



BROADBAND PRICING BENCHMARKING

FINAL REPORT

Thursday, 19th June 2008

Contents

1	Executive Summary	1
2	Introduction	3
3	DSL pricing plan results	3
	Appendix A: Methodology	3
	Appendix B: Provider DSL plan data	3
	Appendix C: Data tables	3

1 Executive Summary

Spectrum Value Partner's has analysed the consumer DSL broadband pricing plans of the incumbent telecommunications providers of eighteen OECD countries. In total, seventy two individual consumer plans were reviewed and categorised based on advertised speed and usage levels (represented by five monthly usage levels). The 'Total Cost of Broadband' to subscribers was calculated for each of the seventy two plans. All costs were considered, including start up costs, headline monthly fees plus any usage charges, all averaged over a 12 month contract period.

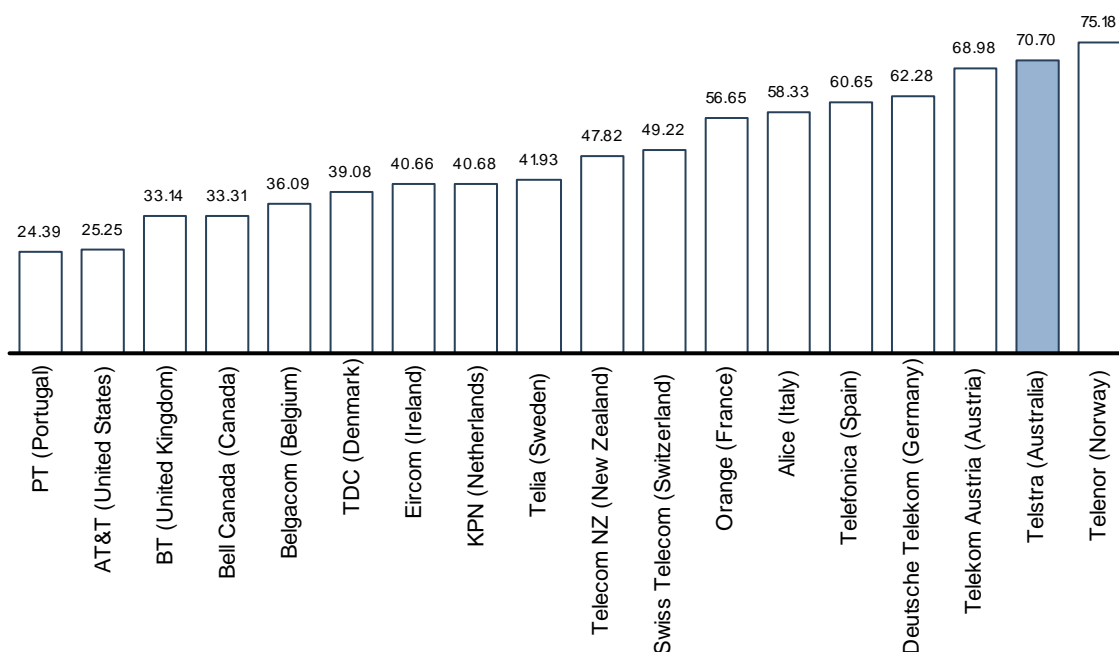
The approaches of incumbents vary widely as might be expected. However, some interesting trends have emerged:

- Telstra ranks as the second most or most expensive provider, compared to its peers, at all usage levels greater than 500MB per month. Of the 72 plans surveyed, 68 offer data caps greater than 500MB.
- Only seven of the eighteen surveyed providers offer capped plans (under which the monthly amount of data that the user may download is capped at a specified amount, with any downloads beyond that cap either charged at an excess data rate, or 'throttled' to a lower speed). All of Telstra's plans are capped. Of those that charge excess usage, Telstra has the highest rates of any provider, six times more than the next most expensive provider. All other Telstra plans throttle excess usage back to dial-up speeds of up to 64kbps.
- Telstra's initial DSL modem and connection fees ranks as the second highest of all surveyed plans. The most expensive modem and connection fee is charged by Alice, (the retail brand of Telecom Italia); however this includes modem rental and free Alice TV with access to more than 200 channels as part of the package.
- Only three of the seventy two plans analysed offer advertised speed of 256kbps or below; two out of the three are from Telstra.
- Over 90% of plans analysed offered advertised download speeds of greater than 1Mbps; while 78% of Telstra's plans offer advertised download speeds of greater than 1Mbps.

In order to compare pricing plans across operators, we have determined the provider's most economical ("best value") broadband offering based on Total Cost of Broadband for each usage level (five categories; 'Ultra Low' (200MB per month), 'Low' (500MB per month), 'Medium' (2GB per month), 'High' (10GB per month) and 'Ultra High' (30GB per month)). We recognise that at a given usage level users will not select plans that would incur unnecessary excess usage charges. As such, for a given usage level, we disregard all data capped plans that are less than 75% of the given usage level (uncapped plans are still included). Exhibit 1 shows the best value package for a 'Low' (500MB per month) user. On this basis, Telstra is the second most expensive of the eighteen carriers analysed.

Broadband Pricing Benchmarking

Exhibit 1: Most economical 'Low' usage (500MB per month) package (AUD\$ pm, at 1st June 2008)



Note: Throttled plans are excluded if the cap is less than 75% of the monthly usage level
 Source: Spectrum Value Partners analysis, company websites

A summary of Telstra's rankings based on the Total Cost of Broadband for each usage level is presented in Exhibit 2. At all usage levels of 500MB per month and above, Telstra ranks either 17th or last out of the 18 operators analysed.

Exhibit 2: Incumbent provider 'best value' ranking by usage level

Usage profiles	Telstra ranking (1 st = Least expensive, 18 th = Most expensive)
Ultra Low (200MB)	11 th
Low (500MB)	17 th
Medium (2GB)	18 th
High (10GB)	18 th
Ultra High (30GB)	18 th
Number of operators	18

Note: Excludes bundled offerings, DSL contracts are 12 months, user has a fixed line with the incumbent, user has no modem and is a new broadband user/customer, lowest cost modem is used, self-service installation where possible, and excludes any promotional deals.

Source: Spectrum Value Partners analysis, company websites.

Telstra's plans are more affordable at lower download speeds. For example, its most affordable plan for a 10GB per month user is actually a 256kbps plan. Given Telstra's more affordable pricing for plans at lower download speeds and its majority market share, it is no surprise that 49% of all Australian broadband users have plans at less than 512kbps downstream (Australian Bureau of Statistics, December 2007). Australians looking for the best value broadband package are currently attracted towards plans at the lower end of potential download speeds.

2 Introduction

Optus has asked Spectrum Value Partners (“Spectrum”) to objectively compare the consumer broadband service offerings from Telstra with those offered by a mix of incumbent operators globally. On this basis, Spectrum Value Partners has analysed the DSL broadband pricing plans of eighteen OECD incumbent telecommunications providers. In total, seventy two individual plans were reviewed and categorised based on advertised speed (five categories) and usage levels (five categories). Finally the Total Cost of Broadband was calculated (i.e. start up costs plus headline fees plus usage charges) of subscribing to each of the seventy two plans for each of the customer usage profiles.

The methodology used was the same as is employed in the Internet Industry Association (IIA) / Spectrum Quarterly Broadband Index which compares broadband plans from five leading Australian providers. This methodology is detailed in Appendix A.

Spectrum Value Partners has previously undertaken work for both Optus and Telstra. Spectrum Value Partners is currently acting as an advisor to Optus and to the Terria Group on the NBN process.

The report authors are Justin Jameson and Ainkaran Krishnarajah. Justin Jameson is the lead Partner of Spectrum’s Sydney office. He has over fourteen years experience advising clients in the media, telecommunications industries. He specialises in corporate strategy, commercial business development, operational support and regulatory strategy. Ainkaran Krishnarajah is a Senior Associate in Spectrum’s Sydney office, with over ten years experience in telecoms, having worked in a number of roles from 3G R&D, 3G standardization, product management, and account management (sales) at a leading telecoms infrastructure vendor during this time.

3 DSL pricing plan results

The DSL plans of eighteen incumbent internet service providers (ISPs) have been compared and analysed. In total, seventy two individual plans were reviewed and categorised based on advertised speed and usage levels (five categories: 'Ultra Low' (200MB per month), 'Low' (500MB per month), 'Medium' (2GB per month), 'High' (10GB per month) and 'Ultra High' (30GB per month)). It is important to note that the definition of the advertised speed varies between operators; either being a guaranteed speed to the end user or an expected maximum (peak) speed. In all cases the maximum advertised speed was used. Based on the methodology in Appendix A, the cost of the most economical ("best value") broadband offering based on Total Cost of Broadband for each user profile was calculated with the results given in Exhibits 3 – 7.

The approaches of incumbents vary widely as might be expected. However, some interesting trends have emerged:

- Telstra ranks as at least the second most expensive provider, compared to its peers, for all usage levels greater than 500MB. In contrast, 68 out of the 72 plans surveyed offer data caps greater than 500MB.
- Only seven surveyed providers offer capped plans (under which the monthly amount of data that the user may download is capped at a specified amount, with any downloads beyond that cap either charged at an excess data rate, or 'throttled' to a lower speed). The others only offer uncapped plans. Telstra only offers capped plans. Where excess usage is charged, Telstra has the highest excess usage rates of any provider, six times more than the next most expensive provider. All other Telstra plans throttle excess usage to dial-up speed of up to 64kbps.
 - For the limited (capped) data plans, excess usage is either; charged by volume (\$/GB) at generally modest rates, or traffic shaped (usually to speeds of circa 64kbps)
- Telstra's initial DSL modem and connection fees ranks as the second highest of all surveyed plans. The most expensive modem and connection fee is charged by Alice (telecom Italia's retail brand); however this includes modem rental and free Alice TV with access to more than 200 channels as part of the package, representing significant value.
 - Most European providers offer a free DSL modem and connection fee
- Two out of the three plans offering advertised download speeds of 256kbps or below are from Telstra. In fact, 93% of plans analysed offered advertised download speeds of greater than 1Mbps, whereas only 78% of Telstra's plans were for speeds of greater than 1 Mbps. The majority of these plans (53%) offer advertised speeds of between 1-7 Mbps. This would suggest that Telstra caters for plans at the lower end of surveyed download speeds. Given Telstra's majority market share and more affordable pricing for plans at lower download speeds it is no surprise, as indicated by the Australian Bureau of Statistics, that 49% of all broadband users have plans less than 512kbps downstream (ABS, December 2007). Australians looking for the best value broadband package for a given usage are skewed to lower end download speeds.
 - Advertised data speeds vary from specifying guaranteed levels to peak speeds only. Some providers do not advertise any download speeds (i.e. Telecom New Zealand)
 - Two out of the five plans offering advertised download speeds of less than 1 Mbps are from Telstra:

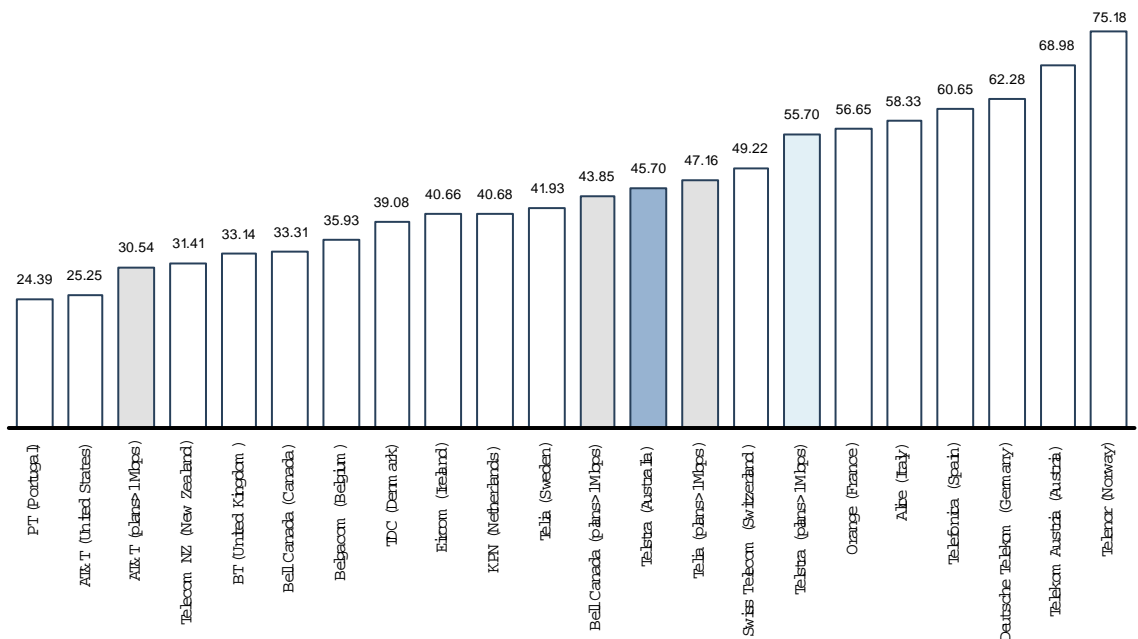
–	Australia	Telstra	'Fast 256/64kbps'
–	Australia	Telstra	'BigPond Liberty Fast 256/64kbps'
–	Sweden	Telia	'Telia Bredband 0.25Mbps'
–	United States	AT&T	'Basic Plan 512kbps'
–	Canada	Bell Canada	'Total Internet Essential 512 kbps'

Broadband Pricing Benchmarking

Exhibits 3 – 7 compare the most economical (“best value”) broadband offerings for each operator based on Total Cost of Broadband for each usage category. Plans of all speeds are included. The analysis shows that once customers get to 500MB of usage a month, Telstra’s Total Cost of Broadband is over AUD\$70, whereas in most markets plans are still available at a Total Costs of Broadband of under AUD\$50 even at 30GB of monthly usage. If low speed and / or plans that throttle speeds back are excluded, these numbers get worse for some operators, including Telstra.

If we consider that users value download speed as an important factor in choosing a plan, then we show the impact on the ‘best value’ for each usage level if plans with speeds < 1Mbps are removed. This relates to four providers that offer very low speed ‘broadband’ plans: Telstra (Australia), AT&T (United States), Bell Canada (Canada) and Telia (Sweden) with plans < 1Mbps download speed.

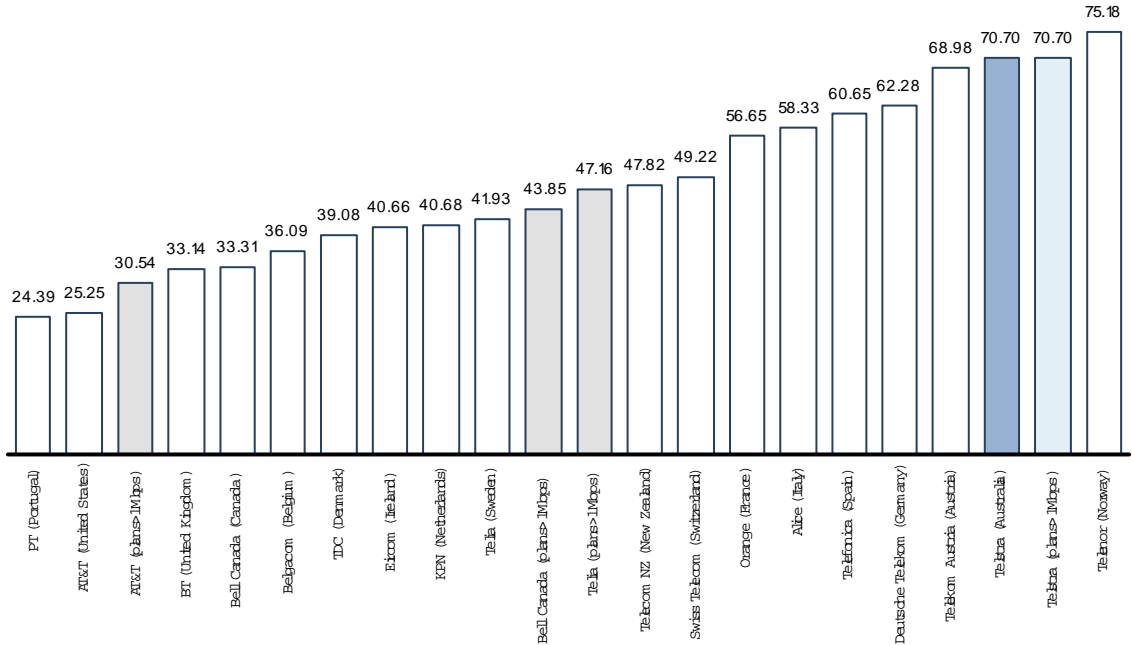
Exhibit 3: Most economical Ultra Low usage plan by monthly cost, excluding plans with data caps less than 75% of the ‘Ultra Low’ usage level of 200MB (AUD\$, as at 1st June 2008)



Source: Spectrum Value Partners analysis, company websites

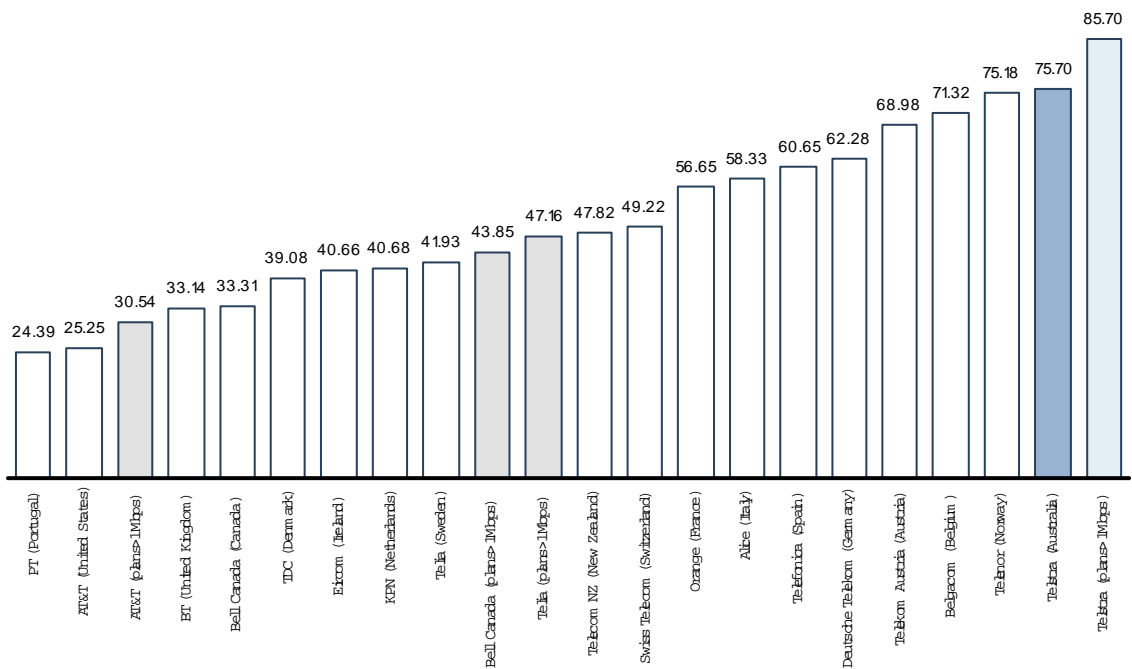
Broadband Pricing Benchmarking

Exhibit 4: Most economical 'Low' usage plan by monthly cost, excluding plans with data caps less than 75% of the 'Low' usage level of 500MB (AUD\$, as at 1st June 2008)



Source: Spectrum Value Partners analysis, company websites

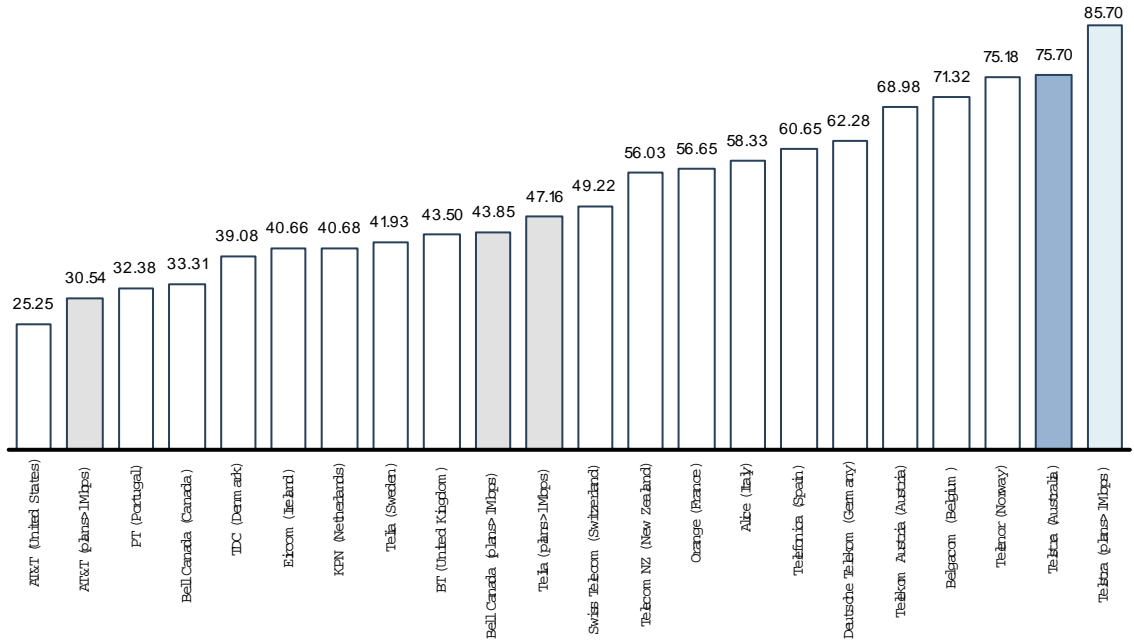
Exhibit 5: Most economical 'Medium' usage plan by monthly cost, excluding plans with data caps less than 75% of the 'Medium' usage level of 2GB (AUD\$, as at 1st June 2008)



Source: Spectrum Value Partners analysis, company websites

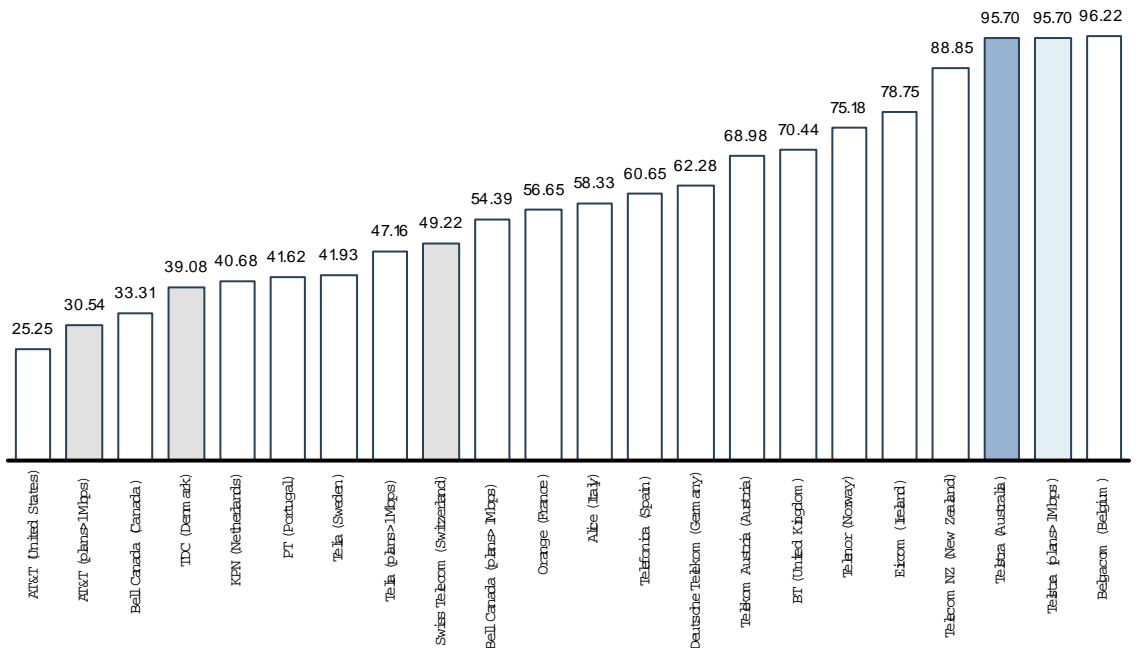
Broadband Pricing Benchmarking

Exhibit 6: Most economical 'High' usage plan by monthly cost, excluding plans with data caps less than 75% of the 'High' usage level of 10GB (AUD\$, as at 1st June 2008)



Source: Spectrum Value Partners analysis, company websites

Exhibit 7: Most economical 'Ultra High' usage plan by monthly cost, excluding plans with data caps less than 75% of the 'Ultra High' usage level of 30GB (AUD\$, as at 1st June 2008)



Source: Spectrum Value Partners analysis, company websites

Broadband Pricing Benchmarking

A summary of Telstra's rankings based on the Total Cost of Broadband for each usage level is presented in Exhibit 8.

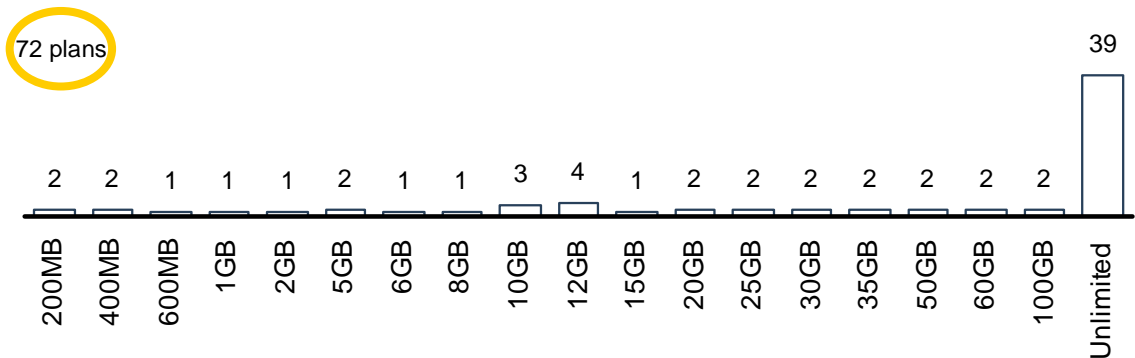
Exhibit 8: Incumbent provider 'best value' ranking by usage level

Usage profiles	Telstra ranking (1 st = Least expensive, 18 th = Most expensive)
Ultra Low (200MB)	11 th
Low (500MB)	17 th
Medium (2GB)	18 th
High (10GB)	18 th
Ultra High (30GB)	18 th
Number of operators	18

Note: Excludes bundled offerings, DSL contracts are 12 months, user has a fixed line with the incumbent, user has no modem and is a new broadband user/customer, lowest cost modem is used, self-service installation where possible, and excludes any promotional deals.

Source: Spectrum Value Partners analysis, company websites.

Exhibit 9: Download cap distribution for surveyed plans



Source: (1) Spectrum Value Partners analysis, company websites

As shown in Exhibit 9, 54% of plans offered unlimited data plans. Unlimited data plans were offered by thirteen of the surveyed providers:

- Alice (Italy)
- AT&T (United States)
- BT (United Kingdom)
- Deutsche Telekom (Germany)
- KPN (Netherlands)
- Orange (France)
- PT (Portugal)
- Swiss Telecom (Switzerland)
- TDC (Denmark)
- Telefonica (Spain)
- Telekom Austria (Austria)

Broadband Pricing Benchmarking

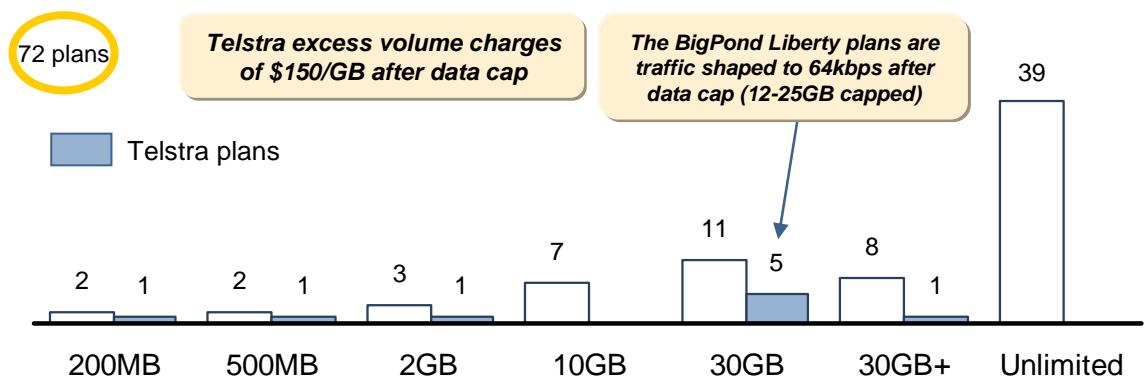
- Telenor (Norway)
- Telia (Sweden)

Capped data plans were only offered by seven of the surveyed providers:

- Belgacom (Belgium)
- Bell Canada (Canada)
- BT (United Kingdom)
- Eircom (Ireland)
- PT (Portugal)
- Telecom NZ (New Zealand)
- Telstra (Australia)

Telstra's BigPond Liberty plans appear tailored for users with heavier download demands (12-25GB), however, traffic is shaped to speeds up to 64kbps once data caps have been exceeded (Exhibit 10). Additionally, 53% of plans analysed offered advertised download speeds of between 1-7 Mbps and 40% offered speeds above 7 Mbps (as shown in Exhibit 11).

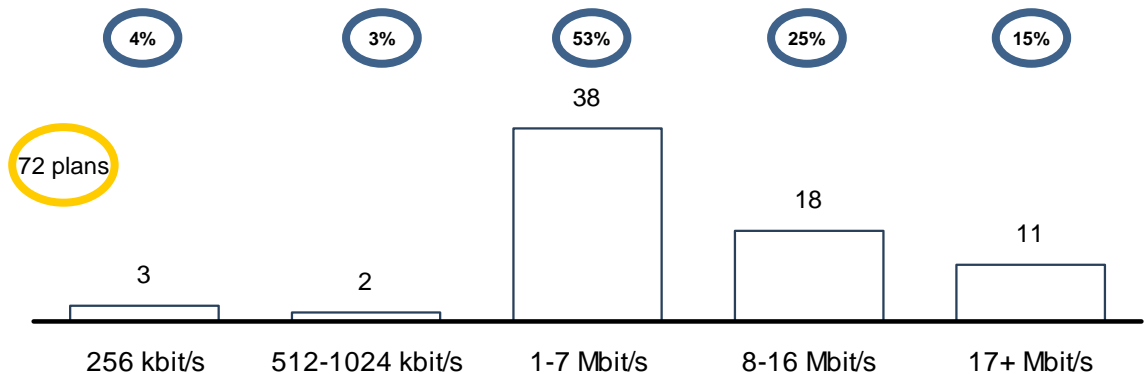
Exhibit 10: Number plans with download caps by user profile for all surveyed plans



Source: (1) Spectrum Value Partners analysis, company websites

Broadband Pricing Benchmarking

Exhibit 11: Speed category distribution for all surveyed plans

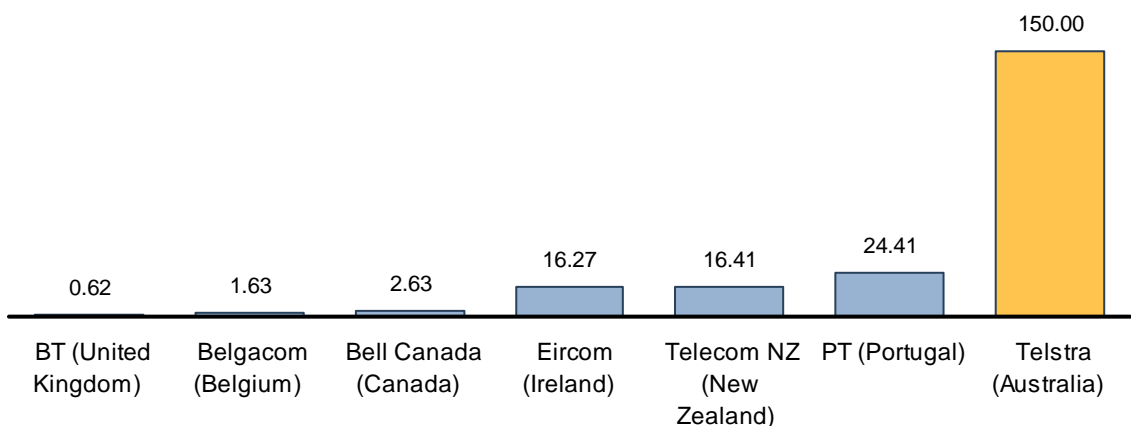


Source: (1) Spectrum Value Partners analysis, company websites

For all limited (capped) data plans, usage exceeding the volume cap is either; charged by volume (\$/GB), or data speeds are reduced (traffic shaped or throttled) to speeds of up to 64kbps (dial-up). No volume usage charges are applied when a service is being throttled.

Telstra's 'Fast', 'Faster' and 'Fastest' plans (refer Appendix B) apply excess volume charges of AUD\$150/GB once data caps have been exceeded (Exhibit 12). It is clear that for all limited (capped) data plans where an excess usage charge is applied Telstra ranks as the highest by cost per GB, as shown in Exhibit 12. This is six times more expensive than the next most expensive provider, PT (Portugal).

Exhibit 12: Excess usage charges on capped plans (AUD\$/GB, as at 1st June 2008)

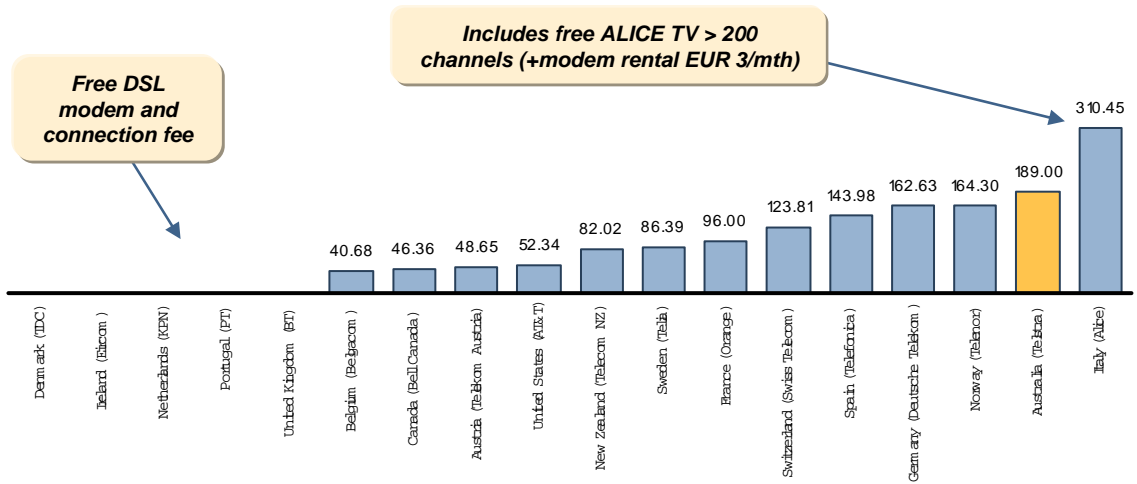


Source: Spectrum Value Partners analysis, company websites

As shown in Exhibit 13, all offers where a DSL modem and connection fee is provided for free these have been offered by European providers. The most expensive modem and connection fee is charged by Swiss Telecom but this includes a VDSL modem, whilst the second most expensive charge is by Alice (Italy). However, charges by Alice include modem rental and free Alice TV services as part of the standalone package. Telstra appears at the high end of the spectrum with the third highest modem and connection charges.

Broadband Pricing Benchmarking

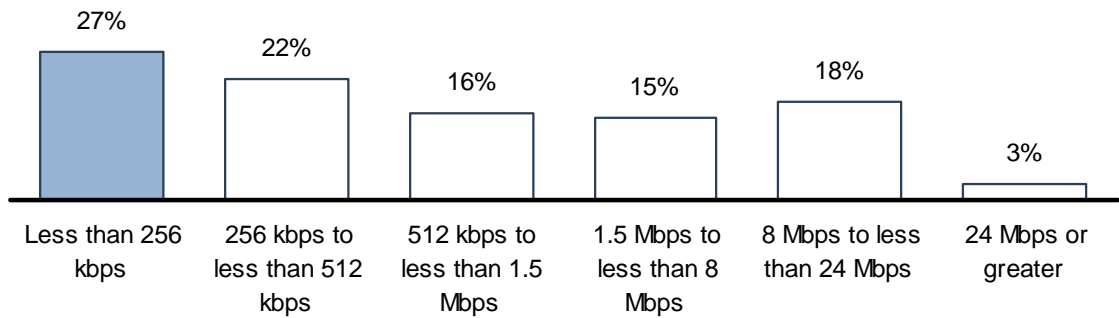
Exhibit 13: One time modem and connection charges (AUD\$, as at 1st June 2008)



Source: Spectrum Value Partners analysis, company websites

The impact of these pricing plans can be seen in the most recent Australian Bureau of Statistics ISP Survey results (Dec 2007) which indicate that in Australia, 49% of all broadband users have taken plans that offer less than 512kbps downstream (Exhibit 14).

Exhibit 14: Australian broadband subscriber download speeds



Source: Australian Bureau of Statistics, Dec 2007

Appendix A: Methodology

In this report, we analysed the incumbent telecommunications providers in eighteen (18) countries in order to calculate the monthly cost to a subscriber over a 12 month contract period. The data was extracted directly from the company websites in the last week of May 2008. In total, seventy two individual plans were reviewed and categorised based on advertised speed (five categories) and usage levels (five categories).

We categorised each plan as follows:

User/subscriber: Has an *existing* fixed (PSTN) line service with the incumbent. Has no DSL modem or DSL accessories and is a new broadband customer to the incumbent. The user will self-install the DSL modem.

Operator: The providers chosen are the largest by market share in their respective home country as at December '07 (Informa database).

Technology: The analysis includes plans offering the following access networks: DSL only.

Speed: We have classified each plan by the maximum advertised download speed (256kbps, 512-1024kbps, 1-7Mbps, 8-12Mbps, 17+Mbps). Upload speeds also vary across packages.

Cost: We created five user profiles based on hypothetical usage levels: 'Ultra Low' (200MB per month), 'Low' (500MB per month), 'Medium' (2GB per month), 'High' (10GB per month) and 'Ultra High' (30GB per month). We then calculated the monthly cost of each pricing package for each user type.

The 'Total Cost of Broadband' of each package includes the following elements:

- Monthly subscription charge
- Cheapest available connection and modem fee amortised over a 12 month contract period. Where no modem cost is tabled, EURO 29.90 is assumed.
- Any additional charges if usage exceeds the monthly data allowance (or cap). Where the usage profile exceeded the data cap, we did include packages which do not charge additional data usage fees but 'throttle' download speed for the remainder of the month

For example, the monthly cost to a 'Low' user of a 0.2GB 12 month plan with a monthly subscription charge of \$49.95, an initial charge of \$189 for the modem and connection fee and an excess data usage fee of \$150 per GB would be:

$$\$49.95 + (\$189/12) + ((0.5-0.2)*\$150) = \$110.70$$

We have excluded from the analysis:

- Special offers and promotions available for a limited period (e.g. connection fees waived for a limited period have been included)
- Business plans
- All bundled plans (i.e. with TV services, mobile, cable, satellite etc)
- All plans based on time (duration) charges
- For each usage level ('Ultra Low', 'Low', 'Medium', 'High', and 'Ultra High') analysis, plans with data caps that are less than 75% of the given usage level (i.e. 200MB, 500MB, 2GB, 10GB and 30GB).

After calculating the monthly cost of every package for each usage level, we identified the 'most economical' package, i.e. the cheapest plan for each of the five user types by incumbent operator.

Broadband Pricing Benchmarking

Appendix B: Provider DSL plan data

Exhibit 15: Input country and provider data

Country	Provider	Plan name	Max download speed (Mb)	Speed Category	Usage (max GB)	Monthly Charge (Local currency)	Additional charge (Local currency/GB)	Modem and Connection Fee (Local currency)
Australia	Telstra	Fast 256/64kbps	0.256	0.256	0.2	29.95	150	189.00
Australia	Telstra	BigPond Liberty Fast 256/64kbps	0.256	0.256	12	59.95	0	189.00
Australia	Telstra	Faster 1500/256kbps	1.5	1	0.4	39.95	150	189.00
Australia	Telstra	BigPond Liberty Faster 1500/256kbps	1.5	1	12	69.95	0	189.00
Australia	Telstra	BigPond Liberty Faster 1500/256kbps	1.5	1	25	79.95	0	189.00
Australia	Telstra	Fastest	20	17	0.6	59.95	150	189.00
Australia	Telstra	BigPond Liberty Fastest	20	17	12	89.95	0	189.00
Australia	Telstra	BigPond Liberty Fastest	20	17	25	99.95	0	189.00
Australia	Telstra	Fastest	20	17	60	149.95	150	189.00
Austria	Telekom Austria	aonPur Flat 2 Mbit	2	1	No cap	39.90	0	29.90
Austria	Telekom Austria	aonPur Flat 4 Mbit	4	1	No cap	59.90	0	29.90
Belgium	Belgacom	ADSL Budget	1	1	0.4	20.00	1	25.00
Belgium	Belgacom	ADSL Light	2	1	1	31.55	1	25.00
Belgium	Belgacom	ADSL Go	4	1	12	41.75	1	25.00
Belgium	Belgacom	ADSL Plus	4	1	35	57.05	1	0
Belgium	Belgacom	VDSL Boost	17	17	35	62.15	1	59.90
Canada	Bell Canada	Total Internet Essential	0.5	0.512	2	27.95	2.50	44.00
Canada	Bell Canada	Total Internet Essential Plus	2	1	20	37.95	2.00	44.00
Canada	Bell Canada	Total Internet Performance	7	1	60	47.95	1.50	44.00
Canada	Bell Canada	Total Internet Max	16	8	100	87.95	1.00	44.00
Denmark	TDC	TDC Broadband 1 Mbit	1	1	No cap	179.00	0	0
Denmark	TDC	TDC Broadband 2 Mbit	2	1	No cap	219.00	0	0
Denmark	TDC	TDC Broadband 4 Mbit	4	1	No cap	259.00	0	0
France	Orange	8 mégamax	8	8	No cap	29.90	0	59.00
France	Orange	16 mégamax	18	17	No cap	34.90	0	59.00
Germany	Deutsche Telekom	Call & Surf Basic Internet flatrate DSL 2000	2	1	No cap	29.95	0	99.95
Germany	Deutsche Telekom	Call & Surf Comfort DSL 6000	6	1	No cap	39.95	0	99.95
Germany	Deutsche Telekom	Call & Surf Comfort Plus DSL 16000	16	8	No cap	49.95	0	99.95
Ireland	Eircom	Broadband home starter	1	1	10	24.99	10	0
Ireland	Eircom	Broadband home plus	2	1	20	29.99	10	0
Ireland	Eircom	Broadband home professional	3	1	30	48.40	10	0
Italy	Alice	Alice ADSL 7 Mega	7	1	No cap	19.95	0	190.80
Italy	Alice	Alice ADSL 20 Mega	20	17	No cap	24.95	0	190.80
Netherlands	KPN	Internet KPN Go	1.5	1	No cap	25	0	0
Netherlands	KPN	Internet KPN Lite	3	1	No cap	30	0	0
Netherlands	KPN	Internet KPN Basic	6	1	No cap	50	0	0
New Zealand	Telecom NZ	Basic	8	8	0.2	29.95	20	99.95
New Zealand	Telecom NZ	Explorer	8	8	6	49.95	0	99.95
New Zealand	Telecom NZ	Adventure	8	8	10	59.95	0	99.95
New Zealand	Telecom NZ	Pro	8	8	15	79.95	20	99.95
New Zealand	Telecom NZ	Pro Advanced	8	8	30	99.95	20	99.95

Broadband Pricing Benchmarking

New Zealand	Telecom NZ	Pro Ultra	8	8	50	149.95	20	99.95
Norway	Telenor	Online ADSL Mini	1.5	1	No cap	299	0	799.00
Norway	Telenor	Online ADSL Basic	3.5	1	No cap	349	0	799.00
Norway	Telenor	Online ADSL Plus	4.5	1	No cap	419	0	799.00
Norway	Telenor	Online ADSL Extra	6	1	No cap	499	0	799.00
Norway	Telenor	Online ADSL Max	16	8	No cap	549	0	799.00
Norway	Telenor	Online ADSL Turbo	16	8	No cap	399	0	799.00
Portugal	PT	Internet SAPO ADSL 2Mb	2	1	5	14.99	15	0
Portugal	PT	Internet SAPO ADSL 6Mb	6	1	10	19.90	15	0
Portugal	PT	Internet SAPO ADSL16Mb	16	8	50	25.58	15	0
Portugal	PT	Internet SAPO ADSL 24Mb	24	17	100	44.50	15	0
Portugal	PT	Internet SAPO ADSL 6Mb (Unlimited)	6	1	No cap	27.40	0	0
Portugal	PT	Internet SAPO ADSL16Mb (Unlimited)	16	8	No cap	33.08	0	0
Portugal	PT	Internet SAPO ADSL 24Mb (Unlimited)	24	17	No cap	52.00	0	0
Spain	Telefonica	Dúo ADSL 1MB	1	1	No cap	29.90	0	88.49
Spain	Telefonica	Dúo ADSL 3MB	3	1	No cap	40.90	0	88.49
Spain	Telefonica	Dúo ADSL 10MB	10	8	No cap	44.90	0	88.49
Sweden	Telia	Telia Bredband 0.25	0.25	0.256	No cap	199	0	495.00
Sweden	Telia	Telia Bredband 24	2	1	No cap	229	0	495.00
Sweden	Telia	Telia Bredband 8	8	8	No cap	279	0	495.00
Sweden	Telia	Telia Bredband 24	24	17	No cap	329	0	495.00
Switzerland	Swiss Telecom	DSL standard	3.5	1	No cap	49.00	0	0
Switzerland	Swiss Telecom	DSL extra	5	1	No cap	59.00	0	0
Switzerland	Swiss Telecom	Infinity (VDSL)	20	17	No cap	69.00	0	123.25
United Kingdom	BT	BT Total Broadband Fast & reliable	8	8	5	15.99	0	0
United Kingdom	BT	BT Total Broadband Heavy user	8	8	8	20.99	0	0
United Kingdom	BT	BT Total Broadband UNLIMITED	8	8	No cap	24.99	0.30	0
United States	AT&T	Basic Plan	0.768	0.512	No cap	19.95	0	49.99
United States	AT&T	Express Plan	1.5	1	No cap	25.00	0	49.99
United States	AT&T	Pro Plan	3	1	No cap	30.00	0	49.99
United States	AT&T	Elite Plan	6	1	No cap	35.00	0	49.99

Note: Excludes bundled offerings, assumes 12 month DSL contracts, user has a fixed line with the incumbent, user has no modem and is a new broadband user/customer, lowest cost modem is used, self-service installation where possible, and excludes any promotional deals.

Source: Company websites.

Broadband Pricing Benchmarking

Appendix C: Data tables

Exhibit 16: Total monthly cost (AUD) of most economical broadband packages (as at 1st June 2008)

	Telstra (Australia)	Telekom Austria (Austria)	Belgacom (Belgium)	Bell Canada (Canada)	TDC (Denmark)	Orange (France)
256 Kbps						
Ultra Low	45.70	-	-	-	-	-
Low	75.70	-	-	-	-	-
Medium	75.70	-	-	-	-	-
High	75.70	-	-	-	-	-
Ultra High	75.70	-	-	-	-	-
512-800 Kbps						
Ultra Low	-	-	-	33.31	-	-
Low	-	-	-	33.31	-	-
Medium	-	-	-	33.31	-	-
High	-	-	-	33.31	-	-
Ultra High	-	-	-	33.31	-	-
1-3 Mbps						
Ultra Low	55.70	68.98	35.93	43.85	39.08	-
Low	70.70	68.98	36.09	43.85	39.08	-
Medium	85.70	68.98	71.32	43.85	39.08	-
High	85.70	68.98	71.32	43.85	39.08	-
Ultra High	85.70	68.98	96.22	54.39	39.08	-
8-12 Mbps						
Ultra Low	-	-	-	96.54	-	56.65
Low	-	-	-	96.54	-	56.65
Medium	-	-	-	96.54	-	56.65
High	-	-	-	96.54	-	56.65
Ultra High	-	-	-	96.54	-	56.65
17+ Mbps						
Ultra Low	75.70	-	109.25	-	-	64.79
Low	75.70	-	109.25	-	-	64.79
Medium	105.70	-	109.25	-	-	64.79
High	105.70	-	109.25	-	-	64.79
Ultra High	115.70	-	109.25	-	-	64.79

Note: Excludes bundled offerings, assumes 12 month DSL contracts, user has a fixed line with the incumbent, user has no modem and is a new broadband user/customer, lowest cost modem is used, self-service installation where possible, and excludes any promotional deals.

Source: Spectrum Value Partners analysis, company websites.

Broadband Pricing Benchmarking

Exhibit 17: Total monthly cost (AUD) of most economical broadband packages (as at 1st June 2008)

	Deutsche Telekom (Germany)	Eircom (Ireland)	Alice (Italy)	KPN (Netherlands)	Telecom NZ (New Zealand)	Telenor (Norway)
256 Kbps						
Ultra Low	-	-	-	-	-	-
Low	-	-	-	-	-	-
Medium	-	-	-	-	-	-
High	-	-	-	-	-	-
Ultra High	-	-	-	-	-	-
512-800 Kbps						
Ultra Low	-	-	-	-	-	-
Low	-	-	-	-	-	-
Medium	-	-	-	-	-	-
High	-	-	-	-	-	-
Ultra High	-	-	-	-	-	-
1-3 Mbps						
Ultra Low	62.28	40.66	58.33	40.68	-	75.18
Low	62.28	40.66	58.33	40.68	-	75.18
Medium	62.28	40.66	58.33	40.68	-	75.18
High	62.28	40.66	58.33	40.68	-	75.18
Ultra High	62.28	78.75	58.33	40.68	-	75.18
8-12 Mbps						
Ultra Low	94.83	-	-	-	31.41	95.74
Low	94.83	-	-	-	47.82	95.74
Medium	94.83	-	-	-	47.82	95.74
High	94.83	-	-	-	56.03	95.74
Ultra High	94.83	-	-	-	88.85	95.74
17+ Mbps						
Ultra Low	-	-	66.47	-	-	-
Low	-	-	66.47	-	-	-
Medium	-	-	66.47	-	-	-
High	-	-	66.47	-	-	-
Ultra High	-	-	66.47	-	-	-

Note: Excludes bundled offerings, assumes 12 month DSL contracts, user has a fixed line with the incumbent, user has no modem and is a new broadband user/customer, lowest cost modem is used, self-service installation where possible, and excludes any promotional deals.

Source: Spectrum Value Partners analysis, company websites.

Broadband Pricing Benchmarking

Exhibit 18: Total monthly cost (AUD) of most economical broadband packages (as at 1st June 2008)

	PT (Portugal)	Telefonica (Spain)	Telia (Sweden)	Swiss Telecom (Switzerland)	BT (United Kingdom)	AT&T (United States)
256 Kbps						
Ultra-Light	-	-	41.93	-	-	-
Light	-	-	41.93	-	-	-
Medium	-	-	41.93	-	-	-
Heavy	-	-	41.93	-	-	-
Ultra High	-	-	41.93	-	-	-
512-800 Kbps						
Ultra-Light	-	-	-	-	-	25.25
Light	-	-	-	-	-	25.25
Medium	-	-	-	-	-	25.25
Heavy	-	-	-	-	-	25.25
Ultra High	-	-	-	-	-	25.25
1-3 Mbps						
Ultra-Light	24.39	60.65	47.16	49.22	-	30.54
Light	24.39	60.65	47.16	49.22	-	30.54
Medium	24.39	60.65	47.16	49.22	-	30.54
Heavy	32.38	60.65	47.16	49.22	-	30.54
Ultra High	44.58	60.65	47.16	49.22	-	30.54
8-12 Mbps						
Ultra-Light	41.62	85.06	55.89	-	33.14	-
Light	41.62	85.06	55.89	-	33.14	-
Medium	41.62	85.06	55.89	-	33.14	-
Heavy	41.62	85.06	55.89	-	43.50	-
Ultra High	41.62	85.06	55.89	-	70.44	-
17+ Mbps						
Ultra-Light	72.41	-	64.61	79.63	-	-
Light	72.41	-	64.61	79.63	-	-
Medium	72.41	-	64.61	79.63	-	-
Heavy	72.41	-	64.61	79.63	-	-
Ultra High	72.41	-	64.61	79.63	-	-

Note: Excludes bundled offerings, assumes 12 month DSL contracts, user has a fixed line with the incumbent, user has no modem and is a new broadband user/customer, lowest cost modem is used, self-service installation where possible, and excludes any promotional deals.

Source: Spectrum Value Partners analysis, company websites.

Broadband Pricing Benchmarking

Contact information

Spectrum Value Partners is a leading advisor to the converging industries of telecommunication, media and information technology. We are part of the Value Partners management consulting practice. We currently have over 400 staff, with more than half of these specialising in TMT, making us one of the largest TMT strategy practices worldwide. With offices in Beijing, Buenos Aires, Hong Kong, Istanbul, London, Milan, Mumbai, Rio de Janeiro, Rome, Sao Paolo, Shanghai, Singapore, Sydney, we serve clients in over 40 countries. We are a broad-based consultancy working with the world's leading operators, policy makers, regulators, vendors and financiers to provide strategic, commercial, operational, financial and technical advice. Specifically, we work across corporate and commercial strategy, financial advisory support, bid support, operational improvement and change management, policy and regulation, rights management, strategic technology decisions and strategy implementation. Spectrum Value Partners was formed when spectrum Strategy Consultants was integrated into the Value Partners Group in February 2007.

Spectrum Value Partners

King Street Wharf Suite 302,

45 Lime Street,

Sydney NSW 2000

Telephone: +61 2 9279 0072

Fax: +61 2 9279 0551

www.spectrumstrategy.com

justin.jameson@spectrumstrategy.com

ainkaran.krishnarajah@spectrumstrategy.com