

NBN network speeds explained

General Factors

When discussing the average expected access speed the NBN can offer it is important to remember that external factors can also limit these speeds. The following are just some of the limiting factors that may prevent your service from reaching the maximum speeds:

- The capability of the router you are using You will need a router capable of connecting you to the NBN™ network and which can handle the high speeds available. Router performance can often be the slow point in a NBN™ connection.
- The strength of your network and the way your provider configures their network and manages traffic
- The time of day, as high-traffic times like the evening can cause speeds to slow
- The PC and the software you are using There are many applications and programs that access
 the Internet which may be running in the background on your device performing various activities
 which may affect your speeds ie: downloading updates
- The number of devices and/or users connected at any one time

Specific Factors

In addition to the general factors that can affect all NBN speeds, the specific factors below may affect the actual speed experienced on your NBN™ service.

Technology	Description	Speed options	Specific factors
FTTP Fibre to the Premises	Optical fibre leading all the way to your premises, connecting to your NBN™ Utility Box on an outside wall and internally wiring to your NBN™ Connection Box.	Standard (12/1 Mbps) Premium (50/20 Mbps) Premium Plus (100/40)	See General Factors above
FTTN Fibre to the Node (typically in your street or a street nearby)	Optical fibre leading to a Node in your street or a street nearby with a final stretch of copper to a wall socket inside your premises.	Standard (12/1 Mbps) Premium (50/20 Mbps) Premium Plus (100/40)	See General Factors above and; • Length of copper line from your premises to the node • Quality of copper line from your premises to the node, including corrosion and joint quality. • Weather conditions, including heavy rain. • Quality and layout of in-premises cabling • Internal and External electrical interference

FTTB Fibre to the Building	Optical Fibre leading to a node in the buildings communications equipment room, with a final stretch of copper to your wall socket inside your premises.	Standard (12/1 Mbps) Premium (50/20 Mbps) Premium Plus (100/40)	See General Factors above and; • Length of copper line from your premises to the basement • Quality of copper line from your premises to the basement, including corrosion and joint quality. • Quality and layout of in-premises cabling • Internal and External electrical interference
Wireless	Fixed antenna on your roof receives a wireless signal from your local NBN™ Wireless tower, with internal wiring to your NBN™ Connection Box.	Standard (12/1 Mbps) Premium (50/20 Mbps) Premium Plus (100/40)	See General Factors above Other factors include; • Weather conditions • Signal strength • Antenna obstructions

Choosing the right speed for your household

Please note that not all speed options are available on all NBN™ technologies.

Speed	Advice about choosing this speed
Standard 25/5 Mbps	Recommended for moderate to heavy household use or for small businesses. This speed is suitable for video streaming, larger downloads, transferring large files and engaging in cloud-based collaborative work and if you have more than one device connected at the same time.
Premium 50/20 Mbps	With a super-fast 50Mbps that will make streaming movies, gaming, and other heavy-duty activities instantaneous and delay-free. This plan level is probably sufficient for most households or small businesses, even if you have multiple users streaming video and other data-heavy content at the same time.
Premium Plus 100/40 Mbps	Upload speeds of 40Mbps and download speeds of up to 100Mbps. At these speeds, HD movies can be downloaded in minutes and gaming is virtually guaranteed to be delay-free. Given the high speed and capacity, most business will find these plans suitable and more than adequate for data backups and cloud collaboration for multiple users.

These speeds measure the typical download speeds nationwide between 7PM to 11PM (local time). This is when the network is busiest and performance issues such as congestion are the most likely to occur, so measuring speeds during this period provides more realistic information about the speeds you can expect to experience on the $NBN^{\text{\tiny{M}}}$.