business nbn™

nbn™ fibre access network specifications

The **nbn**™ broadband access network rollout across Australia is expected to meet the bandwidth needs of the vast majority of broadband users. It is recognised, however, that businesses and the government may be interested in changing their existing access network technology to either Fibre to the Premises or business **nbn**™ Enterprise Ethernet with access to higher bandwidths and additional network features.

nbn offers two wholesale fibre products:

- **nbn**™ Fibre to the Premises (FTTP); and
- business **nbn**™ Enterprise Ethernet.

For more information talk to your service provider.

The table below compares the features of each product:

Note that this table provides a summary for information purposes only. Refer to the WBA for full commercial terms of each product.

Network bandwidth	nbn™ Fibre to the Premises (FTTP)	business nbn™ Enterprise Ethernet
Architecture	Gigabit Passive Optical Network (GPON)	Point-to-point fibre from premises to the Fibre Access Node (FAN)
Best effort bandwidth - peak wholesale speeds	12/1 → 1000/400Mbps	10/10 → 1000/1000Mbps
Committed bandwidth	Traffic Class (TC 1) - 0.15/0.15 → 5/5Mbps) TC 2 - 5/5 → 100/100Mbps	10/10 → 1000/1000Mbps
Network performance targets*	**TC 1** Frame Delay (one way) <=6ms Frame Delay variation <=3ms Frame Loss <=0.01%	**CoS High** Frame Delay <=5.25ms Inter Frame Delay Variation <=1ms Frame Loss Ratio <=0.01%
	TC 2 Frame Delay (one way) <=6ms Frame Delay Variation <=10ms Frame Loss <=0.01%	**CoS Medium** Frame Delay - not specified Inter Frame Delay Variation - not specified Frame Loss Ratio <=0.01%
	TC 4 Frame Delay (one way): not applicable Frame Delay Variation: not applicable Frame Loss: not applicable	**CoS Low** Frame Delay: not applicable Inter Frame Delay Variation: not applicable Frame Loss Ratio: not applicable
MTU size	Default Mapped – 1994 Byte DSCP Mapped – 1994 Byte Tagged – 2000 Byte Priority Tagged – 2000 Byte	9004 Byte
MAC address	8 max	No limitation
Target network availability	99.90%	99.95%
Network Termination Device		
Model:	Alcatel-Lucent G-240G-P	Nokia SAS-K5
No of UNI-D ports	4	3
No of UNI-V ports	2	0
Battery back-up (UNI-V port)	Optional	⊗
Dual power supply	⊗	✓
DC power	⊗	✓
AC power	✓	✓
Environmental specification	Internal	Internal
Wall mountable	✓	✓
Rack mountable	✓	✓
Service assurance		
Default service level	Restore target: 5pm next business day in urban areas or where attendance at premises is not required Hours of operations: 8am-5pm business day	Premium 12 (24/7)
Upgrade service levels available#	Enhanced 4 Enhanced 4 (24/7) Enhanced 6 Enhanced 6 (24/7) Enhanced 8 Enhanced 8 (24/7) Enhanced 12 Enhanced 12 (24/7)	Premium 6 (24/7) Premium 8 (24/7) Premium 4 (24/7)

Please note:
Remember that **nbn** is a wholesaler, which means that business data products and other broadband services must be bought from a service provider. So while business **nbn**™ Enterprise Ethernet is available on the **nbn**™ access network, any services which operate over it must be purchased from your service provider.
We're designing the **nbn**™ broadband access network to provide these speeds to our service providers. End customer experience vary depending on a range of factors including the technology over which services are delivered, broadband speed plans, provider and equipment.

*Enterprise Ethernet targets are for OVCs terminated at a Local POI
 FTTP performance targets only apply for certain Layer 2 Frame size at local NNI (TC 1 250 Bytes; TC 2 1500 Bytes) and CVC utilisation <=70%
 For descriptions of FTTP traffic classes see: **https://www.nbnco.com.au/business/product-and-technical-information/wholesale-traffic-classes**
 For descriptions of Enterprise Ethernet Classes of Service see: **https://www.nbnco.com.au/business/product-and-technical-information/enterprise-ethernet/speed**
#"Enhanced 4" refers to a 4 hours restore time target for urban areas or logical faults within business hours. Other geographic areas have longer target times.
"Enhanced 4 (24/7)" is similar to above with 24/7 hours of operations. Enterprise Ethernet nomenclature is similar.