Statistics New Zealand
TATAURANGA AOTEAROA

Embargoed until 3:40pm – 9 March 2007

Internet Service Provider Survey: September 2006

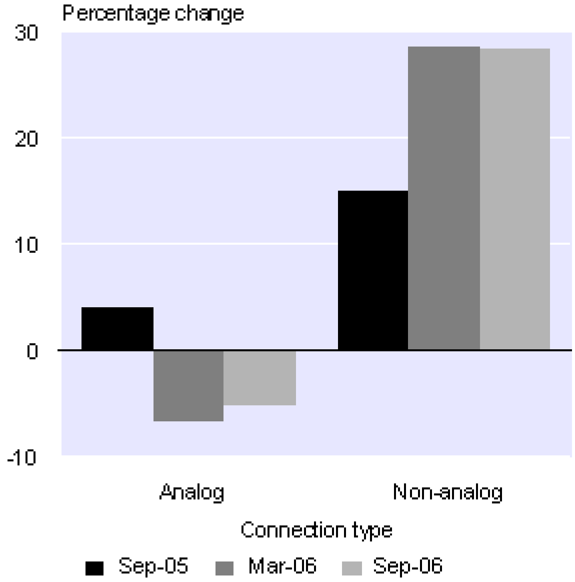
Revised 9 March 2007 – See attached Erratum

Highlights

In the six months ended 30 September 2006:

- **Non-analog (broadband) subscribers increased 28.6 percent** to 611,600.
- **New Zealand had 14.7 non-analog subscribers per 100 inhabitants**, ranking 19th among OECD countries.
- **Subscribers using analog (dial-up) connection technology fell 5.1 percent** to 771,100**.**
- **97.6 percent of non-analog subscribers had a data allowance cap,** with two-thirds having an allowance of under 5GB.

Internet Subscriber Growth Rate
By connection type
March 2005 – September 2006



Note: Analog includes ISDN. Non-analog includes DSL, cellular, wireless, cable, satellite and other.

Dallas Welch
Acting Government Statistician

7 March 2007
Cat 01.500 Set 06/07 – 131

There is a companion Media Release published – *Internet Service Provider Survey: September 2006.*

Commentary

Internet Service Provider Survey: September 2006

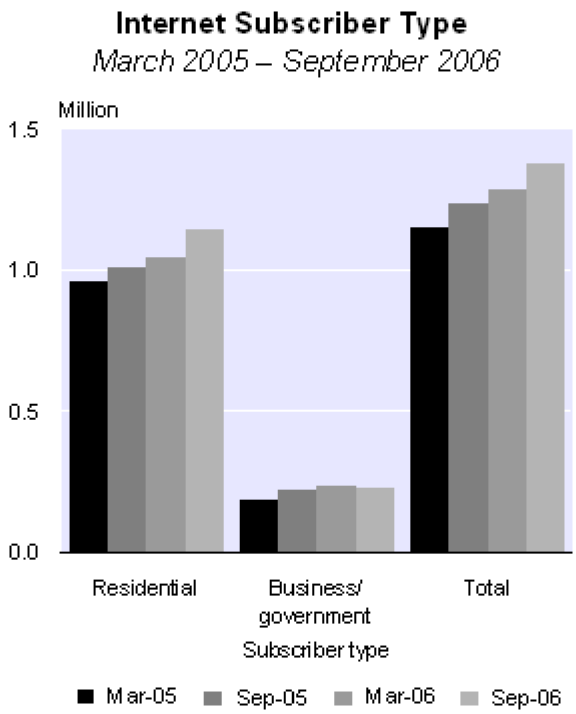
The Internet Service Provider Survey September 2006 provides information on the total number and nature of subscribers who use New Zealand-based Internet service providers (ISPs) to connect either permanently or regularly to the Internet. This information allows a measurement of the global connectivity of New Zealanders, which is regarded as an important determinant in accelerating economic growth. A core set of official statistics on Internet service provision results from this survey. This will help individuals, communities, businesses and government to understand how information and communication technologies are changing the economy and society.

The Internet Service Provider Survey is carried out every six months by Statistics New Zealand.

Internet service provision in New Zealand

For the six months ended 30 September 2006, there were 57 ISPs operating in New Zealand, with 1,382,600 active subscribers. The number of subscribers increased 7.4 percent from 31 March 2006.

Residential (household) subscribers totalled 1,150,000 at the end of September 2006, which accounted for 83.2 percent of all active subscribers and provided 71.5 percent of revenue. While residential subscribers increased 9.6 percent, business and government subscribers decreased 2.4 percent in the same period. Business and government subscribers were 232,600, which was 16.8 percent of the total number of active subscribers and 28.5 percent of revenue.



Size of Internet service providers

Percentiles are a useful method for comparing ISP size over time. Percentiles are determined by sorting ISPs (by number of subscribers) from smallest to largest, then calculating subscriber numbers at intervals of 20 percent. At 30 September 2006, 80 percent of small ISPs in New Zealand experienced declines in subscriber numbers compared with 31 March 2006. ISPs above the 80th percentile increased in size, at the expense of smaller ISPs.

Size of Internet Service Providers
By percentile
March 2005 – September 2006

Percentile*	March 2005	September 2005	March 2006	September 2006
	Number of subscribers			
20th (small ISPs)	100	90	95	85
40th	400	330	270	220
60th	1,640	1,520	1,330	1,040
80th (large ISPs)	7,340	7,710	8,190	8,050

* Percentile is calculated by sorting ISPs (by number of subscribers) from smallest to largest, then calculating subscriber numbers at intervals of 20 percent.
Note: All cells in this table have been randomly rounded.

ISP revenue from business and government subscribers

The proportion of revenue ISPs received from business and government subscribers (compared with that from residential subscribers) at 30 September 2006 was similar to that at 31 March 2006. Twenty-eight percent of ISPs received up to 20 percent of their revenue from business and government subscribers. A further 28 percent received between 81 and 100 percent of their revenue from business and government subscribers.

Internet subscriber connection type

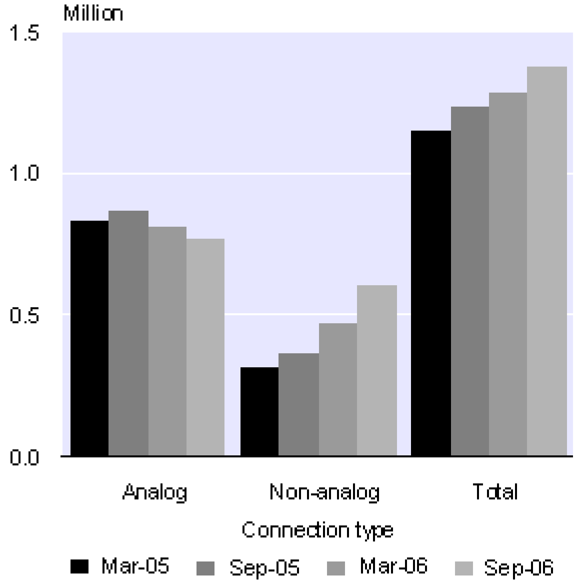
The number of subscribers using analog connection technology decreased 5.1 percent in the six months to 30 September 2006, to 771,100. Analog is still the predominant connection technology with 55.8 percent of total subscribers, down from 63.1 percent at 31 March 2006.

Non-analog (broadband) subscribers increased 28.6 percent from 31 March 2006, to 611,600 subscribers. Of the non-analog connections Digital Subscriber Line (DSL) continues to be the most common connection technology with 493,300 subscribers. The ranking of the next most common non-analog connection technologies in descending order was: cellular, wireless, cable, satellite, and other. This ranking is the same as measured at the end of March 2006.

There were 33.3 Internet subscribers per 100 inhabitants in New Zealand at the end of September 2006, compared with 31.2 subscribers per 100 at 31 March 2006. The number of non -analog (or broadband) subscribers increased from 11.5 per 100 inhabitants to 14.7 per 100 over the same period. New Zealand now ranks 19th in the OECD (OECD Broadband Statistics, June 2006), up from 22nd.

The OECD average broadband subscribers per 100 inhabitants was 15.5 at June 2006.

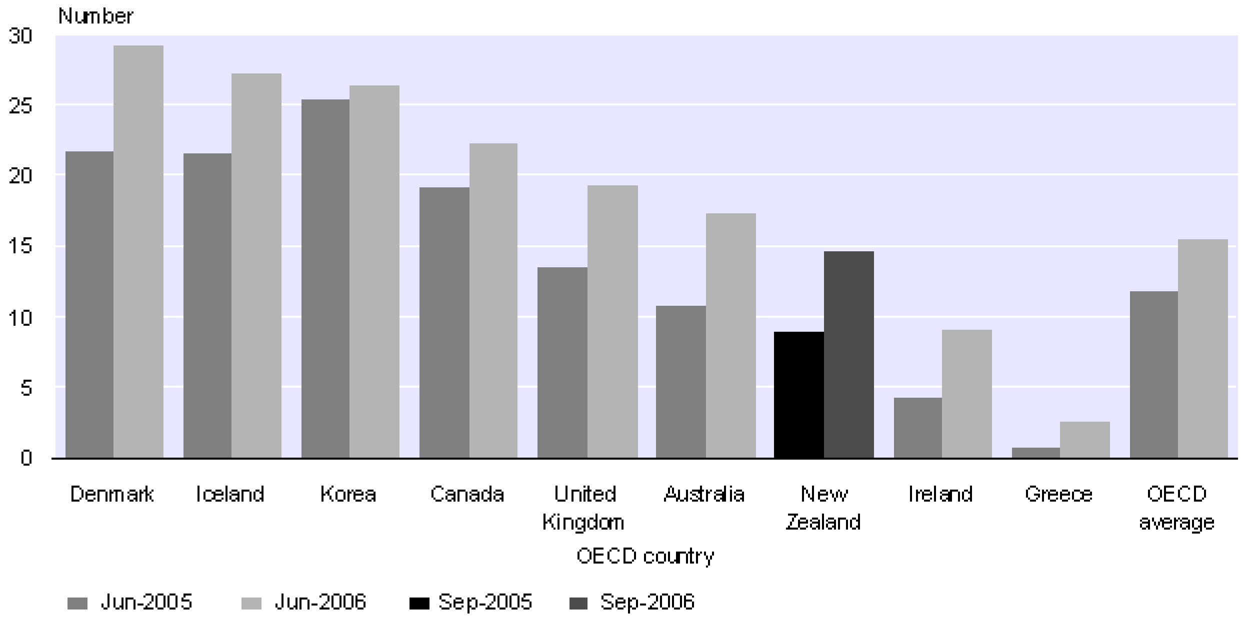
Internet Subscribers by Connection Type
March 2005 – September 2006



Note: Analog includes ISDN. Non-analog includes DSL, cellular, wireless, cable, satellite and other.

Statistics NZ is releasing DSL statistics for the first time in this Hot Off The Press. Over 80 percent of non-analog subscribers use the DSL connection type. Of the 14.7 broadband subscribers per 100 inhabitants in New Zealand, 11.9 were using DSL connection type and 2.8 were using other connection technologies.

Non-analog Internet Subscribers per 100 Inhabitants
By selected OECD countries
2005–2006



Sources: June 2005 and 2006 data : OECD Broadband Statistics. September 2005 and 2006 data: Statistics New Zealand.
Note: New Zealand figures are at September 2005 and September 2006, and include cellular data card subscribers.

Internet subscription data allowances

Of the 611,600 non-analog Internet subscribers at 30 September 2006, only 2.4 percent had no data allowance cap (or data cap) on their subscription plan. Over two-thirds (68.6 percent) used plans with a data cap of less than 5GB (419,600), 25.9 percent used plans with a data cap between 5GB and less than 20GB (158,700), and 3.1 percent had plans with a data cap of 20GB or more (18,700).

Internet subscriber speeds

At 30 September 2006, 59.4 percent of all subscribers (821,200) had subscription-plan download speeds of less than 256kbps, and 40.6 percent had faster Internet download speeds of more than 256kbps.

The majority (90.4 percent) of subscribers had upload speeds of less than 256kbps, and only 9.6 percent had upload speeds greater than 256kbps.

Internet Subscriber Download and Upload Speeds
September 2006

Speed	Number of subscribers	Percent of subscribers
Download speed		
Less than 256 kbps	821,200	59.4
256 kbps or greater and speed unknown	561,400	40.6
Total	1,382,600	100
Upload speed		
Less than 256 kbps	1,249,800	90.4
256 kbps or greater and speed unknown	132,800	9.6
Total	1,382,600	100

Note: Due to rounding, some figures may not add to stated total.

Subscribers with download speeds between 512kbps and 2Mbps increased between 250 and 300 percent, replacing the previous most popular category of between 128kbps and 256kbps. The next most common download speed categories (in descending order) were: 2Mbps to 10Mbps, 128kbps to 256kbps, 256kbps to 512kbps, unknown download speed, 64kbps to 128kbps, and 10 Mbps or greater.

During the same period, upload speeds between 128kbps and 256kbps remained the most common. The next most common upload speeds (in descending order) were: 256kbps to 512kbps, 512kbps to 2Mbps, 2Mbps to 10Mbps, 64kbps to 128kbps, unknown upload speed, and 10Mbps or greater.

Filtering services supplied by ISPs

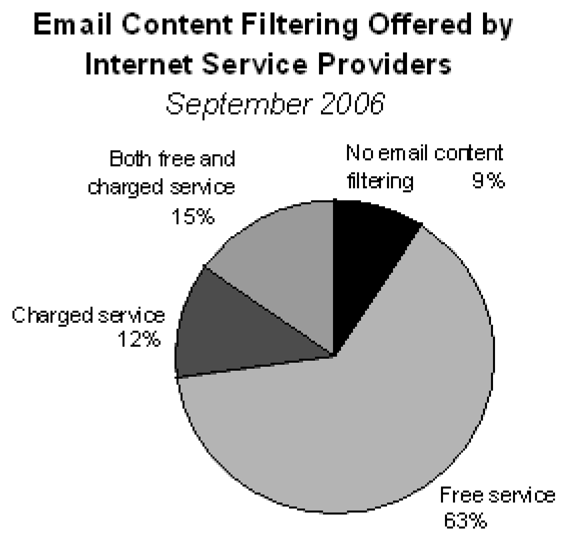
Internet Service Provider Survey September 2006 measures only the uptake of filtering services which are supplied by the ISPs. There are many other alternatives available to subscribers, including purchasing and downloading software, which are outside the scope of this survey.

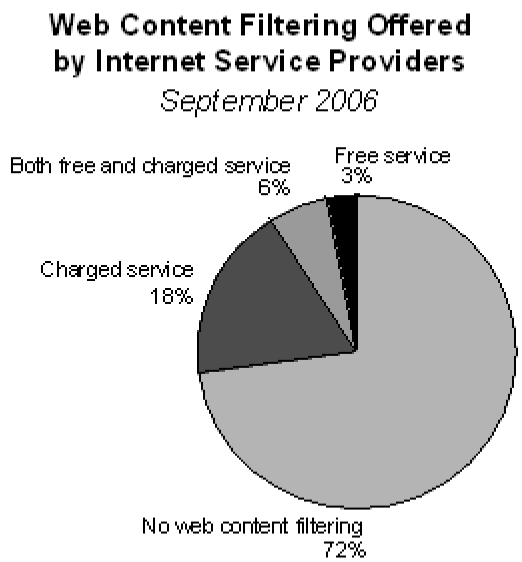
Email filtering

At the end of September 2006, 76.9 percent of Internet subscribers (1,063,600) had adopted an email filtering product offered by their ISPs. Ninety percent of ISPs offered their subscribers email filtering as either a free or charged service. Sixty-three percent of ISPs provided email filtering as a free service, 12 percent provided a charged service and 15 percent of ISPs provided both a free and charged service.

Web filtering

At 30 September 2006, 27 percent of ISPs offered their subscribers web filtering as either a free or charged service. Only 3 percent provided web filtering as a free service; 18 percent provided a charged service and 6 percent provided both a free and charged service. Seventy-two percent of ISPs did not offer web filtering services.

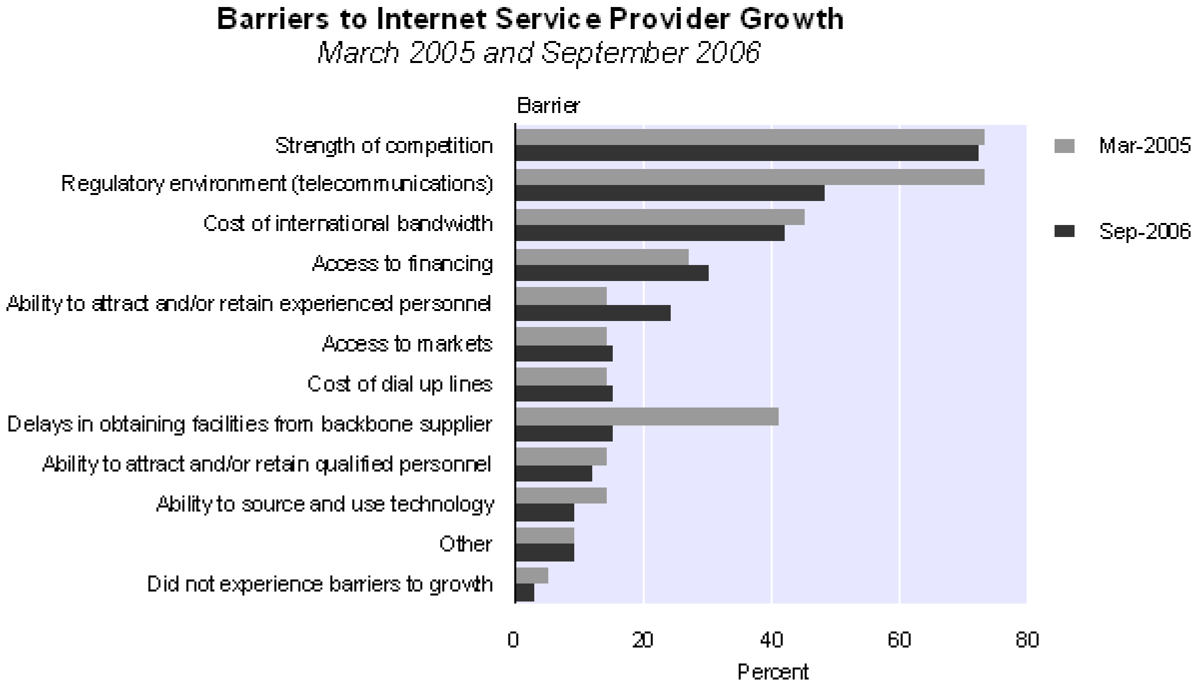




Internet service provider barriers to growth

For the six months ended 30 September 2006, 72 percent of ISPs in New Zealand identified the strength of competition as the greatest barrier to the growth of their operations. Other common barriers to growth recognised were the regulatory environment relating to telecommunications (48 percent), the cost of international bandwidth (42 percent), and ISPs access to financing (30 percent). At 30 September 2006, 3 percent of ISPs reported that there were no barriers to growth.

There was a 34 percent decrease in the number of ISPs reporting that the regulatory environment relating to telecommunications had been a barrier to growth in the past two years, down from 73 percent at the end of March 2005 to 48 percent at September 2006. Only 15 percent of ISPs declared that delays in obtaining facilities from backbone suppliers was a barrier to growth at September 2006, compared with 41 percent of ISPs at March 2005.



For technical information contact:
Guannan Miao
Wellington 04 931 4600
Email: info@stats.govt.nz

Technical notes

Survey background

The Internet Service Provider Survey provides information on the total number and nature of subscribers who use New Zealand-based Internet service providers (ISPs) to connect either permanently or regularly to the Internet. This information allows a measurement of the global connectivity of New Zealanders, which is regarded as an important determinant in accelerating economic growth. A core set of official statistics on Internet service provision results from this survey and this will help individuals, communities, businesses and government to understand how information and communication technologies are changing the economy and society.

Data collection

The Internet Service Provider Survey: September 2006 was a postal survey of all organisations meeting the population selection criteria. The population was constructed by combining ISP industry lists with names of ISP organisations from the Statistics New Zealand Business Frame, according to the Australian and New Zealand Standard Industrial Classification (ANZSIC) 2006 category J591000.

- J591000 Internet Service Providers and Web Search Portals. This class consists of units mainly engaged in providing Internet access services. Also included are units which provide web-search portals used to search the Internet. Primary activities are Internet access provision, Internet access service (online), and Internet service provision.

The questionnaire used a six-monthly reference period ending 30 September 2006. No financial information was requested from respondents. The survey was posted out in October 2006.

Target population

The target population was defined as: 'All resident New Zealand Internet service providers', where Internet service providers were defined as economically significant businesses that supply permanent or regular Internet connectivity services to individuals, households, businesses and other organisations in New Zealand.

A business is considered economically significant if it is found on the Statistics NZ Business Frame and meets one or more of the following criteria:
- has greater than $30,000 annual GST expenses or sales
- had more than two employees over the last year
- is in a GST-exempt industry (except for residential property leasing and rental)
- is part of a group of enterprises.

For the purposes of this survey, the population included all resident ISPs, regardless of their RME (rolling mean employee) measurement, found on the Statistics NZ Business Frame or other employment measures.

Exclusions

Enterprises that provided other Internet services such as web and domain hosting, but who did not provide ISP services, were excluded from the population. This was because the above enterprises were not strictly classified as ISPs. Web-hosting units did not interact directly with the public. Since the public access their website through an ISP, their activity was already covered by the survey. Including them would have resulted in double counting.

Businesses that provided occasional or unmetered access (including Internet cafes, kiosks, libraries, universities) were also excluded. The activity of this group was covered by the ISP each subscribed to, so they did not need to be surveyed separately.

Connections to the Internet via mobile phone were also excluded as this is neither a permanent nor regular Internet connection and thus is beyond the scope of this survey. However mobile (cellular) data-card-only subscriptions to the Internet are included.

The selection unit for inclusion in the population was set at the enterprise level.

Response rate

The target response rate for the Internet Service Provider Survey: September 2006 was 85 percent for units in the population list, with 100 percent collection required of identified key respondents. The actual overall response rate achieved was 87 percent overall and 100 percent for key respondents.

The population for the survey was 75 enterprises.

Imputations

Where data was missing or required clarification respondents were contacted in the first instance. When necessary, missing data was imputed based on historical data collected.

Reliability of the data

Given that the Internet Service Provider Survey: September 2006 is a census rather than a sample, the data is not subject to sample variability. However, other inaccuracies, such as non-sampling errors, may affect the data. These non-sampling errors may arise from sources such as:

- errors in the reporting of data by respondents
- errors in capturing or processing of data
- lack of imputation for missing or misreported data
- definition and classification errors.

Every effort has been made to reduce non-sampling error to a minimum by careful design and thorough testing of questionnaires, efficient operating systems and procedures, and appropriate methodology.

Definitions

Internet service providers (ISPs)
Businesses that supply Internet connectivity services to individuals, households, businesses and other organisations.

Active subscriber
This is a customer who within the last 90 days has accessed the Internet or paid for access to the Internet through an ISP. Under this definition the following inclusions and exclusions are made:

includes:

- all subscribers who obtain access to the Internet through an ISP
- both dial-up and non-dial-up connection subscribers.

excludes:

- web-hosting-only subscribers
- email-only subscribers
- connections to the Internet via mobile phone.

Mbps and kbps
Mbps and kbps are measures of download and upload speed. Mbps stands for megabits per second (1,000,000 bits per second) and kbps stands for kilobits per second (1,000 bits per second).

Internet subscription data allowance
An Internet subscription data allowance is a method employed by ISPs to limit the volume of data downloaded and/or uploaded by subscribers during a fixed period, normally a month. Once a fixed data cap has been reached, lower speed or extra access charges may apply.

Email filtering
Email filtering is a service offered by ISPs that monitors email messages. It will either pass the message through unchanged for delivery to the user's mailbox, redirect the message for delivery elsewhere, or delete or edit the message. Common uses for email filters include removal of spam and computer viruses.

Web filtering
Web filtering is a service offered by ISPs that filters by keyword or blocks by URL what a web browser will display, usually for the benefit of children.

Business Frame
A register maintained by Statistics NZ of all economically significant businesses operating in New Zealand.

Enterprise
A business or service entity operating in New Zealand. It can be a company, partnership, trust, estate, incorporated society, producer board, local or central government organisation, voluntary organisation or self-employed individual.

Rolling mean employment (RME)
This is the 12-month moving average of the monthly employment count, derived from employer monthly schedule data.

More information

For more information, follow the link from the Technical notes of this release on the Statistics New Zealand website.

Copyright

Liability

While care has been used in processing, analysing and extracting information, Statistics NZ gives no warranty that the information supplied is free from error. Statistics NZ shall not be liable for any loss suffered through the use, directly or indirectly, of any information, product or service.

Timing

Timed statistical releases are delivered using postal and electronic services provided by third parties. Delivery of these releases may be delayed by circumstances outside the control of Statistics NZ. Statistics NZ accepts no responsibility for any such delays.

Next release

Internet Service Provider Survey: March 2007 will be released in August 2007.

Statistics New Zealand: The first source of independent information for your key decisions.

Erratum

Error in Internet Service Provider Survey: September 2006

An incorrect table heading appeared in the *Internet Service Providers Survey: September 2006* publication on 7 March 2006. In the Size of Internet service providers section, the right-hand column of the table was incorrectly labelled September 2005.

There is no impact on the data contained in this or other tables in the release.

We regret any inconvenience this error may have caused.

The relevant section in the Commentary has been changed to reflect this correction.

For enquiries please contact:
Guannan Miao
Wellington 04 931 4600
Email: info@stats.govt.nz

Tables

The following tables can be downloaded from the Statistics New Zealand website in Excel 97 format. If you do not have access to Excel 97 or higher, you may use the Excel file viewer to view, print and export the contents of the file.

List of tables

Table 1

Internet Service Providers and Subscribers in New Zealand

March 2005 – September 2006

	March 2005	September 2005	March 2006	September 2006
Total number of Internet service providers(1)	66	66	57	57
Number of subscribers				
Residential	965,000	1,014,500	1,049,700	1,150,000
Business/government	191,200	224,400	238,200	232,600
Total	**1,156,200**	**1,238,900**	**1,287,900**	**1,382,600**
Percent change from previous period				
Residential	...	5.1	3.5	9.6
Business/government	...	17.4	6.1	-2.4
Total	...	**7.2**	**4.0**	**7.4**

(1) All cells in this row have been randomly rounded to base 3.

Symbol:

... not applicable

Table 2

Internet Subscriber Type and Revenue

March 2005 – September 2006

Subscriber type	March 2005	September 2005	March 2006	September 2006
	Percent of subscribers			
Residential	83.5	81.9	81.5	83.2
Business/government	16.5	18.1	18.5	16.8
Percent of revenue(1)				
Residential	64.3	60.3	63.1	71.5
Business/government	35.7	39.7	36.9	28.5

(1) Each ISP reported the aggregate percent which was weighted by subscriber numbers to calculate the weighted total.

Table 3

Size of Internet Service Providers

By percentile

March 2005 – September 2006

Percentile(1)	March 2005	September 2005	March 2006	September 2006
	Number of subscribers			
20th (small ISPs)	100	90	95	85
40th	400	330	270	220
60th	1,640	1,520	1,330	1,040
80th (large ISPs)	7,340	7,710	8,190	8,050

(1) Percentile is calculated by sorting ISPs (by number of subscribers) from smallest to largest, then calculating subscriber numbers at intervals of 20 percent.

Note: All cells in this table have been randomly rounded.

Table 4

Internet Service Provider Revenue

From business and government subscribers

March 2005 – September 2006

Percent of revenue from business and government subscribers	March 2005	September 2005	March 2006	September 2006
	Percent of ISPs			
zero to 20	27	27	21	28
21 to 40	18	18	26	26
41 to 60	9	9	11	7
61 to 80	14	14	11	12
81 to 100	27	27	32	28

Note: Due to rounding, figures may not add to 100 percent.

Table 5

Other Business Activities of Internet Service Providers

March 2005 – September 2006

Business activity	March 2005	September 2005	March 2006	September 2006
	Percent of ISPs			
Wholesale of bandwidth to other ISPs	27	27	26	30
Sale of packages to other ISPs for resale	23	32	32	33

Note: All cells in this table have been randomly rounded to base 3.

Table 6

Internet Connection Type

March 2005 – September 2006

Connection type	March 2005	September 2005	March 2006	September 2006
Number of subscribers				
Analog [1]	835,200	869,300	812,300	771,100
Non-analog	321,000	369,600	475,700	611,600
Digital Subscriber Line	C	C	C	493,300
Other[2]	C	C	C	118,300
Total	**1,156,200**	**1,238,900**	**1,287,900**	**1,382,600**
Percent of subscribers				
Analog [1]	72.2	70.2	63.1	55.8
Non-analog	27.8	29.8	36.9	44.2
Digital Subscriber Line	C	C	C	35.7
Other[2]	C	C	C	8.6
Percent change from previous period				
Analog [1]	...	4.1	-6.6	-5.1
Non-analog[3]	...	15.1	28.7	28.6

(1) Includes analog and Integrated Services Digital Network connection types.

(2) Includes cellular, wireless, cable, satellite and other connection types.

(3) Includes Digital Subscriber Line, cellular, wireless, cable, satellite and other connection types.

Note: Due to rounding, figures may not add to stated totals.

Symbols:

C confidential

... not applicable

Table 7

Internet Subscribers

Per 100 inhabitants

March 2005 – September 2006

Connection type	March 2005	September 2005	March 2006	September 2006
	Subscribers per 100 inhabitants			
Analog	20.4	21.2	19.6	18.6
Non-analog	7.8	9.0	11.5	14.7
Digital Subscriber Line	C	C	C	11.9
Other	C	C	C	2.8
Total	**28.2**	**30.2**	**31.2**	**33.3**

Note: Population data sourced from National Population Estimates, Statistics New Zealand

Symbol:

C confidential

Table 8

Internet Subscribers

Ranked by non-analog connection type

March 2005 – September 2006

Connection type	March 2005	September 2005	March 2006	September 2006
Ranking(1)				
Digital Subscriber Line	1	1	1	1
Cellular	2	2	2	2
Wireless	3	3	3	3
Cable	4	4	4	4
Satellite	5	5	5	5
Other	6	6	6	6
Percent change from previous period(2)				
Digital Subscriber Line	...	11 to 20	21 to 30	C
Cellular	...	11 to 20	21 to 30	31 to 40
Wireless	...	31 to 40	21 to 30	11 to 20
Cable	...	0 to 10	21 to 30	31 to 40
Satellite	...	-71 to -80	11 to 20	300 to 350
Other	...	-21 to -30	S	S

(1) 1 is the highest rank with 6 being the lowest.

(2) Percent ranges are used to protect confidentiality.

Symbols:

C confidential

S suppressed

... not applicable

Table 9

Non-analog Internet Subscribers

Per 100 inhabitants

2005–2006

OECD country	June 2005	December 2005	June 2006
	Per 100 inhabitants		
Denmark	21.8	25.0	29.3
Netherlands	22.5	25.3	28.8
Iceland	21.7	26.7	27.3
Korea	25.5	25.4	26.4
Switzerland	20.3	23.1	26.2
Finland	18.7	22.5	25.0
Norway	18.2	21.9	24.6
Sweden	16.5	20.3	22.7
Canada	19.2	21.9	22.4
United Kingdom	13.5	15.9	19.4
Belgium	18.2	18.3	19.3
United States	14.5	16.8	19.2
Japan	16.4	17.6	19.0
Luxembourg	11.8	14.9	17.9
France	12.8	15.2	17.7
Austria	12.5	14.1	17.7
Australia	10.9	13.8	17.4
OECD average	**11.8**	**13.6**	**15.5**
Germany	10.2	13.0	15.1
New Zealand(1)	**9.0**	**11.5**	**14.7**
Spain	9.3	11.7	13.6
Italy	10.0	11.9	13.2
Portugal	9.9	11.5	12.9
Czech Republic	2.8	6.4	9.4
Ireland	4.3	6.7	9.2
Hungary	4.6	6.3	7.8
Poland	3.3	2.4	5.3
Turkey	1.2	2.1	3.0
Slovak Republic	1.6	2.5	2.9
Mexico	1.0	2.2	2.8
Greece	0.8	1.4	2.7

Source: OECD Broadband Statistics. Excludes cellular data card subscribers.

(1) New Zealand data sourced from Internet Service Provider Surveys for September 2005, March 2006 and September 2006. Includes cellular data card subscribers.

Table 10

Internet Subscription Data Allowance

Non-analog subscribers

September 2006

Data allowance[1]	Number of subscribers	Percent of subscribers
Less than 5GB	419,600	68.6
5GB to less than 20GB	158,700	25.9
20GB or more	18,700	3.1
No cap	14,600	2.4
Total non-analog subscribers	**611,600**	**100**

(1) Data allowance (or data cap) is the volume of data allowed before restrictions apply.

Note: Due to rounding, figures may not add to stated totals.

Table 11

Internet Subscriber Download and Upload Speeds

September 2006

Speed	Number of subscribers	Percent of subscribers
Download speed		
Less than 256kbps	821,200	59.4
256kbps or greater and speed unknown	561,400	40.6
Total	**1,382,600**	**100**
Upload speed		
Less than 256kbps	1,249,800	90.4
256kbps or greater and speed unknown	132,800	9.6
Total	**1,382,600**	**100**

Note: Due to rounding, figures may not add to stated totals.

Table 12

Internet Subscriber Non-analog Speed

March 2005 – September 2006

Speed	March 2005	September 2005	March 2006	September 2006
Ranking[1]				
Download speed				
64kbps to less than 128kbps	3	6	6	6
128kbps to less than 256kbps	4	1	1	3
256kbps to less than 512kbps	1	5	4	4
512kbps to less than 2Mbps	5	2	3	1
2Mbps to less than 10Mbps	2	3	2	2
10Mbps or greater	7	4	5	7
Speed unknown	6	7	7	5
Upload speed				
64kbps to less than 128kbps	2	4	4	5
128kbps to less than 256kbps	1	1	1	1
256kbps to less than 512kbps	4	3	2	2
512kbps to less than 2Mbps	3	2	3	3
2Mbps to less than 10Mbps	5	5	5	4
10Mbps or greater	7	7	6	7
Speed unknown	6	6	7	6
Percent change from previous period[2]				
Download speed				
64kbps to less than 128kbps	...	-81 to -90	21 to 30	-81 to -90
128kbps to less than 256kbps	...	451 to 500	0 to 10	-71 to -80
256kbps to less than 512kbps	...	-71 to -80	51 to 60	0 to 10
512kbps to less than 2Mbps	...	151 to 160	0 to 10	250 to 300
2Mbps to less than 10Mbps	...	-41 to -50	81 to 90	130 to 140
10Mbps or greater	...	more than 500	31 to 40	-90 to -100
Speed unknown	...	-61 to -70	S	S
Upload speed				
64kbps to less than 128kbps	...	-61 to -70	11 to 20	-81 to -90
128kbps to less than 256kbps	...	41 to 50	21 to 30	31 to 40
256kbps to less than 512kbps	...	111 to 120	51 to 60	31 to 40
512kbps to less than 2Mbps	...	-11 to -20	-21 to -30	11 to 20
2Mbps to less than 10Mbps	...	-61 to-70	201 to 250	150 to 200
10Mbps or greater	...	81 to 90	31 to 40	200 to 250
Speed unknown	...	-71 to -80	S	S

(1) 1 is the highest rank with 6 being the lowest.

(2) Percent ranges are used to protect confidentiality.

Symbols:

S suppressed

... not applicable

Table 13

Use of Internet Service Provider Filtering Services(1)

September 2006

Type of filtering service	Subscribers using service	
	Number	Percent
Email content filtering	1,063,600	76.9
Web content filtering	C	C

(1) This is new question in the survey, and supersedes previous SPAM, virus and content questions.

Symbol:
C confidential

Table 14

Filtering Service Offered by Internet Service Provider(1)

September 2006

Filtering service offered	Email content filtering	Web content filtering
	Percent of ISPs	
None	9	72
Free service	63	3
Charged service	12	18
Both free and charged service	15	6

(1) This is new question in the survey, and supersedes previous SPAM, virus and content questions.

Note: All cells in this table have been randomly rounded to base 3.

Table 15

Barriers to Internet Service Provider Growth

March 2005 – September 2006

Barrier	March 2005	September 2005	March 2006	September 2006
	Percent of ISPs			
Strength of competition	73	77	79	72
Regulatory environment (telecommunications)	73	59	53	48
Cost of international bandwidth	45	36	42	42
Access to financing	27	32	37	30
Ability to attract and/or retain experienced personnel	14	14	11	24
Access to markets	14	14	16	15
Cost of dial up lines	14	18	16	15
Delays in obtaining facilities from backbone supplier	41	23	21	15
Ability to attract and/or retain qualified personnel	14	14	16	12
Ability to source and use technology	14	5	11	9
Other	9	5	11	9
Did not experience barriers to growth	5	9	0	3

Note: All cells in this table have been randomly rounded to base 3.