

## WHAT IS YOUR NBN TECHNOLOGY

NBN is delivered across Australia with fibre optic technology, but in some cases the connection to your premises can partially use the older infrastructure. Knowing what technology is used in your premises is important for understanding:

- If there could be any limitation on the speed and why
- What kind of hardware you can use
- Where responsibilities lies

Key Telecom offer the following technologies NBN:

## FTTP (Fibre To The Premises)

### HIGHLIGHTS

Key Telecom is responsible to deliver the service up to the NTD

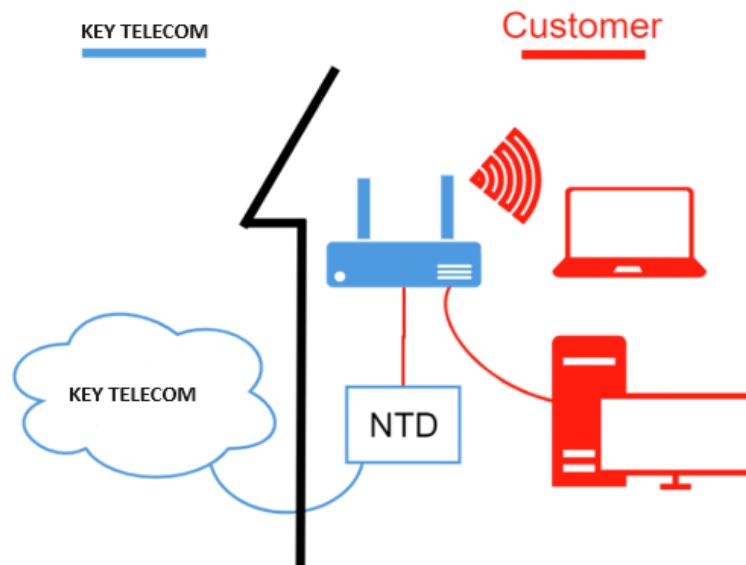
Require a VDSL2 modem/router, which is provided by Key Telecom

The optic fibre is connected directly at the premises



This is the most common technology on new buildings. The optic fibre is delivered directly to premises on a device called NTD (Network Termination Device), which looks like the image above (with and without the cover).

Key Telecom delivers the service to the NTD and maintains the modem. An ethernet cable to connect the NTD and the modem is provided. The customer is responsible for the connection of each device and for the cables in the premises, although basic support is provided.



## FTTB (Fibre To The Basement)

### HIGHLIGHTS

Key Telecom is responsible to deliver the service up to the MDF (comms room)

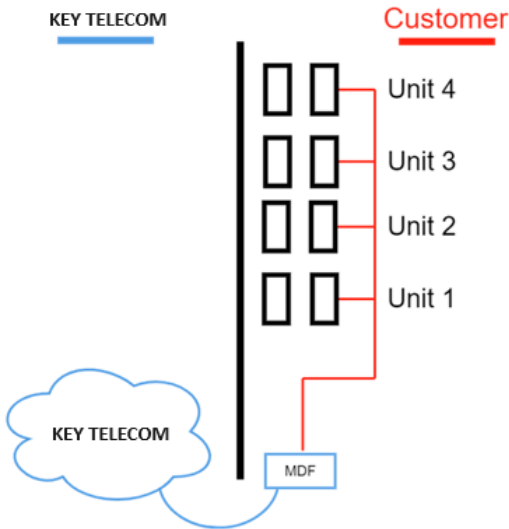
Require a VDSL2 modem/router, which is usually provided by Key Telecom

From the MDF to the premises is usually used copper



This is one of the most common technology on old multi-dwelling buildings and commercial centre. The optic fibre is delivered to the Communication Room of your building, usually in the basement.

Key Telecom is responsible to deliver the service up to the MDF and to provide and maintain a modem that must be connected to the phone socket. The building manger is usually responsible to ensure the connection is established from the MDF to the first phone socket of the premises, which may look like the image above. The customer is responsible for the connection of each device and for the cables in the premises, although basic support is provided.



## FTTC (Fibre To The Curb)

### HIGHLIGHTS

Key Telecom is responsible to deliver the service up to the NTD

Require a simple router, which is provided by Key Telecom

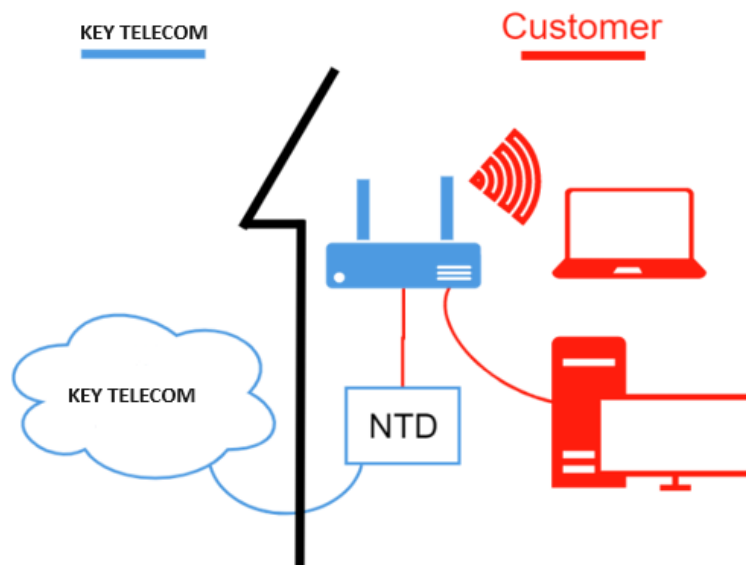
From the curb to the premises is usually used copper

Voice continuity is possible, but there could be up to 10 days of disservice



This is one of the most common technology on old houses and townhouses. The optic fibre is usually delivered to a pit near the premises and from there with copper to the NTD, which looks like the image above.

Key Telecom deliver the service to the NTD and maintain the modem. An ethernet cable to connect the NTD and the modem is provided. The customer is responsible for the connection of each device and for the cables in the premises, although basic support is provided.



## FTTN (Fibre To The Node)

### HIGHLIGHTS

Key Telecom is responsible to deliver the service up to the first socket

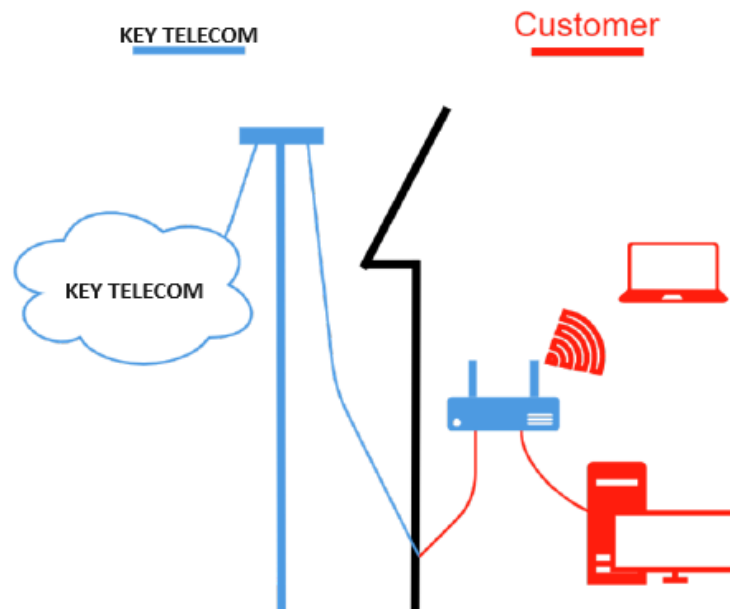
Require a VDSL2 modem/router, which is provided by Key Telecom

From the node to the premises is usually used copper



This is one of the most common technology on old residential or commercial areas. The optic fibre is delivered to a distribution point in the street and then is delivered with copper to the first socket of the premises.

Key Telecom is responsible to deliver the service up to the first socket and to provide and maintain a modem that must be connected to the phone socket. The customer is responsible for the connection of each device and for the cables in the premises, although basic support is provided.



## HFC (Hybrid Fibre Coaxial)

### HIGHLIGHTS

Key Telecom is responsible to deliver the service up to the first socket

Require a VDSL2 modem/router, which is provided by Key Telecom

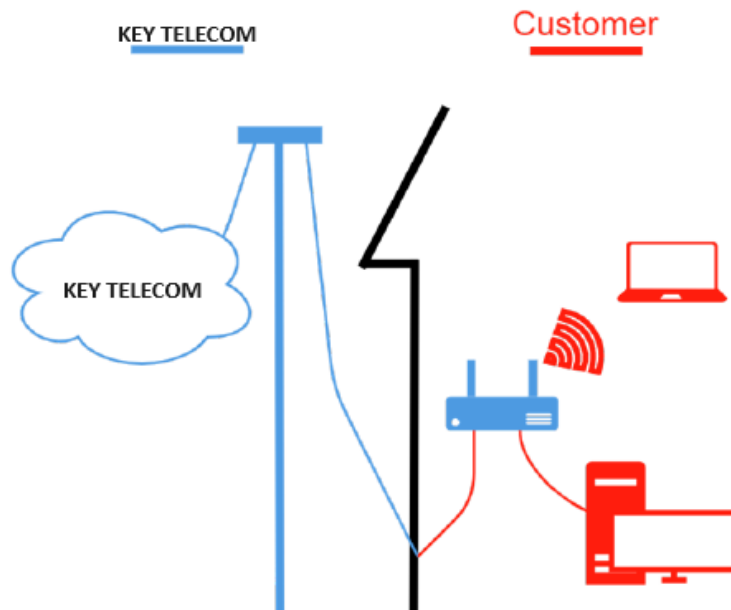
It uses an existing pay TV or cable network

The NTD can be installed by a professional or self-installed



This is the most common technology on residential premises, where there is already an existing 'pay TV' or cable network. The optic fibre is delivered to a distribution point in the street and then is delivered to the first socket of the premises, which looks like the image above.

Key Telecom is responsible to deliver the service up to the first socket and to provide and maintain the NTD, which must be connected to the coaxial wall outlet, and the router, if provided. The customer is responsible for the connection of each device and for the cables in the premises, although basic support is provided.



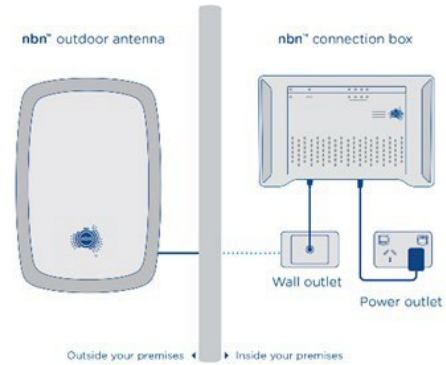
## FIXED WIRELESS

### HIGHLIGHTS

Key Telecom is responsible to deliver the service up to the NTD

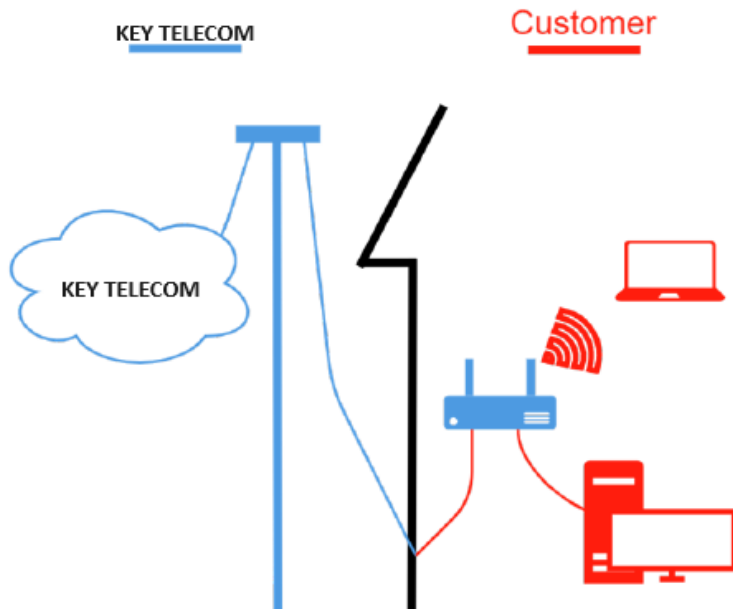
Require a VDSL2 modem/router, which is provided by Key Telecom

It uses an external radio antenna



This is the most common technology for rural areas or whenever is not possible to use any other technology. An external antenna is connected with fibre optic to the NTD, which should be inside the premises, which looks like the image above.

Key Telecom is responsible to deliver the service up to the NTD and to provide and maintain the router, if provided. The customer is responsible for the connection of each device and for the cables in the premises, although basic support is provided.



## WHAT SPEED TIERS KEY TELECOM OFFERS

Key Telecom currently offers four different speed tiers.

The table below explains more in details each of them and allow you to make an informed decision on which plan is best for you

TOO MANY DEVICES CONNECTED  
IN YOUR NETWORK



TECHNOLOGY USED



TOO MANY APPLICATION  
OPENED ON YOUR PC



PROXIMITY TO WALLS AND FURNITURES



TOO MUCH TRAFFIC FROM OTHER  
PEOPLE IN THE SAME AREA



SLOW DESTINATION SERVER



	BASIC	STANDARD	STANDARD +	PREMIUM
Users	1	1-3	3-6	6+
Web Browsing	✓	✓	✓	✓
Emails	✓	✓	✓	✓
Voice calls	✓	✓	✓	✓
Social Media	✗	✓	✓	✓
HD Videos and Music	✗	✓	✓	✓
4K Video	✗	✗	✓	✓
Download large files	✗	✗	✗	✓
Hardcore Gaming	✗	✗	✗	✓
Typical minimum evening speeds (7pm – 11pm)	6 Mbps download	15 Mbps download 4 Mbps upload	30 Mbps download 15 Mbps upload	60 Mbps download 24 Mbps upload
Typical minimum speeds off-peak (11pm – 7pm)	11 Mbps download	22 Mbps Download 4 Mbps upload	45 Mbps download 15 Mbps upload	90 Mbps download 30 Mbps upload

Is important to take in consideration that the maximum achievable speed can be limited by many factors that are not under Key Telecom or NBN control. For FTTB and FTTN customers, we can't confirm your maximum line speed until your service is installed and activated.



## WHAT CAN LIMIT YOUR SPEED

There are multiple factors that can limit your experience with NBN. The first thing to do if you experience any issue is always to take in consideration the following reasons:

Possible reasons can be:

### **Presence of co-existence**

Co-existence can only affect NBN technologies that used copper services, like FTTB, FTTN and FTTC. In some areas, NBN has not been completely rolled out NBN Co may reduce the power of a node to prevent interference with pre-existing ADSL services, significantly reduce the bandwidth speed of your service. This is usually resolved when the NBN rollout is completed in the area.

### **Type of technology used**

Technologies that use the copper for connecting the node (FTTN) or the MDF (FTTC and FTTB) to your home, are susceptible to degradation of the signal related to the length of the copper cable or its quality (if there is corrosion or problem in the joints). Bad weather conditions can also affect the external wiring. Is also important to keep in mind that copper is subject to electrical interference.

For Fixed Wireless customers, is important to keep in mind that the speed cannot be defined as we do for wired technologies and is significantly affected by the distance of the receiver from the NBN tower and the number of antennas that are served by a tower.

### **Internal cabling issues**

Is also important to verify the condition of the internal wiring of your premises or the connection from the MDF to where you connect the modem, which is not always tested by NBN or Key Telecom because is categorized as internal cabling and is under the responsibility of the owner or the building manager.

### **How NBN is used**

The speed tier you choose must be proportionate to how you use your internet connection. To know what the best plan for your needs is, use the table provided in this document

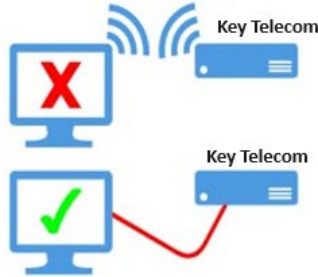
## TESTING YOUR SPEED

If you think that your internet connection is slow, you can contact our support Team by calling 1300 174 637, by emailing to [support@keytelecom.com.au](mailto:support@keytelecom.com.au) .

Please follow the indications below to allow our Customer Service Representative to provide you with the best possible service:

# NBN EXPLAINED

1. CONNECT A COMPUTER DIRECTLY TO OUR MODEM USING A CABLE



2. CLOSE ALL THE APPLICATIONS AND OPEN ONE INSTANCE OF THE BROWSER



3. MAKE AT LEAST 3 TEST IN DIFFERENT TIME OF THE DAY



## DEALING WITH OUTAGES

We cannot guarantee to keep the service operating 100% of the time. Causes of a service interruption can be:

BAD WEATHER



UNPLANNED OUTAGES



NBN MAINTENANCE



POWER OUTAGES



**If you have an alarm or you need NBN for a medical device their functionality may be affected.**

Is important to understand that if your phone is connected with NBN, it will not work if the NBN connection is interrupted. If your business relies on internet or calls, is your responsibility to have in place a contingency plan, which can be backup internet connection with us or another provider or a mobile backup service.

A CHEAPER BACKUP INTERNET CONNECTION



A MOBILE BACKUP INTERNET CONNECTION

**ASK US ABOUT IT!**



Ask our Sales or Customer Service Representative about the best solution for your business.

## MORE INFORMATION

More information please email us on: [support@keytelecom.com.au](mailto:support@keytelecom.com.au)