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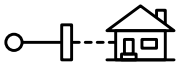
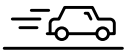
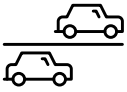
nbn™ speeds explained

Speeds on the **nbn** network can vary due to a number of factors, and explanations can often get a bit technical. To keep things simple, we have likened it to how fast you can drive a car.

Factors influencing internet speed	How fast you can drive a car
The nbn technology connected to your premises 	The model of your car and the maximum speed it can achieve 
Your speed plan and any caps we apply to that plan 	The speed limit of the road you are driving on 
The service provider's network capability 	The number of lanes the service provider has built to carry the traffic 
Your in home setup and how you use your service 	The local driving conditions and how well you maintain your car 

As you keep reading, you'll find more information on the different **nbn** technologies, including the estimated maximum speeds for each type.

The nbn technology connected to your premises

nbn co is rolling out a mixture of different technologies, to connect homes and businesses across Australia. Your maximum line speed is the maximum speed the infrastructure is capable of, and is determined by the type of technology nbn co makes available at your premises. The infrastructure connected to your address is the same, regardless of which service provider you choose.

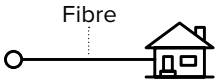
It is normal for the speed of your internet connection to be slower than the maximum line speed, and speeds will vary due to a range of additional factors.

Technology types provided by nbn co

Based on the technology type nbn co has rolled out in your area, one of the following options will be available at your address.

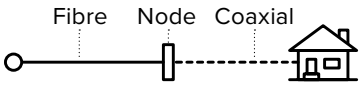
Fibre to the Premises (FTTP)

Optical Fibre leading all the way to your address, with an nbn connection box (NTD) inside your premises.



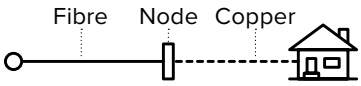
Hybrid Fibre Coaxial (HFC)

Optical Fibre leading to a node, then Coaxial Cable to your address, with an nbn connection box (NTD) inside your premises.



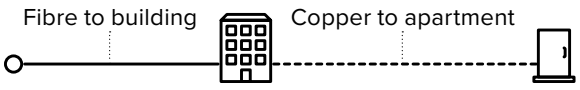
Fibre to the Node (FTTN)

Optical Fibre leading to a node in the street, then connects via existing copper cable to your address, wired to a wall socket inside your premises.



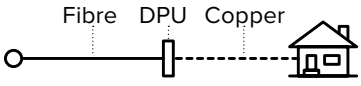
Fibre to the Building (FTTB)

Optical Fibre leading to a node within the building communications room, then copper cable to your apartment, wired to a wall socket inside your premises.



Fibre to the Curb (FTTC)

Optical Fibre leading to a Distribution Point Unit (DPU) in your street, then connecting via an existing copper cable to your address, wired to a wall socket inside your premises.



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Factors influencing copper line speed

Technologies using copper cable have additional factors which may reduce speeds, including:

- The length of copper cable from the node to your wall socket
- The condition of the copper, and exposure to the elements
- Any additional wall sockets, intercoms, or alarm systems connected within the home
- Any internal or external electrical interference

Your plan speeds

We offer three plan tiers with different typical download and upload speeds during the evening peak.

Home Broadband speed – How fast?

Starter	Standard Plus	Premium
		
1-2 people online at the same time ✔ Emails and browsing ✔ Social media ✔ Online gaming ✔ HD video streaming to 1 device only ✘ Download and upload large files ✘ 4K/Super HD video streaming	**3-6 people online at the same time** ✔ Emails and browsing ✔ Social media ✔ Responsive online gaming ✔ HD video streaming to 2-3 devices ✔ Download and upload large files ✘ 4K/Super HD video streaming	**6-9 people online at the same time** ✔ Emails and browsing ✔ Social media ✔ Responsive online gaming ✔ Simultaneous download & upload very large files ✔ 4K Steaming to one device and HD streaming to 3+ devices
25 Mbps typical download speed during evening peak. 8 Mbps typical upload speed during evening peak.	50 Mbps typical download speed during evening peak. 17 Mbps typical upload speed during evening peak.	100 Mbps typical download speed during evening peak. 17 Mbps typical upload speed during evening peak.

Typical download and upload speeds are not guaranteed and your actual speeds may be slower. Evening peak is 7pm to 11pm. Certain plans are not suitable for some activities (indicated by the crosses) and where the activities require speeds in excess of the speeds available on your plan, they will not work.

Some plans are unavailable depending on the nbn connection technology type and/or past speed data from that address.

Estimated maximum speeds for each nbn technology type

Even if you move to a higher speed plan your nbn network speed can never go faster than the maximum line speed.

This means for Fibre to the Node (FTTN) and Fibre to the Building (FTTB) services, which use a combination of copper and fibre cables, a higher speed plan may not improve your speeds, if the maximum line speed is slower than the speed plan you have chosen. We'll confirm actual speeds on Fibre to the Building (FTTB) Node (FTTN) and Curb (FTTC) services.

To test your service speed or maximum line speed, your service needs to be connected and active.

The service provider's network capability

Service providers are required to purchase network capacity (bandwidth) from nbn co to allow their customers access to the internet. Network capacity upgrades are required as service providers connect more customers.

At Belong, we're working to provide a consistent speed experience for our customers on the nbn network. To optimise network performance and ensure our network capability, we monitor and make adjustments regularly with Telstra and nbn co.

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Things that affect your internet speed

There are a number of factors relating to your in-home setup and use, which can affect how your service performs. Understanding these factors will help you get the most out of your connection.

Modem

Modems and routers will perform differently depending on their specifications. You will generally get better performance when connecting devices via an Ethernet cable where possible.

Devices

Speeds to each device will vary due to settings, configuration, and the type of device connected. Your speed will be shared across your home network, as you connect more devices. You can also do updates, virus scans, and optimisation steps to keep your device safe and performing in top condition.

Wi-fi

Your wi-fi speed and your service line speed are different. Mirrors, walls, and nearby electrical devices will interfere with your wi-fi signal.

Tips: To improve your wi-fi performance try placing your modem in a central location within your home. You can test your service line speed by connecting via an Ethernet cable.

Visit our support page at belong.com.au/support for more tips.

Content

Speed to a certain site may be impacted by other users, so keep that in mind when you are downloading, streaming, or accessing sites for work or study. Gaming, browsing, or downloading may also be slower if content is hosted internationally.

Wires and cabling

Sometimes the wiring to your home or within your home may be damaged, corroded, or in poor condition, which can reduce your internet speeds. If you are experiencing a slow connection, Belong can test and arrange repairs for any external network damage we find. Some in-home repairs may require you to arrange your own electrician, but we'll let you know if this is needed.

Getting the most out of your service

We're continuously working to provide you with a hassle free service, so if you think your service isn't as fast as it should be, visit our support page at belong.com.au/support for answers to common troubleshooting questions.

If you're still having issues, let us know so we can help you get the most out of your service on the nbn network.