

# **Status of Telecommunication Statistics Collection and Dissemination in Singapore**

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## **Introduction**

The aim of this paper is to present the status of telecommunication statistics collection and dissemination in Singapore.

Singapore is a small island state of some 700 square kilometres with a population of 4.24 million. It is located at the Southern tip of the Malaya peninsula. Singapore, since its founding, serves as the trade gateway and transit point for the movement of goods into and out of South East Asia. International trade and shipping activities have always been very important to Singapore. Today, the Services producing industries accounts for over 60% of the GDP and the Goods producing industries accounts for 34.3%<sup>1</sup>. The Infocomm (ICT) sector (excluding the manufacturing of Infocomm goods) accounts for about 6.1% of the GDP.

## **Statistics Collection in Singapore**

At the national level, the Singapore Department of Statistics (DOS) at the Ministry of Trade and Industry is the competent authority on the collection, analysis and dissemination of national statistics. The DOS is empowered by the Statistics Act, 1999 and the Census Act, 1991. The DOS also coordinates the

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<sup>1</sup> <http://www.singstat.gov.sg/keystats/mqstats/mds/mds41.pdf>

collection of sectoral statistics by other national social and economic agencies like IDA.

The Infocomm Development Authority of Singapore (IDA) is the national agency responsible for the promotion and development of the infocomm sector and the regulator for the postal and telecommunication industries. IDA reports to the Minister for Information, Communications and the Arts. IDA's Research and Statistics Unit operates under the aegis of the Statistics Act. IDA works closely and collaborates with the DOS to produce national level indicators and statistics.

On its own, IDA requires to measure and collect data about the Infocomm sector in order to fulfil its role as promoter, developer and champion agency for Infocomm as well as the regulator of the domestic postal and telecommunication industries.

### **Collection of Telecommunication Statistics**

Since 1 April 2000, the telecommunication industry in Singapore has been fully liberalised. Today, there are over 134 telecommunication operators licensed by IDA.<sup>2</sup> 35 of these operate with their own facilities and the remaining 99 operate as purely services providers or resellers.

Under the terms of their operating licences, each telecommunication operator is required to submit monthly statistics on the number of subscribers/usage for these essential services:

- Fixed lines services
- Mobile telephone services

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<sup>2</sup> <http://www.ida.gov.sg>

- Paging services
- Internet services – both dialup and broadband
- International telephone services (in terms of call minutes)

As the submission by each operator on its own is confidential and the information therein is market-sensitive in a competitive environment, IDA rigorously ensure that none of the individual submission can be accidentally or purposely leaked out in any way. The confidence of each operator must be maintained at all times for the licensing obligation to provide information to continue. In this regard, by the imposition of licensing obligations on the telecommunication operators at the outset, the collection of telecommunication statistics is made much easier.

These submissions are consolidated on a monthly basis and published via IDA website. The key telecommunication data that are collected on a monthly basis are:

- Fixed line telephone services – total number and by residential and corporate subscription
- International telephone services – outgoing retail minutes (inclusive of transit traffic)
- Mobile phone market – total subscription, post-paid and pre-paid and SMS volume
- Paging services – total subscription
- Internet – total, residential and corporate subscription for dial-up and broadband; broadband breakdown by types (xDSL, cable modems, leased lines, other access technologies).

A sample web page with the latest key telecommunication statistics in detail is attached as Annex A.

## **Conclusion**

The telecommunication indicators are a subset of indicators which IDA regularly collects in order to execute its roles and charter. As the indicators only serve as a means to measure the success of policy objectives and development plans, over time, the list of indicators will be reviewed and revised to be in step with the social and economic development of Singapore.

### Statistics on Telecom Services for 2004 (Jul - Dec)

CATEGORY	JUL	AUG	SEP	OCT	NOV	DEC
<b>Fixed Line Services (Direct Exchange Lines)</b>						
- Total fixed line subscriptions	1,875,000	1,871,100	1,869,000	1,867,400	1,866,100	1,864,000
- Total Residential fixed line subscriptions	1,109,200	1,106,800	1,104,500	1,102,900	1,101,300	1,099,900
- Total Corporate fixed line subscriptions	765,900	764,200	764,500	764,400	764,700	764,100
- Fixed line population penetration	44.8%	44.7%	44.7%	44.6%	44.6%	44.6%
- Fixed line household penetration <sup>1</sup>	102.4%	102.2%	100.7%	100.5%	100.4%	100.3%
<b>Mobile Market</b>						
- Total mobile phone subscriptions <sup>2</sup>	3,690,800	3,716,600	3,741,900	3,757,300	3,798,800	3,860,600
- Total post-paid subscriptions	2,553,900	2,565,300	2,570,900	2,575,200	2,585,100	2,613,800
- Total pre-paid subscriptions	1,137,000	1,151,300	1,170,900	1,182,100	1,213,700	1,246,900
- Total number of SMS messages	647.77 million	666.36 million	646.17 million	649.84 million	653.58 million	692.41 million
- Mobile Phone penetration	88.2%	88.8%	89.4%	89.8%	90.8%	92.2%
<b>Paging Services</b>						
- Total paging subscriptions <sup>3</sup>	127,600	127,600	113,500	113,500	113,500	103,500
- Paging penetration	3.0%	3.0%	2.7%	2.7%	2.7%	2.5%
<b>Dial-Up Internet Services</b>						
- Total Internet dial-up subscriptions <sup>4</sup>	1,747,500	1,740,900	1,734,100	1,727,500	1,720,700	1,714,300
- Total Residential Internet dial-up subscriptions	1,684,300	1,678,000	1,671,600	1,665,900	1,659,700	1,653,600
- Total Corporate Internet dial-up subscriptions	63,200	62,900	62,500	61,600	60,900	60,800
- Internet dial-up penetration	41.8%	41.6%	41.4%	41.3%	41.1%	41.0%
<b>Broadband Internet Access Services</b>						

- Total broadband subscriptions <sup>5</sup>	465,400	473,400	483,500	491,000	497,100	512,400
- Total Residential broadband subscriptions	422,300	429,400	438,300	444,400	450,100	464,300
- Total Corporate broadband subscriptions	43,100	44,000	45,100	46,600	47,000	48,100
- Total xDSL subscriptions	273,100	274,900	276,900	280,600	282,000	288,300
- Total cable modem subscriptions	187,600	193,700	201,200	205,300	209,500	218,500
- Total leased line Internet subscriptions	3,100	3,100	3,100	3,000	3,100	3,100
- Total subscriptions using other broadband Internet access method	1,600	1,600	2,200	2,100	2,600	2,500
- Household broadband penetration <sup>6</sup>	39.0%	39.6%	40.0%	40.5%	41.0%	42.0%
<b>Total Number of Outgoing Retail International Telephone Call Minutes Including Transit</b>						
- Total number international telephone call minutes <sup>7</sup>	395.88 million	395.32 million	409.54 million	404.03 million	377.62 million	398.07 million

Penetration rate figures from June 2002 onwards have been re-computed, taking into account the revised population figures recently released by the Department of Statistics.

With effect from Jan 2001, we have begun to use total population instead of total residential population as a population base for the calculation of penetration rates for telecom services (unless otherwise stated). Total residential population was previously used because historically, the take-up of telecom services by foreign workers was typically low. With the government's recent efforts in promoting foreign talent, the profile of the foreign worker has changed. Specifically, there has been a marked increase in the subscription to telecom services by "non-residential" foreigners. It is therefore timely to adopt the total population figure as a population base in calculating penetration rates to give a more accurate picture of the various telecom market segments.

All subscriber figures rounded to the nearest hundred.

All penetration figures rounded to the nearest decimal point.

Penetration rates are computed based on the total population figures released by the Department of Statistics.

Please note that the fall in Internet dialup subscribers from May 2001 onwards is a result of a database correction of an Internet Service Provider, to remove from its system discontinued dial-up Internet accounts for the period of Dec '99 - Aug '00 that were not previously deleted.

<sup>1</sup> This figure is computed using the total number of residential fixed line subscribers on a per

household basis. The number of households is obtained from the latest figures available from the Department of Statistics.

<sup>2</sup> The pre-paid SIM card subscriber base figures are included in the total number of mobile phone subscribers as well as in the total number of GSM900 and GSM1800 subscriber bases.

<sup>3</sup> Paging figures from Jan 99 onwards have been re-computed based on updated data information. With effect from July 2004, paging figures will be updated on a quarterly basis every March, June, September and December. The figures for Jan, Feb, Apr, May, July, Aug, Oct and Nov will not be updated and will reflect the latest quarterly figure.

<sup>4</sup> The dial-up market penetration figures includes the following subscribers: (i) subscription-based subscribers for all IASPs, including ISDN dial-up subscriptions; and (ii) free Internet access subscribers. Following full telecom market liberalisation, the number of IASPs have increased considerably. Starting Jan 2001, the published figures on the internet dial-up market include contributions from such new IASPs.

<sup>5</sup> With effect from July 2004, the total number of broadband subscriptions includes xDSL, cable modems, leased line Internet and other broadband Internet access methods.

<sup>6</sup> This figure is computed using the total number of residential broadband subscribers on a per household basis. The number of households is obtained from the latest figures available from the Department of Statistics.

<sup>7</sup> Following full liberalisation of the telecommunications market, Singapore's international services market has grown considerably both in diversity of services available as well as in the number of operators offering international telephone services. As Singapore continues to develop as a hub for international voice traffic, including transit and regional traffic in our published statistics will provide a more holistic picture of the vibrancy and growth of the entire international telephone services market in Singapore. Thus, this figure includes total retail outgoing international call minutes as well as transit minutes. For comparison purposes, figures from previous years will also be adjusted accordingly. This change has been applied retroactively from Jan 2001. Furthermore, starting from Jan 2001, traffic from other service providers such as ISR operators has also been included. Since July 2004, IDA has also expanded on the reporting of international telephone services to include all Service-Based Operators (SBO), resulting in a marked increase in the minutes reported from June 2004. Part of the increase is also due to monthly traffic fluctuations.

**Source:** <http://www.ida.gov.sg>