Market Clarity

Australia's Source for Telecommunications Intelligence

Closing the Trans-Tasman Broadband Value Gap: Comparing Prices in Australia and New Zealand

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1 Introduction

1.1 About This Report

This report provides a comparison of fixed broadband value between Australia and New Zealand.

In both countries, two parameters predominate the marketing of broadband services: the notional speed of the service ("notional" because broadband services rarely operate at their advertised speed); and the data caps offered under various plans.

Similarly, both countries have experienced a growth in data allowances in recent years. Australians watching the industry will be familiar with the emergence, in 2010 and 2011, of plans offering 1 TB of monthly data allowances. New Zealand is experiencing a similar shift, albeit from a lower base.

To carry out this research, Market Clarity focussed on providers that represent a significant proportion of each country's market. This inevitably involves the exclusion of a large number of small retail ISPs from the market. However, this is a necessary part of managing project scope, since a full census of the two markets would have required capturing and analysing plans from around 500 ISPs.

The following Australian ISPs are included in this analysis:

- iiNet,
- Internode,
- iPrimus,
- Optus,
- Telstra, and
- TPG.

The following New Zealand ISPs are included in this analysis:

- Orcon,
- Slingshot,
- Telecom New Zealand,
- Telstra Clear, and
- Vodafone New Zealand.

1.2 Notes on Methodology

Plans were captured at June 2011 and, using data already held by Market Clarity as well as sources such as the Internet Archive's Wayback Machine, for June 2010. This allows not only a geographical comparison, but also a longitudinal comparison of the changes in offerings during the last 12 months.

The key metric used in this report is the cost of a service based on a gigabyte of data: the monthly cost of a broadband Internet plan, divided by the allowance (in gigabytes) provided by that plan.

1.2.1 Bundling

To ensure consistency, Market Clarity has, wherever possible, based its analysis on "unbundled" services (i.e., plans which do not include home telephone or other non-broadband services).

It should be noted that some New Zealand providers only offer broadband services bundled with home telephony. Where appropriate, Market Clarity has sought to offset the inclusion of the home telephone line by discounting the monthly plan price by the retail price of a home telephone line (for example, at the time of writing, this was around $NZ45 per month depending on geographic location).

1.2.2 "Unlimited" Plans

To enable comparison of capped plans with plans promoted as "unlimited", Market Clarity has assigned a notional data allowance of 1 TB to such plans. In one case, plans were described as "unlimited" although throttling was applied at a given usage level. These plans were treated not as "unlimited" plans, but as plans offering the throughput at which throttling came into effect.

1.2.3 Exchange Rates

Plan prices have been normalised to local currency (Australian dollars and New Zealand dollars) for this analysis, using the exchange rate tables published by the Reserve Bank of Australia. Exchange rates of $AU1.2308 per $NZ1 at June 30, 2010, and $AU1.2953 to $NZ1 at June 30, 2011, are used in this comparison.

1.2.4 Broadband Plans included in the Analysis

In this analysis Market Clarity has focused on fixed broadband (ADSL and HFC) plans offered in Australia and New Zealand.

2 Comparing Australian and NZ Broadband Prices

As countries in which broadband usage is metered, Australia and New Zealand are in a unique position: the similarity of plan structures in the two countries allows them to be directly compared.

Broadband Plan Observations:

1. **Market Clarity notes that both upload and download data usage is counted in the data allowances offered in conjunction with both Australian and NZ broadband plans. For brevity, we've used the term "download" to refer to information usage (uploads and downloads).**

2. **In Australia, many broadband plans split data allowances between peak and off-peak quotas. New Zealand providers tend not make this distinction, although one provider (Slingshot) does not count off-peak downloads towards a subscriber's monthly quota. In this analysis, Market Clarity has not differentiated between time-of-day quotas.**

3. **In Australia, if the information allowance in a metered broadband plan is exceeded, speed shaping is applied. Speed shaping ranges from 64 Kbps to 4 Mbps, varying by provider and plan. One provider (Internode) also offers an option to purchase additional data blocks.**

4. **In New Zealand, if the information allowance in a metered broadband plan is exceeded, excess charges tend to apply, although several providers offer an option to use speed shaping instead. Speed shaping ranges from 56 Kbps to 64 Kbps.**

5. **In New Zealand, most providers charge an extra fee (generally NZ$10/month) if a subscriber does not have a home line with that provider. In this analysis, we have added the unbundling "penalty" where applicable.**

6. **It is also worth noting that Australian and New Zealand providers who have their own DSLAM or HFC infrastructure tend to offer their most cost-effective plans in conjunction with their infrastructure footprint. Broadband services that are offered on third-party infrastructure generally attract a price premium.**

The comparison Market Clarity presents in this study is designed to provide insights into:

- How broadband plan value, as expressed in cost per gigabyte of plan allowance, differs between Australia and New Zealand; and
- The shift in cost per Gigabyte from 2010 to 2011 in each country.

Our key findings are as follows:

- It is clear from Market Clarity's analysis that New Zealand broadband users have historically paid higher prices on a per-GB basis than Australian customers.
- In both countries, broadband value improved between 2010 and 2011.
- While the gap between New Zealand and Australian plan value narrowed somewhat from 2010 to 2011, New Zealand users are generally offered lower plan quotas for any given plan price than Australian users.
- At the "premium" end of the broadband market — in which subscribers pay the highest prices but receive the highest plan allowances — customers in the two countries now pay similar prices on a per-GB basis. If a special offer currently available in New Zealand is included in the analysis, the best per-GB price currently available in New Zealand (NZ 3 cents per GB) is below the best per-GB price available in Australia (AU 6 cents per GB).

While there was a considerable "value gap" in broadband services between New Zealand and Australia as late as 2010, the gap has closed considerably for premium services in the last 12 months.

Although the "value gap" in premium broadband services between the two countries is closing, the "value gap" in median prices has worsened. From 2010-2011, the median price in Australia went from A$1.12 to A$0.37 per GB, whereas the median price in New Zealand went from A$4.60 to A$2.17 per GB — meaning that New Zealander's paid 4.1 more per GB in 2010 and 5.8 more per GB in 2011 than Australians.

The good news is that in real terms the median price per GB is declining in both countries. But, the declining price per GB is happening at a faster pace in Australia.

Market Clarity has been closely tracking the Australian broadband market for a number of years, and it is evident that plan allowances once relegated to premium services have slowly made their way into mainstream plans. (For example, the Australian median plan allowance in 2010 was 55 GB, whereas in 2011 it increased to 200 GB. By contrast, as recently as 2008, there were no 200+ GB plans offered.)

If the similarity between the two markets holds, and New Zealand plan inclusions continue on their present upward trajectory, the gap between the two markets will continue to narrow.

2.1 Plan Characteristics — Price Points and Data Allowances

In this section, we discuss the price characteristics of fixed broadband services in Australia and New Zealand.

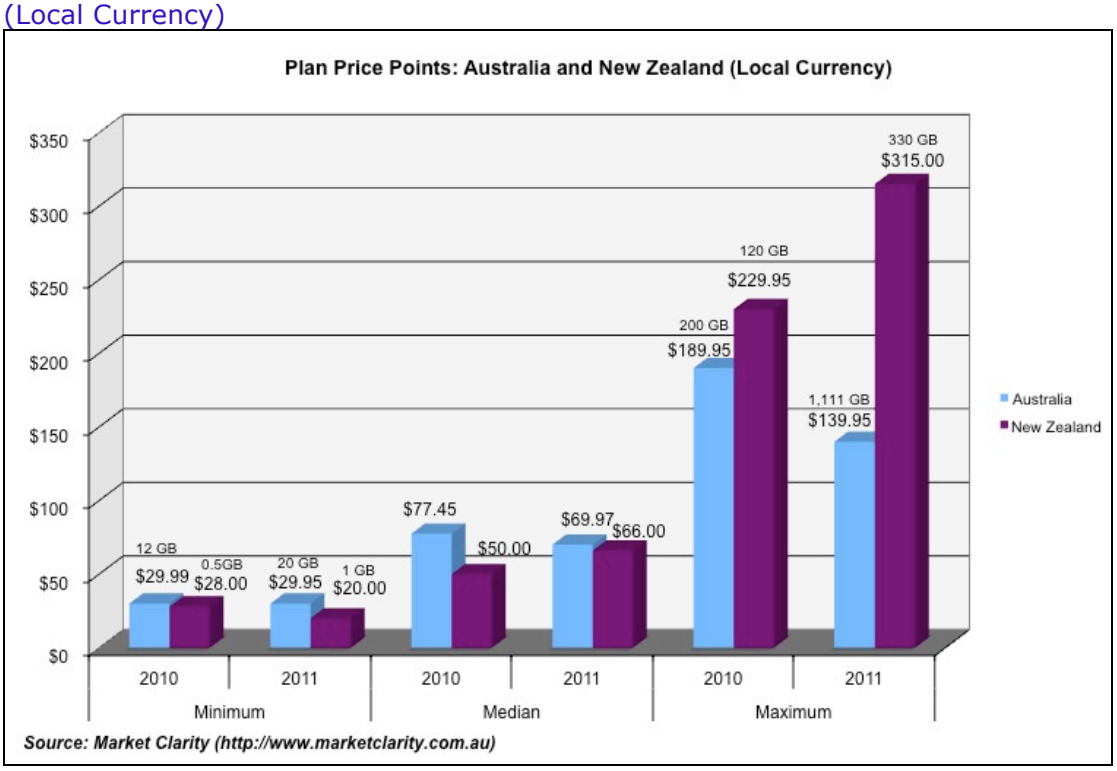
Headline plan price points offered by ISPs in different countries should not be considered as a valid way to compare the cost of broadband services, for the following reasons:

- **Currency values.**
- **Plan inclusions** — Merely analysing plan price points does not take into account the services that are included for a given price. In particular, plan price points alone do not provide an indication of the data allowance included with any given plan.
- **User distribution** — Plan price points do not take into account user buying behaviour. Hence the "average price" of broadband services provides no indication of what users are paying; e.g. the distribution of plans selected by subscribers.

However, the range of price points offered by ISPs in Australia and New Zealand provides a useful indication of market positioning of services. They illustrate how providers regard their "entry level" services, and likewise, the highest prices providers are willing charge for a service.

Figure 1, below, shows the price points favoured by ISPs in Australia and New Zealand, respectively, in 2010 and 2011 in each local currency. This Figure also shows the data allowance associated with the Minimum and Maximum plans. (Median plan prices are a mathematical construct and are not associated with a specific plan.)

Figure 1. — Broadband Plan Price Points in Australia and New Zealand: 2010-2011 (Local Currency)



Because the price point chosen by any retailer has as much to do with retail psychology as economic reality, Market Clarity has chosen to represent these prices in their "native" currency.

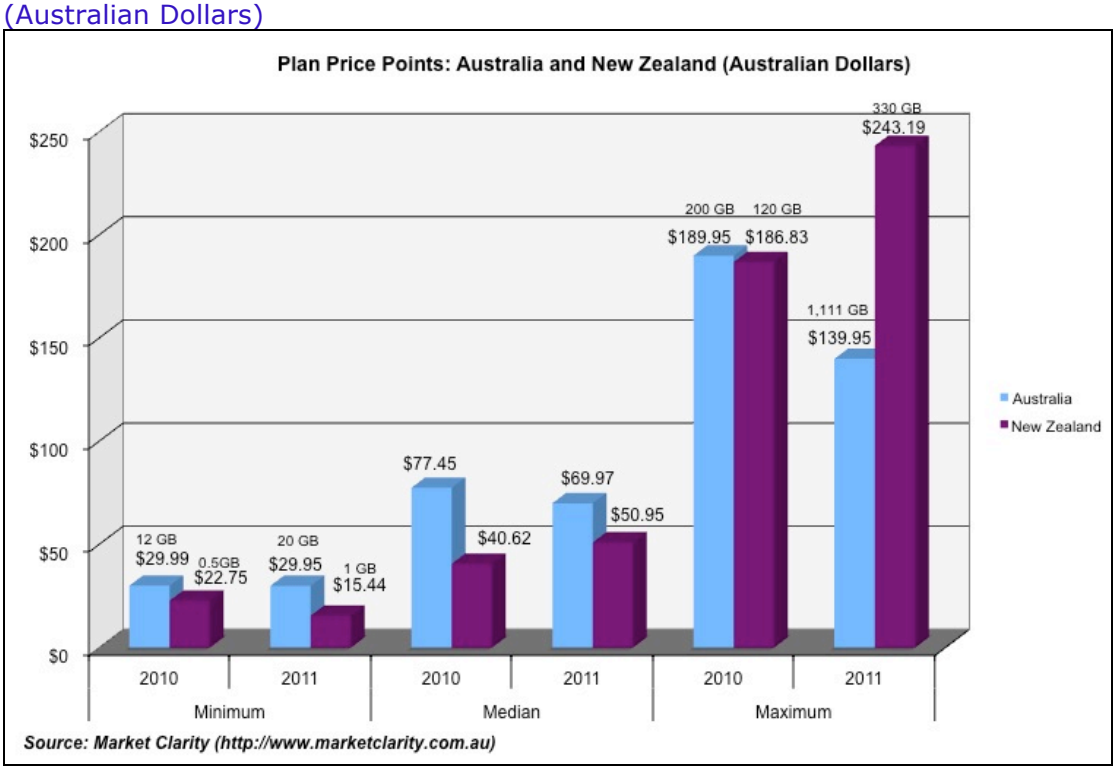
It should also be remembered that unless the price points are weighted to take into account the distribution of users across plans, price points cannot be averaged to present an analysis of the real average price paid by consumers.

However, Figure 1 does inform some aspects of broadband services in Australia and New Zealand:

- New Zealand providers seem to favour slightly lower price points[1] than Australian providers, with the exception of premium services. In both 2010 and 2011, New Zealand's minimum and median plan prices are below Australia's (in local currency).
- Australian providers have simplified their plan portfolios, and between 2010 and 2011, prices fell at the median and top of the market. The lowest price point in Australia remained virtually unchanged ($AU29.95, down from $29.99).
- In the same period, new plan offerings in New Zealand lifted both the median and maximum plan prices. By comparison, Australian median and maximum plan prices have decreased from 2010 to 2011.
- In all cases, plan data allowances have increased over time. However, it's also clear that Australian plan allowances are significantly larger than those available in New Zealand at both the top and bottom end of the market.

Figures 2 and 3 represent this information in Australian and New Zealand dollars, respectively, to enable comparison in each respective currency.

Figure 2. — Broadband Plan Price Points in Australia and New Zealand: 2010-2011 (Australian Dollars)



[1] Excluding forced phone bundling as described in Section 1.2.1.

Figure 3. — Broadband Plan Price Points in Australia and New Zealand: 2010-2011 (New Zealand Dollar)

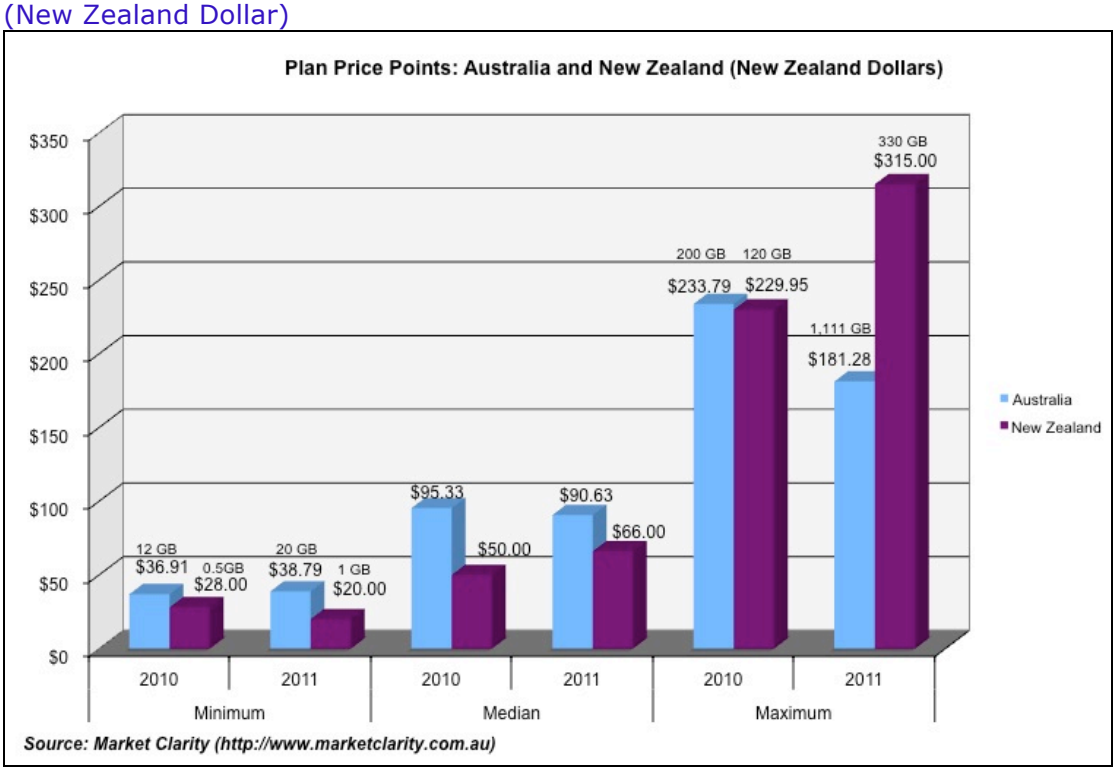


Figure 4 and Table 1, below, illustrates the growth in plan allowances in Australia and New Zealand from 2010 to 2011. It's worth noting that in New Zealand, the top plan allowance (1 TB) is *not* the most expensive.

Figure 4. — Broadband Allowances, Australia and New Zealand: 2010-2011

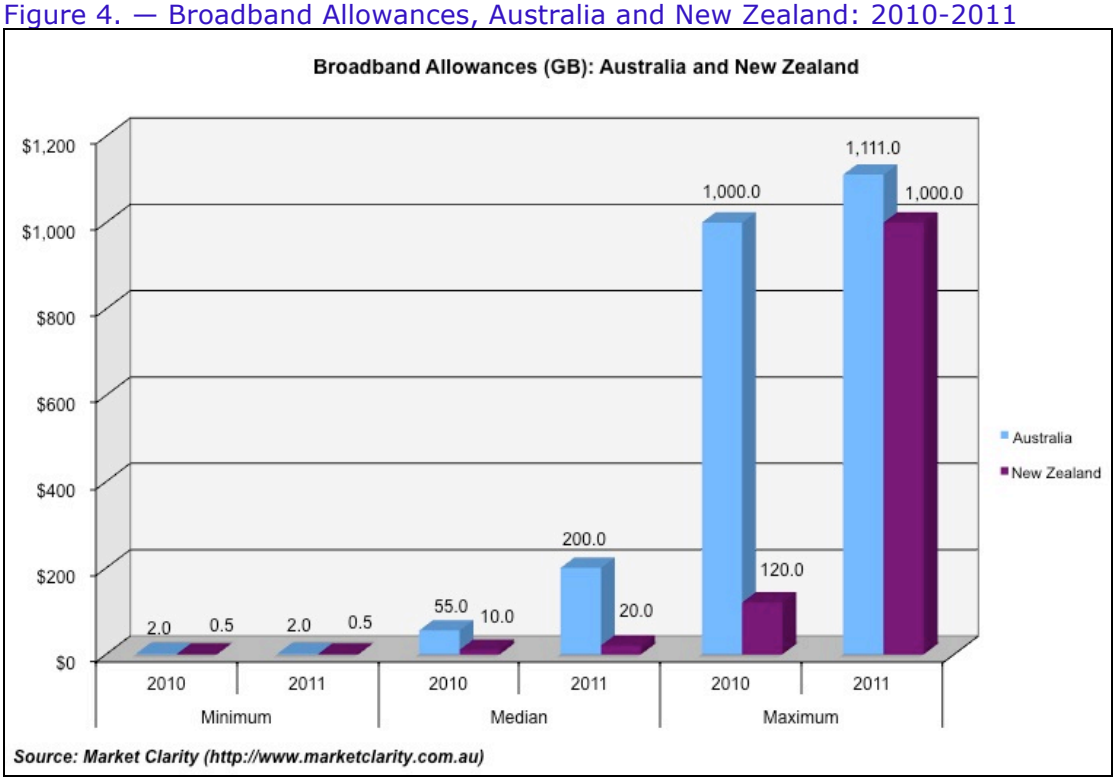


Table 1. — Broadband Allowances, Australia and New Zealand: 2010-2011

Allowances in GB	Minimum		Median		Maximum	
	2010	2011	2010	2011	2010	2011
Australia	2.0	2.0	55.0	200.0	1,000.0	1,111.0
New Zealand	0.5	0.5	10.0	20.0	120.0	1,000.0

It should be noted that the Terabyte plans shown in Table 1, above, for New Zealand in 2011, and Australia in 2010 are "unlimited" plans, which, for the purposes of this analysis, are treated as Terabyte plans.

If this plan is excluded from analysis, the maximum plan allowance offered by New Zealand providers in the study sample is 330 GB per month.

Clearly, allowances in both countries are growing, with the exception of the allowances for the least-cost, entry-level service. Until 2011, New Zealand suffered a considerable lag regarding the size of its broadband allowances. To cite a single example, plans offering a 100 GB allowance, similar to the largest allowance offered by the New Zealand sample in 2010, were available in Australia in 2006.

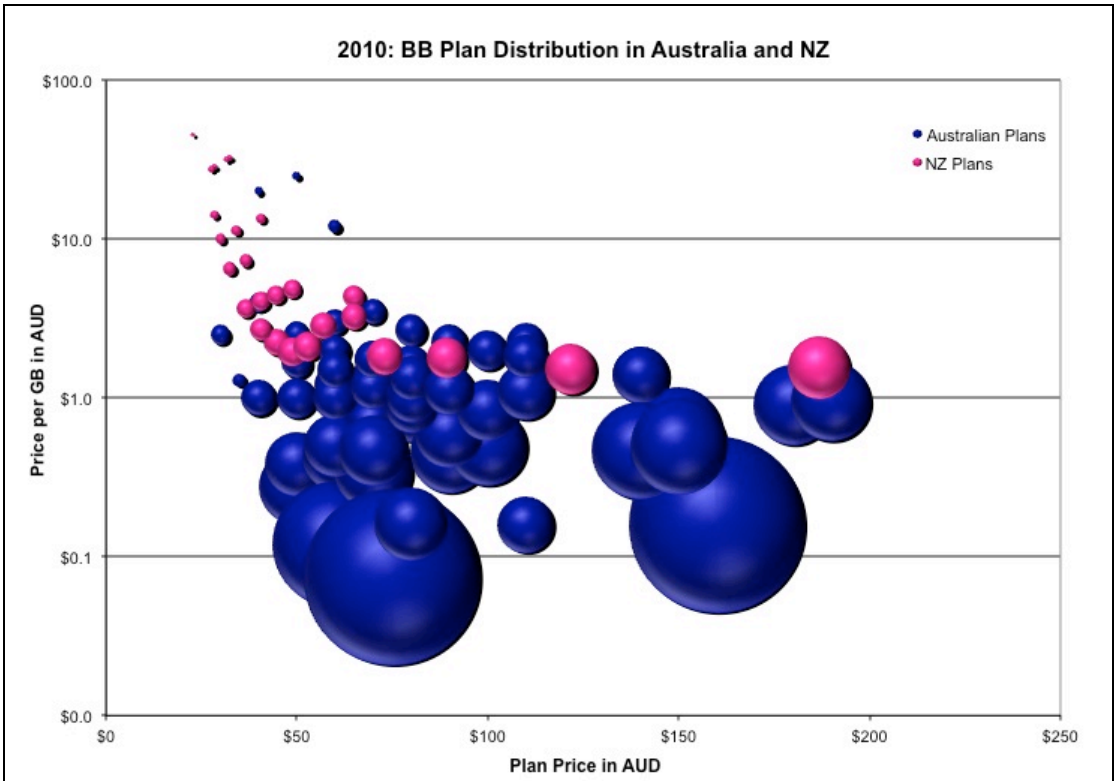
The median allowance of Australian plans analysed by Market Clarity was just 55 GB in 2010, rising to 200 GB in 2011. Not surprisingly, the change at the very top of the market was minimal, with one provider seeking to trump other "terabyte" services with a contrived allowance of 1,111 GB per month for its most-expensive plan.

Median and maximum allowances in New Zealand also rose between 2010 and 2011, but from a much lower base: 10 GB per month in 2010, which doubled to 20 GB per month in 2011 at median. The top of the market showed much greater change — from 120 GB per month in 2010 to an unlimited plan (analysed as 1,000 GB per month) in 2011 (or, if the "unlimited" plan is excluded, 330 GB per month at the top of the market).

The price points used by ISPs in Australia and New Zealand suggests that customers in the two countries have quite similar price-sensitivity. The difference between the two countries lies not in the "cost" of retail broadband plans, but in the value offered by those plans.

In order to better understand broadband plan dynamics in Australia and New Zealand, it's useful to view the full distribution of plan prices relative to data allowances. In Figure 5 (2010) and Figure 6 (2011), we illustrate each broadband plan in terms of plan price, data allowance (the size of the plan bubble graphic: the bigger the bubble, the larger the plan allowance) and the price per GB of the plan. These Figures are shown in Australian dollars, based on the exchange rate in each year.

Figure 5. — Distribution of Broadband Plans in Australia and New Zealand by Price and Plan Data Allowance: 2010

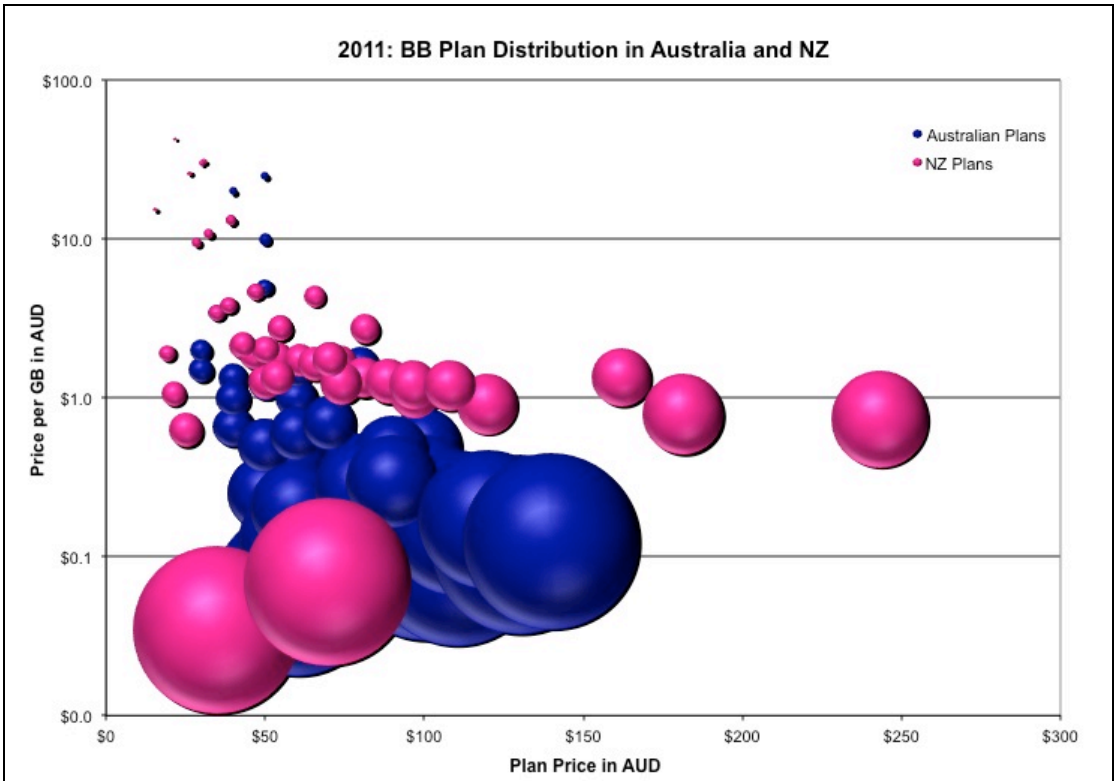


Note: Because this Figure illustrates prices on two axes (plan price and price per GB), the most favourable position on the chart is towards the lower-left corner.

Our key findings are as follows:

- In 2010, there were many more plans in Australia than in New Zealand offered by the providers surveyed for this study.
- Australian broadband plans cluster at the lower end of the plan price spectrum, with a smaller cluster of higher priced plans. And, because Australian plans typically have larger plan allowances the price per GB is also significantly lower in Australia.
- New Zealand broadband plans also cluster at the lower end of the plan price spectrum. However, plan allowances are much smaller, yielding a comparatively high price per GB.

Figure 6. — Distribution of Broadband Plans in Australia and New Zealand by Price and Plan Data Allowance: 2011



Our key findings are as follows:

- In 2011, Australian providers reduced the number of available plans, while New Zealand consumers enjoyed an increasing number of plan options.
- New Zealand broadband plans have become more distributed in terms of price range than in 2010, with several low priced plans with large data allowances dominating the Figure.
- Australian broadband plans cluster at the mid range of the plan price spectrum. And, with several notable exceptions, Australian plans tend to have larger plan allowances than in New Zealand, resulting in a lower price per GB. (Note: Due to the overlap in plan pricing between Australia and New Zealand, some of the lower end Australian plans are obscured by the lower priced New Zealand plans with large data allowances.)

In the following section, we further examine relative plan values in Australia and New Zealand.

2.2 Plan Value Analysis

Figure 7 and Figure 8, below, present the value of broadband plans in Australia and New Zealand, for 2010 and 2011, expressed as price per GB of plan allowance in Australian and New Zealand Dollars, respectively.

This information is also shown in tabular form in Tables 2 and 3.

Figure 7. — Price per GB: Australia and New Zealand, 2010-2011 (Australian Dollars)

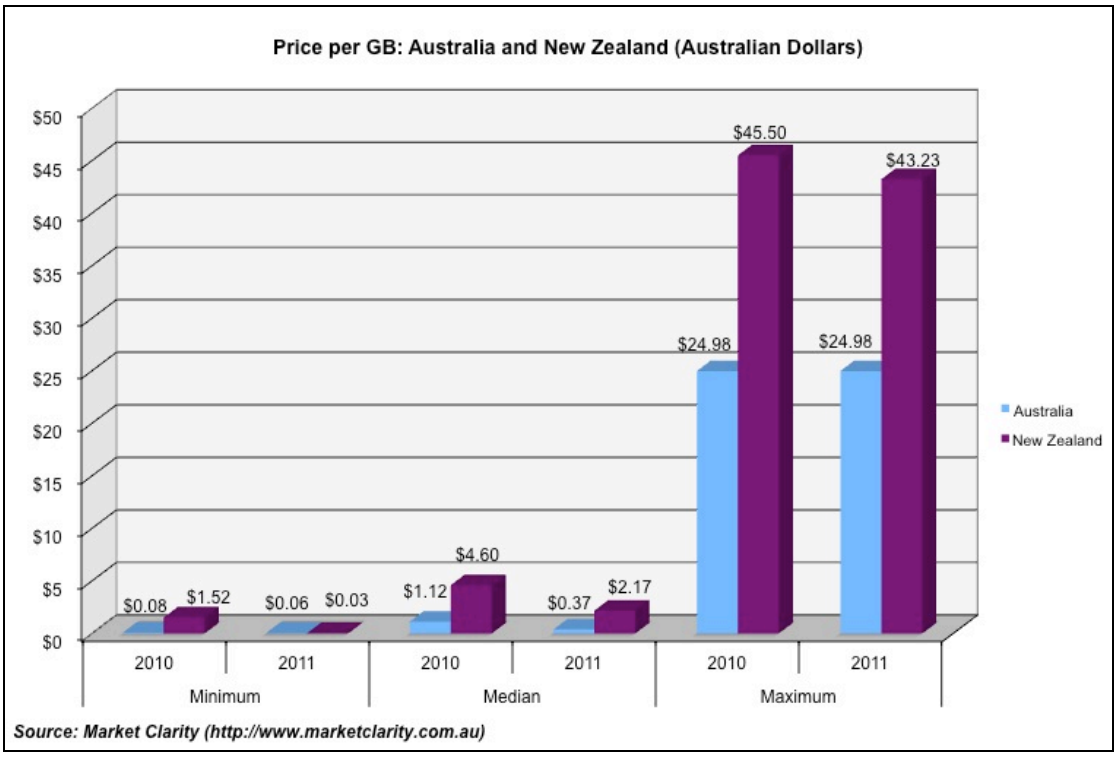


Figure 8. — Price per GB: Australia and New Zealand, 2010-2011 (New Zealand Dollars)

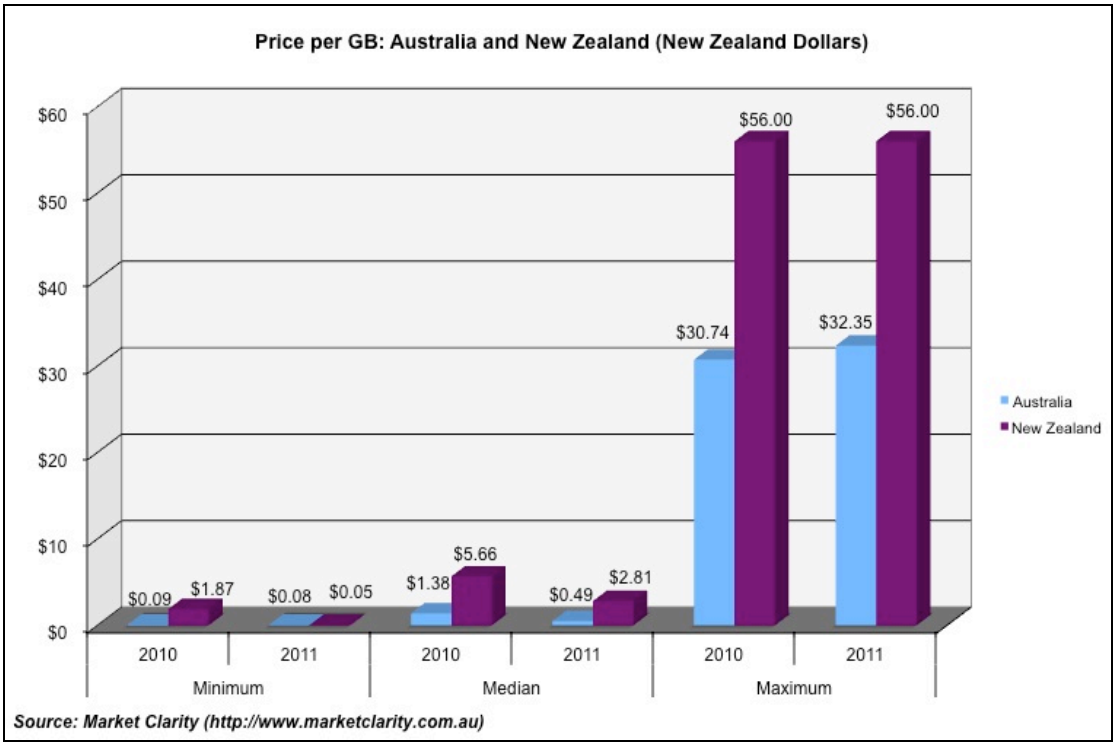


Table 2. — Price per GB: Australia and New Zealand, 2010-2011 (Australian Dollars)

Price per GB - in AU Dollars	Minimum		Median		Maximum	
	2010	2011	2010	2011	2010	2011
Australia	$0.08	$0.06	$1.12	$0.37	$24.98	$24.98
New Zealand	$1.52	$0.03	$4.60	$2.17	$45.50	$43.23

Table 3. — Price per GB: Australia and New Zealand, 2010-2011 (New Zealand Dollars)

Price per GB - in NZ Dollars	Minimum		Median		Maximum	
	2010	2011	2010	2011	2010	2011
Australia	$0.09	$0.08	$1.38	$0.49	$30.74	$32.35
New Zealand	$1.87	$0.05	$5.66	$2.81	$56.00	$56.00

In most cases, there is a considerable premium for New Zealand broadband plans compared to Australian broadband plans. In 2010, the cheapest gigabyte of data downloaded in New Zealand cost the customer $NZ1.87, which is more than the *median* cost per GB in the Australian plans captured in for 2010. The introduction of more aggressive pricing from some tier-two providers in New Zealand removed this anomaly in 2011.

In fact, the lowest per-GB price now available in New Zealand is marginally lower than in Australia. This is for a time-limited special currently offered by Slingshot; if this plan is excluded from the analysis, however, Australia's and New Zealand's best value plans have notional per-GB prices within one cent of each other (in either currency).

However, in any market where capped plans are the norm, the best value is available only to those users willing to pay relatively high monthly subscription fees.

Market Clarity expects that most subscribers buy plans at or below the median price of the plans on offer (yielding a per GB cost between median and maximum). As a result, most Australian users were probably paying between $AU0.37 and $AU24.98 for a gigabyte of downloaded data in June 2011, while the New Zealand customer in June 2011 paid between $NZ2.81 and $NZ56.00 per GB of allowance.

Market Clarity notes that in local currency, the most expensive plans in Australia and New Zealand on a per-GB basis did not change between 2010 and 2011. Where these are converted into the trans-Tasman currency, the apparent change (New Zealand's most expensive per-GB plan falling from $AU45.50 to $AU43.23; Australia's most expensive per-GB plan rising from $NZ30.74 to $NZ32.35) is due to the change in exchange rates from June 2010 to June 2011.

Figure 9, below, illustrates the growth in plan allowances in Australia and New Zealand from 2010 to 2011, compared to the Price per GB in Australian Dollars.

Figure 9. — Price per GB (Australian Dollars) and Included GB: 2010-2011

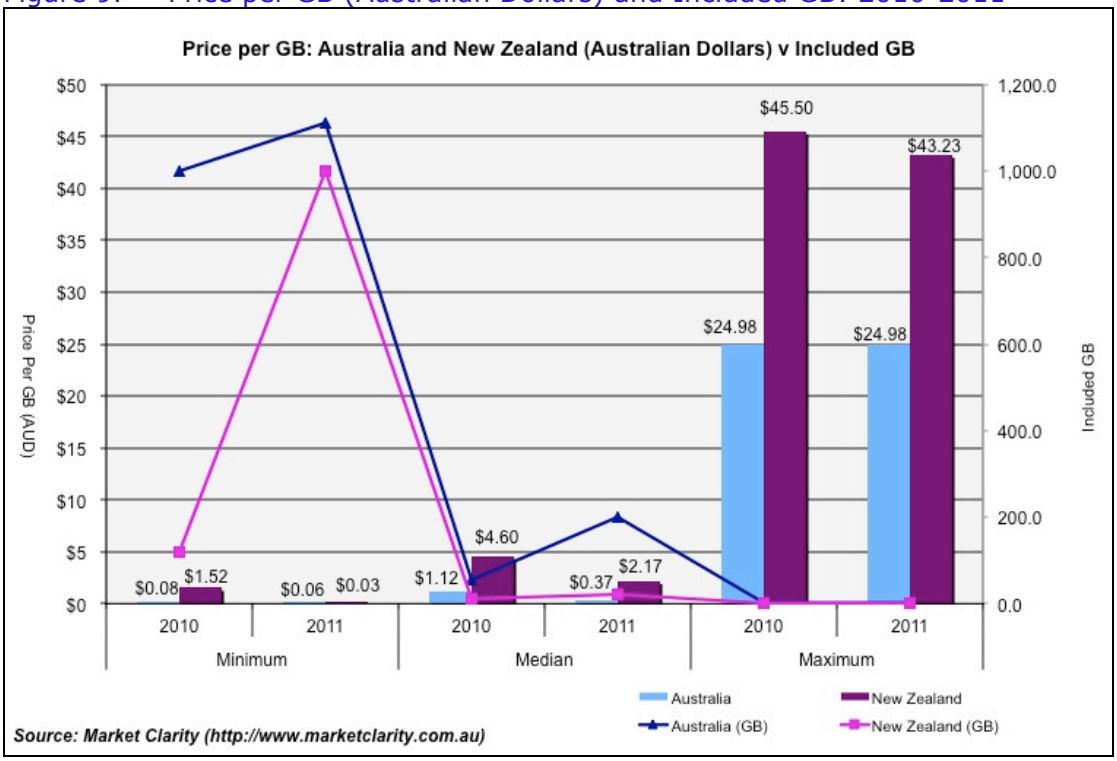


Table 4, below, quantifies the change in allowances and price per GB between 2010 and 2011 for the two countries:

Table 4. — Change in Broadband Allowances and Price per GB: 2010-2011

Change: 2010 to 2011	Australia			New Zealand		
	Min	Median	Max	Min	Median	Max
Price per GB	-20%	-67%	0%	-98%	-53%	-5%
Allowances in GB	0%	264%	11%	0%	100%	733%

Table 5, below, shows the continuing large gaps between broadband in Australia and New Zealand.

Table 5. — Comparing Plan Value in Australia and New Zealand: 2010-2011

NZ - to - Australia comparison	Minimum		Median		Maximum	
	2010	2011	2010	2011	2010	2011
Price per GB - NZ is % higher than Australia	1,931%	-42%	309%	479%	82%	73%
Price per GB - NZ is multiple higher than Australia	20.3	0.6	4.1	5.8	1.8	1.7
Allowances in GB - NZ as % of Australia	25.0%	25.0%	18.2%	10.0%	12.0%	90.0%

As this illustrates, by several measures, New Zealand ISPs are closing the "value gap" that exists between the two countries. In particular, the price premium that seems to apply to New Zealand broadband data allowances is falling at the top end of the market.

However, the gap is widening in the middle of the market, with New Zealand customers in 2011 only offered one-tenth the download allowances of Australian customers at the median, and the difference in price per GB rising from 2010 to 2011.

This is primarily because between 2010 and 2011, Australian ISPs began upgrading allowances without altering prices. In other words, higher-allowance services rapidly filtered downwards to plans with a lower price point. This shift has not yet been reflected in New Zealand.

Australia's experience is that growing allowances at the top of the market can become available to the "ordinary" user within a few years. If this experience is replicated in New Zealand, then plans with allowances in the hundreds of gigabytes, could become more common and more affordable in New Zealand in the 2012-2013 timeframe.

3 Conclusions

From the outside, it appears clear that New Zealand broadband customers receive less value for their spend than Australian customers.

Why this would be so is a complex question which could only be properly answered with a detailed study of ISPs' cost base in the two countries, and a comparison of ISP profitability.

Broadly, the cost inputs of a retail ISP include the following:

- **Customer Network Access —** Either the cost of the provider's access to an unbundled copper local loop, in addition to the cost of operating a DSLAM network (or similar HFC network costs); or, if the provider is a wholesale customer of a broadband network owner, the wholesale price paid for access to the broadband network;
- **In-country Backhaul —** The cost of bringing aggregated customer traffic into the ISP's network;
- **Internal IT and Network Operations Costs —** Including the operation of data centres, switching and routing, customer management, billing systems, content and application servers, and other operational systems;
- **Marketing —** Customer acquisition costs, including advertising, direct marketing, and public relations;
- **Customer Support —** Customer support is a significant cost for ISPs, but a necessary part of minimising costly customer churn;
- **Administration —** Back office functions, along with services such as internal or external legal advice;
- **International Data Services —** If a provider is purchasing international services separately from Internet Transit services; and
- **Internet Transit —** The cost of accessing Tier 1 Internet backbones. This may include international services as a bundled component of Internet transit, or a provider may acquire its own international services terminating in the USA and/or Australia, where it can negotiate Internet transit.

Each of these cost items is likely to reflect local conditions to a greater or lesser degree. To identify a subset of these costs:

- Customer network access is subject to different national regulators responding to local market conditions and competitive concerns, and with different regulated prices for access to unbundled copper and wholesale services.
- Australia and New Zealand experience differing levels of competition for wholesale backhaul services.
- IT and network infrastructure vendors apply different pricing policies in different countries; it may be that New Zealand suffers relatively higher prices both for hardware and software due to its smaller scale.
- The cost of Internet transit, whether or not this is bundled with international cable services, is directly related to scale. Large providers can negotiate

better prices when purchasing Internet transit services. The relatively smaller size of the New Zealand market may impact the cost at which NZ ISPs can acquire Internet transit services.

- Staff salaries, the local labour market will impact both internal salaries as well as the acquisition of third-party services.

The degree to which New Zealand retail ISPs are able to close the gap between their service offerings and those in Australia depends not only on their willingness to do so, but also on their ability to overcome the challenges of their relatively small scale.

In Market Clarity's view, a comprehensive study of retail ISP input costs and purchasing power parity in the two countries would be required in order to arrive at a comprehensive explanation of the value differences that appear to exist between Australia and New Zealand.

It will be interesting to track New Zealand broadband plan changes in the coming year, as well as the impact of the National Broadband Network (NBN) rollout in Australia.