

National
Broadband
Network



Preparing for the NBN **Fibre Connections**

April 2014



Thanks for
switching to the
**National Broadband
Network (NBN)**

You're only days away from enjoying
the benefits of Australia's leading-edge
fibre network



To help you to prepare for your upcoming installation appointment, have a read through this booklet for information about how your home or business will be connected to the NBN.

Connecting your home or business to the NBN

When you called to switch your phone and/or internet services to the NBN, your service provider will have made an appointment for an NBN installer to come to your home or business and install the necessary equipment. Your installer should call you the business day before the scheduled installation to confirm the appointment time is still suitable.

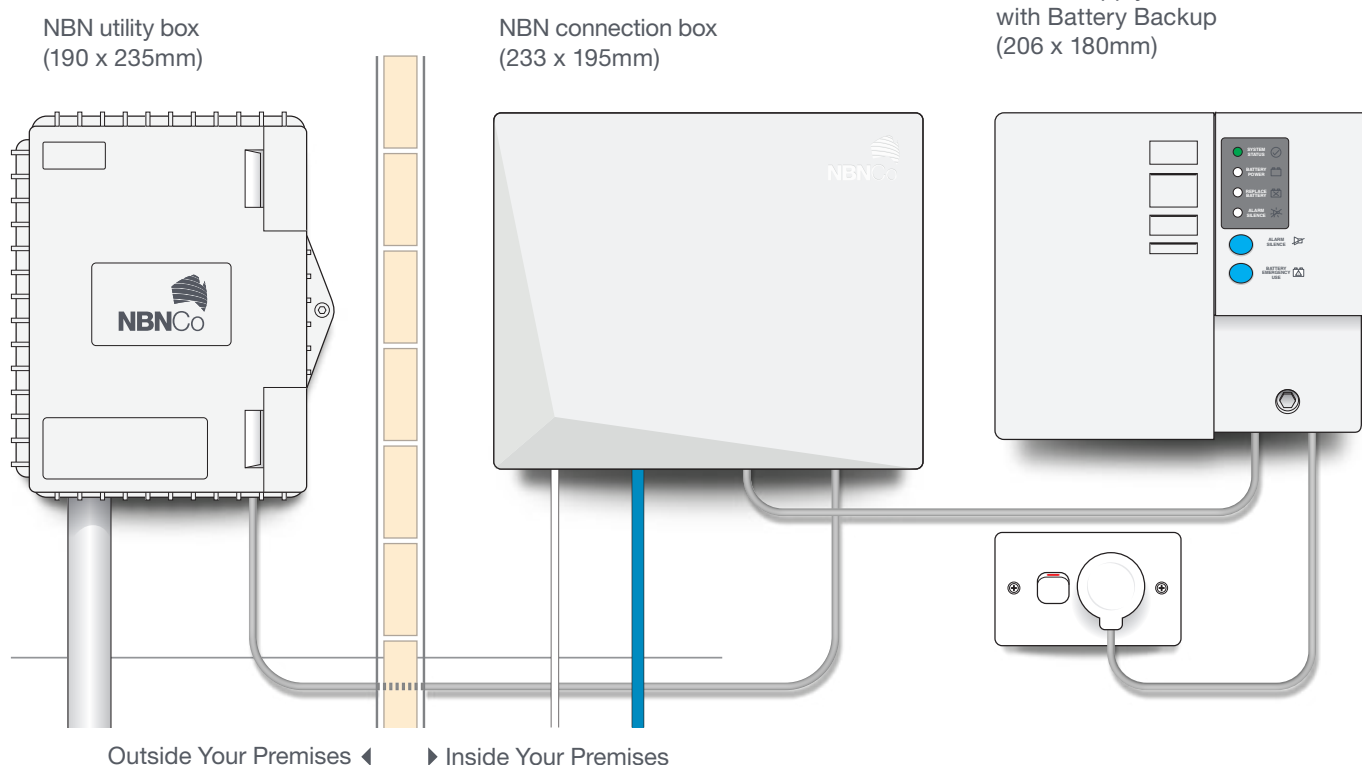
* For more information on what's included in a standard installation, visit nbnco.com.au/fibreinstallation

What does the installation involve?

If the outside of your property hasn't been connected to the NBN yet, the free standard installation* will include connecting a fibre optic cable from your street to the NBN utility box installed on the outside of your home or business (also known as a Premises Connection Device). The next step is for your installer to drill a small hole through your wall and feed the fibre optic cable from the outside into the NBN connection box (also known as a Network Termination Device).

There will also be a separate power supply box which includes battery backup (also known as Battery Backup). The Battery Backup will keep selected phone and internet services running for up to five hours (including a manually activated emergency reserve) in case of power failure. You can find more information on this in the FAQ section.

What does NBN equipment look like?



The NBN connection box shown is designed for use inside the home and business. If your installation requires an external NBN connection box your device will differ to the one shown above.

Before your installation appointment

The best location for the NBN connection box

You'll need to think about where you want the NBN connection box and power supply to be installed. You will need to consider how you want to connect your devices inside the house – i.e. computers, smartphones, tablets, landline phones, monitored security/medical/fire alarms and internet TV boxes. The best place is:

- Near your current internet (wireless) modem if you have one
- Near your existing phone or network cabling
- Near an accessible power point
- In a cool, dry, ventilated area
- Away from busy areas where it may be knocked and damaged.



Other devices that may be affected by the NBN

The installation of NBN equipment will also affect other devices you may have in your home or business.

STEPS FOR MOVING SERVICES TO THE NBN:



In-home wiring changes

You can plug one phone (or other device) into the inbuilt phone socket that comes with the NBN in-home equipment if you've ordered a phone service over this socket. If you want to keep using other existing phone sockets in your home, wiring changes will be required.

To organise in-home wiring changes to enable your existing equipment or phone sockets to work over the NBN:

- **Call your preferred phone company or internet service provider.**

- Ask if they can arrange in-home wiring changes
- What the cost will be

OR,

- **Contact a registered cabler** about connecting phone sockets to your phone service over the NBN (look up 'Telephones & systems – installation & maintenance' either online or in your phone directory).



Priority Assistance

Priority Assistance services are available for individuals with diagnosed life-threatening medical conditions.

- **Call your preferred phone company or internet service provider.**

- Tell them you have a Priority Assistance service and that you need the same service levels over the NBN.



Emergency call buttons (or similar dialler devices)

1. **Call your preferred phone company.**

- Let them know you have an emergency call button
- Check if you need to have any wiring changes done to connect your device to the NBN.

2. **After the NBN is installed and working, confirm that your device is working with your emergency contact.**



Medical Alarm

1. **Call your alarm provider.**

- Ask what internet or phone services over the NBN will support your alarm
- Ask what in-home wiring changes are required.

2. **Call your preferred phone company or internet service provider.**

- Let them know that you have a monitored medical alarm
- Tell them your alarm requirements
- Arrange to have any required wiring changes done to connect your alarm to the NBN.

3. **After the NBN is installed and working, confirm that your alarm is working correctly with your alarm provider.**



Monitored security alarm or fire alarm (excludes household smoke detectors)

1. Call your alarm provider.

- Ask what internet or phone services over the NBN will support your alarm
- Ask what in-home wiring changes are required.

2. Call your preferred phone company or internet service provider.

- Let them know that you have a monitored alarm
- Tell them your alarm requirements
- Arrange to have any required wiring changes done to connect your alarm to the NBN.

3. After the NBN is installed and working, confirm that your alarm is working correctly with your alarm provider.



EFTPOS terminal/ATM terminal

1. Call your bank or EFTPOS/ATM provider

- Ask what internet or phone services over the NBN will support your EFTPOS/ATM machine services
- Ask what in-premises wiring changes are required

2. Call your preferred phone company or internet service provider

- Let them know you have an EFTPOS/ATM terminal
- Tell them your EFTPOS/ATM requirements
- Arrange to have any required wiring changes done to connect your EFTPOS/ATM to the NBN

3. After the NBN is installed and working, confirm that your EFTPOS/ATM is working correctly with your provider



Fax machine & Teletypewriter (TTY) device

1. Call your preferred phone or internet provider.

- Tell them you have a fax or TTY device you want to work over the NBN
- Arrange to have any required wiring changes done to connect your fax or TTY device to the NBN (such as connecting existing phone sockets to the NBN).

2. After the NBN is installed and working, confirm that your fax machine or TTY device is working.

On the day of installation

When your installer arrives, check their ID before giving them access to your property. Your installer will discuss with you where the equipment is going to be installed. Remember to keep these things in mind:

- Some locations might not be possible due to safety or other considerations such as the location of the existing telecommunications infrastructure.
- Make sure you advise the installer of any safety issues you are aware of on the property, like any known or suspected asbestos or asbestos-containing material on your property or if there have been any recent pest treatments on the property.
- Please also advise the installer if you're aware of any heritage requirements or restrictions that might be relevant.

PLEASE NOTE

Customer telephone and data cables can't extend outside or between buildings. They are susceptible to lightning and are a potential hazard as the lightning can be transferred between different ports of the NBN connection box to connected equipment.



What if I can't be there for my appointment?

If you can't be there on the day of your installation, you can either reschedule it with your phone or internet service provider, or ask someone you trust who is over 18 to give access to all areas of your property. Remember, they'll potentially need to make decisions about the installation for the technician, so someone needs to be present for the whole installation process.

Some things to expect during installation

If the fibre optic cable has not been connected from your street to the outside of your property, we might need to dig a small trench, or, if it's coming from overhead, clear a small amount of vegetation. Don't worry; we'll try to keep disturbance to a minimum.

To get to the location you want the equipment installed, some furniture may need to be moved around. We'll need to drill a hole through your wall, as well as some other holes to mount the equipment, so be prepared for a small amount of drilling noise and dust - but we'll clean it up afterwards.

Asbestos-containing materials may also be identified during the installation process. In some cases, an installer may suspect and/or assume that asbestos-containing materials are present because of the age of the building. Asbestos-containing materials such as fibre cement sheeting were commonly used in building materials in Australia until the 1980s. Where asbestos-containing material is identified or assumed to be present in a property, the installer will consider options to avoid disturbing that material or area of the property, or will otherwise use accepted work practices to ensure, so far as is reasonably practicable, the safety of themselves and the occupants of the property.

Your installer may also need to turn off your electrical power for a short time. However, they'll discuss this with you beforehand to make sure this won't impact critical electrical equipment, such as medical devices.

How long will it take?

If your property already has a fibre optic cable connected to a NBN utility box outside, standard installations normally take between approximately two and four hours. If your property does not have the fibre optic cable connected, then a standard installation could take between four and eight hours. Non-standard installations may take longer.

What happens if we can't complete the installation?

If we are unable to complete your installation on the day, NBN Co will work with your service provider to give you notification of when the issue should be resolved and when you can book a new appointment.

How much does the installation cost?

A standard installation of NBN equipment is currently free of charge. Remember to ask your preferred provider if they have any other fees. A standard installation includes connecting fibre optic cable from your street to the NBN utility box on an outside wall of your home or business and to an NBN connection box inside.

If your requirements are non-standard, your installer can discuss your options with you. For more information on what's included in a standard installation, visit nbnco.com.au/fibreinstallation. Speak to your service provider before installation to see if they have any other charges such as set up or activation fees.

What's supplied in your NBN installation

NBN Co supplies:

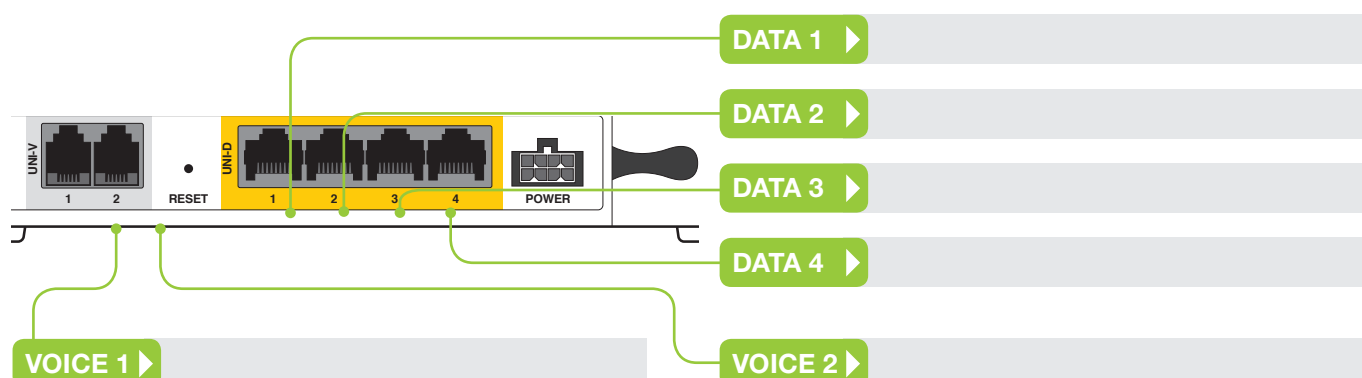
- NBN utility box
- NBN connection box and with Battery Backup (optional)
- External cabling from the street network to the NBN utility box and internal cabling up to the NBN connection box

This equipment remains the property of NBN Co. Our boundary of responsibility stops at the data (UNI-D) / voice (UNI-V) ports. From there, the service on that port is the responsibility of your phone and internet service provider. All other cables and equipment are the responsibility and property of you or your phone and internet service provider. This includes the internal wiring required for additional internal phone outlets within a home or business.

Connecting your equipment

Your NBN connection box has several ports on the back of it. Each service you subscribe to will be allocated to a specific port on your NBN connection box. Your phone or internet service provider can tell you which ports have been activated in your NBN connection box. Please don't plug things into ports other than the one your installer advises, as the other ports will be inactive.

You can keep a record of which ports have been activated in your NBN connection box using the diagram below.





Connectivity options

COMPUTER/INTERNET ACCESS

To connect computers to your NBN connection box, you'll need a separate router – a box that shares an internet connection over Ethernet wiring, or wireless networking (Wi-Fi). If you already own a router from your old cable or DSL broadband, it might not work over the NBN. Your phone or internet service provider can confirm this and may be able to provide you a new one. If not, any router you buy needs to be able to support Ethernet WAN. If you want to connect computers or other devices in other rooms, you will need to use either a wireless router, power-line adaptors (see FAQs for more information on power-line adaptors) or install Ethernet cables between rooms.

INTERNET TV (IPTV)

Generally, internet TV boxes need a wired connection to your NBN connection box, though some may work with Wi-Fi. To watch broadband-based TV services delivered over the NBN, you will need to order the relevant service from your preferred provider so you have the right equipment for these services.

TELEPHONE

If you've ordered a landline phone service, ask your phone or internet service provider where to connect your phone. There are dedicated 'UNI-V' ports on the back of the NBN connection box into which you can plug a phone, but not all phone services use these ports, which is why it's important to confirm with your phone or internet service provider beforehand.

You can plug one phone (or other device) into the inbuilt phone socket that comes with the NBN in-home equipment. If you want to keep using other existing phone sockets in your home, wiring changes will be required. Wiring changes aren't covered in the free standard installation and the NBN will work without them, but they are necessary if you want more than the one phone socket built into your NBN equipment or your service provider's equipment.

WIRELESS NETWORK

If you have an existing wireless router, your phone or internet service provider can advise you if it can operate with the service you acquire over the NBN.

FAQs

Can I run everything on a wireless network?

It's possible to run most services over a Wi-Fi network, but if for any reason you find Wi-Fi limiting, there are other options. For instance, powerline networking adaptors can make a home network by using existing electricity wiring in your house. These plug directly into home powerpoints and use existing in-home electrical wiring for data networking, avoiding the need to install new cables. These adaptors are readily available in retailers – search for “powerline networking adaptor” on your internet browser.

Do I need to install any cables and outlets?

Most services can be run over a Wi-Fi network, but you may prefer to have wired connections for things like internet TV (IPTV), data and/or phone outlets. You can arrange for any registered cabler to install points. Your phone and internet service provider may be able to recommend a registered cabler in your area or look up “Telephones & Systems – Installation & Maintenance” online or in your phone directory. Alternatively, you can wait until you and your installer have agreed on the location of your NBN connection box. You can arrange to have as many internal home network points as you like, but these will not be included in a standard installation.

Do I need to get a separate supplier for the internal wiring?

Beyond the NBN connection box, your NBN installer won't undertake internal wiring tasks and permanent cabling through wall, floor or ceiling cavities. This must be done by a registered cabler. Your phone and internet service provider may be able to recommend a registered cabler in your area or look up “Telephones & Systems – Installation & Maintenance” online or in your phone directory.

Will there be any interruption to my existing landline phone and internet service?

No, installation of NBN equipment on the exterior of your property should not interrupt your existing landline phone and internet services. However the NBN is currently scheduled to replace most landline phone, ADSL internet and Telstra cable internet. These existing services will be permanently switched off around 18 months after the NBN is rolled out in your area*. You'll need to transfer your existing landline phone and internet services to the NBN before the scheduled disconnection date in your area if you want to keep making phone calls or accessing the internet using a landline connection.

Will my existing monitored alarm work over the NBN?

The most certain way to find out is to your alarm service provider. It is expected that the NBN will be capable of supporting most existing monitored medical, security and fire alarms, as well as a wide range of internet-connected alarms. If you currently have a monitored alarm installed in your home or business you should speak to your alarm service provider and your phone or internet service provider about the issues to consider when moving to an NBN-based landline phone service. You should test your alarm and can also request that your alarm service provider test your alarm service the same day that the service is activated by your service provider, and also check that your in-premises wiring is correctly connected up to your new NBN equipment. For further information on alarms and the NBN, please visit nbnco.com.au/alarms

When I'm on the NBN, can I use the phone or internet if my power fails?

The NBN connection box comes with a Power Supply unit that has battery backup. This means that you'll be able to keep making phone calls for up to five hours (including a manually activated battery emergency reserve period) after the power goes out, as long as you are using a standard corded phone that doesn't need to be plugged into a power point, and your phone service is provided through one of the “UNI-V” ports on the connection box.

Other phone services or cordless phones are not powered by the battery backup. To ensure your phone service is supported by battery backup, please ask your service provider to supply your phone service through the NBN “UNI-V” port, and make sure you are using a standard corded phone that doesn't need to be plugged into a power point.

The Battery Backup service can also support any internet-connected device when connected to an active UNI-D port on the NBN connection box via an Ethernet cable, as long as the internet-connected device has its own separate battery.

What if the installer damages my property?

Your installer has an obligation to take appropriate care on your property during the installation, however in the unlikely event any damage is caused, you can contact NBN Co on 1800 OUR NBN (1800 687 626).

* Services not replaced by the NBN include some TransACT, OptiComm, some Telstra Velocity services and others. For a full list please visit nbnco.com.au/switchoff or call us on 1800 687 626. Optus cable internet services may also be switched off on a different date and existing customers will be advised separately.

Your connection checklist



CHECK

I have checked with my device provider and my phone or internet service provider that any devices I rely on will work on the new NBN-based service



AUTHORISATION

I've arranged for myself (or an authorised representative over 18) to be there for the whole appointment



CONSENT

I have my landlord's consent for the installation (if required)



UNDERSTANDING

I understand that a normal installation appointment might take up to four hours



CONSIDERATION

I've considered where I would like my NBN Co equipment to be positioned in my premises

Deaf, hearing or speech impairment services

If you are deaf or have a hearing or speech impairment, contact us through the National Relay Service:

TTY phone **1800 555 677**
and enter **1800 687 626**

Speak and Listen users phone **1800 555 727**
and enter **1800 687 626**

Internet relay users connect to
www.iprelay.com.au/call and enter **1800 687 626**

Translating or interpreting services

If you need an interpreter, please call the Translating and Interpreting Service (TIS National) on **131 450** and ask for the NBN Co Contact Centre on **1800 687 626**

For more information

Phone **1800 OUR NBN** (1800 687 626)

Visit our website at **www.nbnco.com.au**

Email **info@nbnco.com.au**



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Disclaimer

This document provides general information about the technical requirements for connecting to the NBN and is correct as at April 2014. Technical connection requirements may change due to factors such as legislative and regulatory requirements as well as advances in technologies. For any queries about your particular circumstances or requirements, please consult your phone and internet service provider or other supplier.