



# Hot Off The Press

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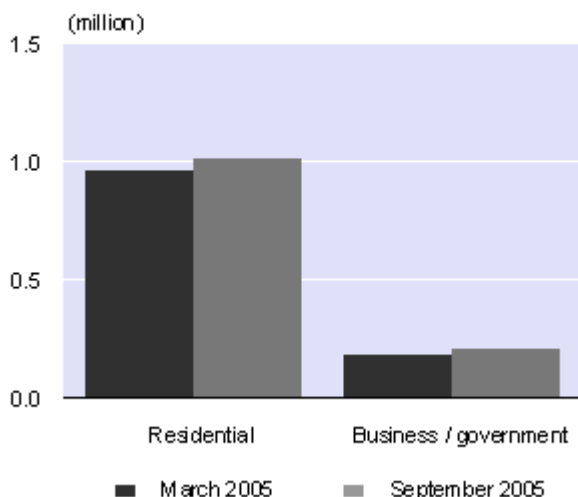
## Internet Service Provider Survey September 2005

### Highlights

At 30 September 2005

- There were **66 Internet service providers (ISPs)** in New Zealand, with 1.24 million active subscribers.
- **Analog was the predominant connection technology**, with 869,300 active subscribers.
- **Non-analog connections increased by 15 percent (to 369,600)** compared with 31 March 2005.
- There were **30.2 active Internet subscribers per 100 inhabitants**, up from 28.2 per 100 at 31 March 2005.
- The predominant download speed category was less than 64kbps.
- **77 percent of ISPs in New Zealand saw the strength of competition as the greatest barrier to growth of their operations.**

Types of Internet Subscribers in New Zealand  
By survey period



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There is a companion Media Release published – [Internet Service Provider Survey: September 2005](#).

# Commentary

## Internet Service Provider Survey September 2005

The Internet Service Provider Survey September 2005 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 the 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 ISPs 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.

## Data revision

Following the previous survey in March 2005, Statistics NZ reviewed and clarified a number of categories and data in conjunction with the OECD and survey respondents. Consequently, revisions have been made to the March 2005 data.

## Guide to interpreting the data

The following summary highlights the main points to consider when interpreting the Internet Provider Survey September 2005 results. A full technical description is contained in the Technical Notes of this release.

## Definitions

### Internet service providers (ISPs)

These are 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 'active' includes: all subscribers who obtain access to the Internet through an ISP; both dial-up and non-dial-up connection subscribers. It excludes: web-hosting-only subscribers; email-only subscribers; connections to the Internet via mobile phone.

### kbps and mbps

Both are measures of bandwidth. Kbps stands for kilobits or thousands of bits per second, and mbps is megabits or millions of bits per second.

### SPAM filtering

Any system in place to filter unsolicited electronic messages, regardless of content.

### Virus filtering

Any system in place to protect subscribers from computer viruses. A virus is defined as a computer program that is designed to replicate itself by copying itself into other programs stored in a computer.

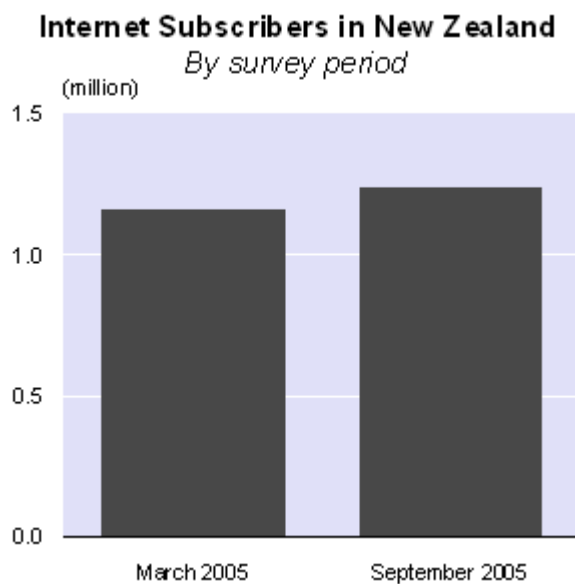
## Content filtering

Any system in place to minimise exposure to potentially harmful or undesirable material.

## Internet service provision in New Zealand

At 30 September 2005, there were 66 ISPs in New Zealand, with a total of about 1.24 million active subscribers. The total has increased about 7 percent from 31 March 2005.

Residential (household) subscribers accounted for about 82 percent of all active subscribers and provided 60 percent of revenue. Business and government subscribers were 18 percent of the total number of active subscribers and provided 40 percent of revenue. The number of business and government subscribers increased by about 17 percent (33,200 subscribers) from 31 March 2005, while residential subscribers were up 5 percent over the same period.

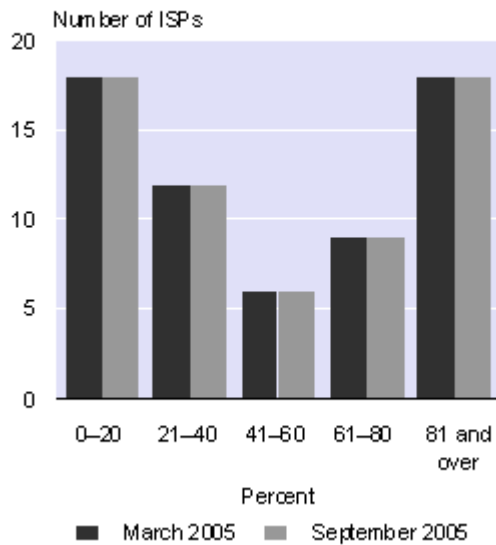


## ISP revenue from business and government subscribers

At 30 September 2005 the proportion of revenue ISPs received from business and government active subscribers was the same as at 31 March 2005. Eighteen ISPs received between 0 and 20 percent of their revenue from government and business subscribers, and a further 18 ISPs received between 81 and 100 percent of their revenue from business and government subscribers.

## Internet Service Provider Revenue

*From business and government subscribers*



## Internet subscriber connection type

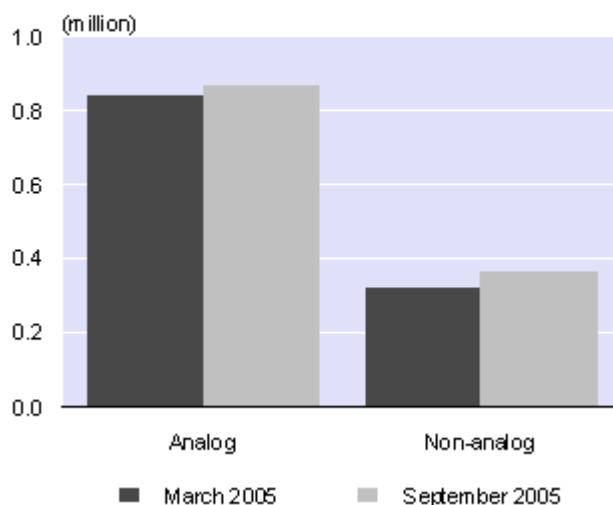
At 30 September 2005, the predominant connection technology was analog (also referred to as dial-up), with 869,300 active subscribers, up 4.1 percent on 31 March 2005. Analog subscribers were 70 percent of the total number of active subscribers.

There were 369,600 non-analog active subscribers (also referred to as broadband subscribers), which is a 15 percent increase from 31 March 2005.

Of the non-analog connections, digital subscriber line (DSL) continues to be the most common connection technology. The ranking of the next most common non-analog connection technologies in descending order was: cellular, all wireless connections, cable, satellite, and other. This ranking did not change from 31 March 2005.

## Internet Subscriber Connection Type

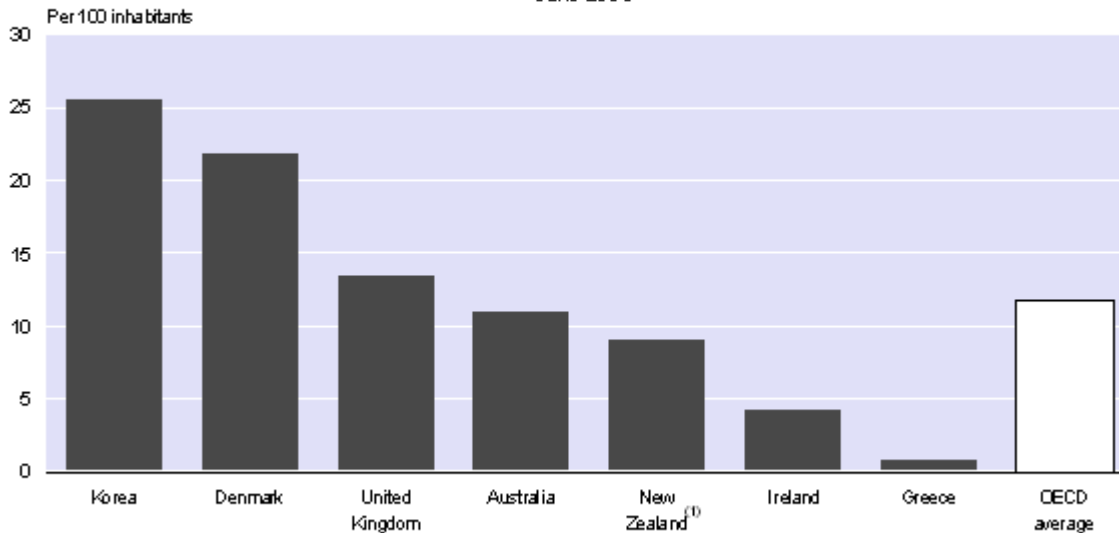
*By survey period*



At 30 September 2005 there were 30.2 active subscribers per 100 inhabitants in New Zealand, compared with 28.2 per 100 at 31 March 2005.

The number of non-analog subscribers in New Zealand increased from 7.8 per 100 inhabitants at 31 March 2005, to 9.0 per 100 at 30 September 2005. This compares with the June 2005 OECD average of 11.8 per 100 inhabitants.

**Non-analog Internet Subscribers**  
*Compared with selected OECD countries*  
June 2005



(1) September 2005 data

## Internet subscriber download speeds

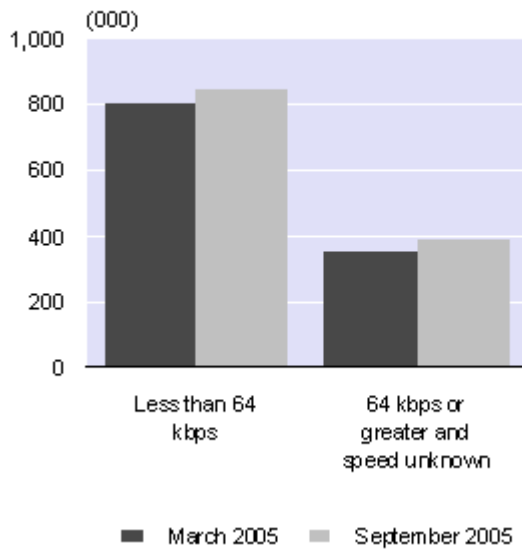
At 30 September 2005, the predominant download speed category was less than 64kbps (846,300 active subscribers), an increase of 5.5 percent from 31 March 2005.

There were 392,600 active subscribers whose design download speed was 64kbps or greater. Within this category, download speeds of 128kbps to 256kbps were the most common, with an increase of 450 to 500 percent from 31 March 2005. The next most common download speed categories, in descending order were: 512kbps to 2mbps, 2mbps to 10mbps, 10mbps or greater, 256kbps to 512kbps, 64kbps to 128kbps, and unknown download speed.

At 31 March 2005 the most common download speed was 256kbps to 512kbps. This dropped to being the fifth most common at 30 September 2005, with the number of subscribers in this category falling 71 to 80 percent over this period.

## Internet Subscriber Download Speed

*By survey period*

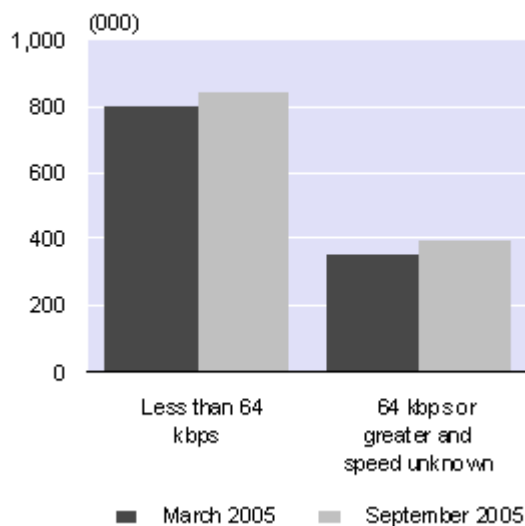


## Internet subscriber upload speeds

At 30 September 2005, the predominant upload speed category was less than 64kbps (847,300 active subscribers), up 5.5 percent from 31 March 2005. There were also 391,700 active subscribers whose design upload speed was 64kbps or greater. Within this category, upload speeds of 128kbps to 256kbps were the most common. The next most common upload speeds, in descending order were: 512kbps to 2mbps, 256kbps to 512kbps, 64kbps to 128kbps, 2mbps to 10mbps, unknown upload speed, and 10mbps or greater.

## Internet Subscriber Upload Speed

*By survey period*

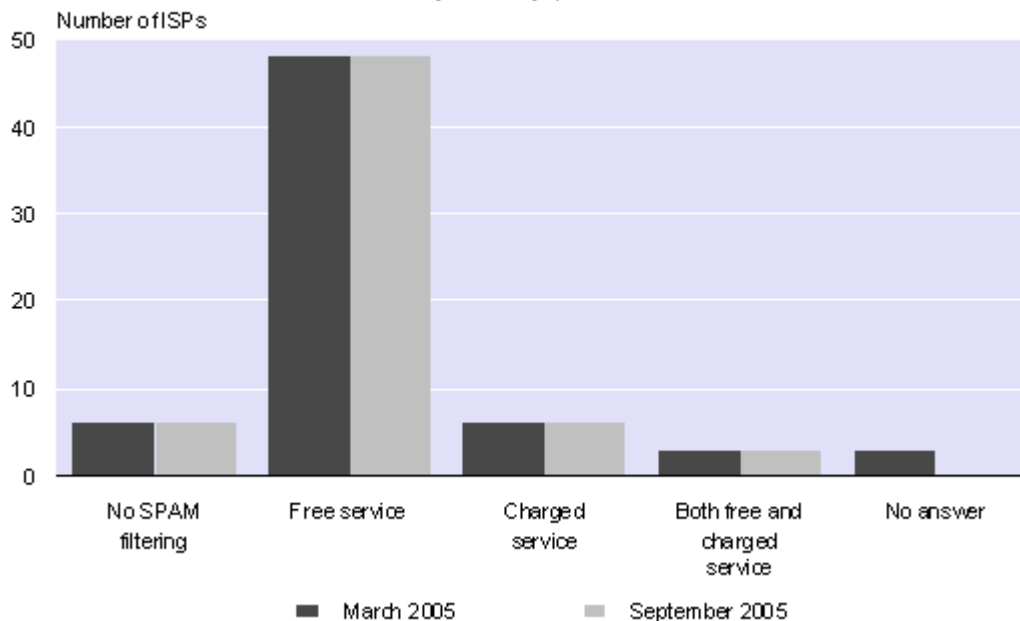


## SPAM filtering

At 30 September 2005, 57 ISPs (about 91 percent) offered their subscribers SPAM filtering as either a free or charged service. Of those ISPs, 48 provided SPAM filtering as a free service, six provided it as a charged service and three ISPs provided both a free and charged service. This has not changed from 31 March 2005.

## SPAM Filtering Offered by Internet Service Providers

*By survey period*

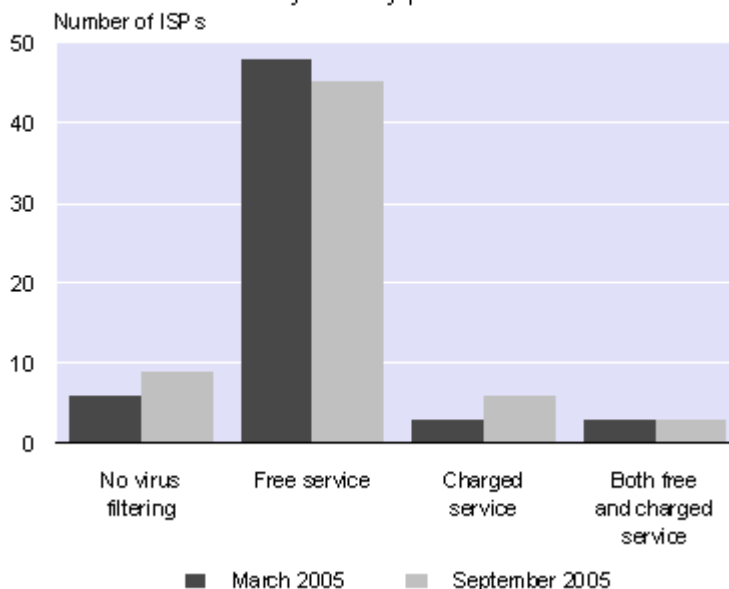


## Virus filtering

At 30 September 2005, 54 ISPs (about 86 percent) offered their subscribers virus filtering as either a free or charged service. Of those ISPs, 45 provided virus filtering as a free service, six offered it as a charged service and three ISPs provided both a free and charged service.

## Virus Filtering Offered by Internet Service Providers

*By survey period*

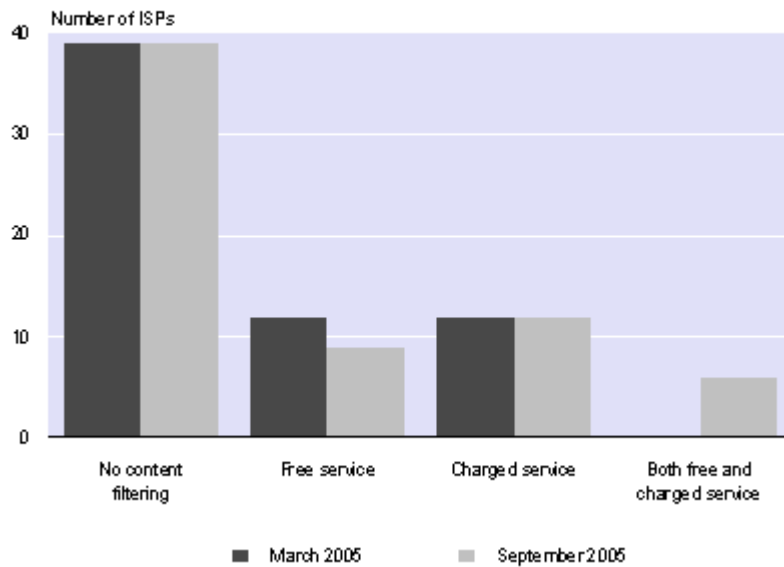


## Content filtering

At 30 September 2005, 27 ISPs (about 41 percent) offered their subscribers content filtering as either a free or charged service. Of those ISPs, nine provided a free service, 12 provided a charged service, and six both a free and charged service. There were also 39 ISPs (almost 59 percent) who offered no content filtering services.

## Content Filtering Offered by Internet Service Providers

*By survey period*



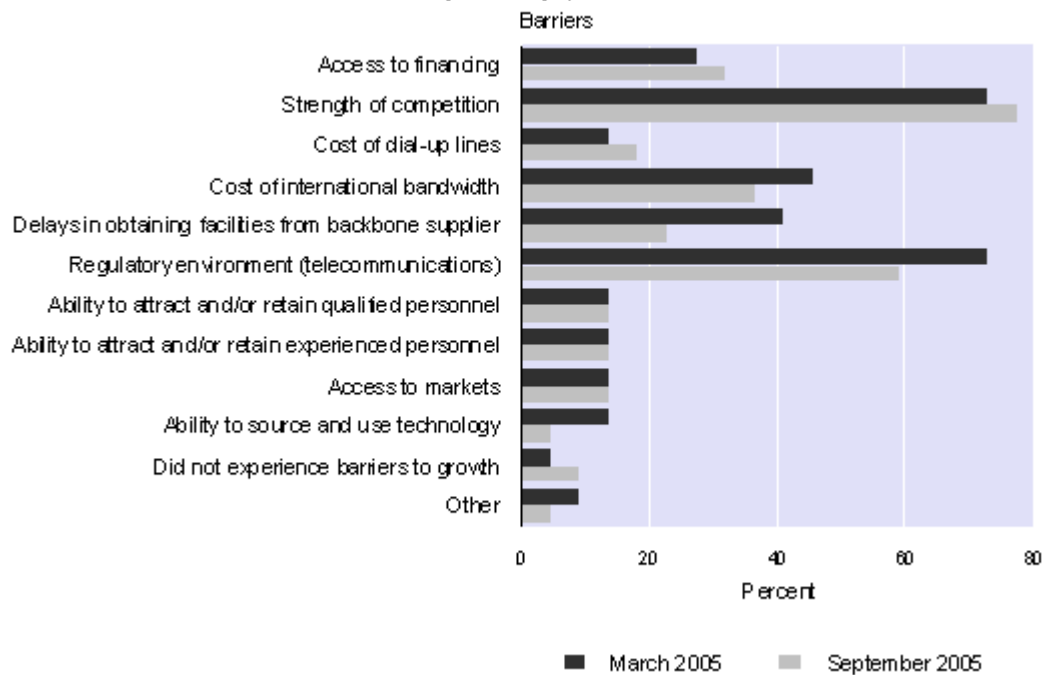
### Internet service provider barriers to growth

For the six months ended 30 September 2005, 77 percent of ISPs in New Zealand saw the strength of competition as the greatest barrier to the growth of their operations. Other common barriers to growth identified were the regulatory environment relating to telecommunications (59 percent), the cost of international bandwidth (36 percent), and access to financing (almost 32 percent).

Compared with 31 March 2005, 18 percent fewer ISPs reported delays in obtaining facilities from backbone suppliers as a barrier to their growth. There has been a 14 percent decrease in the number of ISPs reporting the regulatory environment was a barrier to their growth.

## Barriers to Internet Service Provider Growth

*By survey period*



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# Technical notes

## Survey background

The Internet Service Provider Survey September 2005 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 the 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 ISPs 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 2005 was a postal survey of all organisations meeting the population selection criteria. The population was arrived at through combining ISP industry lists with names of ISP organisations from Statistics New Zealand Business Frame keyword searches.

Before the personalised questionnaires were posted to the survey respondents, 'key' respondents were contacted by phone. This helped to identify the exact person with the overall understanding of the ISP activities in their organisation.

The questionnaire uses a six-monthly reference period ending 30 September 2005. No financial information was requested from respondents. The survey was posted out in October 2005.

## Data revision

Following the previous Internet Service Provider Survey in March 2005, Statistics NZ reviewed and clarified a number of categories and data, in conjunction with the OECD and survey respondents. Consequently, revisions have been made to the March 2005 data.

## 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. An enterprise is said to be economically significant if it 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
- is involved in agriculture or forestry and had greater than zero annual GST activity.

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 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 2005 was 85 percent for units in the population list, with 100 percent completion required of identified key respondents. The actual overall response rate achieved was 90 percent overall, and 96 percent for key respondents.

The population for the survey consisted of 88 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 2005 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.

## Table notes

### **Table 4.1 Revenue by Subscriber Type**

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

### **Table 8 Internet Subscribers per 100 Inhabitants of New Zealand**

Population estimates from National Population Estimates: March 2005 quarter and National Population Estimates: September 2005 quarter.

### **Table 9 Non-analog Internet Subscribers per 100 Inhabitants**

OECD Broadband Statistics, June 2005.

### **Tables 17.1 and 17.2 Barriers to Internet Service Provider Growth**

Data in the 'other' category from March 2005 has been further analysed and reassigned to relevant categories.

## Definitions

### **Internet Service Providers (ISPs)**

Businesses that supply Internet connectivity services to individuals, households, businesses and other organisations.

### **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 provided by Inland Revenue.

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## 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 2006* will be released in August 2006.

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## 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.

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