Indigenous Australians and ICTs

Introduction

2.1 The Committee’s inquiry into Indigenous cyber-safety and related issues builds on evidence previously taken suggesting that Indigenous Australians are increasingly subject to cyber-bullying and online racism.

2.2 Users in some remote areas have been targeted by advance fee scammers; for others where telecommunication links are just being established the potential benefits and harms are evolving.¹

2.3 Indigenous youth are fast adopters of mobile technology, where services are available. The Committee’s previous reports on cyber-safety for the young and for seniors identified a significant skills gap between cyber savvy youth and older people.² In remote Indigenous communities, cultural, language and access barriers exacerbate this rift, meaning mobile enabled youth may be more vulnerable to cyber-bullying and other emergent online threats as mobile access is improved.³

2.4 This chapter provides a brief background to Information and Communications Technology (ICT) access issues facing Indigenous Australians. It draws on published data and studies to chart demographic

³ See ARC Centre for Excellence for Creative Industries and Innovation (CCI), Submission 2, p. 11.
trends and patterns of ICT usage by the first Australians, before considering evidence taken on access related cyber-safety issues.

Demography

2.5 Australia’s Indigenous peoples are a growing, and comparatively youthful, proportion of the Australian population.

- In the 2011 Census, three per cent of Australians identified as Aboriginal or Torres Strait Islander, up from 2.3 per cent in the previous 2006 Census, and an increase of 11 per cent since the 2001 Census.

- The median age of the Indigenous population at 2006 was 21 years, comparing with 37 years for the non-Indigenous.

2.6 The vast majority of Indigenous Australians live in urban and regional areas (over 75 per cent), but more live in remote areas than do the non-Indigenous.

- Of the total 455 028 people identifying as Indigenous in the 2006 census, 108 143 lived in remote or very remote areas, comprising 54 per cent of the total remote area population.

- There are 1 187 discrete (majority) Indigenous communities in remote and very remote areas, 83 per cent have a population below 100, with 73 per cent below 50 and the average being 20 people.

2.7 Indigenous populations are concentrated in some States and Territories. According to 2006 census results, the majority of Torres Strait Islanders

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5 This compares with an increase of 3.8 per cent in the non-Indigenous population over the same period, ABS, 4713.0 - *Population Characteristics, Aboriginal and Torres Strait Islander Australians*, <www.abs.gov.au/ausstats/abs@.nsf/Lookup/B7164C771F4A35D7CA2578D800283CB1?opendocument> viewed April 2013.


8 Data in this section cited in ARC Centre of Excellence for Creative Industries and Innovation (CCI) and Central Land Council (CLC), *Home Internet for Remote Indigenous Communities*, supported by Australian Communications Consumer Action Network (ACCAN), 2011, p. 9.
(64 per cent) live in Queensland, which includes the Torres Strait Area. The Northern Territory (NT) has the largest proportion of Aboriginal residents by population (32 per cent) with the majority living in remote areas, while New South Wales has the largest number of Indigenous people, constituting only two per cent of the total population and mainly resident in regional or urban areas.9

2.8 The NT, Western Australia and Queensland have the highest concentration of small remote communities.10 Many of these communities were formed during the Outstation Movement of the 1970s, when Aboriginal people returned to their homelands to avoid social problems in larger communities and to maintain traditional sites. 11

Internet and communication technology take-up

2.9 In 2007 the Australian Bureau of Statistics (ABS) produced disaggregated data based on household internet access and use gathered during the 2006 Census. The Patterns of Internet Access in Australia report found that:

- Indigenous people were 69 per cent less likely than the majority population to have an internet connection and 52 per cent less likely to have access to broadband; 12 and

- household access decreased with remoteness. While 54 per cent of Indigenous households in major cities had internet access, only 48 per cent in inner regions and 38 per cent in outer regions did. Remote and very remote Indigenous households had 25 per cent and eight per cent access respectively. 13

9 Northern Territory (NT): 79 per cent living in remote and very remote areas. New South Wales (NSW) 148 178 or 29 per cent of the total Australian population. See ABS 4713.0 - Population Characteristics, Aboriginal and Torres Strait Islander Australians, 2006, Estimate Resident Population, viewed April 2013.
13 ABS, 8146.0.55.001 - Patterns of Internet Access in Australia, 2006 (2007), p. 57, and see Figure 2.7, ACMA, Telecommunications in Remote Indigenous Communities, March 2008, p. 38.
2.10 Over 2011–2012 the Regional Telecommunications Independent Review Committee conducted its first review of telecommunications services in regional, rural and remote Australia.\textsuperscript{14} In its submission to that review, the Indigenous Remote Communications Association (IRCA) recognised the potential of digital convergence technologies for social, service and economic development in remote Indigenous communities:

Remote access to broadband will reduce the vast digital divide for remote Indigenous populations and provide significant outcomes in terms of social and economic development.\textsuperscript{15}

2.11 According to the IRCA, remote Indigenous peoples are rapid adopters of new digital technologies, such as mobile smartphone telephony and ICTs when these are available.\textsuperscript{16}

2.12 However, the ABS Patterns of Access study revealed that, in addition to technical barriers, socio-economic status and key indicators such as family structure, level of education and labour force status also inhibit ICT use among Indigenous Australians.\textsuperscript{17}

Remote internet access

2.13 As indicated above, Indigenous households have very low rates of internet connectivity compared with urban and regional remote communities. ACMA’s report \textit{Telecommunications in Remote Communities} (2008) provided a survey of barriers to internet access in remote communities.\textsuperscript{18}

2.14 A range of supply and demand factors were identified. Supply side factors included the costs and difficulty of service provision in geographically isolated and harsh desert terrain, lack of commercial incentives and so lack of choice of services providers, appropriateness of technology deployed, limits on bandwidth and infrastructure, and cost of technology. Demand side factors include low incomes, low use of technology skills and lack of awareness of the value of internet access.

\textsuperscript{14} The Committee was appointed in July 2011 by the Minister for Broadband, Communications and the Digital Economy Senator Stephen Conroy to conduct triennial reviews of telecommunications services in regional, rural and remote Australia and to assess the potential benefits of the digital economy. See Department of the Broadband, Communications and the Digital Economy (DBCDE), \texttt{<www.dbcde.gov.au/funding_and_programs/regional_telecommunications_review>} viewed June 2013.

\textsuperscript{15} The Indigenous Remote Communications Association (IRCA), \textit{Submission to the Regional Telecommunications Inquiry} (2011–12 Regional Telecommunications Independent Review), 2011, p. 3.


\textsuperscript{18} See ACMA, \textit{Telecommunications in Remote Indigenous Communities}, March 2008, p. 16 for the list of studies consulted.
distance from existing network infrastructure and problems with timely maintenance. Demand side considerations included economic disadvantage, affordability and lack of awareness, education, skills and online cultural content.\(^{19}\)

2.15 The submission from the ARC Centre of Excellence for Creative Industries and Innovation (CCI) referred to its Home Internet in Remote Communities project (HIP), a joint venture with the Centre for Appropriate Technology, Central Land Council and Swinburne University. The project aimed to investigate the feasibility of home-based computing and internet access in three small remote communities in Central Australia.\(^{20}\)

2.16 The preliminary report for the project, *Home Internet for Remote Indigenous Communities* (2011), confirmed that:

- residents lacked awareness of satellite services and government subsidies to provide them, as well as the technical knowledge and telephone contacts for the service set up;
- meeting eligibility criteria and negotiating and paying for recurrent usage plans were obstacles for people with English as a second language;
- due to the number of residents and their mobility, housing arrangements raised concerns about the safety and security of computer equipment and about bill paying; and
- the cost of electricity and limited capacity under coin operated systems and solar power provided practical disincentives to home internet use in remote communities.\(^{21}\)

2.17 To overcome such limitations, governments to date have focussed on the provision of shared community internet communication facilities.\(^{22}\)

2.18 While progress on this has been mixed,\(^{23}\) a notable success story is the Papunya Computer Room project.\(^{24}\) The Centre was established in 2009, to

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20 In Kwale Kwale, Imangara and Mungalawurr. See ARC Centre of Excellence for Creative Industries and Innovation (CCI), *Submission 2*, p. 2.
23 For example, despite plans for a shared internet facility being in place for the Anangu Pitjantjatjara Yankunytjatjara (APY) Lands in South Australia since 2003, and a new National Regional Partnership Agreement in 2009, the population centre Ernabella (Pukatja) still had no functional public internet centre and no Anangu (Aboriginal) household had internet access at
provide positive stimulus to young Aboriginal men and boys (14-25 years) who missed education due to substance abuse.\textsuperscript{25}

\textbf{2.19} Recently, a Kunga (women and girls) room was opened at the PRC to provide an alternative space to this male dominated area for women and children. Research has shown that the centre has been used mainly for recreational purposes by residents, with some older residents and visitors using the facilities for tax lodgements and internet banking.\textsuperscript{26}

\textbf{2.20} The CCI referred to a study it had conducted at the PCR in 2012 to evaluate the benefits of shared computer facilities. It concluded that reliance on shared facilities in larger remote Indigenous settlements, compared with the expectation of home connection elsewhere, will exacerbate social inequalities experienced by remote Indigenous residents.\textsuperscript{27} By contrast, equal access to communications and information technologies has:

\begin{quote}
...the potential to extend education, health, e-government, commerce, communication and entertainment applications to remote Indigenous constituents, which will help them manage aspects of daily life and ameliorate some of the disadvantage they experience.\textsuperscript{28}
\end{quote}

\textbf{2.21} The IRCA argued that, to avoid a ‘two-speed economy’ between urban and remote Australia, any new services must have adequate speeds for two way real time application if promised improvements to health, education, justice and media and for mobile telephony services are to be achieved.\textsuperscript{29}

\textbf{2.22} The CCI submission concluded that the major obstacle to home internet access for Indigenous people remains the cost of setup and maintenance.\textsuperscript{30}

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\textsuperscript{25} Papunya is a remote Aboriginal community located around 300 kilometre north-west of Alice Springs on the fringes of the Western Desert of the Northern Territory. Papunya Computer Room, Dot Com Mob: Empowering Indigenous Youth, <www.dotcommob.org/papunya.html> viewed June 2013.

\textsuperscript{26} Central Australian Youth Link-up Service, CAYLUS Project Brief, September 2012, p. [1].

\textsuperscript{27} CCI, Submission 2, pp. 2-3.

\textsuperscript{28} CCI, Submission 2, p. 4.

\textsuperscript{29} IRCA, Submission to the Regional Telecommunications Inquiry, 2011, p. 3.

\textsuperscript{30} In contrast to mainstream Australia. Survey cited in CCI, Submission 2, p. 9.
Mobile phone take-up

2.23 While not all areas of Australia support mobile technologies, the smartphone has nevertheless become the dominant platform for information access and communication across Indigenous communities.

2.24 In some areas, research suggests that Indigenous people appear to be even more enthusiastic users of the technology than the mainstream community, demonstrating the importance of the new technology to maintain Indigenous social networks.\footnote{Studies by the Victorian Department of Education and Early Childhood Development (DEECD), 2010, and the State of Victoria’s Children, 2009, cited in F Edmonds, C Rachinger, J Waycott, P Morrissey, O Kelada and R Nordlinger, ‘Keeping Intouchable: a Community Report on the Use of Mobile Phones and Social Networking by Young Aboriginal People in Victoria’ (2012).}

2.25 Young people are rapid adopters of mobile phones. In Victoria, the majority of Aboriginal people are under the age of 25. The \textit{Keeping Intouchable: a Community Report on the Use of Mobile Phones and Social Networking by Young Aboriginal People in Victoria} (2012) confirmed that prepaid mobile phones are now the favoured platform among Indigenous youth in the state, with popularity attributable to the growing affordability, compactness and portability of these devices.\footnote{See Victorian Indigenous Youth Advisory Council (VIYAC), \textit{Voices Telling It Like It Is: Indigenous Young People on Education}, Melbourne, 2011, p. 14 and P Collin, K Rahilly, I Richardson and A Third, \textit{The Benefits of Social Networking Services: A Literature Review, Cooperative Research Centre for Young People, Technology and Wellbeing Melbourne}, 2011, p. 10.}

2.26 Research also confirms the rapid take-up of prepaid mobile in remote Central Australia and in the North, with prepaid mobiles being preferred for cost and credit management.\footnote{ACMA, \textit{Telecommunications in Remote Indigenous Communities}, March 2008, pp. 46–47 and Tangentery Council Research Hub and CLC, \textit{Ingerrekenhe Antirrkawene, Mobile Phone Use Among Low Income Aboriginal People: a Central Australian Snapshot}, 2007, p. 6.}

2.27 The 2007 Tangentery Council Research Hub and CLC report on mobile phone use among remote low income Indigenous people in the Alice Springs area found that 60 per cent of those surveyed used the phone for emergencies and for family contacts, noting:

For the majority, a mobile phone is considered a necessity, rather than a luxury... Connections with family and friends take on far greater importance in Aboriginal culture than in most other sections of the population for cultural reasons.\footnote{Tangentery Council Research Hub and CLC, \textit{Ingerrekenhe Antirrkawene}, 2007, p. 6.}
The IRCA observed that mobile technologies are more appropriate than fixed line telephony for Indigenous people in remote areas, given lack of effective copper wire connections and internet connectivity. Smartphones best suit the needs of many Indigenous people who require a transportable internet platform which allows for individual management and prepayment of bills, avoiding shared bills in large households.

Other access issues affecting remote users of mobile phones include the lack of competition among service providers in remote regions—Telstra is currently the sole provider for terrestrial wireless broadband in Central Australia. ACMA suggested that the high costs of handsets and call charges may continue to place satellite mobile telephony out of reach of remote Indigenous communities.

Concerns about cyber-safety and access

According to the Papunya study and HIP trials, to date cyber-safety is not regarded by residents as a significant issue, although some concerns were expressed about the use of social media sites. At Papunya, proposals for increased mobile coverage did however alarm some Elders, who were fearful of the effects on young people of mobile enabled cyber-bullying and ‘sexting’ they had heard about in other communities.

Remote communities have been proactive in adopting measures at shared computer facilities, where problems have arisen. At Tennant Creek, the Council of Elders and Respected Persons, for example, have appointed ‘cyber cops’ to monitor chat room exchanges. The CCI mentions the use of ‘Diva Chat Cops’ at chat rooms, under the auspices of the NT Justice
Department’s Strong Choices program with support by Telstra, which delivers the Diva Chat social networking platform.\textsuperscript{41}

2.32 While risks are associated with increased internet access, the potential benefits drive government plans to expand satellite services into remote areas under the National Broadband Network (NBN).\textsuperscript{42} The NT Government and Telstra have also recently announced a joint initiative to provide new mobile and fixed broadband services to remote Territorian communities.\textsuperscript{43}

2.33 Given these developments, the CCI predicts there will be a greater uptake of ICTs by remote Aboriginal households through subscriptions to mobile or satellite services and the use of low range private wifi networks.\textsuperscript{44}

2.34 Smartphones and other portable ICTs have utility to remote peoples, which will likely ensure rapid adoption where services are available and affordable.\textsuperscript{45} The CCI warns that community capacity to provide protections, such as by monitoring shared chat rooms, will no longer be effective as individual and home access becomes more common.\textsuperscript{46}

2.35 The submission from the Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA) advised of recent changes to the Northern Territory Emergency Response Act 2007, which required the monitoring of chat room activities to limit access to sexually explicit and violent material in publically funded computer centres. The changes respond to the introduction of smartphone and tablet technology, and to complaints from medical services that compulsory filters restricted their practice.\textsuperscript{47}

\textsuperscript{41} See CCI, Submission 2, pp. 15-16, and Chapter 3 for more detail on Diva Chat and the Strong Choices initiative.

\textsuperscript{42} NBN Co. Ltd launched the first Interim Satellite Service across the mainland and Tasmania in July 2011 <www.nbnco.com.au/nbn-for-home/how-it-works/satellite.html> viewed 23 April 2013, and see Australian Communications Media Authority (ACMA), Telecommunications in Remote Indigenous Communities, March 2008, pp. 31–34.

\textsuperscript{43} Including the installation of eight new mobile sites at Ampilatwatja, Arlparra, Barrow Creek, Mutitjulu, Newcastle Waters, Palumpa, Papunya and Peppimenarti, and of ADSL2+ fixed broadband equipment at Mutitjulu, Hermannsburg, Ngukurr, Numbulwar, Elliott and Wadeye. See Telstra citation in CCI, Submission 2, p. 18.

\textsuperscript{44} CCI, Submission 2, pp. 17–18.

\textsuperscript{45} Researchers returning to Papunya in December 2012, six months after the CCI survey, found for example that many in the community had portable tablets after an upgrade of software allowed for PRC syncing with personal devices. CCI, Submission 2, p. 17, and see Central Australian Youth Link-up Service, CAYLUS Project Brief, September 2012, p. [3].

\textsuperscript{46} CCI, Submission 2, p. 17.

\textsuperscript{47} In particular, the ability to work with medical images on computers. See Department of Families, Housing and Indigenous Services (FaHCSIA), Submission 3, p. 3.
2.36 FaHCSIA reports that the new requirements will be part of funding agreements with all government service providers, not just those in Indigenous communities, to take ‘reasonable steps’ to protect clients, and in particular children, from accessing or viewing harmful material. An education program, the Stronger Futures Classification Education Project, will support Indigenous communities in ‘prohibited material areas’ to better understand what constitutes unacceptable material, under restrictions to continue until 2022.  

2.37 Submissions to the inquiry identified a more urgent need to raise digital literacy among Indigenous Elders and seniors in particular so they can manage mobile enabled cyber-bullying and other threats effectively as services improve in remote communities:  

   It is important to engage elders in responding to cyber-bullying because they have the authority to provide leadership to younger people about what is culturally appropriate in regard to use of ICTs concerning the potential risks of crossing cultural boundaries and causing distress to other community members. Education about the risks and implications of cyber-bullying in regard to legal and civic responsibilities also need to be provided to those using ICTs in remote communities.  

2.38 The CCI also recommended implementation of a local area network model of access in larger communities, so that network level filtering might be conducted in accordance with the specific concerns of Elders and residents.  

2.39 Evidence to the inquiry indicated that Aboriginal and Torres Strait Islander children and youth have skills with internet technology equivalent to that of mainstream children. It was noted at Southside Education, a school for disadvantaged girls in suburban Brisbane, that even where English and maths skills are lacking, Indigenous students have a ‘very solid grasp of technology’ despite not having a computer at home. 

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49 CCI, Submission 2, p. 4; ACCAN, Submission 1, pp. 2, 3.


51 CCI, Submission 2, p. 17.

52 Mrs Christine Hill, Principal South side Education, Committee Hansard, 7 May 2013, p. 3.
The Committee was told that young Indigenous people routinely use mobile technology for information and music downloads, as well as keeping in contact with family and friends. The students at Southside Education and at the Murri School all had mobile phones but, according to the Southside Education Principal, ‘for Aboriginal and Torres Strait Islander families, having a computer and internet access in the home are very, very rare’.  

### Conclusion

At present, Aboriginal and Torres Strait Islanders have low levels of home internet access compared with other Australians, irrespective of where they live.

Indigenous people are thus at particular risk of being left behind as other Australians utilise home internet access and go online. At the same time, the rapid take up of smartphone and tablet technology ameliorates that risk while opening up a range of other threats, some of which are uniquely nuanced by Indigenous cultural practices and social norms.

Given the planned nationwide rollout of the NBN and other initiatives, the Committee believes that Indigenous communities must be empowered to manage online risks, and to make decisions about the nature of the services they receive.

The terms of reference of this inquiry invite comparison between risks for urban and remote communities. In the Committee’s opinion, a more lengthy inquiry is necessary to survey views on the best means to facilitate internet access for all Indigenous Australians, and to enable them to exploit the benefits of the internet and to do so safely.

The next chapter looks at the prevalence of mobile phone use among Aboriginal and Torres Strait Islanders and the cyber-safety implications for young people in particular.

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53 Mrs Hill, Committee Hansard, 7 May 2013, p. 6.