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International Price Comparison for Retail Fixed-line and Mobile Telecommunications Services 2011

Telecommunications monitoring report

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Exchange Rate

All foreign prices are converted to \$NZ using OECD purchasing power parity (PPP) exchange rates.

Executive Summary

The purpose of the report is to benchmark New Zealand's retail prices for fixed-line and mobile voice (including text messages) and broadband services against those of other OECD countries. Comparing prices paid for telecommunications services in New Zealand with those paid overseas gives an indication of the relative competitiveness of New Zealand telecommunications markets.

The benchmarking results are summarised below for each of the following services:

- Fixed-lines services for both voice and broadband
- Mobile voice and text message services for both pre and post pay services
- Mobile broadband delivered as mobile phone data and data card services

Fixed-line services

Voice

New Zealand fixed-line voice prices are considerably higher than the OECD average, although lower than Australia, for the OECD basket most representative of New Zealand residential usage (140 calls per month).

The key reason for this is the high monthly line rental charged by Telecom, reflecting limited competition in the market and the TSO¹ (formerly Kiwi Share) requirement for unlimited local calling. Unlike many other countries, New Zealand has no plans tailored for low levels of voice usage.

Table 1: Summary of OECD fixed-line voice benchmarking

		2011 (NZD PPP ex GST)		
Service Basket representative of NZ consumers		New Zealand	Australia	OECD average
Fixed-line voice	140 calls (residential)	98.66	106.37	69.39
Fixed-line voice	260 calls (business)	126.63	206.93	116.77

NZ % variance from			
Australia OECD			
	average		
-7%	+42%		
-39%	+8%		

Source: Teligen T-basket

The business basket (260 calls per month) is competitively priced internationally and significantly cheaper than Australia. Business fixed-line services are not subject to any TSO requirements. These results are summarised in Table 1.

Broadband

Retail prices for both standalone (naked) broadband and broadband bundled with conventional voice were compared. For naked broadband, pricing of the most

Local Residential Telephone Service Telecommunications Service Obligation.

representative basket for New Zealand (10GB) is not significantly higher than the international benchmark average, and is lower than Australia. Naked broadband is more competitive than fixed-line voice.

For broadband with conventional voice, New Zealand's pricing is less competitive, given the high price of such voice services in New Zealand. This situation may lead to consumers switching to cheaper digital voice services. These results are summarised in Table 2.

Table 2: Summary of broadband benchmarking

		2011 (NZD PPP ex GST)		c GST)
Service Basket representative of NZ consumers		New Zealand	Australia	Bench- mark Average
Naked broadband	10GB	47.83	54.50	45.31
Broadband + voice	10GB + voice line	72.17	54.45	56.25

NZ % variance from			
Australia Bench- mark Average			
-12%	+6%		
+33%	+28%		

Source: Teligen T-Connect

For larger data users New Zealand is one of the most expensive countries benchmarked for both types of broadband. For example, for the 60GB naked broadband basket, New Zealand's price is 77% greater than the benchmark average.

Mobile voice services

Retail prices for both pre and post pay mobile voice services were compared.

Pre pay

The basket most representative of New Zealand pre pay subscribers is the 400 messages basket. The New Zealand price is 31% cheaper than the OECD average and competitive with Australia. This result is shown in Table 3.

For other baskets, New Zealand is priced significantly higher than Australia.

Post Pay

The basket most representative of New Zealand post pay subscribers is the 30 calls basket. New Zealand's pricing for this basket has increased from prior years to be 13% more expensive than the OECD average, and significantly more expensive than Australia. This result was largely driven by changes to post pay plans by one provider. The results are shown in Table 3.

For other usage baskets New Zealand post pay prices are higher than the OECD average and significantly higher than those in Australia. Australia has had the benefit of a less concentrated mobile market than New Zealand for many years.

Table 3: Summary of mobile voice and text messaging benchmarking

		2011 (NZD PPP ex GST)		
Service	Basket representative of NZ consumers	New Zealand	Australia	OECD average
Mobile pre pay	400 messages ²	19.56	18.75	28.16
Mobile post pay	30 calls	26.30	17.10	23.21

NZ % variance from			
Australia OECD average			
+4%	-31%		
+54%	+13%		

Mobile Broadband

Mobile phone data

In benchmarking the price of purchasing 50MB of data as an add-on to a mobile phone plan, New Zealand prices are significantly below average. The 50MB basket is probably most representative of current New Zealand mobile phone data usage.

For high data usage New Zealand's pricing is above average.

Mobile data cards

Mobile broadband, accessed through dongles or data cards, is a fast growing market in New Zealand, but mobile data prices are expensive compared to other countries.

The most representative basket for New Zealand data card usage is 1.5GB, which is priced well above both the OECD average and Australia. This result is shown in Table 4.

Table 4: Summary of mobile broadband benchmarking

		2011 (NZD PPP ex GST)		
Service	Basket representative of NZ consumers	New Zealand	Australia	Bench- mark Average
Mobile data	50MB	5.22	5.80	6.89
Data cards	1.5GB	34.78	14.23	22.35

NZ % variance from			
Australia	Bench- mark Average		
-10%	-24%		
+144%	+56%		

Source: Teligen T-Connect

Mobile broadband can be cheaper than fixed-line broadband when data use is low, but is significantly more expensive for higher data use. This suggests mobile broadband is priced as a premium service in New Zealand that is likely to complement rather than replace fixed-line broadband.

This basket also includes 8 calls.

Introduction

Purpose

The purpose of the report is to benchmark New Zealand's retail prices for fixed-line and mobile voice and text messaging services against those of other OECD countries. It also compares the prices of fixed and mobile broadband services available in New Zealand to those available in a similar group of countries.

This information is presented to make consumers, policy makers and the industry aware of how New Zealand's prices compare with those in other countries, and to inform them of possible reasons for some of the larger price differences.

Empowering Legislation

This report is released under section 9A of the Telecommunications Act 2001 (the Act), which requires the Commission to monitor telecommunications markets.

The purpose of the Act is to promote competition in telecommunications markets *for the long-term benefit of end-users in New Zealand*.³ Comparing prices paid for telecommunications services by New Zealand consumers with those paid overseas consumers gives an indication of the competitiveness of New Zealand telecommunications markets relative to other countries.

Data

The Commission has undertaken retail price benchmarking based on data collected by Teligen⁴, supplemented with observations by the Commission. Details of the benchmarking process are described in Attachment 1.

The benchmarking data was collected by Teligen in separate packages. These data packages are summarised in the table below.

Service	Teligen data package
Fixed-line and mobile voice services	T-Basket, August 2011
Fixed-line broadband services	T-Connect, September 2011
Mobile broadband services	T-Wireless, June 2011
Mobile handset data	T-Data, August 2011

The benchmarking results have been generated using OECD calculated purchasing power parity (PPP) exchange rates⁵ excluding GST/VAT. The use of PPP rates is preferable to exchange rates as they are a more stable measure.⁶

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Section 18 of the Telecommunications Act 2001.

http://www.teligen.com

Benchmarking approach

The Commission has benchmarked monthly retail prices for fixed-line and mobile telecommunications services, with a focus on residential⁷ and small business customers.

Medium to larger businesses usually negotiate a discounted confidential price for a bundle of telecommunications services, making benchmarking for this group more difficult.

All the data used for the benchmarking was provided in the benchmarking products purchased from Teligen.

Fixed-line voice and mobile voice and text messaging benchmarking was conducted using OECD consumption baskets. Details of publicly available retail telecommunications plans are used to calculate the lowest price to fill each OECD usage basket in each OECD country.

Benchmarking for fixed and mobile broadband (including data cards) used the selection of countries surveyed by Teligen which is similar but not identical to OECD countries. Consumption baskets were selected based on previous benchmarking and New Zealand usage patterns. No year-on-year comparison is available for these benchmarked services.

The results of retail price benchmarking of telecommunications services should be interpreted with caution as they can be affected by a number of factors. Some of these factors are summarised in Attachment 2.

See http://www.oecd.org/dataoecd/48/18/18598721.pdf

There is still some imprecision when comparing telecommunication prices between countries using general OECD PPP rates which were based on a 2008 survey and updated using a measure of general inflation

Businesses run from home, including farms, are often treated as residential customers

Retail Fixed-line Services - Voice

Key observations

Retail fixed-line voice services

- New Zealand's ranking on price has deteriorated for all usage baskets compared to last year. This may reflect limited competition for fixed-line voice services.
- New Zealand ranks at the bottom of the OECD in price for low levels of fixed-line calling. This is linked to the TSO requirement for Telecom to bundle free local calls with line rental.
- Unlike in many other countries, there are no plans tailored for low levels of voice usage.
- The most representative business basket (260 calls per month) is competitively priced internationally and significantly cheaper than in Australia.

Introduction

Telecom New Zealand is the only telecommunications retailer with its own nationwide fixed-line access network. However, after separation on 30 November 2011 Telecom's retail arm has become separate from the local access network used to supply its services.

TelstraClear has an independent access network that covers most of Wellington and Christchurch. Both Telecom and TelstraClear use their access networks to provide voice and broadband services to residential customers.

In 2008 Chorus, then Telecom's access network arm, commenced local loop unbundling enabling Telecom's competitors to lease the unbundled copper local loop (UCLL). Most urban exchanges have now been unbundled and access to the local copper loop allows access seekers to provide both voice and broadband services to end-users.⁸

Alternatively, Telecom's retail competitors in the fixed-line voice market can obtain a resold voice line or broadband service from Chorus (previously obtained from Telecom Wholesale) at a small discount to the retail price.⁹

In its Annual Telecommunications Monitoring Report 2010 the Commission noted that Telecom dominates the traditional fixed-line voice calling market in New Zealand with over 70% of connections and over 80% of net revenues.¹⁰

OECD fixed-line voice benchmarking

In order to enable cross-country comparisons of retail prices for fixed-line voice services, the OECD has developed a number of standardised consumption baskets. These baskets each include a certain number of local, national, international and fixed-to-mobile calls, and are

As at 30 June 2011 there were 93,000 unbundled lines and 123 unbundled exchanges in New Zealand

⁹ Charged for by Telecom Retail

See p24 of the report.

based on actual traffic data and consumption data collected from operators and regulators in the OECD member countries.

A high-level summary of the OECD fixed-line usage baskets is shown in Table 5 below.

Table 5: Fixed-line OECD usage baskets

	Call distribution			
Basket (calls per month)	Fixed to fixed Local	Fixed to fixed National	Fixed to mobile	International
20 calls	61%	20%	17%	2%
140 calls	58%	15%	23%	4%
420 calls	73%	17%	8%	2%
260 calls business	43%	23%	25%	9%

Source: Teligen

For OECD fixed-line voice benchmarking, Teligen generally collects data from the largest fixed-line operator in each OECD country, which is Telecom in New Zealand. Details of publicly available plans are used to calculate the cheapest cost of filling each usage basket in each OECD country.

The ranking for each usage basket is driven by the fixed monthly cost of accessing a fixed telephone line¹¹ and the variable cost for the different call types included in the basket.

In its benchmarking the Commission has concentrated on the OECD usage baskets which are most likely to suit New Zealand consumptions patterns. Actual residential consumption data collected from Telecom indicates that the 140 calls basket is close to the average New Zealand residential consumption.

-

¹¹ The monthly line rental and amortised connection cost.

Summary of OECD fixed-line voice benchmarking results

Overall, New Zealand performs poorly on price for fixed-line voice services in comparison to other OECD countries. Residential usage basket prices are considerably higher than the OECD average although the 140 calls basket is lower than the similar basket available in Australia. This is shown in Table 6.

Benchmarking results for the 20 calls basket show that the price faced by New Zealand consumers for keeping a fixed-line phone that is used for only a small number of voice calls is very high compared to other OECD countries.

Table 6: Summary of OECD fixed-line voice benchmarking

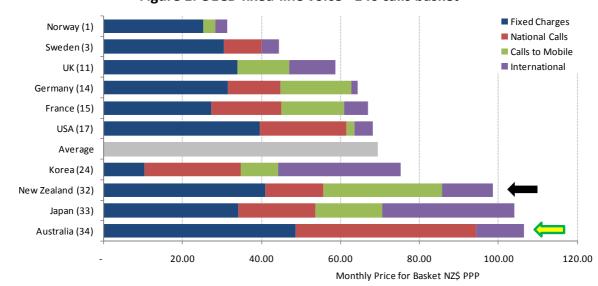
	2011 (NZD PPP ex GST)			
Basket	New Zealand	Australia	OECD average	
20 calls (low usage)	54.17	43.15	35.66	
140 calls (medium usage)	98.66	106.37	69.39	
420 calls (high usage)	147.34	111.74	109.02	
260 calls (business)	126.63	206.93	116.77	

NZ % variance from			
Australia OECD average			
+26%	+52%		
-7%	+42%		
+32%	+35%		
-39%	+8%		

Source: Teligen T-basket

Figure 1 shows the how the New Zealand pricing of the basket most representative of New Zealand residential calling patterns compares to a selection of OECD countries.

Figure 1: OECD fixed-line voice - 140 calls basket



Source: Teligen T-Basket

For the business basket, the New Zealand price is closer to the OECD average and 39% cheaper than Australia. This is shown in Figure 2.

Fixed Charges UK (1) ■ National Calls Germany (5) Calls to Mobile International USA (13) Sweden (16) France (19) Average New Zealand (22) Korea (25) Australia (32) Japan (33) 40.00 80.00 200.00 240.00 Monthly Price for Basket NZ\$ PPP

Figure 2: OECD fixed-line voice - 260 calls business basket

Source: Teligen T-Basket

Attachment 3 – *Fixed-line voice benchmarking results*, provides further graphical information on each of the baskets, and identifies which plan was used in the benchmarking process.

When the calling baskets are compared on a year-on-year basis, the price of all baskets have increased in New Zealand while the OECD average price for each basket has decreased. This is shown in Table 7.

Table 7: Year-on-year change for fixed-line voice baskets

	New Zealand (NZD PPP ex GST)		YoY change	YoY change
Basket	2010 2011		(NZ)	(OECD)
20 calls (low usage)	52.57	54.17	+3%	-4%
140 calls (medium usage)	95.85	98.66	+3%	-9%
420 calls (high usage)	144.02	147.34	+2%	-14%
260 calls (business)	126.51	126.63	0%	-11%

Source: Teligen T-basket

A summary of New Zealand's ranking for fixed-line voice pricing is shown in Table 8 below. The comparison shows that year-on-year (YoY) New Zealand's ranking has deteriorated in all usage baskets. Given prices in New Zealand have been rising whereas the OECD average price has fallen, this result is unsurprising.

New Zealand's OECD ranking is particularly poor for low levels of calling, with the major contributor being the high monthly line rental charged by Telecom. New Zealand's ranking

improves slightly as the number of calls included in the OECD usage basket increases, but is still in bottom quarter of the OECD.

Table 8: Summary of OECD ranking for fixed-line voice

Basket ¹²	Ranking 2010	Ranking 2011	Change in OECD ranking
20 calls (low usage)	33	34	- 1
140 calls (medium usage) ¹³	29	32	- 3
420 calls (high usage)	23	26	- 3
260 calls (business)	18	22	- 4

Source: Teligen T-basket

Limited competition and TSO affect residential telephone service

The Local Residential Telephone Service Telecommunications Service Obligation (known as TSO and formerly the Kiwi Share) was intended as a consumer protection measure because it put a cap on the price of the standard residential telephone service, ensured that it included unlimited local calls, and required that it continue to be available within the existing network footprint.

By requiring unlimited local calls to be bundled with the monthly line rental, the TSO distorts the retail market. This means those customers who make few local calls have to purchase a bundled product that is more expensive than they need.

By contrast, in other countries consumers can often choose from a selection of different residential telephone services tailored to their requirements. For example, in Australia the incumbent fixed-line operator company, Telstra, offers a variety of residential plans. These range from HomeLine Budget which costs A\$22.95 per month and 30 cents per local call through to HomeLine Ultimate which costs A\$89.90 and includes unlimited local and national calling.

This lack of choice in New Zealand explains why Australia, which like New Zealand has relatively limited competition in residential voice services¹⁴, is benchmarked as more expensive for some usage patterns but is noticeably cheaper for low users. The impact of this shows through more generally in the international comparators where low usage customers in New Zealand are facing the highest relative prices in the OECD.

There are 34 benchmarked countries for 20 calls, 140 calls and 420 calls baskets. The 260 basket is out of 33 countries.

¹³ The 140 calls basket most closely matches average consumption in New Zealand.

See pages 22-24 of Annual Telecommunications Monitoring Report 2010.

The lack of competition in the retail voice market allows TSO distortions to adversely affect consumers. Telecom is free to offer additional rental packages which do not bundle unlimited local calls, but currently does not do so.¹⁵

This may reflect a lack of incentive to meet customer demand due to low levels of competition in residential voice services; in 2010 Telecom still retained over 70% of fixed-line residential connections. Telecom has also usually increased its line rental annually up to the CPI cap allowable under the TSO.

This lack of vigorous competition in residential voice services is reflected in the year-on-year benchmarking results which show residential voice prices in New Zealand are gradually increasing. This is in contrast to comparator OECD countries that are on average experiencing decreasing prices.

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For several years in the early 2000s, Telecom offered a *Homeline Economy* plan, which gave a 35 per cent discount on the standard residential price in return for local calls being charged at 20 cents each.

Retail Fixed-line Services - Broadband

Key observations

Retail fixed-line broadband services

- For naked broadband, New Zealand's pricing is slightly higher than the
 international benchmark average for low and medium use baskets, and is lower
 than Australia. This service benchmarks significantly better than fixed-line voice
 which likely reflects greater competitive pressure in broadband services.
- For broadband with conventional voice, New Zealand's pricing is less competitive given the high price of such voice services in New Zealand. This situation may lead to consumers switching to cheaper digital voice services like those provided by the Orcon Genius product.
- New Zealand is one of the most expensive countries benchmarked for larger data users for both types of broadband.

Introduction

Fixed-line broadband in New Zealand is largely delivered over the same access network as fixed-line voice. Telecom's nationwide network uses DSL technology to deliver broadband over copper lines to residential customers, while TelstraClear uses co-axial cable to deliver cable broadband to residential customers in Wellington, Kapiti and Christchurch.

TelstraClear and other fixed-line retailers including Slingshot, Vodafone, Orcon, and Compass offer DSL broadband services using wholesale access to Telecom's network in areas where they do not have their own infrastructure.

Increasingly retailers are providing DSL broadband services over unbundled copper local loops leased from Chorus, usually together with voice services.

Sometimes the combined voice and broadband services uses VoIP to deliver a digital voice service over the broadband connection. This means the retailer can deliver the service over a naked DSL bitstream service or an unbundled copper local loop. The best known example is Orcon's *Genius* service which gives a digital voice over IP service together with 30GB of broadband data (or 5GB of data and unlimited national calling) for \$75 a month.

Broadband pricing in New Zealand is almost always based only on the amount of data included with the plan rather than the speed. The amount of data offered with a residential broadband plan usually ranges from 2GB per month to 100GB or more per month.

In its Annual Telecommunications Monitoring Report 2010 the Commission noted that Telecom faces greater competition in broadband services than voice, but broadband is still a concentrated market compared to international comparators. ¹⁶

See p25 of the report.

Fixed-line broadband benchmarking

The Commission has benchmarked New Zealand's fixed-line broadband prices against a group of countries monitored by Teligen's T-Connect service¹⁷. Several large providers are benchmarked in each country.

Due to rises in average broadband speeds and increased data usage the benchmarked baskets have been adjusted in 2011. The data usage for the high user basket has risen from 40GB to 60GB and the speed of the low user basket was increased to ensure it captures only full speed broadband services. The new baskets are shown in Table 9 below.

User TypeData usage per monthMinimum Downstream Speed18Low User2GB10MbpsMedium User10GB10MbpsHigh User60GB10Mbps

Table 9: Fixed-line broadband usage baskets

On average, New Zealand broadband subscribers use 9 GB of data per month¹⁹ making the 10GB medium usage basket most representative of New Zealand consumers. Only 3% of broadband subscribers have data caps of 50GB or more.²⁰

The Commission has included naked broadband (broadband purchased without having a voice service) in the benchmarking report due to the increasing demand for this service.

The Commission has also benchmarked the price of a bundled broadband with voice service as it is a common bundle purchased by consumers.

Previously, the Commission had benchmarked the incremental cost of buying a broadband service. This raised various consistency issues and, given New Zealand's high fixed monthly voice line price previously mentioned, may have favoured New Zealand in broadband price comparisons.

Data from Cyprus has been excluded from the analysis as the results are atypical.

Compliance with the downstream speed requirement is assessed based on the maximum speeds listed for each plan. Actual speeds may differ from speeds listed for a number of reasons, such as customer premises wiring and distance from the local telephone exchange.

Statistics New Zealand "Internet Service Provider Survey: 2011 - tables" table 5.

Statistics New Zealand "Internet Service Provider Survey: 2011 - tables" table 4.

Summary of fixed-line broadband benchmarking results

For naked broadband New Zealand is ranked around the middle of the pack for low and medium use baskets, but performs poorly in the high usage basket. This is, however, notably better than fixed-line voice, which is likely to reflect greater competitive pressure in broadband services.²¹

The broadband with voice service is ranked in the bottom quarter of the countries benchmarked for all usage categories. This is summarised in Table 10 below.

Table 10: Summary of fixed-line broadband benchmarking

Baskets	Naked Broadband Rank	Broadband with Voice Rank
2GB (low usage)	23 out of 38	20 out of 26
10GB (medium usage)	23 out of 38	24 out of 26
60GB (high usage)	35 out of 38	24 out of 27

Source: Teligen T-Connect

Naked Broadband

The 10GB basket is the most representative of New Zealand broadband usage and is priced slightly higher than the benchmark average. This is shown in Figure 3.

Lithuania (1) South Korea (6) France (11) Germany (16) Sweden (18) Average New Zealand (23) UK (25) Australia (29) Japan (32) USA (34) Turkey (38) 0.00 20.00 40.00 60.00 80.00 100.00 120.00 Monthly Price NZ\$ PPP

Figure 3: Fixed-line - 10GB basket naked broadband

Source: Teligen T-Connect

New Zealand compares favourably to Australia for the low and medium use baskets. While both countries have prices above the benchmark average, the New Zealand price is not significantly above the OECD average.

²¹ In 2010 Telecom represented over 70% of fixed-line connections and a far lower 55% of broadband connections. Annual Telecommunications Monitoring Report 2010.

The high usage basket for both countries is well above the average, with New Zealand 77% higher. These results are summarised in Table 11 below.

Table 11: Summary of naked broadband benchmarking

	2011 (NZD PPP ex GST)				
Basket	New Australia Zealand		Zoaland		Benchmark average
2GB (low usage)	47.83	54.50	44.24		
10GB (medium usage)	47.83	54.50	45.31		
60GB (high usage)	83.13	72.68	46.96		

NZ % variance from		
Australia	Benchmark	
	average	
-12%	+8%	
-12%	+6%	
+14%	+77%	

Source: Teligen T-Connect

Broadband with voice

Broadband with voice is a common bundle purchased by New Zealand consumers. Performance is poor for all usage baskets against both the benchmark average and the prices available in Australia. This is summarised in Table 12.

Table 12: Summary of broadband with voice benchmarking

	2011 (NZD PPP ex GST)			
Basket	New Zealand	Benchmark average		
2GB + voice line (low)	63.48	48.09	55.21	
10GB + voice line (med)	72.17	54.45	56.25	
60GB + voice line (high)	91.30	59.03	61.30	

NZ % variance from			
Australia	Benchmark average		
+32%	+15%		
+33%	+28%		
+55%	+49%		

Source: Teligen T-Connect

The benchmarked price of broadband with voice in Australia is less than the naked broadband equivalent. This is partly because the naked broadband plan benchmarked for the low and medium user has a 30GB cap and the high user plan has a 200GB cap, indicating that the naked products in Australia are aimed at medium to high data users. Similarly, the New Zealand plan benchmarked has a 20GB cap.

For the most representative retail usage basket (10GB), New Zealand is one at the most expensive countries benchmarked. This is shown in Figure 4.

Portugal (1) UK (3) Germany (6) Japan (8) France (11) Sweden (13) Australia (14) Average USA (18) New Zealand (24) Chile (26) 20.00 40.00 60.00 80.00 100.00 120.00 Monthly Price NZ\$ PPP

Figure 4: Fixed-line - 10GB basket broadband with voice

Source: Teligen T-Connect

Attachment 4 - Fixed-line broadband benchmarking results provides further graphical information for naked broadband and broadband with voice baskets and the plans used in the benchmarking process.

Data Caps

Broadband pricing in New Zealand and Australia is generally differentiated by the size of data caps. This pricing structure is not as prevalent in European countries where often the same plan was used as the benchmark for all the different sized baskets, and cheaper plans came with a lower speed. This factor tends to favour New Zealand and Australia for the lower use baskets and disadvantage them for the higher use baskets.

Apart from the low user level, Australia's data caps are more generous than those employed in New Zealand. However, data caps have recently been increasing a rapid rate in New Zealand. At the beginning of the year the maximum data cap advertised for standard residential broadband plans in New Zealand was generally 40GB. Now, most of the larger providers' list plans with data caps of 100GB or more. In Australia, terabyte caps are now common.²²

²² InternetNZ discussion paper "Barriers to unmetered domestic internet traffic" 2011

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Retail Mobile Services – Voice and text messaging

Key observations

Retail mobile voice and text messaging services

Pre pay

- The New Zealand pre pay price for all baskets has fallen although only the price of the 30 calls basket has fallen by more than the OECD average.
- New Zealand's pre pay prices are significantly higher than those in Australia except for the 400 messages basket which is similarly priced.
- For the 400 messages basket, which is most representative of a New Zealand pre pay subscriber, the country's ranking has deteriorated although the price is still 31% cheaper than the OECD average.

Post pay

- For all usage baskets New Zealand post pay prices are higher than the OECD average and significantly higher than those in Australia. Australia has had the benefit of a less concentrated mobile market than New Zealand for many years.
- For the 30 calls basket, which is most representative of a New Zealand post pay subscriber, the country's ranking has deteriorated to 23rd out of 34 and 13% more expensive than the OECD average. This was due to a revamp of post pay plans which also lowered the pricing of high use baskets.

Introduction

Since August 2009 there have been three mobile networks operators in New Zealand, namely, Telecom, Vodafone and 2degrees. These operators continue to be the only significant retailers, with the possible exception of TelstraClear which has a mobile virtual network operator (MVNO) agreement with Vodafone. There are several other MVNO operators, none of which currently have a significant number of customers.

Vodafone and Telecom both operate nationwide mobile networks. 2degrees has had its own cell sites in Auckland, Wellington, Christchurch and Queenstown for several years and is currently part way through extending its network to other New Zealand cities. Other cities with coverage now include Tauranga and Hamilton. 2degrees relies on a national roaming agreement with Vodafone to provide coverage outside the reach of its own network.

All three mobile providers in New Zealand operate a 3G network which allows mobile broadband to be provided in addition to voice and text messages.

Around two thirds of mobile subscribers in New Zealand use pre pay plans.²³ This puts New Zealanders among the higher users of pre pay plans in the OECD. In 2009, the percentage of pre pay subscribers in OECD countries ranged from 1% to 88%, with an average of 43%.

²³ Commerce Commission "2010 Market Monitoring Report" (29 April 2011), page 37.

OECD mobile voice and text messaging benchmarking

The OECD has developed consumption baskets to enable cross-country comparisons of retail mobile voice and text messaging prices. See attachment 1 for basket characteristics.

For mobile benchmarking, Teligen generally include plans from the two largest mobile operators in each OECD country and take the lowest priced plan that fills the basket as the benchmark.

As with the fixed-line voice benchmarking, the Commission has concentrated its analysis on the OECD usage baskets that are most likely to reflect New Zealand consumption patterns.

From data collected for the Commission's 2010 annual report²⁴mobile voice usage was shown to be among the lowest in the world, averaging 79 minutes per month per subscriber. The average number of calls per month was approximately 25. Average text usage was approximately 230 per month.

For pre pay subscribers, average voice usage was lower at 54 minutes per month (which equates to around 18 calls) and text usage was higher at 311 per month. For post pay subscribers, average voice usage was more than double pre pay, and text usage close to one third of pre pay.

This means for pre pay customers the 400 message basket, which includes 8 voice calls, is the most representative of subscriber usage patterns. For post pay customers the 30 calls basket, which includes 100 texts, is most representative.

2

Commerce Commission "2010 Market Monitoring Report" (29 April 2011), pages 40-41.

Summary of OECD mobile voice and text messaging benchmarking results

The assessment of New Zealand is split into pre and post pay markets due to the different size and characteristics of each market. The pre pay market has a greater number of subscribers but they spend less.

Mobile pre pay

When compared to OECD averages, the price for the 400 messages basket outperforms the OECD average. This is shown in Figure 5. The 400 message basket most closely matches pre pay usage in New Zealand and includes on and off-net text messaging messages and 8 phone calls.

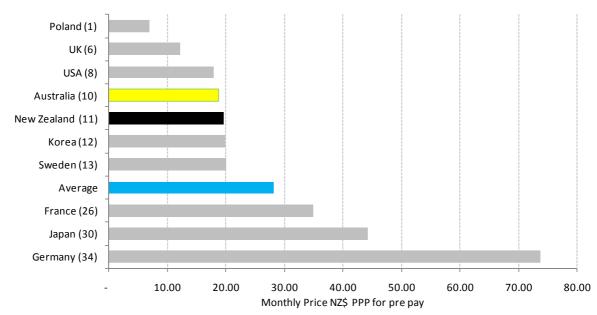


Figure 5: OECD pre pay mobile voice and text messaging - 400 messages basket

Source: Teligen T-Basket

A contributor to this result could have been the regulation of the rate for terminating text messages on other networks. There has been falling revenue for off-net text messaging messages indicating a decreasing price.²⁵ New plans introduced include 2,500 texts to any network.

New Zealand's pre pay pricing is more expensive compared to Australia for all usage baskets. This is particularly noticeable for the 100 calls basket, which includes 140 texts, where the price in New Zealand is over 4 times as expensive as a similar product in Australia.

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²⁵ Commerce Commission "Mobile monitoring report for May to July 2011", page 7.

Table 13: New Zealand pre pay mobile voice and text messaging comparison

	2011 (NZD PPP ex GST)			
Basket	New Zealand	Australia	OECD average	
30 calls (low usage)	24.49	9.92	23.05	
100 calls (medium usage)	114.60	27.51	54.47	
400 messages	19.56	18.75	28.16	

NZ % variance from		
Australia OECD average		
+147%	+6%	
+317%	+110%	
+4%	-31%	

The high pricing of the 100 calls basket in New Zealand (the pre pay price is \$114 compared to \$41 post pay) appears to be targeted at attracting these higher value customers into a contract with the provider. This approach seems to be consistent with other OECD countries (\$54 pre pay average compared to \$39 post pay average).

While New Zealand's pre pay prices fell in 2011, this trend was mirrored in the OECD countries benchmarked, see Table 14. The price for the low use 30 calls basket, which includes 100 texts, has fallen by almost double the rate seen in the OECD average.

Table 14: Year-on-year change for pre pay mobile voice and text messaging baskets

	New Zealand (NZD PPP ex GST)		YoY change	YoY (OECD)
Basket	2010	2011		
30 calls (low)	38.65	24.49	-36%	-19%
100 calls (medium)	117.14	114.60	-2%	-18%
400 messages	21.59	19.56	-9%	-37%

Source: Teligen

New Zealand's ranking for its most representative basket (400 messages) has deteriorated to lie just outside the cheapest 10 OECD countries benchmarked.

New Zealand's ranking for the 30 calls basket improved 8 places from 29th to 21st out of 34 countries. These results are shown in Table 15.

Table 15: Summary of OECD rankings for pre pay mobile voice and text messaging

Basket	Ranking 2010	Ranking ²⁶ 2011	Change in OECD ranking
30 calls (low usage)	29	21	+8
100 calls (medium usage)	33	33	-
400 messages	5	11	-6

Mobile post pay

Similar to the pre pay comparison, the price of New Zealand post pay plans is considerably more expensive than comparable Australian plans.

Table 16: New Zealand post pay mobile voice and text messaging comparison

	2011 (NZD PPP ex GST)		
Basket	New Zealand	Australia	OECD average
30 calls (low usage)	26.30	17.10	23.21
100 calls (medium usage)	41.06	26.11	38.82
300 calls (high usage)	78.26	53.11	68.51
400 messages	30.65	9.00	28.93

NZ % variance from			
Australia	ustralia OECD		
	average		
+54%	+13%		
+57%	+6%		
+47%	+14%		
+240%	+6%		

Source: Teligen

Year-on-year the OECD has seen decreases in the price of all post pay mobile baskets. New Zealand, on the other hand, has seen only the price of the 300 calls basket falling more than the OECD average.

This basket would not be likely to represent many users in the New Zealand market. These results are shown in Table 17.

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Out of 34 countries

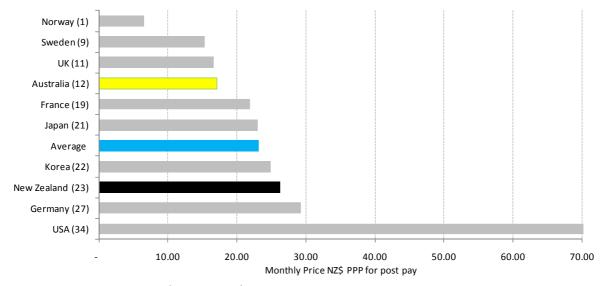
Table 17: Year-on-year change for post pay mobile voice and text messaging baskets

	New Zealand (NZD PPP ex GST)		YoY change	YoY (OECD)
Basket	2010	2011		
30 calls (low)	17.41	26.30	+51%	-17%
100 calls (medium)	49.33	41.06	-17%	-20%
300 calls (high)	104.67	78.26	-25%	-22%
400 messages	26.79	30.65	+14%	-30%

New Zealand's ranking for post pay plans has deteriorated for all but the high use basket with New Zealand being placed between 20th and 23rd out of the 34 countries benchmarked.

For the 30 calls usage basket, which is most representative of New Zealand post pay consumers, New Zealand is more expensive that the OECD average as shown in Figure 6.

Figure 6: OECD post pay mobile voice and text messaging - 30 calls basket



Source: Teligen T-Basket

The 30 calls basket has had a significant deterioration in its ranking from 2010. This drop resulted from one operator undertaking a major revamp of its post pay plans, which also had the effect of improving New Zealand's ranking for the high use baskets.

Table 18: Summary of OECD rankings for post pay mobile voice and text messaging

Basket	Ranking 2010	Ranking ²⁷ 2011	Change in OECD ranking
30 calls (low usage)	8	23	-15
100 calls (medium usage)	19	20	-1
300 calls (high usage)	25	22	+3
400 messages	15	22	-7

Attachment 5 – *Mobile voice and text messaging OECD benchmarking* provides further graphical information for pre pay and post pay baskets and the plans used in the benchmarking process.

Out of 34 countries

Retail Mobile Services - Broadband

Key observations

Mobile phone data

- In benchmarking the price of purchasing 50MB of data as an add-on to a mobile phone plan, New Zealand ranks well at 7th out of 22 countries with a price significantly below average. Although small, the 50MB basket is probably most representative of New Zealand mobile data usage.
- New Zealand also benchmarks well for the 200MB medium use basket, but for the high use 500MB basket slips to near the bottom of the benchmarked countries.

Mobile data cards

- New Zealand ranks poorly at 28th and 31st out of the 33 countries benchmarked for the 1.5GB and 6GB mobile broadband data card usage baskets respectively with prices well above average.
- Mobile broadband may be a reasonable substitute for fixed-line broadband when data use is low, but it is not financially attractive for higher data use. This suggests mobile broadband is priced as a premium service in New Zealand.

Introduction

Mobile data is becoming increasingly important. Internationally, mobile average revenue per user (ARPU) is decreasing, with falling voice revenues being partially offset by increased use of mobile data. Telecom in its 2010/11 Annual Report stated that mobile data usage is increasing rapidly as customers demand greater mobile internet and broadband capacity. The increased demand is driven by innovation in mobile devices and value added services.

Mobile networks can provide higher speed access to the internet for consumers by:

- Providing access to the internet directly from 3G mobile phones. This can be using a
 plan tailored for mobile handsets that enable internet access, such as the iPhone.
 Alternatively, it can be provided by an add-on to a conventional mobile pre pay or
 post pay plan, allowing mobile data to be purchased.
- Providing a specialist data plan that connects the consumer to the internet via a 3G mobile network by way of a data card, dongle or mobile modem that plugs into a laptop or PC.

Mobile phone data benchmarking

The use of smart phones is becoming common as they drop in price and become more popular.

Using a 3G mobile phone to access the internet typically uses much less data than using a laptop or PC. As well as being more efficient in their use of data, the applications used on

smart phones tend to be less data intensive. Furthermore, smart phones generally also have Wi-Fi connectivity which allows users to consume data over a home or other Wi-Fi service, and reduces the amount of data consumed via 3G mobile networks.

Using a smart phone for casual browsing of news websites and checking some email will use only around 50MB of data month. More extensive use of email on a smart phone may use up to 200MB a month, and very intensive use of a smart phone may use up to 500MB of data per month. Accordingly, the Commission has used Teligen T-Data to benchmark the price of mobile phone data baskets with sizes of 50MB, 200MB and 500MB. It appears average mobile data usage is closest to the 50MB basket.

The benchmarked price is generally that for purchasing the data as an add-on to a mobile phone plan. However, some mobile plans include data along with calls and texts in a bundle at an all inclusive price.

Summary of mobile broadband benchmarking results

New Zealand's mobile broadband prices for low and medium usage baskets rank well in benchmarking, but for high usage New Zealand slips to being one of the most expensive countries benchmarked. Table 19 shows New Zealand's ranking.

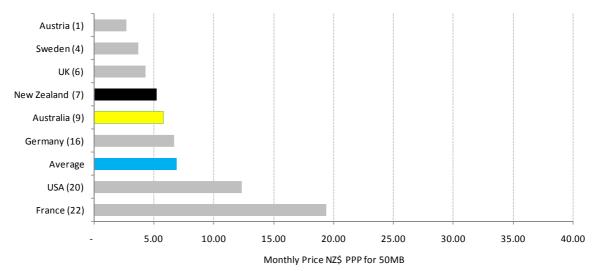
Table 19: Summary of mobile broadband benchmarking

Baskets	2011 Rank
50MB (low usage)	7 out of 22
200MB (medium usage)	13 out of 22
500MB (high usage)	21 out of 22

Source: Teligen T-Connect

For the 50MB usage basket, which is most representative of current New Zealand usage patterns, New Zealand plans are competitively priced. This is shown in Figure 7.

Figure 7: 3G mobile phone data benchmarking - 50MB



Source: Teligen T-Data

New Zealand performs poorly in the high use basket although the benchmarked package, Telecom's *Smartphone 40* plan, also provides for the use of 50 minutes and 300 texts.

When compared to Australia, New Zealand's performance is poor for all but the low usage basket.

Table 20: New Zealand mobile broadband comparison

	2011 (NZD PPP ex GST)		
Basket	New Zealand	Australia	Benchmark average
50MB (low usage)	5.22	5.80	6.89
200MB (medium usage)	8.70	5.81	10.43
500MB (high usage)	34.78 ²⁸	5.81	13.84

NZ % variance from			
Australia Benchmark			
average			
-10%	-24%		
+50%	-17%		
+499%	+151%		

Source: Teligen T-Connect

Mobile broadband plans can be added to smartphone plans to get extra data in New Zealand but this was not considered by Teligen. For example, taking Telecom's prepaid 500MB mobile broadband plan would fill the basket for \$NZ25.00 and 2degrees' 1GB Broadband Zones DataPack would fill it for \$20. Using either of these plans as the benchmark would improve New Zealand's high usage ranking.

Attachment 6 – *Mobile broadband benchmarking* provides further graphical information on the mobile broadband baskets and the plans used in the benchmarking process.

Mobile data card benchmarking

A mobile data card or dongle can be a substitute for fixed-line broadband or as a supplement for laptop users when they are away from home. The Commission has used the Teligen T-Wireless tool (June 2011 edition) to benchmark the price of mobile broadband plans by looking at the cost of purchasing 1.5GB and 6GB of data a month using a standard 3G data card. Connection charges have been excluded. T-Wireless surveys most mobile broadband providers in a country, and hence includes 2degrees in New Zealand in its benchmarking.

The Commission concentrated its analysis on the usage baskets that are most likely to reflect New Zealand consumption patterns. The indications are that data cards are not used for a large amount of data use. Telecom's post pay data card plans range from 750MB to 4GB and Vodafone's from 512MB to 2GB. The 1.5GB basket is probably most representative of New Zealand mobile data card use. The 6GB basket was used to test the feasibility of an average user of broadband data substituting mobile broadband for fixed-line broadband on a permanent basis.

-

While it may be possible to purchase three 200MB plans for a lower price of \$21.15 there may be constraints limiting the use of the data. Therefore a specific 500MB plan has been chosen for the benchmarking.

Summary of mobile data card benchmarking results

New Zealand ranks poorly in data card pricing. It is in the bottom fifth of those countries benchmarked for both 1.5GB and 6GB data card baskets. This is shown in Table 21.

Table 21: Summary of 3G data card benchmarking

Baskets	2011 Rank
1.5GB (low usage)	28 out of 33
6GB (medium usage)	31 out of 33

Source: Teligen T-Connect

The price for naked fixed-line broadband using a 2GB or 10GB basket is \$47.83 per month. The price shown in

Table 22 indicates that substituting mobile broadband for fixed-line broadband for anything above low data use of several GBs is financially unattractive in New Zealand. It also suggests that mobile broadband is priced as premium service in New Zealand.

The 1.5GB basket is most representative of data card usage in New Zealand. New Zealand is significantly more expensive than the average for the countries benchmarked, as shown in Figure 8.

Estonia (1) Sweden (8) Australia (9) Average France (19) UK (23) Germany (25) New Zealand (28) USA (29) Japan (32) Spain (33) 10.00 20.00 30.00 40.00 50.00 60.00 Monthly Price NZ\$ / PPP per Month

Figure 8: 3G data card benchmarking - 1.5GB

Source: Teligen T-Wireless

The price of New Zealand's data card baskets is high compared to the benchmark average, and very high when compared to Australia.

Table 22: New Zealand data card comparison

	2011 (NZD PPP ex GST))		
Basket	New Zealand	Benchmark	
	Zealand		average
1.5GB (low usage)	34.78	14.23	22.35
6GB (medium usage)	86.96	27.52	46.88

NZ % variance from			
Australia Benchmark			
	average		
+144%	+56%		
+216%	+86%		

Source: Teligen T-Connect

Attachment 7 – *Data card benchmarking* provides further graphical information on the mobile broadband baskets and the plans used in the benchmarking process.

Attachment 1 - Data sources and benchmarking processes

Benchmarking data collected by Teligen

For OECD benchmarking, details of publicly available retail telecommunications plans are used to calculate the lowest price to fill each OECD usage basket in each OECD country. The data gathering is performed by Teligen²⁹ and its T-Basket³⁰ database is available for purchase on a subscription basis.

The OECD regularly reviews the usage baskets that are employed in the benchmarking process as consumption patterns change. The latest Teligen T-Basket includes updated OECD 2010 usage baskets adopted in March 2010. These baskets have been developed based on actual traffic and consumption data collected from operators and regulators in OECD member countries. More detail on the contents of the baskets is shown in attachment 3.

Fixed-line benchmarking

For its fixed-line benchmarking Teligen have collected tariff data for Telecom's two standard residential phone plans, *Homeline*³¹ and *Anytime*³², and one standard business plan, *BusinessTime*³³. The prices used are those that apply in Auckland for *Homeline*, Auckland, Wellington and Christchurch for *Anytime*, and the standard nationwide price of *BusinessTime*. See in table below

Telecom residential line rental pricing (from 1 June 2011)

Region	Homeline Price (including GST)	Anytime Price (including GST)
Wellington and Christchurch	\$41.60	\$46.00
Auckland	\$45.75	\$46.00
Rest of New Zealand	\$50.23	\$51.00

Source: Telecom

Telecom's residential phone plans are cheapest in Wellington and Christchurch because Telecom has to compete with TelstraClear's independent network. Prices are also cheaper in Auckland, which is where there is most competition from other retailers via services provided over unbundled copper local loops.

²⁹ Telecommunications research specialists: http://www.teligen.com/

Benchmarking service: http://www.teligen.com/t_basket.asp

Standard Telecom residential telephone line plan that requires a monthly line rental be paid and full price paid for any telephone calls. Some call types have price caps but these apply only after calls of a much longer than average duration.

Alternative residential telephone line plan that has a higher monthly line rental in return for lower priced telephone calls and better price caps.

Standard Telecom business telephone line plan that has a slightly higher rental (\$51.95 + GST) than the residential plans but lower calling charges, except for local calls which are chargeable to businesses, and better price caps.

OECD fixed-line benchmarking baskets are now identified by the number of calls assumed to be made per month, with the residential baskets being for 20, 60, 140 and 420 calls. There are also two business baskets, the 100 calls basket and the 260 calls basket. The table below provides a summary of the Teligen baskets.

Fixed-line Baskets Specifications

2010 Baskets	Local	National	Fixed to mobile	Inter- national	Duration (minutes)
20 Calls	12	4	3	1	1.3 to 6.3
60 Calls	36	9	13	2	1.9 to 6.8
140 Calls	81	21	32	6	1.7 to 7.6
420 Calls	307	71	34	8	1.8 to 8.1
100 Calls Bus	48	19	30	3	1.5 to 5.4
260 Calls Bus	112	60	65	23	1.7 to 4.1

Mobile benchmarking

The OECD mobile baskets are now identified by the number of calls and texts, assumed to be made per month. There are baskets consisting of 30 calls, 100 calls, 300 calls, 900 calls and 400 texts. In addition, there is now a specific pre pay basket which consists of 40 calls a month and 60 texts. See the table below.

Mobile Basket Specifications

2010 Mobile		Voice	text messaging		
Baskets	On-net	Off-net	Other	On-net	Off-net
30 Calls	17	8	6	53	47
100 Calls	52	28	20	71	69
300 Calls	138	111	51	113	113
900 Calls	495	252	153	175	175
40 Calls Prepaid	26	7	7	32	28
400 Messages	4	2	2	200	200

Most of the calls in each basket are assumed to be on net calls with a progressively smaller percentage being on net, mobile-to-fixed and voicemail. A summary of the OECD mobile baskets and the calling distribution is shown in the table below.

OECD mobile usage baskets

	Calls	text messag ing per month	Call distribution			
Basket	per month		Mobile to fixed	On-net	Off-net	Voicemail
30 calls	30	100	16%	55%	25%	4%
100 calls	100	140	17%	52%	28%	3%
300 calls	300	225	14%	46%	37%	3%
400 messages	8	400	8%	55%	25%	12%

Source: Teligen

The mobile benchmarking was performed in August 2011 and used the new range of post pay plans launched by Vodafone that month. The benchmarking did not consider all the old post pay plans that Vodafone has grandfathered.³⁴

Top-up bonuses are extra minutes or texts provided when particular value pre pay top-ups are purchased. They can have conditions attached to their use like being available only for weekend use or only for on-net use. Top-up bonuses were not factored into New Zealand pre pay prices this year because they are generally transitory offers and can be difficult to fairly value.

Benchmarking results are indicative only and need to be interpreted with caution.

1294773.5

Grandfathering is a term used to describe the common practice of telecommunications providers leaving existing customers on plans which are no longer offered to new customers. This can leave existing customers worse off than new customers.

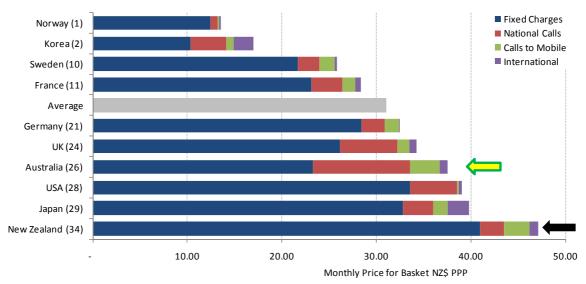
Attachment 2 - Factors affecting the result of retail price benchmarking

Factor	Sub Issue	Discussion	Benchmarking Approach
Comparability	Sample	Comparable services from each country should be included in the benchmark set. For example, benchmarking the cheapest service offered by the incumbent in each country is consistent, although such benchmarking is unlikely to give the cheapest price for each country.	For retail fixed-line voice benchmarking data is collected on the plans offered by the incumbent operator in each country. For mobile voice and text messaging benchmarking the plans collected are those offered by two of the larger operators. Other benchmarking often collects plans for more than two operators in each country.
	Technology	Often a telecommunications service can be provided by different technologies or different variations of the same technology. This may impact on comparability. For example, a fixed-line broadband service can be provided by DSL over copper or data over cable, and one may provide a better quality service.	The OECD benchmarking looks at the service provided within the general technology categories of fixed telephone lines and cellular mobile services. Fixed-line broadband benchmarking considers any fixed-line technology that meets the basket requirements.
	Quality	Some telecommunications services like DSL broadband services can have significant quality differences between providers. Such quality differences will affect comparability.	Quality should largely be comparable across the voice and text messaging services being benchmarked. There is insufficient data available to try to adjust broadband benchmarking for quality factors.
Conversion	Exchange rate	When the price of services is compared between countries, each national price needs to be converted into common currency. This conversion can be based on the spot exchange rate or an average exchange rate over a longer period to iron out shorter term fluctuations. The option chosen can affect the result.	The market exchange rate is one option that can be selected with OECD benchmarking but is not the option used by the Commission.
	Purchasing power adjustments	Rather than using market exchange rates, the exchange rate used for conversion can be adjusted to take account of the differing cost of living in different countries. Such an adjusted exchange rate is called a purchasing power parity (PPP) exchange rate. There are different methods for calculating PPPs.	The OECD calculates its own PPP rates which are referred to as OECD Comparative Price Levels. The Commission chooses to use these PPP rates.

	Тах	The retail price of telecommunications services usually includes a value added tax (VAT) like GST, and the tax rate varies between countries. A better indication of retail price differences between countries may be gained by excluding taxes that added to the retail price.	It can be chosen whether to include VAT or not. The Commission chooses to exclude VAT in its benchmarking.
Bundling	Discount allocation	It is common for telecommunications services to be sold at a discount when two or more services are purchased. The discount might not be allocated evenly to each service.	The stand alone price of telecommunications plans is used or the price of the whole bundle of services. For broadband this equates to naked broadband or the voice + broadband bundle.
	Imputed price	Sometimes telecommunications services like broadband are only available (at least from some suppliers) in a bundle with another service like voice. An imputed price for the 2 nd service is therefore required to price the first service if a disaggregated price is required.	Bundled prices are not disaggregated so no imputation is needed.
	Custom deals	Larger businesses usually negotiate a confidential price for a customised package of telecommunications services, making it difficult to benchmark the price of affected telecommunications services and to make any such benchmarking publicly available.	The benchmarking used assesses plans applicable to residential customers and small businesses only.

Attachment 3 – Fixed-line voice benchmarking results³⁵

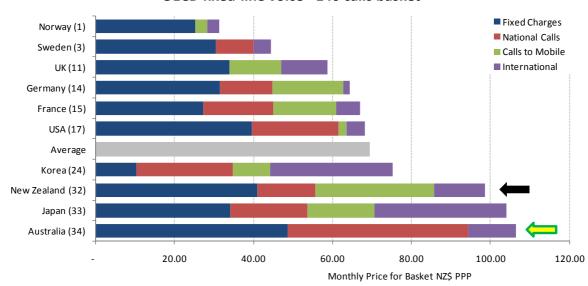
OECD fixed-line voice - 20 calls basket



Source: Teligen T-Basket

The plan used for the 20 calls basket is Telecom *Anytime*³⁶ and the Auckland, Wellington, Christchurch price. *Anytime* has a fixed component of NZ\$46 (including GST) per month and outside the three largest cities, *Anytime* is even more expensive at NZ\$51 per month.

OECD fixed-line voice - 140 calls basket



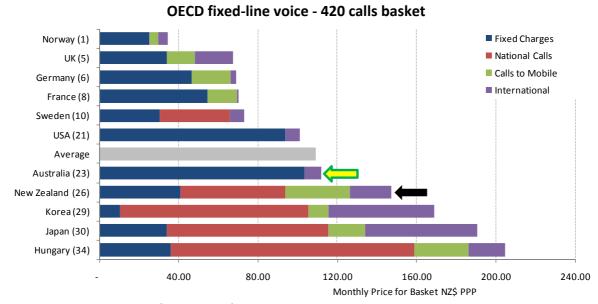
Source: Teligen T-Basket

The plan used for the 140 calls basket is Telecom *Anytime* and the Auckland, Wellington, Christchurch price.

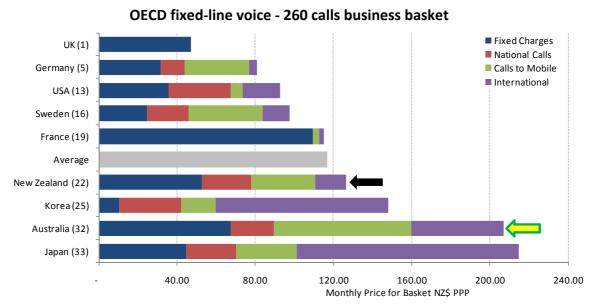
All graphs are in NZ dollars purchasing power parity (PPP) and exclude GST.

1294773.5

Telecom *Anytime* is an alternative Telecom residential telephone line plan that has a higher monthly line rental in return for lower priced telephone calls and better price caps.



The plan used for the 420 calls basket is Telecom *Anytime* and the Auckland, Wellington, Christchurch price.

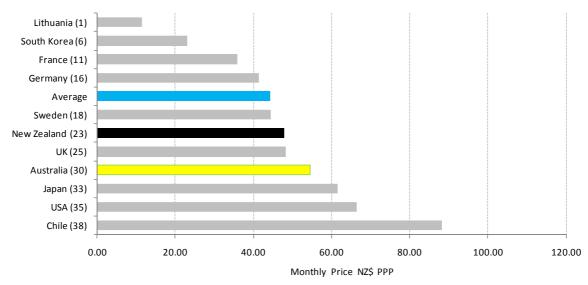


Source: Teligen T-Basket

The plan selected for New Zealand is Telecom BusinessTime.

Attachment 4 - Fixed-line broadband benchmarking results³⁷

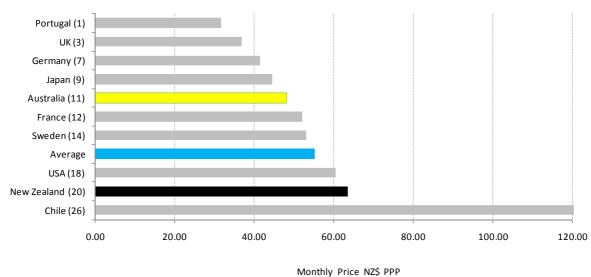
Fixed-line - 2GB basket naked broadband



Source: Teligen T-Connect

The benchmarked plan is Vodafone's *Ideal Naked 20GB* with the price applicable to Vodafone on account customers. However, TelstraClear offers a 20GB naked cable broadband plan for \$55.95 and Snap offers a 5GB naked DSL plan for \$55 a month.

Fixed-line - 2GB basket broadband with voice



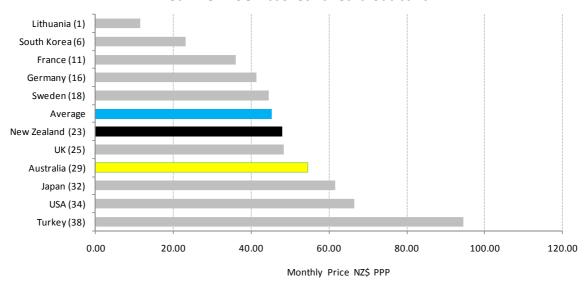
Source: Teligen T-Connect

The benchmarked plan is Telecom's Total Starter.

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All graphs are in NZ dollars purchasing power parity (PPP) and exclude GST.

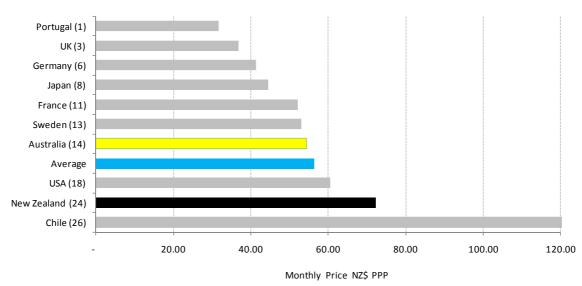
Fixed-line - 10GB basket naked broadband



Source: Teligen T-Connect

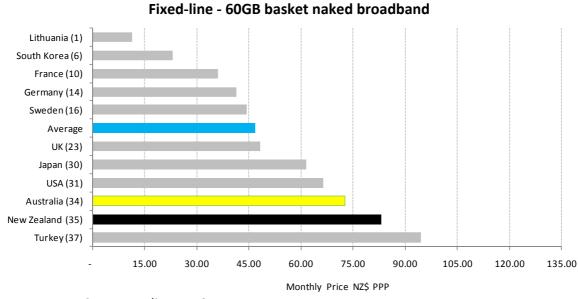
The benchmarked plan is Vodafone's *Ideal Naked 20GB* with the price applicable to Vodafone on account customers but again TelstraClear offers a 20GB naked cable broadband plan for \$55.95.

Fixed-line - 10GB basket broadband with voice



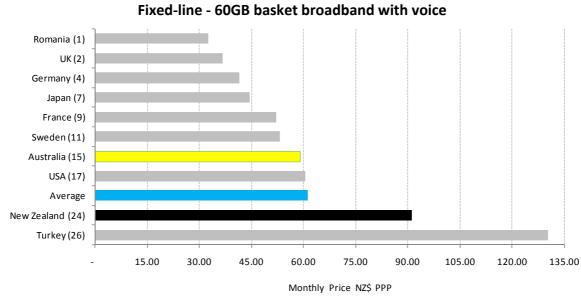
Source: Teligen T-Connect

The benchmarked plan is Telecom's *Total Home Lite*. Orcon's *Genius* plan would fill this basket a little more cheaply at \$75 per month.



Source: Teligen T-Connect

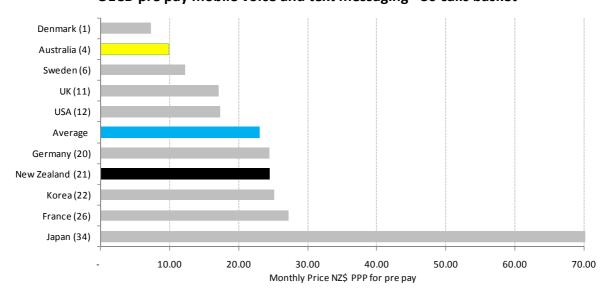
The benchmarked plan is Vodafone's *Ultimate Naked* with *Double Your Data* to bring the data cap to 90GB.



Source: Teligen T-Connect

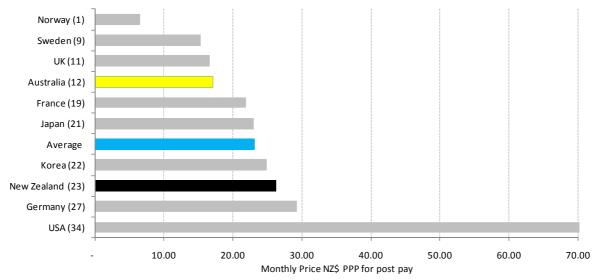
The benchmarked plan is Telecom's Total Home Broadband.

Attachment 5 – Mobile voice and text messaging OECD benchmarking³⁸
OECD pre pay mobile voice and text messaging - 30 calls basket



The benchmarked plan is the Telecom *OneRate Prepaid TalkText Value Pack,* at a price of \$28.17 per month in \$NZ (including GST).

OECD post pay mobile voice and text messaging - 30 calls basket



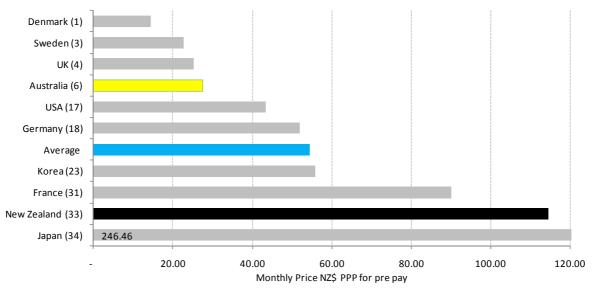
Source: Teligen T-Basket

The drop in New Zealand's ranking comes from Vodafone withdrawing its *Easy 20* plan for new customers. The benchmarked plan is the Telecom *Talk & Text 50* plan.

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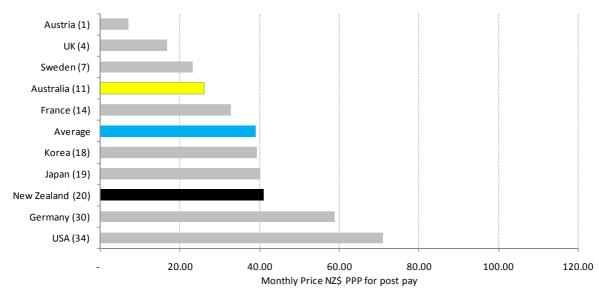
All graphs are in NZ dollars purchasing power parity (PPP) and exclude GST.

OECD pre pay mobile voice and text messaging - 100 calls basket



The benchmarked plan is Vodafone's Simply Pre pay.

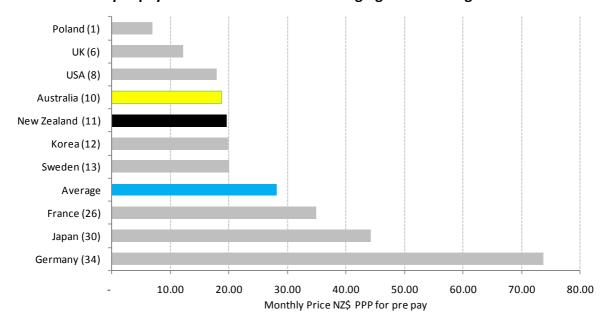
OECD post pay mobile voice and text messaging - 100 calls basket



Source: Teligen T-Basket

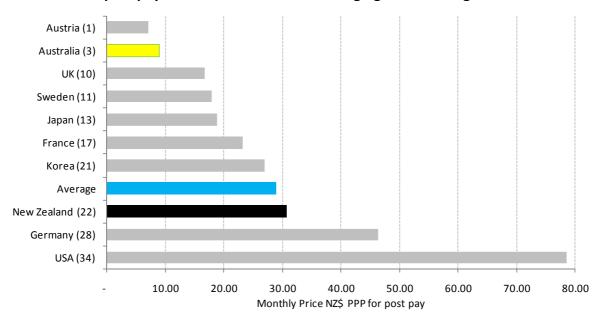
The benchmarked plan is Vodafone's TXTer 60 + 2 BestMates.

OECD pre pay mobile voice and text messaging - 400 messages basket



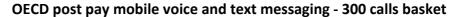
The benchmarked plan is Telecom's OneRate Prepaid TalkTextValue Pack.

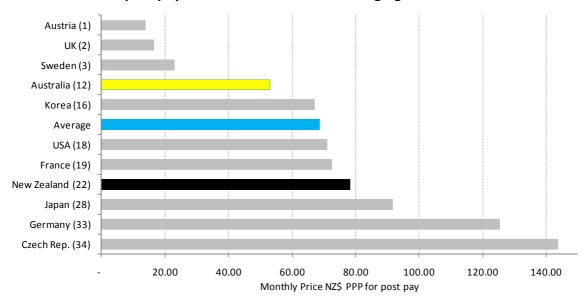
OECD post pay mobile voice and text messaging - 400 messages basket



Source: Teligen T-Basket

The benchmarked plan is Telecom's Talk & Text Off-Peak 100 + Txt Boost.

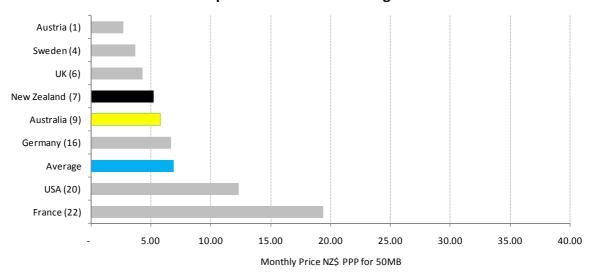




The benchmarked plan is the Vodafone Smart \$100 + 2 Bestmates at a price of \$90. This is a reduction of nearly \$30 from the cheapest New Zealand plan benchmarked last year.

Attachment 6 - Mobile broadband benchmarking³⁹

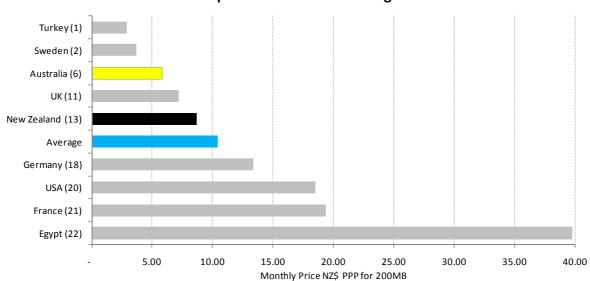
3G mobile phone data benchmarking - 50MB



Source: Teligen T-Data

The benchmarked package was Telecom's Extra 6 50MB top up.

3G mobile phone data benchmarking - 200MB



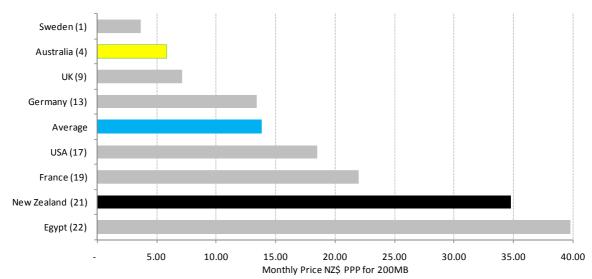
Source: Teligen T-Data

The benchmarked package was Telecom's *Data Boost 10* which includes monthly data of 250MB for \$10.

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All graphs are in NZ dollars purchasing power parity (PPP) and exclude GST.

3G mobile phone data benchmarking - 500MB

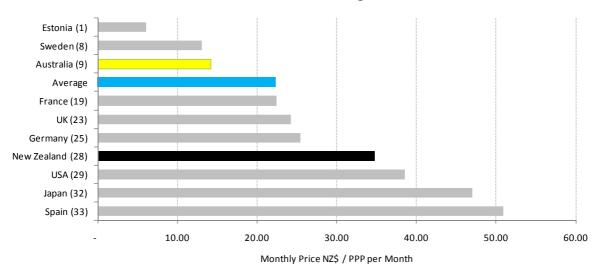


Source: Teligen T-Data

The benchmarked package was Telecom's *Smartphone 40* which includes 500MB of data in addition to 50 minutes and 300 texts.

Attachment 7 – Data card benchmarking⁴⁰

3G data card benchmarking - 1.5GB



Source: Teligen T-Wireless

The benchmarked plan for New Zealand was the purchase of two 2degrees 1GB Broadband Zones Data Packs for a cost \$NZ 40.00 (including GST) per month.

3G data card benchmarking - 6GB



Source: Teligen T-Wireless

The benchmarked plan for New Zealand was the purchase of two 2degrees *3GB Broadband Zones Data Packs* for a cost \$NZ 100.00 per month.

⁴⁰ All graphs are in NZ dollars purchasing power parity (PPP) and exclude GST.