenous Shire Councils, with assistance provided by the Library Board of Queensland. The Indigenous Knowledge Centres work in their communities to document and record the local histories, stories and language as part of their local collections.	Targeted
Western Australian Government	
Digital Farm Grants Program : supports the widespread adoption of digital farm technologies to improve business and agricultural productivity by providing enterprise-grade digital connectivity for regional Western Australia.	Universal

Affordability programs

Name/Activity and short description	Universal/ Targeted Indigenous	
Australian Government	(
Commonwealth telephone allowance : assists welfare recipients with the costs of maintaining a telephone or Internet service. It is administered through the welfare system as a supplement to primary payments. Not specific to type of Internet access.	Universal	

Digital ability programs

Name/Activity and short description	Universal/ Targeted Indigenous (target audience)
Australian Government	
Aboriginal and Torres Strait Islander Technology-Facilitated Abuse Resources Program: co-designed resources and training to support Aboriginal and Torres Strait Islander women to identify, report and protect themselves and their children from technology-facilitated abuse. Includes a grants program for Aboriginal Community Controlled Organisations to develop culturally appropriate, place-based resources.	Targeted
Be Connected : an initiative aimed at increasing the confidence, skills and online safety of older Australians. Be Connected will deliver a range of resources specifically for those aged 50 years and over, who have minimal or no engagement with digital technology	Universal
Be Deadly Online : animation and poster campaign about online issues such as bullying, reputation and respect. The campaign has been developed with Indigenous writers and voice actors.	Targeted

Name/Activity and short description	Universal/ Targeted Indigenous (target audience)
Digital Solutions -Australian Small Business Advisory Services : small businesses around Australia can access individual support to grow their digital capabilities through the Digital Solutions program. The program offers small businesses low cost, high quality advice on a range of digital solutions to help them meet their business needs. In April 2020, the program was broadened to include general business support for small businesses impacted by the COVID-19 pandemic. As part of the 2021-22 Budget Digital Economy Strategy, the Government will introduce a pilot to give 200 not-for-profit small business organisations, including Indigenous small businesses.	Universal
Empowering Businesses to go Digital (NAVII) : further support for small businesses is available with the Empowering Business to Go Digital through Navii.com.au. Government funding has enabled Digital Coaching International to establish this non-government organisation and web platform. The program's aim is to increase small business awareness and adoption of digital technology.	Universal
eSafety Parents: resource for parents to learn about the digital environment and how to help children have safe and enjoyable online experiences	Universal
Foundation Skills for Your Future Remote Community Pilots: the new pilot program will deliver foundation English Language, Literacy, Numeracy and Digital literacy (LLND) skills, training and assessment in four remote communities.	Universal
Online Safety Charter : Online Safety Charter, which sets out the Government's expectations for technology firms to help keep children safe online.	Universal
Scamwatch (and other consumer awareness initiatives including Little Black Book of Scams, cyber.gov.au): information to consumers and small businesses about how to recognise, avoid and report scams.	Universal
Skill Finder Platform : the Platform enables Australian workers and SMEs to upskill and reskill in areas such as web design, business analytics, and cyber security. Launched on 1 April 2021, the Platform is a marketplace providing access to free and paid digital skills training from leading technology companies such as Adobe, Atlassian, Amazon Web Services, Google, IBM, LinkedIn, Microsoft, Canva and Salesforce. The Government invested \$2.5 million as part of the JobMaker Digital Business Plan in the 2020-21 Budget to expand the industry-led platform and recruit more Australian training partners onto the platform.	Universal
Start the chat, keep our mob safe online: campaign about helping everyone in a child's life to have a conversation about online safety.	Targeted
The YeS Project: a social and digital health program encouraging young people to improve online attitudes and practices, and increase supportive and help-seeking behaviours	Universal
Your Online Journey app: addresses digital literacy and safety needs of remote Indigenous communities.	Targeted
Northern Territory Government	
Digital Territory Strategy : enabling Territorians to make the most of digital technology to build connections, reach their potential and succeed in a thriving digital economy.	Universal
Queensland Government	
Community Digital Champions Program : recognition of role models who increase awareness and uptake of digital technologies within their communities.	Universal
Deadly Digital Communities : community based digital technology skills training program for Aboriginal and Torres Strait Islander peoples and communities across Queensland. An initiative of the State Library, and Telstra in partnership with Indigenous Knowledge Centres and local councils.	Targeted
Tasmanian Government	
Digital Ready for Daily Life : aims to increase the online confidence and skills of Tasmanians experiencing high levels of digital exclusion.	Universal

Name/Activity and short description	Universal/ Targeted Indigenous (target audience)
Non- Government	
CyberSafety: An Interactive Guide To Staying Safe On The Internet: free modules on cyber-safety delivered by InformED.	Universal
DigiHouse: aims to improve the digital skills of social housing residents.	Universal
"digIT" ICT summer schools: targets Year 9 and 10 students from groups that are under-represented in STEM and engage them in digital technologies and related careers.	Universal
Digital Literacy Hub : Aboriginal Literacy Foundation initiative aims to bring to one interactive, digital platform a range of assets; networks; libraries; schooling resources; tools and portals that will make the educational experience of Indigenous students and their families a much easier and more interactive one.	Targeted
Digital Trackz: digital resource to help Indigenous young people deal with teasing and bullying.	Targeted
eSmart Digital Licence: an online safety education program that teaches children good behaviour and how to deal with bad behaviour online.	Universal
Go Digi : national four year digital literacy programme with the goal of supporting more than 300,000 Australians to improve their digital skills. Indigenous communities are a key focus group for the initiative.	Universal
IDX (Indigenous Digital Excellence) Initiative : co-founded and designed by the National Centre of Indigenous Excellence and the Telstra Foundation and seeks to inspire, build and connect the next generation of Indigenous entrepreneurs and digital makers through sustainable community led programs and collaborations.	Targeted
inDigiMOB : partnership between First Nations Media Australia and Telstra which aims to bridge the digital divide for remote communities in the Northern Territory through forming partnerships with communities and local organisations and making available a suite of resources that communities can take advantage of according to their needs. These resources include technical, training and infrastructure support around digital technology and the online world.	Targeted
Tech Savvy Seniors program: helps build the skills and confidence to use computers, tablets and smart phones.	Universal

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Endnotes

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