



## BROADBAND JARGONBUSTER

**3G** Third generation—often used in relation to mobile telephone and data networks, 3G mobile networks offer higher speed data services than older '2G' networks. These services include internet access, video-calling and video and music downloads. Consumers can access these services on a 3G mobile phone or use a 3G mobile phone or plug-in card to access services via a computer.

**ADSL** Asymmetric digital subscriber line—a system for sending high bandwidth signals over existing copper phone lines. ADSL offers maximum theoretical peak download speeds of 8 Mbps, which declines the further a customer is from their local telephone exchange.

**ADSL2+** An improved form of ADSL, which offers faster upload and download speeds. The maximum theoretical peak download speed is around 20 Mbps but also declines the further a customer is from the exchange.

**VDSL2** A further extension to ADSL that offers extremely fast upload and download speeds, peaking around 50 Mbps over very short distances.

**FTTN** Fibre-to-the-node—involves extending high-speed fibre optic cables closer to customers by running them from exchanges all the way to street-side junction boxes called 'nodes'. Customers are connected to these nodes by standard copper phone lines. Broadband services can be provided over the FTTN network using ADSL2+ (or VDSL2). FTTN increases the ADSL2+ (or VDSL2) speeds available to many customers by reducing the distance between these customers and the edge of the fibre network.

**FTTH** Fibre-to-the-home—completely replaces the existing copper phone lines with fibre optic cable from the exchange all the way to the customer's home or business. FTTH would deliver faster speeds than FTTN but is likely to cost more to build.

**HFC cable** Hybrid fibre coaxial cable—originally rolled out to deliver pay-TV, the network can also provide broadband services. Peak cable broadband speeds may be higher than peak ADSL speeds. However, cable speeds are shared between all customers connected to a 'segment' of cable (which could be around 1000 households).

**WiMax** A new wireless technology that may provide improved wireless broadband speeds. WiMax operates via radio signals rather than a 'fixed line' copper, fibre or cable network. Some providers say they are already offering WiMax services in Australia. ●