



SNAPSHOT OF BROADBAND DEPLOYMENT AS AT 30 SEPTEMBER 2006

This report details the deployment of broadband services throughout Australia as at 30 September 2006. The report is based on data provided by the major carriers of broadband services.

The report includes aggregated data in relation to the take-up of broadband services and gives estimated numbers of services in operation in respect of cable, satellite, ADSL, other DSL and miscellaneous offerings including wireless.

In preparing this quarter's Broadband Snapshot report, it should be noted that the ACCC has made adjustments to the historical data for the xDSL ('Other DSL') category for the periods between September 2004 and June 2006. These adjustments have the effect of reducing the total xDSL figures reported (for June 2006 by around 190,000 services, with somewhat smaller adjustments in earlier periods).

The adjustments were made after consultation with reporting carriers, and are aimed at ensuring against double-counting in the data. However, given that the Broadband Snapshot is based on data provided by only 9 broadband carriers, and does not yet include 3G mobile broadband, the ACCC considers that the reported estimates of broadband take-up are still likely to be under-stated to a small degree. Nevertheless, the ACCC's primary concern is to ensure that the statistics are not over-estimated. Full details of the nature of these adjustments have not been provided, in order to preserve the confidentiality of information provided by the parties.

Main findings:

As at 30 September 2006 total broadband take-up was 3,639,700.

- Broadband take-up has increased by 1,232,300 or 51 per cent, from the September 2005 figure of 2,407,400.
- The take-up of ADSL services is now at 2,763,000.
- Total quarterly growth in broadband was at 9.3 per cent for the September 2006 quarter:
 - While growth is lower than previous quarters, this is to be expected given the larger base of total connections in absolute terms.

Broadband figures—31 March 2002 to 30 September 2006

	Cable	Satellite	ADSL	Other DSL	Other	Totals
31-Mar-02	124,200	7,300	64,200	3,900	100	199,700
30-Jun-02	140,900	9,000	97,200	10,900	100	258,100
30-Sep-02	158,200	10,700	120,600	22,200	500	312,200
31-Dec-02	173,200	12,200	139,900	38,000	200	363,500
31-Mar-03	191,900	12,600	160,600	58,200	300	423,600
30-Jun-03	215,400	13,000	193,500	94,600	300	516,800
30-Sep-03	236,300	13,200	216,600	136,000	300	602,400
31-Dec-03	251,200	13,300	241,400	182,400	300	688,600
31-Mar-04	283,300	13,200	275,100	243,600	300	815,500
30-Jun-04	324,400	12,900	340,800	347,100	300	1,025,500
30-Sep-04[^]	376,700	12,700	835,100*	37,900*	300	1,262,700
30-Dec-04	404,300	13,500	1,011,200	41,500	300	1,470,800
31-Mar-05	438,700	14,400	1,235,200	47,000	300	1,735,600
30-Jun-05	473,000	17,800	1,499,600	43,400	300	2,034,100
30-Sep-05	510,600	22,000	1,786,100	47,900	40,800	2,407,400
31-Dec-05	533,600	23,300	2,013,300	49,300	53,300	2,672,800
31-Mar-06	563,200	23,000	2,301,400	48,400	75,000	3,011,000
30-Jun-06	594,500	23,500	2,549,900	61,400	99,100	3,328,400
30-Sep-06	624,300	42,400	2,763,000	70,500	139,500	3,639,700

- * Telstra reported statistics for its wholesale *asymmetric* 'Layer 2' broadband product under the 'ADSL' category for the first time in the September 2004 quarter. In all previous quarters, the statistics for this product were included under the 'other DSL' category. This changed reporting format does not affect the time series for total DSL subscribers ('ADSL' + 'other DSL') or the time series for total broadband subscribers.
- ^ As noted above, in preparing this quarter's Broadband Snapshot report, the ACCC made adjustments to the historical data for the xDSL ('Other DSL') category. These adjustments have been made to the xDSL and Total columns, from the September 2004 quarter onwards.

Percentage broadband growth						
	Cable	Satellite	ADSL	Other DSL	Other	Totals
QUARTERLY						
Q2 02 Growth	13.4	23.3	51.4	179.5	0.0	29.2
Q3 02 Growth	12.3	18.9	24.1	103.7	400.0	21.0
Q4 02 Growth	9.5	14.0	16.0	71.2	-60.0	16.4
Q1 03 Growth	10.8	3.3	14.8	53.2	50.0	16.5
Q2 03 Growth	12.2	3.2	20.5	62.5	0.0	22.0
Q3 03 Growth	9.7	1.7	11.9	43.8	0.0	16.6
Q4 03 Growth	6.3	0.8	11.4	34.1	0.0	14.3
Q1 04 Growth	12.8	-0.8	14.0	33.6	0.0	18.4
Q2 04 Growth	14.5	-2.5	23.9	42.5	0.0	25.7
Q3 04 Growth	16.1	-1.8	-*	-*	0.0	23.1
Q4 04 Growth	7.3	6.5	21.1	9.7	0.0	16.5
Q1 05 Growth	8.5	7.0	22.2	13.2	-0.4	18.0
Q2 05 Growth	7.8	23.2	21.4	-7.8	2.2	17.2
Q3 05 Growth	7.9	24.0	19.1	10.6	-^	18.4
Q4 05 Growth	4.5	5.9	12.7	3.0	30.6	11.0
Q1 06 Growth	5.5	-1.5	14.3	-1.9	40.7	12.6
Q2 06 Growth	5.6	2.1	10.8	27.0	32.2	10.5
Q3 06 Growth	5.0	80.7**	8.4	14.8	40.8	9.3

* See notes regarding ADSL growth and time series on previous page.

^ Additional wireless figures were reported and included in the "Other" category for the first time in the September 2005 quarter. As these were not reported in previous quarters, and as not all wireless providers provided data for the Broadband Snapshot, it has not been possible to calculate take-up figures that are representative of the growth of wireless and "other" broadband

technologies in the quarters prior to September 2005. However, this growth rate does represent the additional wireless figures included from September 2005 onwards.

** Additional satellite figures were reported for the September 2006 quarter.

Percentage broadband growth						
ANNUAL						
	Cable	Satellite	ADSL	Other DSL	Other	Totals
Dec 03–Dec 04	60.9	1.5	-*	-*	0.0	113.6
Mar 04–Mar 05	54.8	9.1	-*	-*	0.0	112.8
Jun 04–Jun 05	45.8	37.8	-*	-*	0.0	98.4
Sep 04–Sep 05	35.6	73.9	113.9*	26.5	-[^]	90.7
Dec 04–Dec 05	32.0	73.0	99.1	18.8	-[^]	81.7
Mar 05–Mar 06	28.4	59.3	86.3	2.9	-[^]	73.5
Jun -05 – Jun 06	25.7	31.9	70.0	41.7	-[^]	63.6
Sep - 05 – Sep - 06	22.3	92.4	54.7	47.2	241.8	51.2

* Telstra reported statistics for its wholesale *asymmetric* 'Layer 2' broadband product under the 'ADSL' category for the first time in the September 2004 quarter. In all previous quarters, the statistics for this product had been reported under the 'other DSL' category. Consequently, it had not been possible to calculate 'DSL' and 'other DSL' growth figures for the September 2004 quarter (quarterly growth); and the December 2004, March 2005, and June 2005 quarters (annual growth).

[^] Additional wireless figures were reported and included in the "Other" category for the first time in the September 2005 quarter. As these were not reported in previous quarters, and as not all wireless providers provided data for the Broadband Snapshot, it has not been possible to calculate take-up figures that are representative of the growth of wireless and "other" broadband technologies in the quarters prior to September 2005. However, this growth rate does represent the additional wireless figures included from September 2005 onwards.

Broadband services—roll out/coverage as at 30 September 2006 as reported to the ACCC

Type of broadband offering					
	Cable	Satellite	ADSL	XDSL	Other
Geographic Availability	<ul style="list-style-type: none"> • Brisbane, Sydney, Melbourne, Canberra, Adelaide, Perth. 	Australia wide	<ul style="list-style-type: none"> • All state and territory CBDs • All state and territory metro areas • Majority of all state and territory regional centres 	<ul style="list-style-type: none"> • All state and territory CBDs • All state and territory metro areas except limited for: <ul style="list-style-type: none"> - South Australia - Tasmania - Northern Territory 	<ul style="list-style-type: none"> • Metro areas in: <ul style="list-style-type: none"> - Adelaide - Brisbane - Canberra - Melbourne - Perth - Sydney • Some regional areas of Victoria

Definitions

Broadband is defined in this context to mean any high speed connection greater than 256kbits/sec over a mix of media. This definition of broadband excludes PSTN dial-up connections that run at 56 kbit/sec and ISDN dial up connections which run at either 64 or 128 kbit/sec. Satellite services with a broadband capability, that may or may not be being utilised, are included in the survey.

Cable is a data service that is delivered to a subscriber through channels in a coaxial cable or optical fibre cable to a cable modem installed externally or internally to a subscriber's computer or television set.

A **satellite** connection is an arrangement in which the upstream (outgoing) and the downstream (incoming) data are sent from, and arrive at, a computer through a satellite. Each subscriber's hardware includes a satellite dish antenna and a transceiver that operates in the microwave portion of the radio spectrum. A satellite installation can be used even where the most basic utilities are lacking such as regional and remote locations.

DSL (digital subscriber line) is a technology for bringing high-bandwidth information to homes and small businesses over ordinary copper telephone lines. DSL consists of a series of data link layer protocols enabling broadband capacity over continuous copper circuits of digital subscriber lines. DSL lines can carry both data and voice signals and the data part of the line is continuously connected. The term DSL is used to refer to different variations of DSL, HDSL and RADSL. In this report the term **other DSL** refers to all types of DSL excluding ADSL (see below). While ADSL is a subset of DSL, it is reported separately here given its prominence compared to other DSL technology.

DSL (ADSL) (asymmetric digital subscriber line) is a technology for transmitting digital information at a high bandwidth on existing phone lines to homes and businesses. Unlike regular dial-up phone service, ADSL provides continuously available, 'always on' connection. ADSL is asymmetric in that it uses most of the channel to transmit downstream to the user and only a small part to receive information from the user, for example 512K up/128K down. ADSL is reported separately given the prominence of ADSL compared to other DSL technology.

Other includes LMDS (local multipoint distribution system), microwave, laser, and additional forms of broadband wireless access including fixed radio and those utilising spectrum in the 1.9 GHz and 3.4-3.5 GHz frequencies. As not all wireless providers have provided data for the Broadband Snapshot, the survey of wireless take-up is incomplete and may understate actual figures.

Background to collection of statistics

Data required by the ACCC

The carriers were asked to provide data in respect of the following questions:

- a) the geographic availability of their service
- b) the total number of end-user connections.¹

Method of collection

The carriers were asked to provide a report covering the June 2006 – September 2006 period. Data was requested from and submitted by nine carriers.

The carriers provided this data to the ACCC on the basis that individual statistics would be treated as confidential and only aggregate data would be published.

Notes

Figures are approximate to the nearest hundred, but an error rate of approximately 5 per cent is assumed.

Not all broadband providers are included in this survey. As the survey is not a census of broadband take-up activity, the ACCC considers that the figures presented may understate total subscriber numbers although not to a material extent.

This data includes aggregated estimates of both residential and business connections; however, the ACCC does not have a break down of the figures for each category.

ADSL is a subset of DSL but is reported separately given the level of take-up.

It should also be noted that the ACCC is seeking to incorporate statistics for 3G mobile broadband in future reports.

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¹ Within the confines of this report a connection is the successful completion of necessary arrangements so that two or more parties can communicate over a network.