



INTERNET ACTIVITY

AUSTRALIA

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- 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 in Australia. This publication contains results from all identified ISPs operating in Australia at 31 March 2004.

DATA QUALITY

A number of reporting errors relating to the data on subscribers adopting a SPAM filtering product were discovered for the previous cycle. As a result, the September quarter 2003 figures for the number of subscribers who have adopted SPAM filtering products have been revised downwards from 2.48 million to 837,000.

Estimates for data at the State/Territory level are derived from data provided for POPs (Point 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.

CHANGES TO COLLECTION FREQUENCY

The ABS has conducted a review of the collection. As a result, the IAS will change from a biannual to an annual frequency following the completion of the September 2004 collection. The annual collection will continue to measure changes in the structure of the ISP industry and the number of Australian households and organisations obtaining access to the Internet through ISPs.

CHANGES IN THIS ISSUE

Two new tables have been added to this issue; the first, showing the distribution of subscribers by type and ISP size, has been added to Chapter 2: Subscriber Characteristics, whilst the second, showing average data downloads per subscriber by type and ISP size, has been added to Chapter 4: Data Downloaded.

A change has been made to the question on SPAM filtering products and their provision by ISPs. An additional category was included to capture those ISPs who provided SPAM filtering products as both a free and a charged service. Previously only an either/or response could be given.

COMMENTS

Comments and suggestions for both survey content and this publication are welcome and should be addressed to the Director, Innovation & Technology Business Statistics Centre, GPO Box K881, Perth, WA, 6842.

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
ISP Internet service provider
POP point of presence
TIO Telecommunications Industry Ombudsman

Dennis Trewin
Australian Statistician



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HIGHLIGHTS

- At the end of the March quarter 2004, total Internet subscribers in Australia numbered just over 5.2 million, an increase of 9,000 (0.2%) from the end of September quarter 2003. This modest increase follows a slightly larger increase in the previous cycle, (3%) for the six months to the end of the September quarter 2003.
- Whilst the March quarter 2004 showed only a minimal increase in the total number of subscribers, of more interest is the compositional shift in access technologies from dial-up to non dial-up.
- Dial-up subscriber numbers in Australia fell by 163,000 (4%) in the six months to the end of the March quarter 2004, and now account for 84% of total subscribers. This continued a pattern of decline evident since March quarter 2003 when 91% of total subscribers accessed the Internet via dial-up technology.
- The number of non dial-up subscribers grew from 690,000 at the end of the September quarter 2003 to 861,000 at the end of the March quarter 2004, an increase of 171,000 (25%) reflecting the continuing move toward these technologies. Digital Subscriber Line (DSL) subscriber numbers again showed strong growth from 372,000 in the September quarter 2003 to 512,000 in the March quarter 2004, an increase of 140,000 (38%).
- There were 694 ISPs supplying Internet access to 5.2 million active subscribers at the end of the March quarter 2004. This is an increase of 27 ISPs (4%) over the six months to the end of the September quarter 2003.
- 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 834,000 broadband subscribers at the end of the March quarter 2004, an increase of 27% from the end of the September quarter 2003.
- Data downloaded by subscribers during the March quarter 2004 increased by 37% from 4,665 million MBs to 6,409 million MBs. Reflecting the much faster download speeds available with non dial-up technology, these non dial-up subscribers increased their usage by 53% and accounted for over 75% of the total data downloaded whilst dial-up subscribers increased their downloads by just 5%.

1.1 INTERNET ACTIVITY SUMMARY, Australia

		2002		2003		2004
		March Quarter	September Quarter	March Quarter	September Quarter	March Quarter
ISPs(a)(b)						
Very small	no.	102	102	110	153	176
Small	no.	276	254	251	316	319
Medium	no.	161	172	160	163	165
Large	no.	26	29	26	27	25
Very large	no.	6	6	7	8	9
Total	no.	571	563	554	667	694
Internet Access Lines(b)						
Dial-up	no.	—	—	—	626 554	623 839
Non Dial-up	no.	—	—	—	680 933	850 506
Total	no.	447 050	639 197	857 470	1 307 487	1 474 345
Subscribers(b)						
Dial-up						
Business and government	'000	—	—	520	505	499
Household	'000	—	—	4 087	4 017	3 859
<i>Total</i>	'000	—	—	4 607	4 522	4 359
Non Dial-up						
Business and government	'000	—	—	139	190	241
Household	'000	—	—	331	499	620
<i>Total</i>	'000	—	—	470	690	861
Total						
Business and government	'000	505	650	659	696	740
Household	'000	3 724	3 904	4 417	4 516	4 480
Total	'000	4 229	4 555	5 076	5 211	5 220
Data Downloaded(c)						
Dial-up						
Business and government	million MBs	—	—	—	178	137
Household	million MBs	—	—	—	1 341	1 457
<i>Total</i>	million MBs	—	—	—	1 520	1 594
Non Dial-up						
Business and government	million MBs	—	—	—	1 169	1 294
Household	million MBs	—	—	—	1 976	3 521
<i>Total</i>	million MBs	—	—	—	3 145	4 815
Total						
Business and government	million MBs	528	740	782	1 347	1 431
Household	million MBs	1 303	2 172	2 264	3 317	4 978
Total	million MBs	1 831	2 913	3 046	4 665	6 409

— nil or rounded to zero (including null cells)

(b) As at the end of the reference quarter

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

(c) During the three months of the reference quarter

1.2 INTERNET ACTIVITY SUMMARY, State and territory

		2002		2003		2004
		March Quarter	September Quarter	March Quarter	September Quarter	March Quarter
NEW SOUTH WALES						
ISPs(a)	no.	236	240	212	236	254
Access lines(b)	no.	160 100	241 541	295 563	449 591	470 122
All subscribers(b)	'000	1 441	1 583	1 770	1 828	1 782
Data downloaded(c)	million MBs	676	1 132	1 074	1 672	2 034
VICTORIA						
ISPs(a)	no.	212	198	187	213	215
Access lines(b)	no.	114 544	163 855	241 274	347 371	395 898
All subscribers(b)	'000	1 045	1 180	1 338	1 394	1 413
Data downloaded(c)	million MBs	457	709	847	1 197	1 721
QUEENSLAND						
ISPs(a)	no.	151	150	146	170	173
Access lines(b)	no.	77 432	102 767	143 362	219 800	249 848
All subscribers(b)	'000	863	822	886	923	944
Data downloaded(c)	million MBs	308	524	464	688	999
SOUTH AUSTRALIA						
ISPs(a)	no.	74	65	57	62	60
Access lines(b)	no.	31 394	34 807	44 386	84 533	90 480
All subscribers(b)	'000	294	328	347	343	360
Data downloaded(c)	million MBs	125	141	193	396	572
WESTERN AUSTRALIA						
ISPs(a)	no.	100	92	85	96	94
Access lines(b)	no.	42 647	65 044	86 538	137 786	187 431
All subscribers(b)	'000	386	411	472	472	480
Data downloaded(c)	million MBs	173	273	303	522	798
TASMANIA						
ISPs(a)	no.	30	28	22	24	22
Access lines(b)	no.	9 159	12 404	20 876	28 109	34 697
All subscribers(b)	'000	88	98	109	107	107
Data downloaded(c)	million MBs	36	49	60	78	126
NORTHERN TERRITORY						
ISPs(a)	no.	21	23	15	18	18
Access lines(b)	no.	3 661	4 701	6 860	9 340	13 363
All subscribers(b)	'000	43	37	38	35	32
Data downloaded(c)	million MBs	16	19	26	25	35

(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

1.2INTERNET ACTIVITY SUMMARY, State and territory *continued*

		2002		2003		2004
		March Quarter	September Quarter	March Quarter	September Quarter	March Quarter
AUSTRALIAN CAPITAL TERRITORY						
ISPs(a)	no.	46	44	37	38	34
Access lines(b)	no.	8 113	14 078	18 611	30 957	32 506
All subscribers(b)	'000	71	95	116	110	102
Data downloaded(c)	million MBs	40	66	80	87	126

AUSTRALIA

ISPs(a)	no.	571	563	554	667	694
Access lines(b)	no.	447 050	639 197	857 470	1 307 487	1 474 345
All subscribers(b)	'000	4 229	4 555	5 076	5 211	5 220
Data downloaded(c)	million MBs	1 831	2 913	3 046	4 665	6 409

(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

SUBSCRIBERS

At the end of the March quarter 2004, there were 5.2 million active Internet subscribers in Australia, comprised of almost 4.5 million household subscribers and 740,000 business and government subscribers.

The majority of subscribers (74%) access the Internet via services provided by Very large ISPs. Internet service provision is not dominated by Very large ISPs amongst non dial-up business and government subscribers where the remaining ISP size groups service 50% of subscribers.

At the end of the March quarter 2004, the number of household Internet subscribers had fallen by 36,000 (1%) following a 2% increase in the previous September 2003 cycle. However, household subscribers still accounted for the majority (86%) of total subscribers. There was growth in business and government subscribers, with an increase of 44,000 subscribers or 6% from the September quarter 2003.

ACCESS PLANS

The majority of Internet subscribers remain on either monthly/quarterly/annual plans (88% or 4.6 million subscribers), or hourly access plans (10% or 0.5 million subscribers).

The number of subscribers opting for monthly/quarterly/annual plans at the end of March 2004 increased by 473,000 (11%) subscribers from the number recorded at the end of the September quarter 2003. During the same period, hourly access plans decreased in popularity, falling from 921,000 subscribers at the end of the September quarter 2003, to 509,000 at the end of the March quarter 2004.

The number of subscribers choosing volume only access plans increased slightly (4%), with 88,000 subscribers now using these plans, growing from 85,000 subscribers at the end of the September quarter 2003.

Approximately 618,000 business and government subscribers (84%) accessed the Internet via monthly/quarterly/annual plans, while almost 4 million household subscribers (89%) selected these plans.

ACCESS TECHNOLOGY

Despite the significant fall recorded in dial-up subscribers (a decrease of almost 4% or 163,000 subscribers from the end of the September quarter 2003), the vast majority of subscribers (over 4.3 million) continue to utilise this access technology. By contrast, the number of subscribers with a non dial-up connection has increased by 171,000 subscribers (25%) to 861,000 at the end of the March quarter 2004. Non dial-up subscribers now comprise 16% of all subscribers while dial-up subscribers have fallen 3% to a historic low of 84%.

ACCESS TECHNOLOGY

continued

DSL recorded the strongest growth amongst the non dial-up connection technologies with Internet subscribers increasing from 372,000 (just over 7% of total subscribers) at the end of the September quarter 2003 to 512,000 subscribers (almost 10% of total subscribers) at the end of the March quarter 2004.

Using the definition of broadband adopted by the ABS (those technologies providing access speeds of 256kbps or greater), the number of broadband subscribers at the end of the March quarter 2004 is now 834,000 representing an increase of 37% over the September quarter 2003 total of 657,000 subscribers. Broadband subscribers now represent 16% of all Internet subscribers.

While household subscribers comprise the majority of broadband connections (73%), these technologies represent only 14% of total household subscribers. A much higher proportion of business and government subscribers (225,000 or 30% of all business and government subscribers) have taken advantage of faster access speeds.

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

	DIAL-UP		NON DIAL-UP		TOTAL	
	<i>Percentage of</i>		<i>Percentage of</i>		<i>Percentage of</i>	
	<i>Subscribers</i>	<i>subscribers</i>	<i>Subscribers</i>	<i>subscribers</i>	<i>Subscribers</i>	<i>subscribers</i>
	'000	%	'000	%	'000	%
.....						
BUSINESS AND GOVERNMENT SUBSCRIBERS						
Very small	1	—	2	1	4	1
Small	21	4	16	6	37	1
Medium	73	15	26	11	99	13
Large	68	14	77	32	145	20
Very large	336	67	120	50	456	62
Total	499	100	241	100	740	100
.....						
HOUSEHOLD SUBSCRIBERS						
Very small	3	—	1	—	4	—
Small	87	2	9	1	96	2
Medium	341	9	29	5	369	8
Large	506	13	84	14	590	13
Very large	2 923	76	497	80	3 420	76
Total	3 859	100	620	100	4 480	100
.....						
ALL SUBSCRIBERS						
Very small	5	—	3	—	8	—
Small	108	2	25	3	133	3
Medium	414	9	54	6	468	9
Large	573	13	162	19	735	14
Very large	3 259	75	617	72	3 876	74
Total	4 359	100	861	100	5 220	100

— nil or rounded to zero (including null cells)

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

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

	<i>Monthly/ quarterly/ annual access</i>		<i>Hourly access</i>		<i>Volume access</i>		<i>Free/Other access combined</i>		<i>All access plans</i>	
	'000	%	'000	%	'000	%	'000	%	'000	%
.....										
BUSINESS AND GOVERNMENT SUBSCRIBERS										
Very small	np	np	np	np	np	np	—	3	4	100
Small	26	71	6	15	4	11	1	2	37	100
Medium	66	67	27	27	4	4	2	—	99	100
Large	88	61	11	7	45	31	—	—	145	100
Very large	np	np	np	np	np	np	—	—	456	100
Total	618	84	65	9	54	7	3	—	740	100
.....										
HOUSEHOLD SUBSCRIBERS										
Very small	np	np	np	np	np	np	—	7	4	100
Small	70	73	18	19	2	3	6	6	96	100
Medium	272	74	84	23	3	1	11	3	369	100
Large	516	87	69	12	5	1	1	—	590	100
Very large	np	np	np	np	np	np	2	—	3 420	100
Total	3 983	89	444	10	33	1	19	—	4 480	100
.....										
ALL SUBSCRIBERS										
Very small	6	76	np	np	np	np	—	4	8	100
Small	97	73	24	18	6	5	6	4	133	100
Medium	338	72	111	24	7	1	12	3	468	100
Large	604	82	80	11	50	7	1	—	735	100
Very large	3 556	92	np	np	np	np	2	—	3 876	100
Total	4 601	88	509	10	88	2	22	—	5 220	100

— nil or rounded to zero (including null cells)

np not available for publication but included in totals where applicable, unless otherwise indicated

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

2.3 INTERNET SUBSCRIBERS AND ISPS, by access technology

	SEPTEMBER QUARTER 2003			MARCH QUARTER 2004		
	<i>Number of subscribers</i>	<i>Percentage of subscribers</i>	<i>Number of ISPs providing subscribers with this access (a)</i>	<i>Number of subscribers</i>	<i>Percentage of subscribers</i>	<i>Number of ISPs providing subscribers with this access (a)</i>
	'000	%	no.	'000	%	no.
Dial-up						
Analog	4 474	86	601	4 297	82	614
ISDN (Digital)	43	1	153	60	1	142
Satellite	np	np	29	np	np	25
Other	np	np	1	np	np	1
<i>Total Dial-up</i>	4 522	87	611	4 359	84	620
Non Dial-up						
Analog	31	1	169	22	—	47
DSL	372	7	439	512	10	526
ISDN (Digital)	14	—	190	10	—	131
Cable	np	np	115	np	np	78
Satellite	np	np	93	np	np	102
Fixed Wireless	5	—	118	4	—	84
Mobile Wireless	3	—	33	6	—	47
Other	6	1	17	6	1	10
<i>Total non Dial-up</i>	690	13	558	861	16	584
Total	5 211	100	667	5 220	100	694

— nil or rounded to zero (including null cells)

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) ISPs are counted for each technology provided hence totals may not equal the sum of their components

2.4

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

	<i>Number of subscribers at end of reporting period</i>	<i>Number of ISPs reporting subscribers</i>	<i>Percentage of subscribers</i>
	'000	no.	%
.....			
BUSINESS AND GOVERNMENT SUBSCRIBERS			
Less than 256kbps Broadband(a)	515	540	70
256kbps to less than 512kbps	94	428	13
512kbps to less than 1.5Mbps	97	425	13
1.5Mbps to less than 2Mbps	np	327	np
2Mbps or greater	np	151	np
<i>Total Broadband</i>	225	526	30
Total all access speeds	740	620	100
.....			
HOUSEHOLD SUBSCRIBERS			
Less than 256kbps Broadband(a)	3 871	583	86
256kbps to less than 512kbps	192	404	4
512kbps to less than 1.5Mbps	244	322	5
1.5Mbps to less than 2Mbps	np	212	np
2Mbps or greater	np	43	np
<i>Total Broadband</i>	609	438	14
Total all access speeds	4 480	622	100
.....			
TOTAL ALL SUBSCRIBERS			
Less than 256kbps Broadband(a)	4 386	633	84
256kbps to less than 512kbps	287	502	5
512kbps to less than 1.5Mbps	341	469	7
1.5Mbps to less than 2Mbps	np	358	np
2Mbps or greater	np	157	np
<i>Total Broadband</i>	834	576	16
Total all access speeds	5 220	694	100

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) See Glossary for definition of broadband

BACKGROUND

Many ISPs have provided SPAM filtering products to their subscribers either as a free or a charged product; the latter being included in subscription fees or paid separately. From the September quarter 2003, the IAS has collected data relating to SPAM filtering products made available by ISPs and their uptake amongst Internet subscribers.

In the process of routine checking and quality assurance for the March 2004 cycle, reporting errors were found for the previous period. As a result the September quarter 2003 figures for the number of subscribers adopting SPAM filtering products have been revised downwards from 2.48 million to 837,000 (66%).

ISPS

Of the 694 active ISPs in Australia at the end of the March quarter 2004, 65% offered their subscribers a SPAM filtering product as either a free or charged service. This was a 7% increase from September quarter 2003. At the end of the March quarter 2004, there were 354 ISPs offering SPAM filtering products as a free service, 44 ISPs offering SPAM filtering products as a charged service and a further 50 ISPs who provided both a free and charged service.

SUBSCRIBERS

At the end of the March quarter 2004, slightly more than 1 million Internet subscribers (19% of all subscribers) had adopted a SPAM filtering product offered by their ISP, an increase of 20% over the revised September quarter 2003 figure. Almost 149,000 business and government subscribers (20%) had adopted a SPAM filtering product offered by their ISP at the end of the March quarter 2004. This is a similar proportion to the 856,000 household subscribers (19%) who had also done so.

The uptake of SPAM filtering products is very similar across both access types with 19% of dial-up subscribers and 20% of non dial-up subscribers having adopted these services. This compares with 17% for dial-up and 11% for non dial-up using the revised figures for September quarter 2003. When cross classified by subscriber type, the uptake for business and government non dial-up subscribers for March quarter 2004 has remained largely unchanged at 20% (47,000 subscribers) while the uptake by household non dial-up subscribers has risen from just 11% (38,000) at the end of the September quarter 2003 to 20% (126,000) at the end of the March quarter 2004.

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

	March Quarter 2004
	no.
ISPs offering SPAM filtering products as a free service only	354
ISPs offering SPAM filtering products as a charged service only	44
ISPs offering SPAM filtering products as both a free and a charged service	50
ISPs not offering a SPAM filtering product	246

3.2 INTERNET SUBSCRIBERS ADOPTING AND ISPS OFFERING SPAM FILTERING PRODUCTS, by access technology, by subscriber type

	SEPTEMBER QUARTER 2003		MARCH QUARTER 2004	
	<i>Number of ISPs offering SPAM filtering products</i>	<i>Subscribers who have adopted SPAM filtering products</i>	<i>Number of ISPs offering SPAM filtering products</i>	<i>Subscribers who have adopted SPAM filtering products</i>
	no.	'000	no.	'000
Dial-up				
Business and government	318	r84	268	103
Household	335	r680	374	731
<i>Total</i>	350	r763	400	833
Non Dial-up				
Business and government	286	r26	253	47
Household	248	r38	226	126
<i>Total</i>	310	r74	283	172
Total				
Business and government	350	r110	319	149
Household	345	r728	397	856
<i>Total</i>	379	r837	448	1 005

r revised

ALL ACCESS
TECHNOLOGIES

There were 6.4 million megabytes (MB) of data downloaded by subscribers during the three months ended 31 March 2004, representing an average of 1,228 MBs per subscriber (an increase of 327 MBs per subscriber or 36% over the September quarter 2003 figure of 901 MBs per subscriber).

Household subscribers, representing 86% of all subscribers, downloaded 4,978 million MBs (78% of all data downloaded). This resulted in an average of 1,109 MBs per household subscriber, an increase of 368 MBs per subscriber or 50% over the September quarter 2003 figure of 741 MBs per subscriber.

Business and government subscribers downloaded 1,431 million MBs during the three months ended 31 March 2004. This was an increase of 84 million MBs (6%) from the September quarter 2003. Average downloads per business and corporate subscriber rose by 48 MBs (3%) to 1,963 MBs per subscriber.

DIAL-UP VERSUS NON
DIAL-UP ACCESSES

Non dial-up subscribers downloaded 4,815 million MBs during the three months ended 31 March 2004, representing 75% of all data downloaded. This results in an average of 5,885 MBs per non dial-up subscriber. In contrast, dial-up subscribers downloaded 1,594 million MBs at an average of 362 MBs per subscriber. The faster download speeds offered by the majority of the non dial-up connections allow more data to be downloaded within the same time online, leading to the higher average downloads by non dial-up subscribers.

Business and government non dial-up subscribers downloaded 1,294 million MBs at an average of 5,669 MBs per subscriber, whilst household non dial-up subscribers downloaded a total of 3,521 million MBs at an average of 5,968 MBs per subscriber. In comparison, business and government dial-up subscribers downloaded just 137 million MBs at an average of 274 MBs per subscriber, a decrease of 19% from September quarter 2003. Download levels for household dial-up subscribers increased by 12% to 1,457 million MBs, an average of 374 MBs per subscriber.

Very small and Small ISPs reported larger average downloads per subscriber overall but specifically within the non dial-up area. This is due to a tendency amongst these smaller operators to offer unlimited plans or specialised plans tailored to the needs of either larger business/government subscribers or the 'heavy user' end of the household subscriber market. It should be noted that a single subscriber can mean a large number of users behind that subscription, leading to significant downloads, and some smaller ISPs have chosen to cater specifically to these subscribers.

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

	SEPTEMBER QUARTER 2003						MARCH QUARTER 2004					
	<i>Dial-up</i>		<i>Non Dial-up</i>		<i>Total</i>		<i>Dial-up</i>		<i>Non Dial-up</i>		<i>Total</i>	
	million MBs	%	million MBs	%	million MBs	%	million MBs	%	million MBs	%	million MBs	%
BUSINESS AND GOVERNMENT SUBSCRIBERS												
Very small	2	1	24	2	26	2	1	1	41	3	42	3
Small	23	13	180	15	204	15	9	7	167	13	177	12
Medium	36	20	341	29	377	28	34	25	171	13	205	14
Large	49	28	420	36	469	35	26	19	683	53	709	50
Very large	68	38	203	17	271	20	66	48	231	18	297	21
Total	178	100	1 169	100	1 347	100	137	100	1 294	100	1 431	100
HOUSEHOLD SUBSCRIBERS												
Very Small	1	—	8	—	9	—	2	—	5	—	7	—
Small	64	5	40	2	104	3	34	2	51	1	85	2
Medium	127	9	292	15	418	13	161	11	128	4	289	6
Large	314	23	326	16	640	19	239	16	798	23	1 037	21
Very large	836	62	1 310	66	2 146	65	1 021	70	2 538	72	3 559	71
Total	1 341	100	1 976	100	3 317	100	1 457	100	3 521	100	4 978	100
ALL SUBSCRIBERS												
Very small	3	—	33	1	35	1	3	—	47	1	50	1
Small	87	6	221	7	308	7	44	3	218	5	262	4
Medium	163	11	633	20	796	17	195	12	299	6	494	8
Large	363	24	745	24	1 109	24	265	17	1 482	31	1 747	27
Very large	904	59	1 513	48	2 417	52	1 088	68	2 769	58	3 856	60
Total	1 520	100	3 145	100	4 665	100	1 594	100	4 815	100	6 409	100

— nil or rounded to zero (including null cells)

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

4.2 AVERAGE DATA DOWNLOAD PER INTERNET SUBSCRIBER(a), by access technology, by subscriber type, by ISP size(b)

	<i>Dial-up</i>	<i>Non Dial-up</i>	<i>Total</i>
	MB/subscriber	MB/subscriber	MB/subscriber
.....			
BUSINESS AND GOVERNMENT SUBSCRIBERS			
Very small	768	18 807	11 948
Small	425	10 930	4 731
Medium	483	6 869	2 133
Large	356	9 488	4 903
Very large	199	2 031	665
<i>Total</i>	274	5 669	1 963
.....			
HOUSEHOLD SUBSCRIBERS			
Very small	610	6 242	1 739
Small	389	5 983	882
Medium	467	4 587	776
Large	440	10 004	1 665
Very large	350	5 368	1 049
<i>Total</i>	374	5 968	1 109
.....			
TOTAL ALL SUBSCRIBERS			
Very small	655	15 322	6 408
Small	397	9 162	1 956
Medium	469	5 660	1 054
Large	430	9 759	2 275
Very large	334	4 720	1 004
<i>Total</i>	362	5 885	1 228

- (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 2004. The IAS is a census that covers all identified Internet Service Providers (ISPs) providing Internet access across Australia.

CENSUS SCOPE AND METHODOLOGY

2 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 services to individuals, households, businesses 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 ISP	1 - 100 subscribers
Small ISP	101 - 1,000 subscribers
Medium ISP	1,001 - 10,000 subscribers
Large ISP	10,001 - 100,000 subscribers
Very Large ISP	100,001 + subscribers

REFERENCE PERIOD

7 At present, the IAS is conducted biannually and the reference quarters are March and September. 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.

8 Following the September quarter 2004 collection, the frequency of the IAS will reduce from biannual to annual.

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 mis-reported data

RELIABILITY OF DATA *continued*

- 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.

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.

ACKNOWLEDGEMENT

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, 2002-03, cat. no. 8129.0

Government Technology, Australia, 2002-03, cat. no. 8119.0

Household Use of Information Technology, Australia, 2001-02, cat. no. 8146.0

Information Technology, Australia 2000-01, cat. no. 8126.0

Use of Information Technology on Farms, Australia, June 2002, cat. no. 8150.0

DATA AVAILABLE ON REQUEST

16 As well as the statistics included in this publication, the ABS may have relevant data available on request. The availability of more detailed data are subject to confidentiality and quality checks. Inquiries should be made to the National Information and Referral Service on 1300 135 070 or to Peter Hodgson by telephone on 1800 136 387 during business hours or via email to peter.hodgson@abs.gov.au at any time.

MORE INFORMATION ON ABS
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17 Information about ABS activities in the field of information technology statistics is available from the Information Technology Statistics theme page on the ABS web site <<http://www.abs.gov.au>>. To access the theme page, select 'Themes' from the menu on the home page.

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 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	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.
Average number of subscribers per access line	Calculated by dividing the number of active subscribers at the end of the reference quarter by the number of access lines at the end of the reference quarter.
Bit	Abbreviation for <i>binary digit</i> 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.
Byte	Abbreviation for <i>binary term</i> . 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.
Cable	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.
Contention Rate	The ratio of dial-up subscribers per access line. Most ISPs work on the assumption that not all dial-up subscribers will require access to the Internet at any one time so, rather than pay for access lines that may not be used, they usually offer a ratio of between 5 to 10 subscribers per access line.
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 22km 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 PCs.
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 on-line 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, 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.
Virtual ISP	An ISP who does not own or operate their own network of servers (Points of Presence or POPs) but instead relies on infrastructure provided by a third party.
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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- INTERNET* **www.abs.gov.au** the ABS web site is the best place to start for access to summary data from our latest publications, information about the ABS, advice about upcoming releases, our catalogue, and Australia Now—a statistical profile.
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