



Broadband Availability and Quality: *Summary Report*

23 December 2013



The key preliminary findings of this analysis of Australian broadband availability and quality are:

Availability¹

- > Approximately 9.9 million premises (91 per cent) have access to fixed line broadband services delivered via xDSL technology.
- > Approximately 3.1 million premises (28 per cent) have access to a high speed broadband platform (defined as including fibre-to-the-premises, fibre-to-the-node, hybrid fibre coaxial networks and fixed wireless networks).
- > Approximately 8.8 million premises (81 per cent) have access to 3G mobile broadband services and about 6.4 million premises (59 per cent) have access to 4G services.
- > All Australian premises are covered by satellite broadband, although there is a ceiling to the capacity of these services and therefore not all premises can access a service.

Quality

- > Approximately 3.1 million premises (28 per cent) have access to peak download speeds of between 25 megabits per second (Mbps) and 110 Mbps.
- > Approximately 7.1 million premises (65 per cent) are in areas that have access to peak median download speeds of less than 24 megabits per second over the copper network.
- > About 0.7 million (6 per cent) premises are unable to get access to a fixed broadband service.
- > Of premises with access to xDSL broadband services over copper, about 3.7 million are located in areas with an estimated peak median download speed of less than 9 Mbps, and 920,000 in areas with an estimated peak median download speed of less than 4.8 Mbps.

In summary (Figure 1), whilst there is a section of the Australian community who have severely limited access to broadband services, the more significant national issue is the quality of broadband services.

¹ The total of this section exceeds 100 per cent because the majority of premises have access to multiple broadband technologies.

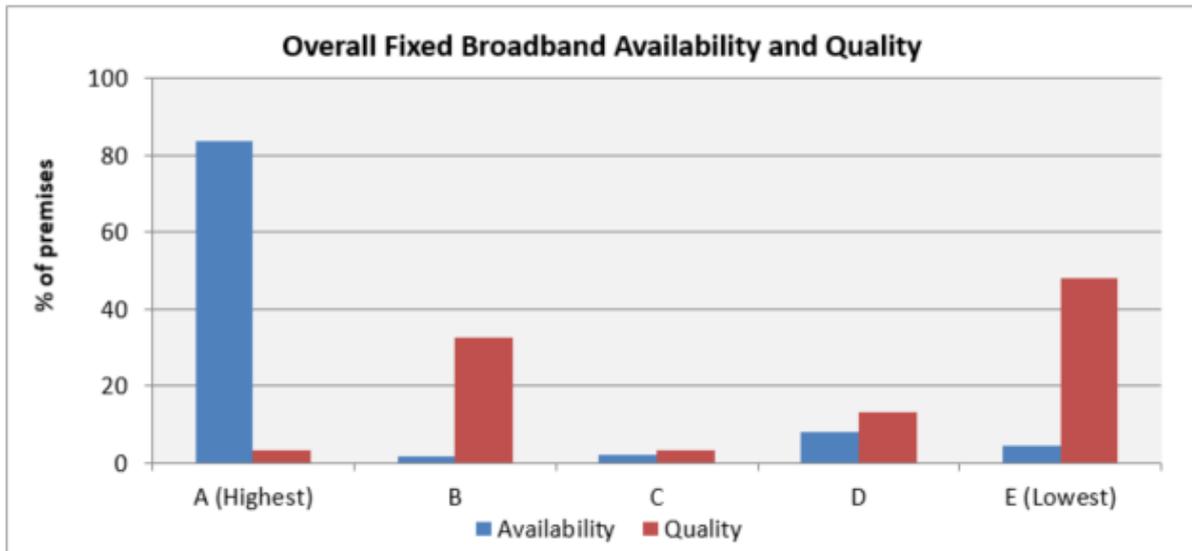


Figure 1. Percentage of Australian premises in each fixed broadband availability and fixed broadband quality band

xDSL Quality

The findings of this, and many other studies, note that the most common form of fixed broadband subscription is provided by xDSL technologies, which reflects the widespread availability of this access technology. Figure 2 provides information on the approximate percentage of premises with access to xDSL that are likely to receive particular xDSL median peak download speeds.

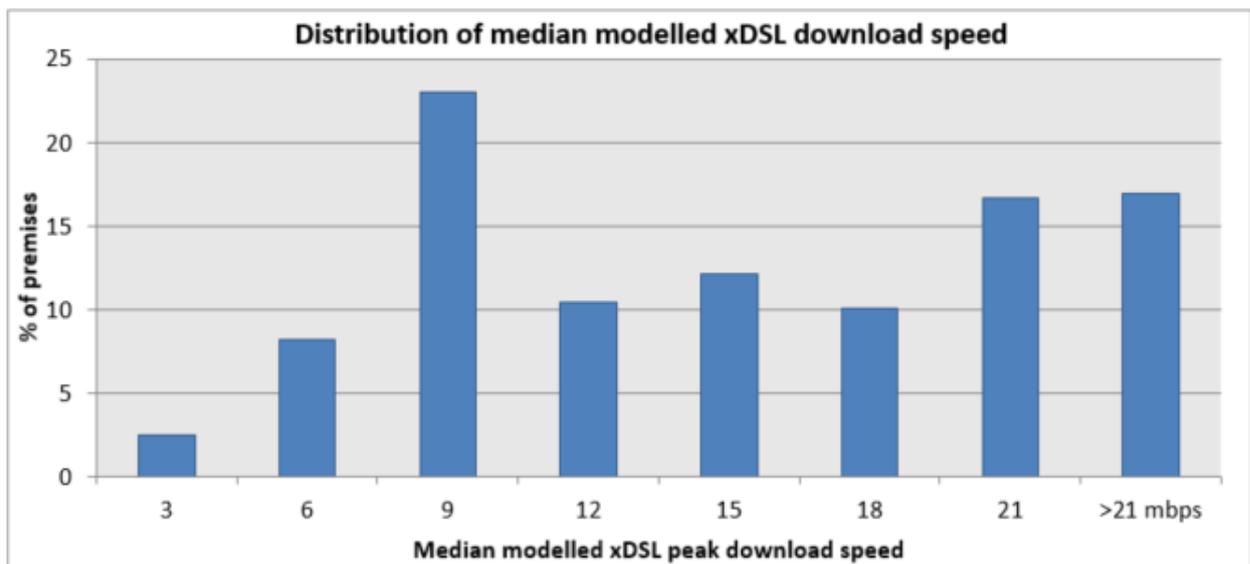


Figure 2. Percentage of premises in each band of modelled median peak download speeds

Broadband services are generally more available, and of higher quality, in metropolitan areas than in regional and remote areas. Although premises within regional and remote areas that are located close to local telephone exchanges do have access to higher quality xDSL services, premises further away from the exchange or on the outskirts of towns generally do not. The analysis has also identified many small urban areas where there is



limited availability of fixed broadband services and a large number of premises that can access a basic service only at download speeds that are less than 9 Mbps.

It is important to note that broadband availability and quality is affected by multiple factors. Key elements are considered in this analysis, but a range of other factors may impact individual circumstances. In many locations there will be premises whose individual circumstances vary from the high or low rating for broadband availability and quality that their local area receives in this analysis.

Data Inputs

This analysis makes use of the following data inputs:

- > Current network coverage data from all major telecommunications carriers, and a number of smaller players with customer access networks,
- > Data from the Telstra Wholesale website,
- > Empirical xDSL usage observations comprising 20,000 real world measures of xDSL download sync speeds, associated cable loss, and the location and number of small, medium and large pair gains, and
- > Locations and numbers of premises based on the Geocoded National Address File (G-NAF).

All data sources are the most current available, dating from July 2013 to October 2013, with the exception of Telstra's spatial representation of its mobile coverage (current as at January 2013). It is important to note that telecommunications carriers continually invest in infrastructure and broadband availability, and quality is therefore dynamic². This analysis represents a snapshot of broadband as at December 2013.

Next Steps

This Summary Report is the first release of material from the broadband availability and quality analysis and provides a national snapshot. The Department is refining the granular detail of the analysis, and compiling maps which will be published along with the methodology used. There will be an opportunity to provide feedback on the methodology and the preliminary results.

Further information on this analysis will become available in early 2014 via a website that will allow end users to obtain the results for their local community and provide feedback on their individual experience.

If you have any questions about this material please email mybroadband@communications.gov.au.

² Investment in the mobile market is resulting in expanding coverage, particularly in 4G coverage. Telstra announced on 18 December 2013 its 4G network coverage had expanded to reach 85 per cent of the Australian population. Optus has dual 4G networks and aims to expand its 4G coverage to over 70 per cent of the population in metropolitan areas by April 2014.