

Fact Sheet: Fixed Wireless

What is the **National Broadband Network**?

The National Broadband Network (NBN) is an upgrade to Australia's existing telecommunications network. It's designed to provide Australians with access to fast, affordable and reliable internet and landline phone services.

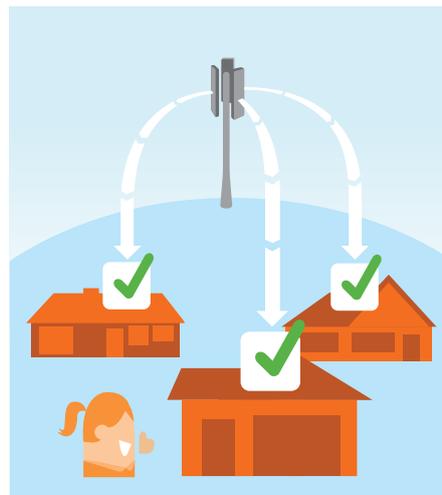
NBN Co plans to upgrade the current telecommunications network in the most cost-efficient way using best-fit technology and taking into consideration existing infrastructure. This will vary from place to place and will include technologies such as Fibre to the Node (FTTN), Fibre to the Premises (FTTP), Fixed Wireless and Satellite. Other technologies may also be considered.

How does fixed wireless work?

The NBN's fixed wireless network, which uses advanced technology commonly referred to as LTE or 4G, is engineered to deliver services to a fixed number of premises within each coverage area.

This means that the bandwidth per household is designed to be more consistent than mobile wireless, even in peak times of use.

Unlike a mobile wireless service where speeds can be affected by the number of people moving into and out of the area, the speed available in a fixed wireless network is designed to remain relatively steady.



Fixed Wireless

Single type of device with a fixed number of connections operating at a fixed cell boundary



Mobile Wireless

Variable numbers and types of devices, operating at variable cell boundaries

NBN Co's fixed wireless network is designed to offer service providers with wholesale access speeds of up to 25Mbps for downloads and 5Mbps for uploads. With this fixed wireless service you could have access to fast internet at speeds people in the city take for granted.*

While NBN Co's high-quality fixed wireless service is not a mobile service, it will use cellular technology to transmit signals to and from a small antenna fixed on the outside of a home or business, which is pointed directly towards the fixed wireless facility.

NBN Co has designed each fixed wireless facility to serve a set number of premises, which enables greater consistency in the speed and quality of service that can be delivered to each home and business receiving the fixed wireless service. The actual speed and quality of the service experienced by end users will depend on some factors outside NBN Co's control including equipment quality, software, plans offered by service providers and how their service provider designs its network.

* We're designing the NBN to provide these speeds to our wholesale customers, phone and internet providers.

Building NBN Co's fixed wireless network

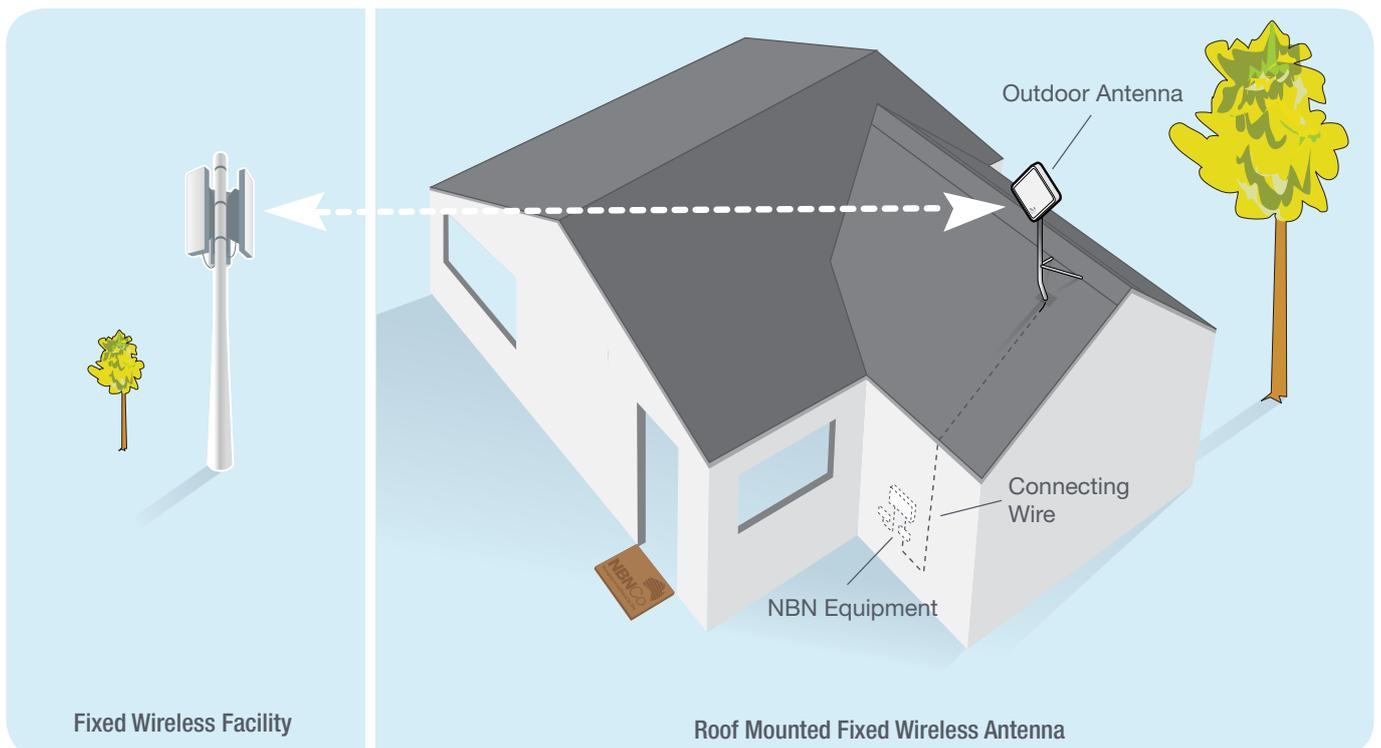
In order to provide access to fast, affordable and reliable internet, NBN Co works in consultation with local, state and federal governments to determine the most efficient and effective way to roll out the fixed wireless network. A key consideration in these decisions is the optimal network design. NBN Co engineers take into account factors such as population density, geography and other network specific considerations when defining rollout plans.

The fixed wireless rollout is now underway, with some regions already live and receiving services. Consultations are continuing with local authorities and communities for the rest of the regions scheduled to receive the fixed wireless service. NBN Co's priority is to use existing telecommunications structures wherever possible. Where there is a lack of suitable, available infrastructure, NBN Co will seek to establish new sites to facilitate the delivery of consistent, high quality broadband. This generally involves lodging a development application with the relevant authority and engaging with the local community.

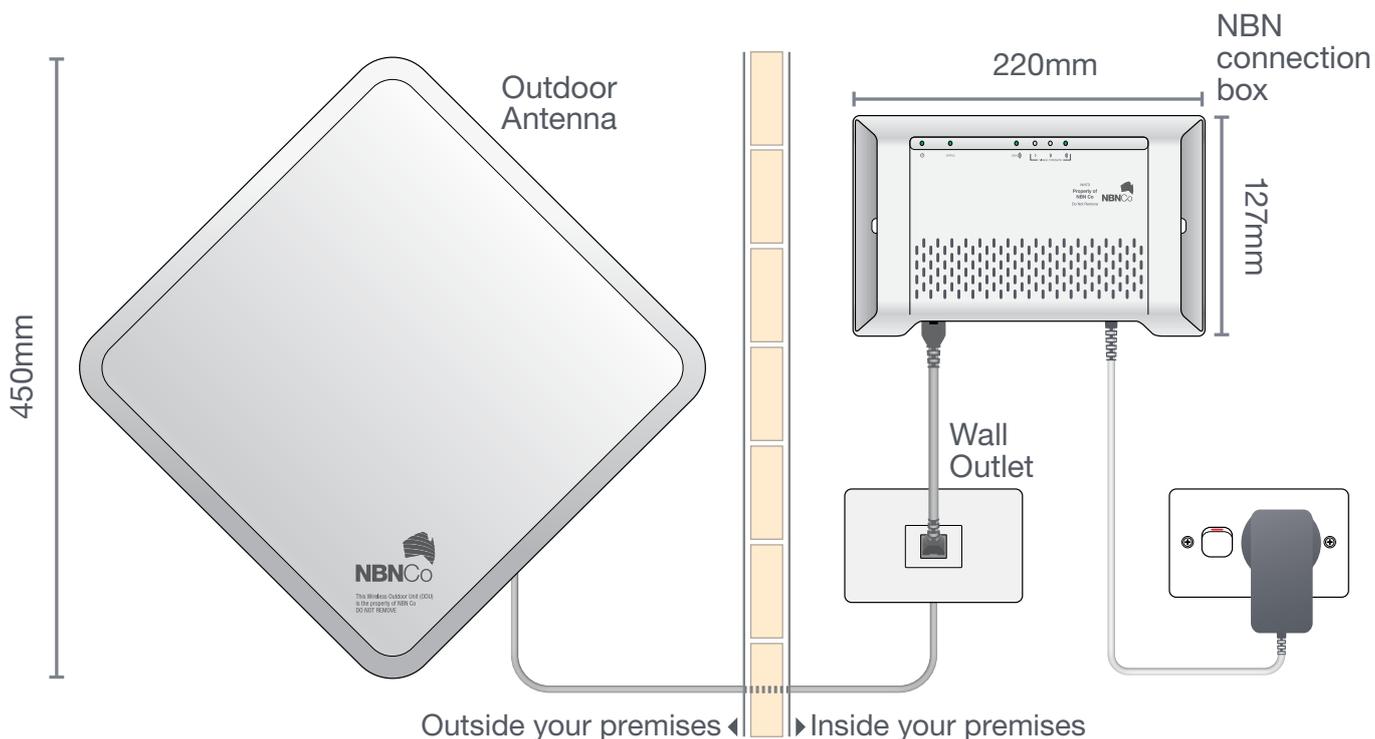
Fixed wireless to your premises

Our fixed wireless services are delivered by radio communications from a fixed wireless facility direct to a small outdoor antenna attached to the premises.

The antenna on the outside of a home or business will be connected by a cable running through the wall to the NBN connection box (Network Termination Device) which will be located within the home or business. Generally your phone or internet service provider will assist you with the best means of connecting your computer, TV or Wi-Fi router to the NBN connection box. That device sits within the building, and is hardwired to the outdoor antenna pointed at a fixed wireless site.



Fixed wireless equipment



Getting connected

NBN Co is a wholesale provider, which means that to connect a service you will need to contact your preferred phone or internet service provider. Once fixed wireless becomes available in your area, you are encouraged to contact your preferred service provider to order a service.

Before the network equipment is installed, a service validation test will be carried out. If your home or business is unable to be served by fixed wireless or other fixed line technologies, you will be able to receive NBN Co's Long Term Satellite service which is scheduled for launch in 2015. In the meantime there may be a number of other options available including mobile internet and commercial satellite. We recommend that you speak to your preferred phone or internet service provider to discuss your options.

Once the validation test has been confirmed, your service provider will organise the installation of NBN equipment at your premises. A standard installation of NBN equipment is currently free of charge. Remember to ask your preferred provider if they have any other fees. For more information about standard and non-standard installations please visit our website at: www.nbnco.com.au.

As NBN Co doesn't sell directly to the public, it's important that you contact your preferred service provider to find the right package for you. They will be able to talk to you about any particular offers and help make your switch to the NBN an easy one.

In fixed wireless areas, NBN Co provides a broadband service only. The copper phone line will remain in place to provide a landline telephone service. However service providers that sell fixed wireless services over the NBN may choose to offer their customers voice over broadband products in those areas as an alternative to landline telephone services over copper phone lines.

To switch to the NBN:

- Call your preferred phone or internet provider.
- Choose the package that suits your needs. They'll do the rest.

For a full list of service providers visit www.nbnco.com.au/serviceproviders

Why switch to the NBN?

NBN Co's fixed wireless network delivers fast wholesale speeds of up to 25 Mbps for downloads and 5 Mbps for uploads, so you can experience a high speed internet connection.[^]

By switching to the NBN, you're able to enjoy:[^]



Fast speeds for everyone

From great quality Skype™ calls, to downloading large files quickly, the whole family can enjoy fast internet at the same time.



Working from your home with ease

With the speed of the NBN, you can quickly send and receive large files and participate in high-quality video calls – making it easy to work from your home.



New ways to study

From online courses and school studies to virtual museum tours, the speed of the NBN allows you to easily access interactive and educational online content.



Entertainment on demand

Whether it's downloading a movie or streaming your favourite TV shows, you and your family can have quick access to the content you need when you need it.

For more information:

If you would like to find out more general information about the NBN and the fixed wireless service, please phone **1800 OUR NBN** (1800 687 626).

If you want to order a service over the NBN you will need to speak to a service provider. Maps showing the current rollout plans for the fibre and fixed wireless services areas, as well as further information about the NBN rollout are available on the NBN Co website at: www.nbnco.com.au



[^]We're designing the NBN to provide these speeds to our wholesale customers, telephone and internet service providers. Your experience including the speeds actually achieved over the NBN depends on some factors outside our control like your equipment quality, software, broadband plans and how your provider designs its network.