The National Broadband Network

The National Broadband Network (NBN) aims to provide the infrastructure for high-speed Internet access for all Australians, regardless of where they live. It will consist of fibre-optic cable to 93 per cent of premises. The remaining 7 per cent of premises, mostly in rural and remote areas, will be connected by fixed wireless or satellite.

Fibre-optic cabling will provide speeds of up to one gigabit per second while fixed wireless and satellite technologies will provide peak speeds of 25 megabits per second. All users, regardless of connection type, will have access to speeds greater than those currently available to many urban people on ADSL.

Rural and remote communities with limited or no current access to broadband have been given priority in its rollout. The entire NBN rollout is scheduled to be complete in 2021, with Tasmania and the fixed wireless and satellite networks set to be finished in 2015. The NBN’s rollout map can be viewed at [www.nbnco.com.au](http://www.nbnco.com.au).

The uniform national wholesale pricing (UNWP) offered by NBN Co means that service providers will pay the same wholesale price for the same broadband service, regardless of location, encouraging greater entry into rural markets and generating competition, lower prices and greater choice for consumers.

Lack of affordability is regarded as one of the most important potential barriers to good Internet access for country people whose incomes, on average, are up to 20 per cent lower than those of city people. For example, 2009 census data shows that four in five children (81 per cent) in Major cities used the Internet, compared with 70 per cent of children living in Remote areas.


The Broadband for the Bush Alliance ([www.broadband-forthebush.com.au](http://www.broadband-forthebush.com.au)) is a group of organisations working to ensure that remote and rural Australia does not become further disadvantaged in the area of communications. It seeks practical outcomes that promote digital inclusion using both fixed and mobile technologies.

Examples of government programs that support the adoption of broadband and improve digital literacy in rural and remote communities:

**Digital Hub for 22 community organisations**
- Basic online training - setting up an email account, internet searches, accessing government services.
- Virtual classrooms and tools for person-to-person and multi-point video communication.

**The Digital Enterprise - Virtual Advisor Program (VAP)**
- Online training for establishing or improving an online business.
- For Aboriginal and Torres Strait Islander individuals or groups owning or operating small to medium enterprises or not for profit organisations.

**Broadband for Seniors ([www.necseniors.net.au](http://www.necseniors.net.au))**
- Free access to computers, the Internet and training for older people.
- 2000 Broadband for Seniors kiosks, many of which are outside major cities.

Mobile coverage in rural areas

Recent natural disasters such as the Queensland floods highlighted the importance of reliable communications during emergency situations in rural areas. Access to mobile broadband and voice services is also important for capturing the next generation of productivity improvements, such as agricultural applications that use mobile technology to record and process data in the field. Mobile devices are increasingly used for social engagement and interaction, so mobile coverage is a key factor in attracting and retaining staff in rural and remote areas, particularly younger workers.

In many rural communities, the use of mobile technology is hindered by patchy, unreliable mobile coverage or the absence of it all together. Mobile phone coverage currently extends to only 25 per cent of the Australian landmass. The limited commercial viability of deploying mobile base stations in rural and remote areas remains a significant disincentive for carriers to increase mobile coverage.

One of the most effective ways of addressing this challenge is through partnership between carriers, government and/or communities. The Regional Mobile Communication Project is a good example of such a partnership: Telstra and the WA Government are spending $106 million to deploy mobile communications infrastructure along major roads and highways and in several regional communities to increase existing mobile coverage in the State by up to 22 per cent.

Access for Aboriginal and Torres Strait Islander people

Aboriginal and Torres Strait Islander people living in remote communities face distinct challenges in accessing and using basic telecommunications services. In 2008-09, Internet use was significantly lower among Aboriginal and Torres Strait Islander people (62 per cent) compared with the national average (74 per cent).

There is a growing trend by Aboriginal and Torres Strait Islander people to access the Internet using mobile devices - more specifically mobile phones. Mobile devices are popular for a number of reasons including low start-up cost, pre-paid options rather than post-paid, mobility across locations and transferability between people.

The Aboriginal and Torres Strait Islander population has a young age profile, with a median age of 21 years compared with 37 years for the non-Indigenous population. Given that young people are generally rapid adopters of mobile phone and internet technology, (according to the 2009 census 94 per cent of people aged 15-17 used the internet), there is likely to be increasing demand for reliable and affordable mobile coverage in Indigenous communities.

The Indigenous Communications Program (ICP) aims to ensure that Aboriginal and Torres Strait Islander people have the same economic, social and cultural communications opportunities as the rest of Australia.

- The public internet access and training component of the Indigenous Communications Program is delivered in collaboration with participating State and Territory governments through the Closing the Gap: National Partnership Agreement on Remote Indigenous Public Internet Access. Since the program began in July 2009, more than 4000 Aboriginal and Torres Strait Islander people in remote communities have received basic internet and computer training.

- The Indigenous Communications Program (ICP) provides and maintains community phones in remote communities with baseline populations of less than 50 people. Community phones provide access to emergency and other medical and support services as well as to family and friends. In 2013–14, up to 545 phones in remote communities will be monitored and maintained and 63 satellite mobile phones have also been provided to eligible remote Indigenous communities.

- The Satellite Phone Subsidy Scheme (also part of the ICP) improves affordability of mobile communications for people living, working and travelling in areas which do not have terrestrial mobile coverage by providing subsidies for the purchase of satellite phone handsets. Since the Scheme’s inception in June 2002, approximately 25,000 subsidies have been provided. The scheme has been extended until 30 June 2014.

Digital television

As part of the government-mandated conversion from analogue to digital television, the VAST (Viewer Access Satellite Television) system has been set up to provide digital television to people who cannot receive terrestrial digital television, mainly those living in ‘black spots’ in rural and remote areas of Australia. VAST may benefit up to 247,000 households across Australia, providing them with coverage that was previously unavailable. The VAST service is replacing the old analog satellite service, Aurora. In the new digital environment, television provides another means for people in rural communities to share in information on healthy lifestyles and reducing health risk factors, as well as other educational services.

Television programs offering rural health content include:

- The Rural Health Education Foundation’s Rural Health Channel (RHC) features professionally accredited programs as well as health education information and programs from other providers such as government, professional organisations and health associations. Over the last 20 years the Foundation has provided free distance learning education programs to more than 50,000 health professionals. The RHC TV Guide is at www.rhef.com.au/rhc

- National Indigenous Television (NITV) is a 24 hour service established by Aboriginal and Torres Strait Islander people. NITV broadcasts programs in a wide variety of genres including music, health, sport, news, current affairs, culture and children’s programs. Upcoming programs are at www.nitv.org.au

For more information on VAST: www.myvast.com.au

Connectivity offers social and economic benefits for rural communities. For households, it will enhance communication and social inclusion, access to education and information, and choice of goods and services. For businesses, it will mean access to new markets, innovation in production and the delivery of services, and opportunities for teleworking. These benefits build strong and healthy communities and are therefore important determinants of health.