

INTERNET ACTIVITY

AUSTRALIA

EMBARGO: 11.30AM (CANBERRA TIME) FRI 12 AUG 2005

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INQUIRIES

For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070 or Peter Hodgson on Perth (08) 9360 5367.



NOTES

INTRODUCTION

The Internet Activity Survey (IAS) is a census which collects details on aspects of Internet access services provided by Internet Service Providers (ISPs) in Australia. This publication contains results from all identified ISPs operating in Australia as at 31 March 2005.

DATA QUALITY AND CHANGES IN THIS PUBLICATION Estimates for data at the state/territory level are derived from data provided for POPs (Point Of Presence or servers). In recent years, changing access technologies, infrastructure and operational arrangements have been impacting on the quality of the data at the POP level. Data presented at the state/territory level should be considered only as indicative measures of the distribution of Internet activity at the reference date and not changes over time. As a result, the format of Table 1.2 has been changed to reflect this.

REVIEW OF THE INTERNET ACTIVITY SURVEY

The ABS has previously notified readers of this publication of a reduction in the frequency of the Internet Activity survey to an annual basis, with the next survey due to be conducted in respect of March 2006. More recently a decision has been made to review the collection to address ongoing concerns with the quality and relevance of the data produced. The review will consider ongoing requirements for the current range of data, new and emerging data needs related to Internet activity, methodology, scope and data collection mechanisms. Pending the outcome of this review, the survey has been suspended for at least the period up to September 2006.

If you wish to know more about the review or provide input, please write to the Director, Innovation and Technology Statistics, Australian Bureau of Statistics, GPO Box K881, Perth, WA, 6842. Subscribers will be notified separately of the outcome of this review.

ROUNDING

Where figures have been rounded, discrepancies may occur between the sum of the components and the total. Averages have been calculated using unrounded data.

ABBREVIATIONS

ABS Australian Bureau of Statistics

DSL digital subscriber line

Gbps gigabits per second

ISP Internet service provider

Kbps kilobits per second

MB megabyte

POP point of presence

PSTN public switched telephone network

TIO Telecommunications Industry Ombudsman

Dennis Trewin

Australian Statistician

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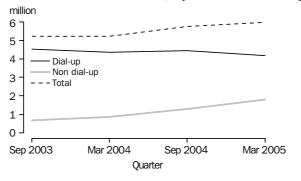
CHAPTER 1

SUMMARY OF INTERNET ACTIVITY FINDINGS

HIGHLIGHTS

- At the end of March 2005, total Internet subscribers in Australia numbered 5.98 million. While this was an increase of 239,000 (4%) from the end of September 2004, growth had slowed following a 10% increase recorded for the six months to the end of September 2004.
- The increase in overall subscriber numbers was again driven by growth (39%) in non dial-up subscribers from 1.3 million at the end of September 2004 to 1.8 million at the end of March 2005. Non dial-up subscribers represented 30% of total Internet subscribers in Australia at the end of March 2005 compared with almost 23% at the end of September 2004. This was the highest proportion of subscribers recorded for non dial-up technologies since the inception of the survey in September 2000.
- Growth in total subscriber numbers between March 2004 and March 2005 was 15%, whereas non dial-up subscriber numbers grew by 109% in the same period.
- Most of the growth for non dial-up was in the household subscriber sector with an increase of 42% in household non dial-up subscribers from the number recorded at the end of September 2004. The number of household non dial-up subscribers at the end of March 2005 was almost 1.4 million or over 77% of total non dial-up subscribers.
- The number of dial-up subscribers recorded at the end of March 2005 fell by almost 6% to 4.2 million. This resumed a downward trend established since the collection of the subscriber type series commenced in March 2003, despite a small increase of 2% recorded at the end of September 2004, when dial-up subscribers totalled 4.4 million.

INTERNET SUBSCRIBERS, by access technology



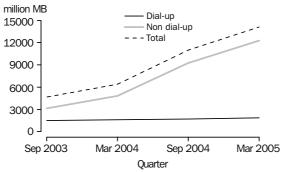
■ There were 689 ISPs supplying Internet access to 5.98 million active subscribers at the end of March 2005. While the total number of ISPs only increased by 2 over the six month period from the end of September 2004, there was more volatility when viewing ISPs by size category. The largest growth was in the Very Small size category, those ISPs with 100 or less subscribers. There were 180 ISPs in this size category, an increase of 5% since the end of September 2004. However these units had little overall effect on the aggregate figure contributing only 0.1% of total subscribers and

HIGHLIGHTS continued

0.4% of total data downloaded. Growth in the Very Small size category was offset by a decrease in the number of Small (101 to 1,000 subscribers) and Large (10,001 to 100,000 subscribers) sized ISPs. As was the case at the end of September quarter 2004, there were 10 ISPs with over 100,000 subscribers at the end of March quarter 2005, although there was some change in the composition of this category in terms of individual ISPs.

Data downloaded by subscribers during the March quarter 2005 continued to grow (28%) to 14,124 million MBs, but had slowed from the rapid increase (72%) experienced during the September quarter 2004 when 11,004 million MBs were downloaded. Non dial-up subscribers accounted for almost 87% of the total data downloaded, reflecting the much faster download speeds available with non dial-up technology.

INTERNET SUBSCRIBER DOWNLOADS, by access technology



- Digital Subscriber Line (DSL) remained the predominant access technology used for non dial-up Internet services with almost 70% of total non dial-up subscribers being connected using this means. There were 550 ISPs (almost 80% of total ISPs) providing Internet services using DSL access technologies at the end of March 2005.
- Using the definition currently adopted by the ABS to define broadband (an 'always on' Internet connection with an access speed equal to or greater than 256kbps), there were almost 1.8 million broadband subscribers at the end of March 2005, an increase of 39% from the end of September 2004.
- The majority (87%) of Australian Internet subscribers used monthly, quarterly or annual plans to access the Internet at the end of March 2005. Hourly access plans were the next most dominant means of accessing the Internet with 11% of subscribers.



1.1 INTERNET ACT	IVITY SUN	MMARY,	Australia				
		2003		2004		2005	
		March Quarter	September Quarter	March Quarter	September Quarter	March Quarter	
• • • • • • • • • • • • • • • • • • • •	• • • • • • • • •	• • • • • • •	• • • • • • • • •	• • • • • • • • • •	• • • • • • • • •	• • • • • • • • •	
ISPs(a)(b)		440	450	470	4-74	400	
Very small	no.	110	153	176	171	180	
Small	no.	251	316	319	323	312	
Medium	no.	160	163 27	165	157 26	162 25	
Large Very large	no.	26 7	21 8	25 9	26 10	10	
very large	no.	1	0	9	10	10	
Total	no.	554	667	694	687	689	
Internet Access Lines(b)(c)							
Dial-up	no.	_	626 554	623 839	658 555	614 093	
Non dial-up	no.	_	680 933	850 506	1 300 359	1 802 437	
Total	no.	857 470	1 307 487	1 474 345	1 958 914	2 416 530	
Subscribers(b) Dial-up							
Business and government	'000	520	505	499	524	433	
Household	'000	4 087	4 017	3 859	3 916	3 744	
Total	'000	4 607	4 522	4 359	4 441	4 177	
Non dial-up							
Business and government	'000	139	190	241	321	412	
Household	'000	331	499	620	979	1 391	
Total	'000	470	690	861	1 300	1 802	
Total							
Business and government	'000	659	696	740	846	845	
Household	'000	4 417	4 516	4 480	4 895	5 135	
Total	'000	5 076	5 211	5 220	5 741	5 980	
Data Downloaded (c)(d) Dial-up							
Business and government	million MBs	_	178	137	253	304	
Household	million MBs	_	1 341	1 457	1 465	1 566	
Total	million MBs	_	1 520	1 594	1 718	1 870	
Non dial-up							
Business and government	million MBs	_	1 169	1 294	2 307	3 255	
Household	million MBs	_	1 976	3 521	6 979	8 999	
Total	million MBs	_	3 145	4 815	9 287	12 254	
Total							
Business and government	million MBs	782	1 347	1 431	2 560	3 559	
Household	million MBs	2 264	3 317	4 978	8 444	10 565	
Total	million MBs	3 046	4 665	6 409	11 004	14 124	

nil or rounded to zero (including null cells)

⁽a) See paragraph 6 of the Explanatory Notes for a description of ISP size categories.

⁽b) As at the end of the reference quarter.

⁽c) The collection of separate access technology details commenced from the September quarter 2003 for Internet access lines and data downloaded.

⁽d) During the three months up to the reference date, also referred to as the reference quarter.



1.2 INTERNET ACTIVITY SUMMARY, State and territory

MARCH QUARTER 2005									
	ISPs(a)	Access lines(b)	All subscribers(b)	Data downloaded(c)					
	no.	no.	'000	million MBs.					
• • • • • • • • • • • • • • • • •	• • • • • • • •	• • • • • • • • • • • •	• • • • • • • • • •	• • • • • • • • • •					
New South Wales	262	817 017	2 023	4 629					
Victoria	205	622 804	1 589	3 716					
Queensland	182	416 364	1 065	2 359					
South Australia	61	157 006	416	888					
Western Australia	88	281 581	606	1 797					
Tasmania	21	41 411	112	263					
Northern Territory	14	18 146	43	97					
Australian Capital Territory	32	62 179	127	376					
Australia	689	2 416 530	5 980	14 124					

⁽a) Based on State or Territory of operations, not Head Office location - see 'Data Quality' in the Notes section on Page 2 for details.

⁽b) As at the end of the reference period.

⁽c) During the three months of the reference period.

CHAPTER 2

SUBSCRIBER CHARACTERISTICS

SUBSCRIBERS

At the end of the March quarter 2005, there were 5.98 million active Internet subscribers in Australia, comprised of 845,000 business and government subscribers and over 5.1 million household subscribers.

The majority of subscribers (77%) accessed the Internet via services provided by Very Large ISPs. These ISPs are similarly predominant in the provision of non dial-up Internet services with 1.4 million non dial-up subscribers, comprising of 249,000 business and government subscribers and 1.2 million household subscribers.

The 5.1 million household subscribers accounted for 86% of total subscribers and represented an increase in household subscribers of almost 5% for the six months to the end of March 2005. The number of business and government subscribers fell marginally, by 1,000 subscribers or 0.1%, in the same period.

ACCESS PLANS

The majority of Internet subscribers remained on either monthly/quarterly/annual plans (87% or 5.2 million subscribers), or hourly access plans (11% or 679,000 subscribers) at the end of March 2005. The number of subscribers using volume only access plans (48,000) represented only 1% of total subscribers at the end of March 2005.

Some 735,000 business and government subscribers (87%) accessed the Internet via monthly/quarterly/annual plans, while the same proportion (87%) or almost 4.5 million household subscribers selected these plans.

ACCESS TECHNOLOGY

While 30% of total subscribers used non dial-up access technologies to access the Internet at the end of the March quarter 2005, the majority of subscribers (almost 4.2 million) continued to utilise dial-up access technologies. However, the proportion of dial-up subscribers continued to fall, reaching a historic low of almost 70% of total subscribers. By contrast, non dial-up subscribers have increased by almost 39% in the same period. DSL recorded the strongest growth amongst the non dial-up connection technologies with Internet subscribers increasing from 822,000 subscribers (14% of total subscribers) at the end of September 2004 to almost 1.3 million subscribers (over 21% of total subscribers) at the end of March 2005.

ACCESS TECHNOLOGY continued

Using the definition of broadband adopted by the ABS (those 'always on' technologies providing access speeds of 256kbps or greater), there were almost 1.8 million broadband subscribers at the end of March 2005, an increase of almost 39% over the 1.29 million broadband subscribers recorded at the end of September 2004. Broadband subscribers represented almost 30% of all Internet subscribers.

While household subscribers comprise the majority of broadband connections (78% or almost 1.4 million), these technologies represented only 27% of total household subscribers. A much higher proportion of business and government subscribers (398,000 or 47% of all business and government subscribers) have taken advantage of faster access speeds.

INTERNET SUBSCRIBERS(a), by access technology, by subscriber type, by ISP

	DIAL-UP		NON DIAL-U	Р	TOTAL	TOTAL			
		Proportion		Proportion		Proportion			
	Number of	of	Number of	of	Number of	of			
	subscribers	subscribers	subscribers	subscribers	subscribers	subscribers			
	'000	%	'000	%	'000	%			
• • • • • • •	• • • • • • • •	• • • • • • • •	• • • • • • • • • • • •	• • • • • • •		• • • • • • •			
	BUS	SINESS AF	ND GOVERNME	NT SUBS	CRIBERS				
Very small	1	_	2	1	3	_			
Small	16	4	19	5	35	4			
Medium	66	15	42	10	108	13			
Large	85	20	100	24	185	22			
Very large	266	61	249	60	514	61			
Total	433	100	412	100	845	100			
		HOU	SEHOLD SUBS	CRIBERS					
Very small	3	_	1	_	5	_			
Small	80	2	15	1	95	2			
Medium	302	8	48	3	351	7			
Large	436	12	163	12	600	12			
Very large	2 922	78	1 163	84	4 085	80			
Total	3 744	100	1 391	100	5 135	100			
• • • • • • •						• • • • • • •			
			ALL SUBSCRIE	BERS					
Very small	4	_	4	_	8	_			
Small	96	2	34	2	130	2			
Medium	368	9	90	5	458	8			
Large	521	12	263	15	785	13			
Very large	3 188	76	1 411	78	4 599	77			
Total	4 177	100	1 802	100	5 980	100			

nil or rounded to zero (including null cells)

⁽a) As at the end of March quarter 2005.

⁽b) See paragraph 6 of the Explanatory Notes for a description of ISP size categories.



2.2 INTERNET SUBSCRIBERS(a), by access plans, by subscriber type, by ISP size(b) .

	MONTHLY/ Q		HOURLY AC	CESS	VOLUME ONL	LY ACCESS	FREE & OTH ACCESS CO		TOTAL ALL	ACCESS
		Proportion		Proportion		Proportion		Proportion		Proportion
	Number of	of	Number of	of	Number of	of	Number of	of	Number of	of
	subscribers	subscribers	subscribers	subscribers	subscribers	subscribers	subscribers	subscribers	subscribers	subscribers
	'000	%	'000	%	'000	%	'000	%	'000	%
			BUSINE	SS AND	GOVERNME	ENT SUBS	SCRIBERS			
Very small	np	np	np	np	np	np	_	1	3	100
Small	28	81	3	9	2	7	1	3	35	100
Medium	85	79	17	16	3	3	2	2	108	100
Large	140	75	17	9	28	15	1	_	185	100
Very large	np	np	np	np	np	np	1	_	514	100
Total	735	87	65	8	41	5	5	1	845	100
• • • • • •		• • • • • • •		• • • • • • •	• • • • • • • • •	• • • • • • •	• • • • • • • • •	• • • • • • • •	• • • • • • • •	• • • • • • •
				HOUSE	HOLD SUBS	SCRIBERS	6			
Very small	np	np	np	np	np	np	_	7	5	100
Small	73	77	15	16	2	2	5	6	95	100
Medium	252	72	79	23	6	2	14	4	351	100
Large	494	82	105	17	_	_	_	_	600	100
Very large	np	np	np	np	np	np	4	_	4 085	100
Total	4 489	87	614	12	8	_	24	_	5 135	100
• • • • • •		• • • • • • •		• • • • • • •	• • • • • • • • •	• • • • • • •	• • • • • • • • •	• • • • • • • •	• • • • • • • •	• • • • • • •
				AL	L SUBSCRI	BERS				
Very small	7	82	np	np	np	np	_	4	8	100
Small	101	78	18	14	4	3	6	5	130	100
Medium	337	74	97	21	9	2	15	3	458	100
Large	634	81	122	16	28	4	1	_	785	100
Very large	4 145	90	np	np	np	np	5	_	4 599	100
Total	5 224	87	679	11	48	1	28	_	5 980	100

nil or rounded to zero (including null cells)

np not available for publication but included in totals where applicable, (b) See paragraph 6 of the Explanatory Notes for a description of ISP size unless otherwise indicated

⁽a) As at the end of March 2005.

categories.



2.3 INTERNET SUBSCRIBERS AND ISPS, by access technology

	SEPTEMBER	QUARTER 200	4	MARCH QUA	MARCH QUARTER 2005			
	Number of Proportion ISPs providing Number of of subscribers subscribers subscribers with this access technology(a)		Number of subscribers	Proportion of subscribers	subscribers			
	'000	%	no.	'000	%	no.		
• • • • • • • • • • • • • • • • • • • •	• • • • • • • •	• • • • • • • •	• • • • • • • • •	• • • • • • • • • • • • •	• • • • • • • •	• • • • • • • • •		
Dial-up								
Analog	4 358	76	610	4 110	69	602		
ISDN (Digital)	82	1	115	67	1	114		
Satellite/Other combined	_	_	25	_	_	17		
Total	4 441	77	614	4 177	70	607		
Non Dial-up								
Analog	11	_	38	11	_	23		
DSL	822	14	549	1 256	21	550		
ISDN (Digital)	50	1	98	11	_	72		
Cable/Satellite combined	399	7	163	483	8	165		
Fixed Wireless	6	_	81	31	1	90		
Mobile Wireless	9	_	42	7	_	43		
Other	3	_	15	3	_	8		
Total	1 300	23	596	1 802	30	615		
Total	5 741	100	687	5 980	100	689		

 [—] nil or rounded to zero (including null cells)

⁽a) As ISPs are counted for each technology provided, totals may not equal the sum of components.



2.4 INTERNET SUBSCRIBERS AND ISPS, by subscriber type, by download speed

	SEPTEMBER	QUARTER 200)4	MARCH QUARTER 2005			
	Number of subscribers	Proportion of subscribers %	Number of ISPs reporting subscribers within this download speed range(a)	Number of subscribers '000	Proportion of subscribers %	Number of ISPs reporting subscribers within this download speed range(a)	
• • • • • • • • • • • • • • • • • • • •		,		• • • • • • • • • • • • • • • • • • • •	,,,		
BUSIN	ESS AND	GOVERNA	MENT SUBSCF	RIBERS			
Less than 256kbps	535	63	526	447	53	508	
Broadband(b) 256kbps to less than 512kbps 512kbps to less than 1.5Mbps 1.5Mbps or greater Total Broadband (256kbps or greater)	140 84 87 311	17 10 10 37	459 434 359 548	151 130 117 398	18 15 14 47	445 452 371 543	
Total all access speeds	846	100	614	845	100	602	
•••••	HOUSE	HOLD SUE	BSCRIBERS	• • • • • • • • • •		• • • • • • • •	
Less than 256kbps	3 916	80	574	3 746	73	565	
Broadband(b) 256kbps to less than 512kbps 512kbps to less than 1.5Mbps 1.5Mbps or greater Total Broadband (256kbps or greater)	390 222 368 979	8 5 8 20	446 346 367 473	508 398 482 1 388	10 8 9 27	469 390 251 501	
Total all access speeds	4 895	100	613	5 135	100	622	
• • • • • • • • • • • • • • • • • • • •	AL	L SUBSCR	BERS	• • • • • • • • • •	• • • • • • • •	• • • • • • • •	
Less than 256kbps	4 451	78	624	4 193	70	612	
Broadband(b) 256kbps to less than 512kbps 512kbps to less than 1.5Mbps 1.5Mbps or greater Total Broadband (256kbps or greater)	530 305 454 1 290	9 5 8 22	544 483 397 598	659 529 599 1 787	11 9 10 30	553 514 427 610	
Total all access speeds	5 741	100	687	5 980	100	689	

⁽a) As ISPs are counted for each download speed range, totals may (b) An 'always on' Internet connection with an access speed equal to not equal the sum of components.

or greater than 256Kbps.

CHAPTER 3

ISPS AND SPAM

ISPS

Of the 689 active ISPs in Australia at the end of March 2005, 521 (almost 76%) offered their subscribers a SPAM filtering product as either a free or charged service. This was a four percentage point increase from the end of September 2004. At the end of March 2005, there were 421 ISPs offering SPAM filtering products as a free service, 43 ISPs offering SPAM filtering products as a charged service and a further 57 ISPs who provided both a free and charged service.

SUBSCRIBERS

At the end of March 2005, 32% of all subscribers (over 1.9 million Internet subscribers) had adopted a SPAM filtering product offered by their ISP, an increase of over 40% from the proportion recorded at the end of September 2004 (24% of all subscribers). Some 262,000 business and government subscribers (31%) had adopted a SPAM filtering product offered by their ISP at the end of March 2005. This compared with the nearly 1.7 million household subscribers (almost 33%) who had also done so.

The uptake of SPAM filtering products was similar across both access types with 34% of dial-up subscribers and almost 28% of non dial-up subscribers having adopted these services. This compared with take up of 25% for dial-up subscribers and 21% for non dial-up subscribers recorded at the end of September 2004. When cross-classified by subscriber type, the uptake for business and government non dial-up subscribers at the end of March 2005 increased to 29% (120,000 subscribers) while the uptake by household non dial-up subscribers increased from 200,000 to 381,000 or 27% of that total population.

It should be noted that the IAS only measures the uptake of SPAM filtering products by subscribers where the product is supplied by the ISP. There are many other alternatives available to subscribers including the purchase and downloading of software available on the Internet, and the downloading of freeware from the Internet.

3.1 ISPS AND SPAM FILTERING PRODUCTS, by type of service offered

	September Quarter 2004	March Quarter 2005
	no.	no.
• • • • • • • • • • • • • • • • • • • •	• • • • • • •	• • • • •
ISPs offering SPAM filtering products as a free service only	386	421
ISPs offering SPAM filtering products as a charged service only	40	43
ISPs offering SPAM filtering products as both a free and a charged service	71	57
ISPs not offering a SPAM filtering product	190	168

INTERNET SUBSCRIBERS ADOPTING AND ISPS OFFERING SPAM FILTERING PRODUCTS, by access technology, by subscriber type(a)

	SEPTEMBER				
	QUARTER 200)4	MARCH QUARTER 2005		
		Subscribers	Subscribers		
	Number of	who have	Number of	who have	
	ISPs offering	adopted	ISPs offering	adopted	
	SPAM	SPAM	SPAM	SPAM	
	filtering	filtering	filtering	filtering	
	products(b)	products	products(b)	products	
	no.	'000	no.	'000	
• • • • • • • • • • • • • • • • • • • •		• • • • • • • • • •	• • • • • • • • • •	• • • • • • •	
Dial-up					
Business and government	375	141	372	141	
Household	418	968	432	1 295	
Total	444	1 109	454	1 437	
Non dial-up					
Business and government	393	73	415	120	
Household	354	200	383	381	
Total	428	273	461	501	
Total					
Business and government	442	214	454	262	
Household	439	1 168	467	1 677	
Total	497	1 382	521	1 938	
				• • • • • • •	

⁽a) Data are only for SPAM filtering products supplied by ISPs.

⁽b) As ISPs are counted for each type of subscriber, totals may not equal sum of components.

CHAPTER 4

DATA DOWNLOADED

ALL ACCESS
TECHNOLOGIES

There were 14,124 million megabytes (MB) of data downloaded by subscribers during the three months ended 31 March 2005. This was an increase of 28% from the 11,004 million MBs downloaded by subscribers during the three months ended 30 September 2004.

An average of 2,435 MBs per subscriber was downloaded during the three months ended 31 March 2005. This was an increase of 378 MBs per subscriber or 18% over the September quarter 2004 figure of 2,057 MBs per subscriber. Please refer to the Glossary for a description of how average data downloaded per subscriber is calculated.

Household subscribers, representing 86% of all subscribers, downloaded 10,565 million MBs (75% of all data downloaded). This resulted in an average of 2,132 MBs per household subscriber, an increase of 290 MBs per subscriber or 16% over the September quarter 2004 figure of 1,842 MBs per subscriber.

The strongest growth was reported by business and government subscribers who downloaded 3,559 million MBs during the three months ended 31 March 2005. This was an increase of 999 million MBs (39%) from the September quarter 2004. Average downloads per business and government subscriber rose by 869 MBs (26%) to 4,209 MBs per subscriber.

DIAL-UP AND NON DIAL-UP ACCESS TECHNOLOGIES Non dial-up subscribers downloaded 12,254 million MBs during the three months ended 31 March 2005. This was an increase of 32% since the end of September 2004 and represented 87% of total data downloaded.

This growth was driven by a 39% increase in the number of non dial-up subscribers as the average volume of data downloaded by non dial-up subscribers fell by 10% for the same period, from 9,565 MBs during the September quarter 2004 to 8,594 MBs during the March quarter 2005. In contrast, while dial-up subscribers downloaded 1,870 million MBs, an increase of 9% for the same period, their average Mbs downloaded per subscriber increased by 9% from 392 MBs per dial-up subscriber during the September quarter 2004 to an average of 428 MBs per subscriber during the March quarter 2005.

Business and government non dial-up subscribers downloaded 3,255 million MBs at an average of 9,462 MBs per subscriber, while household non dial-up subscribers downloaded a total of 8,999 million MBs at an average of 8,318 MBs per subscriber. In comparison, business and government dial-up subscribers downloaded 304 million MBs at an average of 606 MBs per subscriber, while download levels for household dial-up subscribers increased by 7% to 1,566 million MBs, an average of 404 MBs per subscriber for the three months ended 31 March 2005.

VOLUME OF DATA DOWNLOADED, by access technology, by subscriber type, by ISP size(a)

	SEPTEMBER QUARTER 2004						MARCH	MARCH QUARTER 2005				
		Dial-up	Non d	lial-up		Total		Dial-up		dial-up		Total
	million MBs	%	million MBs	%	million MBs	%	million MBs	%	million MBs	%	million MBs	%
	IVIDS	/0	IVIDS	/0	IVIDS	/0	IVIDS	/0	IVIDS	/0	IVIDS	/0
• • • • • • •	• • • • • •	• • • • •	• • • • • • • • •	• • • • •	• • • • • • • • •	• • • • •	• • • • • • • •	• • • • •	• • • • • • • • •	• • • • •	• • • • • • • •	• • • •
			BUSI	NESS	AND GOV	ERNN	MENT SUB	SCRI	BERS			
Very small	1	_	57	2	57	2	1	_	43	1	44	1
Small	13	5	230	10	243	10	11	4	251	8	262	8
Medium	25	10	250	11	275	11	80	26	577	18	658	18
Large	70	28	835	36	905	35	168	55	1 165	36	1 333	37
Very large	144	57	935	41	1 079	42	44	14	1 218	37	1 262	35
Total	253	100	2 307	100	2 560	100	304	100	3 255	100	3 559	100
• • • • • • •					• • • • • • • •	• • • • •	• • • • • • •					• • • •
				Н	OUSEHOLI	D SUE	BSCRIBER	S				
Very small	1	_	18	_	19	_	1	_	17	_	18	_
Small	37	2	91	1	128	2	37	3	138	2	175	2
Medium	115	8	309	4	424	5	185	12	441	5	626	6
Large	254	17	1 543	22	1 797	21	215	14	1 858	21	2 073	20
Very large	1 059	72	5 018	72	6 077	72	1 128	72	6 545	73	7 673	72
Total	1 465	100	6 979	100	8 444	100	1 566	100	8 999	100	10 565	100
• • • • • • •					• • • • • • • •	• • • • •	• • • • • • • •			• • • •	• • • • • • • •	• • • •
					ALL SU	BSCF	RIBERS					
Very small	2	_	74	1	76	1	2	_	60	1	62	1
Small	50	3	321	3	371	3	48	3	389	3	437	3
Medium	140	8	559	6	699	6	265	14	1 019	8	1 283	9
Large	324	19	2 378	26	2 702	25	383	20	3 023	25	3 406	24
Very large	1 203	70	5 953	64	7 156	65	1 172	62	7 763	63	8 935	63
Total	1 718	100	9 287	100	11 004	100	1 870	100	12 254	100	14 124	100

nil or rounded to zero (including null cells)

⁽a) See paragraph 6 of the Explanatory Notes for a description of the



AVERAGE DATA DOWNLOADED BY SUBSCRIBERS(a), by access technology, by subscriber type, by ISP size(b)

	SEPTEMBER	QUARTER 2004		MARCH QUAR	TER 2005	
	Dial-up	Non dial-up	Total	Dial-up	Non dial-up	Total
	MB/subscriber	MB/subscriber	MB/subscriber	MB/subscriber	MB/subscriber	MB/subscriber
• • • • • • • •	• • • • • • • •	• • • • • • • • •	• • • • • • • • • • • •	• • • • • • • • •	• • • • • • • •	• • • • • • • •
	BUSI	NESS AND	GOVERNMENT	SUBSCRI	BERS	
Very small	387	24 455	15 710	542	17 879	12 576
Small	635	13 746	6 493	622	12 750	6 973
Medium	346	8 956	2 769	1 211	15 828	6 399
Large	924	10 749	5 888	1 720	13 845	7 336
Very large	429	6 859	2 285	139	6 051	2 428
Total	500	8 839	3 340	606	9 462	4 209
• • • • • • • •	• • • • • • • •	• • • • • • • • •	• • • • • • • • • • • •	• • • • • • • • •	• • • • • • • •	• • • • • • • •
		HOUSE	HOLD SUBSCR	IBERS		
Very small	379	19 424	4 330	416	18 172	4 305
Small	422	9 440	1 328	439	11 305	1 809
Medium	348	9 210	1 166	616	9 128	1 798
Large	490	16 428	2 941	412	14 008	3 166
Very large	361	8 776	1 732	381	7 372	1 992
Total	378	9 832	1 842	404	8 318	2 132
• • • • • • • •	• • • • • • • •	• • • • • • • • •	• • • • • • • • • • • •	• • • • • • • • •	• • • • • • • •	• • • • • • • •
		AL	L SUBSCRIBER	RS		
Very small	381	23 048	9 523	447	17 961	8 007
Small	464	12 170	2 776	471	12 198	3 256
Medium	348	9 095	1 510	723	12 009	2 846
Large	546	13 858	3 533	618	13 945	4 072
Very large	368	8 407	1 798	357	7 128	2 044
Total	392	9 565	2 057	428	8 594	2 435

⁽a) See Glossary item 'Average data downloaded per subscriber' for a description of the calculation process.

⁽b) See paragraph 6 of the Explanatory Notes for a description of ISP size categories.

EXPLANATORY NOTES

INTRODUCTION

1 This publication presents results from the Internet Activity Survey (IAS) conducted in respect of the three months ending 31 March 2005.

CENSUS SCOPE AND METHODOLOGY

- 2 The IAS is a census that covers all identified Internet Service Providers (ISPs) providing Internet access across Australia. The scope of the IAS is all Australian based ISPs operating at the end of the reference period. ISPs are defined as businesses that supply Internet connectivity and access services to individuals, households, businesses, government and other organisations. Libraries, Internet kiosks and Internet cafes which provide Internet access on a casual basis are excluded from the census. The primary source of the IAS population frame is the Telecommunications Industry Ombudsman (TIO) with which ISPs are required to register. The TIO list is supplemented with ISPs identified from other sources such as Internet association membership lists and industry media.
- **3** The IAS is conducted as a mail-out, mail-back census.

SUBSCRIBERS

4 Active subscribers are defined as subscribers having accounts with ISPs who have accessed the Internet or paid for access to the Internet during the three months of the reference period. Counts of subscribers are not the same as counts of people/organisations with Internet access because subscribers may have accounts with more than one ISP. Conversely, a single ISP subscriber account may provide Internet access (or email addresses) for several people/organisations.

STATISTICAL UNIT

- **5** The unit for which statistics were reported in the census was the legal entity providing Internet access.
- **6** ISPs in this census have been classified by size according to the number of subscribers ISPs reported for at the end of the reference period. The size categories are defined as follows:

Very small ISP1-100 subscribersSmall ISP101-1,000 subscribersMedium ISP1,001-10,000 subscribersLarge ISP10,001-100,000 subscribersVery large ISP100,001+ subscribers

REFERENCE PERIOD

- 7 Until March 2005, the IAS was conducted biannually and the reference quarters were March and September. This equated to the end of March and September for most data items collected and the three months ended March and September for volume of data downloaded. This publication includes information reported by ISPs which were operating in Australia at the end of the reference quarter. Figures on the volume of data downloaded relate to data downloaded during the three months of the reference quarter as reported by ISPs still in operation at the end of the reference quarter. No attempt is made to collect volume of data downloaded from ISPs who ceased operation during the three months to the end of the reference quarter.
- **8** Following the March quarter 2005 collection, the frequency of the IAS was to reduce from biannual to annual. Recently a decision has been made to review the collection to address ongoing concerns with the quality and relevance of the data produced. The review will consider ongoing requirements for the current range of data, new and emerging data needs related to Internet activity, methodology, scope and data collection

REFERENCE PERIOD continued

mechanisms. Pending the outcome of this review, the survey has been suspended for at least the period up to September 2006.

RELIABILITY OF DATA

- **9** As the IAS does not have a sample component, the data are not subject to sampling variability. However, other inaccuracies, collectively referred to as non-sampling errors, may affect the data. These non-sampling errors may arise from a number of sources, including:
 - errors in the reporting of data by respondents;
 - errors in capturing or processing of data;
 - estimation for missing or misreported data; and
 - definition and classification errors.
- **10** Every effort has been made to reduce non-sampling error to a minimum by careful design and testing of questionnaires, efficient operating procedures and systems, and appropriate methodology.
- **11** Estimates for data at the state/territory level are derived from the data provided for POPs (Points of Presence or servers). In recent cycles, changing access technologies, infrastructure and operational arrangements have been impacting on the quality of the data at the POP level. As a result, data presented at the state/territory level should be considered only indicative measures of Internet activity at the reference date.
- **12** The same issues related to the quality of POP data have had a more significant impact at the Statistical Division level. These data cannot be adequately quality assured and could present misleading indicators of regional activity and usage. These data are no longer available for release.

ACKNOWLEDGMENT

- **13** ABS publications draw extensively on information provided freely by individuals, businesses, governments and other organisations. Their continued cooperation is very much appreciated. Without it, the wide range of statistics published by the ABS would not be available. Information received by the ABS is treated in strict confidence as required by the *Census and Statistics Act 1905*.
- **14** In particular, the ABS acknowledges the assistance of the TIO in providing regular lists of registered ISPs.

RELATED PUBLICATIONS

15 Other ABS publications on information technology and telecommunications in Australia are:

Business Use of Information Technology, 2003–04, cat. no. 8129.0 Government Technology, Australia, 2002–03, cat. no. 8119.0 Household Use of Information Technology, Australia, 2002 and 2003, cat. no. 8146.0

Information and Communication Technology, Australia 2002–03, cat. no. 8126.0 Use of Information Technology on Farms, Australia, 2002–03, cat. no. 8150.0

DATA AVAILABLE ON REQUEST

16 As well as the statistics included in this and related publications, the ABS may have other relevant data available on request and for a charge. Inquiries should be made to the National Information and Referral Service on 1300 135 070.

MORE INFORMATION ON ABS INFORMATION TECHNOLOGY STATISTICS

17 Information about ABS activities in the field of information technology statistics is available from the Industry/ Information Technology theme page on the ABS web site http://www.abs.gov.au.

GLOSSARY

Access plan The Internet access package options available to subscribers from ISPs.

Access lines Lines, points, ports, modem access points available to subscribers to access their ISP.

Active subscribers Subscribers who have accessed the Internet or paid for access to the Internet through an

 $\ensuremath{\mathsf{ISP}}$ in the 90 days during the reference period.

Analog/Public Switched
Telephone Network (PSTN)

A telecommunications network operated by a carrier to provide services to the public.

Average data downloaded per

subscriber

Byte

Cable

Calculated by dividing the volume of data downloaded during the three months of the reference quarter by an estimate of the number of subscribers at the midpoint of the reference quarter.

Bit Abbreviation for *bi* nary digit and describing the smallest unit of information handled by a computer. One bit expresses a 1 or a 0 in a binary numeral, or a true or false logical condition. See also Byte.

Broadband Defined by ABS as an 'always on' Internet connection with an access speed equal to or greater than 256Kbps.

Business and government subscribers

All businesses, corporations, non profit organisations and government organisations who obtain access to the Internet through an ISP. Some ISPs are unable to separate out subscriber numbers for business and government. These ISPs provide business plan subscribers as a proxy.

Abbreviation for *b*inary *te*rm. A unit of data, today almost always consisting of 8 bits. A byte can represent a single character, such as a letter, a digit, or a punctuation mark. See also kilobit and kilobyte.

Describes those technologies including coaxial cable, fibre optic cable and hybrid fibre coaxial which are capable of transmitting data at speeds of up to 2Gbps.

Data downloaded Volume of data downloaded from the Internet by subscribers in megabytes (MBs).

Dial-up subscribers Subscribers who connect to the Internet via modem and dial-up software utilising the public switched telecommunication network (PSTN).

Digital Subscriber Line (DSL) More properly referred to as xDSL as this covers several digital technologies (e.g.

asymmetric DSL or ADSL and Symmetric DSL or SDSL) for fast two-way data connections

over the PSTN.

Free access Free access to an email and web browsing account often provided by ISPs to staff or to

subscribers as part of an introductory offer or heavily subsidised by on-screen

advertising.

Fixed Wireless Internet access Point to point microwave link, generally building to building or tower to building which

allows subscribers within the receiving building to access the Internet. Sender and

receiver must be within line of sight and no more than 22 kilometres apart.

Hourly access plan A subscription option where customers pay for Internet access on an hours-on-line basis.

Household subscribers Households and private individuals who subscribe to Internet access via an ISP. This may include some home based businesses. Some ISPs are unable to separate out subscriber

numbers for households. These ISPs provide residential plan subscribers as a proxy.

Internet

A world-wide public computer network. Organisations and individuals can connect their computers to this network and exchange information across a country and/or across the world. The Internet provides access to a number of communication services including the World Wide Web and carries email, news, entertainment and data files.

Internet Service Provider (ISP)

Resident Australian individuals or businesses offering Internet access services to customers.

Integrated Services Digital Network (ISDN) A digital access technique for both voice and data. Digital alternative to an analog public switched telephone service and carries data or voltages consisting of discrete steps or levels, as opposed to continuously variable analog data. ISDN enables digital transmission over the PSTN.

Kilobit (Kb)

A data unit of 1,024 bits and generally abbreviated as kb or kbit. Data speeds are generally referred to in kilobits (kbps) rather than kilobytes.

Kilobyte (KB)

A data unit of 1,024 bytes and generally abbreviated as KB or Kbyte.

Megabit (Mb)

A data unit of 1,048, 576 bits, sometimes interpreted as 1 million bits. Faster data speeds are generally referred to in megabits rather than megabytes (hence Mbps)

Megabyte (MB)

A data unit of 1,048, 576 bytes, sometimes interpreted as 1 million bytes.

Mobile Wireless Internet access

Mobile Internet access via 'hotspots' using a microwave connection often referred to as WiFi. Most commonly utilised by laptop users although it is also becoming increasingly popular within homes and businesses with multiple computers.

Monthly/quarterly/annual access plan

A subscription option where customers pay a flat monthly/quarterly/annual fee, and receive either a set period of time online during the month/quarter/year, usually with additional fees for exceeding that time or set download limits, or a flat monthly/quarterly/annual fee for unlimited access time during the month/quarter/year with other limits usually applying e.g. maximum single session times.

Non Dial-up connections

Refers to permanent and 'always on' connections to the Internet via a variety of technologies including Integrated Services Digital Network (ISDN), Digital Subscriber Lines (DSL), Cable, Wireless, Satellite, dedicated data service, frame relay, etc.

PSTN

See Analog/Public Switched Telephone Network (PSTN).

Satellite/communications

satellite

A satellite stationed in geosynchronous orbit that acts as a microwave relay station, receiving signals sent from a ground based station, amplifying them, and retransmitting them on a different frequency to another ground-based station. Satellites can be used for high-speed transmission of computer data.

SPAM

SPAM is defined as unsolicited electronic messaging, regardless of its content.

Subscriber

An ISP customer to whom Internet access is provided. Included are paying and non paying customers, email only subscribers, dial-up subscribers and those with permanent (non dial-up) connections. Excluded are customers who purchase other services from an ISP, such as web hosting, but do not obtain Internet access.

Volume Only

Volume only plan subscribers are only billed for data downloaded. They do not pay for time spent online and pay no monthly/quarterly/annual access fees but can be billed by any of these periods for data downloaded.

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