INTERNET ACTIVITY

AUSTRALIA

CONTENTS

PLEASE NOTE:
This publication contains revised data - please see Notes on Page 2 for further details.

- 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

ABOUT THIS PUBLICATION

This publication presents statistics on Internet activity conducted through the Internet Service Provider (ISP) industry in Australia. It contains results from all identified ISPs operating in Australia in respect of the three months ended September 2002.

ABOUT THE CENSUS

The Internet Activity Survey (IAS) is a census which collects details on aspects of Internet access services and other services provided by ISPs in Australia. The census population includes all ISPs registered with the Telecommunications Industry Ombudsman and those identified from other sources.

Since the September 2001 quarter, the collection frequency of the IAS has changed from quarterly to biannual, although still collecting information on a quarterly reference period. The collection will continue to measure changes in the structure of the ISP industry and the numbers of Australian household and business and government subscribers obtaining access to the Internet through ISPs. It will also measure movements in the type and amount of infrastructure available to provide Internet connectivity.

DATA QUALITY

In the process of routine checking and quality assurance processes for the September 2002 cycle, a number of data processing errors were discovered for the two previous reporting periods. As a result, both the September 2001 and March 2002 quarter figures for volume of data downloaded have been revised upwards (7.1% and 48.4% respectively). The revised figures reflect an increase in the uptake of broadband services by household subscribers. Where possible, revised data has been shown in tables included in the publication. For Table 5.1, revised data for September 2001 and March 2002 is available upon request.

Estimates for data at the State/Territory and Statistical Division levels are derived from data provided for POPs (Point of Presence or servers). A review of the methodology utilised to estimate POP data which individual ISPs could not provide was undertaken during the processing of the September 2002 IAS. As a result, estimates below the Australian level are considered to be of improved quality, however, comparisons below the Australian level to previous quarters should be undertaken with caution.

COMMENTS

The ABS welcomes comments and suggestions from users regarding content and publication presentation. These comments should be addressed to the Director, New Economy Business Statistics Centre, Australian Bureau of Statistics, 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.

Susan Linacre
Acting Australian Statistician

LIST OF TABLES ....

CHAPTER **1**　　　　　SUMMARY OF INTERNET ACTIVITY FINDINGS .....

- The number of ISPs in Australia decreased by 8 (1%) to 563 over the six month period to the end of September quarter 2002. This represents a slowing in the rate of decline in ISP numbers recorded since September 2000. Takeovers and mergers were the predominant reason for this decrease.

- The number of Points of Presence (POPs) declined (down 164) over the six months to the end of September quarter 2002 as Virtual ISPs (ISPs using infrastructure supplied by another provider) became more prevalent resulting in some rationalisation. See paragraph 9 in the Explanatory Notes for more details on Virtual ISPs.

- The number of access lines available to subscribers increased by 43% to 639,197 between the March quarter 2002 and September quarter 2002. Significantly influencing this growth has been the increasing number of subscribers with permanent connections (around 350,000 subscribers at the end of September quarter 2002, an increase of over 47% from the end of March quarter 2002). In particular, DSL connections increased by 112% reflecting the accelerating uptake of broadband (access speeds equal to or greater than 256kbs) services.   DSL is the predominant technology utilised to deliver broadband services at this time.

- The number of subscribers grew by around 326,000 (8%) to almost 4.6 million. The majority of these were in the household market with over 3.9 million household subscribers. The increase in subscribers was largely attributable to an increase in subscribers on Hourly Access plans (up by 184,000).

- The increasing uptake of broadband services is also evident in the large increase shown in the volume of data downloaded, up 28% between March quarter 2002 and September quarter 2002. This builds on the 42% increase in data downloaded between September quarter 2001 and March quarter 2002. The faster access speeds provided by DSL and other high speed connections allows subscribers to download more data more rapidly.

ISPS

There were 563 Internet Service Providers (ISPs) in Australia supplying Internet access services to 4.6 million active subscribers at the end of September quarter 2002. There were:

- 6 Very large ISPs (with more than 100,000 subscribers) which provided Internet access to 3.1 million subscribers or 68% of all subscribers.

- 29 Large ISPs (10,001 to 100,000 subscribers) with 0.9 million subscribers or 19% of all subscribers

- 172 Medium ISPs (1,001 to 10,000 subscribers) with 0.5 million subscribers or 11% of all subscribers

- 254 Small ISPs (101 to 1,000 subscribers) with 0.1 million subscribers or 2% of all subscribers

ISPS *continued*

■ 102 Very small ISPs (100 or fewer subscribers) with 4,000 subscribers or less than 0.1% of all subscribers.

Whilst there was a decrease of 8 ISPs overall between the end of March quarter 2002 and the end of September quarter 2002, there was also significant movement between the size ranges due to takeovers and mergers.

POPS AND ACCESS LINES

At the end of September quarter 2002, ISPs provided 1,972 POPS and 639,197 access lines across Australia, resulting in a average of 7.1 subscribers per access line. This is considerably lower than the average of 9.5 subscribers per access line at the end of March quarter 2002. The increase in the number of permanent connections has influenced the downward movement in this average.

The moderate fall in POP numbers (a decrease of 8% from the end of March quarter 2002) was due primarily to the continued emergence of Virtual ISPs who offer local POP access via shared, often Australia-wide, infrastructure rather than having to provide their own POPs in all locations.

1.1 INTERNET ACTIVITY SUMMARY, Australia ....

		2000	2001		2002	
		September *Quarter*	*March* *Quarter*	*September* *Quarter*	*March* *Quarter*(a)	*September* *Quarter*
ISPs(b)(c)						
Very small	no.	132	129	r112	102	102
Small	no.	377	330	r299	276	254
Medium	no.	173	169	r155	161	172
Large	no.	28	31	30	26	29
Very large	no.	8	6	6	6	6
Total	no.	718	665	r602	571	563
Internet Access(c)						
Points of presence	no.	2 244	2 310	r2 171	r2 136	1 972
Access lines	no.	521 645	490 108	r486 877	447 050	639 197
Subscribers(c)						
Business and government	'000	432	482	r559	505	650
Household	'000	3 417	3 486	r3 731	3 724	3 904
Total	'000	3 849	3 968	r4 289	r4 229	4 555
Data downloaded(d)						
Business and government	million Mbs	457	428	r506	r528	820
Household	million Mbs	595	611	r780	r1 303	1 531
Total	million Mbs	1 052	1 040	r1 286	r1 831	2 351

r   revised

(a)   The collection frequency for the Internet Activity Survey changed from a quarterly to a biannual for March quarter 2002.

(b)   See paragraph 7 of Explanatory Notes for description of ISPs.

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

(d)   During the three months of the reference quarter.

1.2 INTERNET ACTIVITY SUMMARY, State and territory

		2000 September Quarter	2001 March Quarter	2001 September Quarter	2002 March Quarter	2002 September Quarter
NEW SOUTH WALES						
ISPs	no.	299	283	r244	236	240
Points of presence(a)	no.	738	781	r704	r682	662
Access lines(a)	no.	176 078	157 253	r155 291	r160 100	241 541
All subscribers(a)	'000	1 301	1 284	r1 446	r1 441	1 583
Data downloaded(b)	million Mbs	336	337	r435	r676	906
VICTORIA						
ISPs	no.	267	248	220	212	198
Points of presence(a)	no.	505	500	465	476	416
Access lines(a)	no.	148 583	137 465	r141 313	r114 544	163 855
All subscribers(a)	'000	1 020	1 047	r1 160	r1 045	1 180
Data downloaded(b)	million Mbs	327	250	r347	r457	569
QUEENSLAND						
ISPs	no.	177	170	r161	151	150
Points of presence(a)	no.	427	437	r422	418	357
Access lines(a)	no.	96 035	99 235	r93 985	r77 432	102 767
All subscribers(a)	'000	771	803	r829	r863	822
Data downloaded(b)	million Mbs	181	201	r206	r308	396
SOUTH AUSTRALIA						
ISPs	no.	78	73	r70	74	65
Points of presence(a)	no.	176	186	r188	180	172
Access lines(a)	no.	28 324	31 668	r31 027	r31 394	34 807
All subscribers(a)	'000	246	278	280	r294	328
Data downloaded(b)	million Mbs	59	88	r99	r125	121
WESTERN AUSTRALIA						
ISPs	no.	113	109	r100	100	92
Points of presence(a)	no.	233	239	r224	221	221
Access lines(a)	no.	47 891	40 861	r41 104	r42 647	65 044
All subscribers(a)	'000	318	357	r363	r386	411
Data downloaded(b)	million Mbs	99	113	r129	r173	248
TASMANIA						
ISPs	no.	30	32	r29	30	28
Points of presence(a)	no.	66	73	r77	71	61
Access lines(a)	no.	8 458	10 793	r10 354	r9 159	12 404
All subscribers(a)	'000	76	88	r95	r88	98
Data downloaded(b)	million Mbs	14	17	r31	r36	41
NORTHERN TERRITORY						
ISPs	no.	17	20	r18	21	23
Points of presence(a)	no.	30	32	r30	31	35
Access lines(a)	no.	3 183	4 523	r4 163	r3 661	4 701
All subscribers(a)	'000	30	38	r45	r43	37
Data downloaded(b)	million Mbs	8	9	9	r16	17

r   revised

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

(b)   During the three months of the reference quarter.

1.2 INTERNET ACTIVITY SUMMARY, State and territory *continued* ....

| | | 2000 | 2001 | | 2002 | |
		September Quarter	March Quarter	September Quarter	March Quarter	September Quarter
AUSTRALIAN CAPITAL TERRITORY						
ISPs	no.	58	57	r49	r46	44
Points of presence(a)	no.	69	62	r53	r51	48
Access lines(a)	no.	13 093	8 310	r9 640	r8 113	14 078
All subscribers(a)	'000	86	73	r68	71	95
Data downloaded(b)	million Mbs	27	24	r28	r40	54
AUSTRALIA						
ISPs	no.	718	665	r602	r571	563
Points of presence(a)	no.	2 244	2 310	r2 171	r2 136	1 972
Access lines(a)	no.	521 645	490 108	r486 877	447 050	639 197
All subscribers(a)	'000	3 849	3 968	r4 289	r4 229	4 555
Data downloaded(b)	million Mbs	1 052	1 040	r1 286	r1 831	2 351

r   revised

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

(b)   During the three months of the reference quarter.

CHAPTER **2**   SUBSCRIBER CHARACTERISTICS ....

SUBSCRIBERS

At the end of September 2002, there were 4.6 million active Internet subscribers in Australia, comprising 3.9 million household subscribers and 650,000 business and government subscribers.

The numbers of subscribers being serviced by Large and Very large ISPs grew by 6% and 11% respectively. Subscribers in these two size categories of ISPs represented almost 87% of all Internet subscribers.

SUBSCRIBER GROWTH

At the end of September 2002, there were 180,000 more household Internet subscribers and 145,000 more business and government Internet subscribers than at the end of March 2002.

ACCESS PLANS

Of the 4.6 million Internet subscribers, only 0.4% (17,000) were on a free Internet access plan. This was an increase of 5,000 from the end of March 2002 and resulted from promotional offers which include free access for a limited period within the intitial contract.

The majority of Internet subscribers were still either on a monthly/quarterly/annual access plan (71% or 3.2 million subscribers), or an hourly access plan (21% or 0.9 million subscribers).

Hourly access plans increased in popularity with an additional 274,000 subscribers opting for them by the end of September 2002 (an increase of over 40% in the number of subscribers with hourly access plans since the end of March 2002). Similarly, Volume access plans were increasingly being chosen by subscribers, with 248,000 subscribers at the end of September 2002, representing an increase of almost 30% in the number of subscribers with volume access plans since the end of March 2002. This reflects the emerging broadband market with both of these plan types being well represented in the packages available for broadband services.

There were 60% (388,000) of business and government subscribers on monthly/quarterly/annual access plans, and 73% (2.8 million) of household subscribers on these plans. Hourly access plans accounted for 26% (169,000) of business and government subscribers and 20% (775,000) of household subscribers.

ACCESS TECHNOLOGY

The vast majority of subscribers continue to utilise Dial-up access technology with over 4.2 million subscribers (an increase of 5% or 213,000 subscribers from the end of March 2002), this represents 92% of all subscribers. By contrast, the number of subscribers with a permanent connection has increased by over 112,000 subscribers (47%) to 350,000 at the end of September 2002, this represents 8% of all subscribers. This continues the strong growth seen since the end of September 2001.

ACCESS TECHNOLOGY
continued

DSL which included SDSL, ADSL, xDSL, etc recorded the strongest growth amongst the Permanent connection options with subscribers increasing from 60,000 (just over 1% of total subscribers) at the end of March 2002 to 127,000 subscribers (almost 3% of total subscribers) at the end of September 2002.

The IAS does not currently collect the number of subscribers utilising broadband access technology, however, by adding selected methods of access providing access speeds equal to or greater than 256kbs, a reasonable approximation of broadband service utilisation can be obtained. The addition of both dial-up and permanent wireless, satellite and other connections with permanent DSL, cable and microwave access technologies results in just over 300,000 subscribers that can be considered to have broadband access at the end of September 2002. This is an increase of over 68,000 subscribers from the end of March 2002.

2.1 INTERNET ACCESS PLANS ....

	Free access '000	%	Monthly/ Quarterly/ Annual Access '000	%	Hourly Access '000	%	Volume Access '000	%	Other Access '000	%	All Access Plans '000	%
BUSINESS AND GOVERNMENT SUBSCRIBERS												
ISPs(a)												
Very Small	np	np	1	66	np	np	np	np	np	np	2	100
Small	1	2	19	70	5	19	np	np	np	np	27	100
Medium	1	1	63	60	35	34	np	np	np	np	104	100
Large	—	—	64	45	41	29	34	24	np	np	142	100
Very Large	np	np	240	64	np	np	np	np	np	np	375	100
Total	*np*	*np*	*388*	*60*	*169*	*26*	*np*	*np*	*np*	*np*	*650*	*100*
HOUSEHOLD SUBSCRIBERS												
ISPs(a)												
Very Small	np	np	1	62	1	27	—	2	np	np	2	100
Small	3	4	58	67	22	26	1	1	2	2	86	100
Medium	10	3	241	64	106	28	6	2	13	3	376	100
Large	1	—	515	72	174	24	2	—	22	3	714	100
Very Large	—	—	2 034	75	472	17	153	6	68	2	2 726	100
Total	*np*	*np*	*2 849*	*73*	*775*	*20*	*np*	*np*	*np*	*np*	*3 904*	*100*
ALL SUBSCRIBERS												
ISPs(a)												
Very Small	np	np	3	64	1	24	np	np	np	np	4	100
Small	4	3	77	68	np	np	2	2	np	np	113	100
Medium	12	2	304	63	141	29	9	2	15	3	480	100
Large	1	—	579	68	215	25	np	np	np	np	856	100
Very Large	np	np	2 274	73	np	np	np	np	np	np	3 102	100
Total	*17*	*—*	*3 237*	*71*	*944*	*21*	*248*	*5*	*109*	*2*	*4 555*	*100*

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

—   nil or rounded to zero (including null cells)

(a)   See paragraph 7 of Explanatory Notes for description of ISPs.

2.2 INTERNET ACCESS TECHNOLOGY ....

	Number of subscribers	Percentage of subscribers	Number of ISPs providing subscribers with this access(a)
	'000	%	no.
Dial-up access			
Analog	4 025	88	525
Digital	173	4	165
Wireless	np	np	22
Satellite	np	np	99
Other	np	np	8
Total dial-up	*4 204*	*92*	*541*
Permanent access			
Analog	39	1	321
DSL	127	3	245
Digital	np	np	151
Cable	np	np	11
Satellite	np	np	78
Microwave	—	—	28
Other	—	—	22
Total permanent	*350*	*8*	*432*
Total	**4 555**	**100**	**563**

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

— nil or rounded to zero (including null cells)

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

ACCESS SUPPORT

ISPs have traditionally provided a variety of technical support services to their
subscribers including on-line, help desk and call out/on site support services.

On-line support services were provided by 77% of ISPs overall, with the larger ISPs (Very
large ISPs 100% and Large ISPs 97%) more likely to provide this service than smaller ISPs
(Very small ISPs 59% and Small ISPs 77%).

Different levels of help desk support offered were:
- business hours - provided by 91% of all ISPs
- extended hours - provided by 72% of all ISPs
- 24 hours - provided by 18% of all ISPs.

Call out/on site support services were provided by 69% of all ISPs.

Other technical support services provided by ISPs were start up disk/package services
(provided by 54% of all ISPs) and pager services (provided by 31% of all ISPs).

RELATED SERVICES

Other related services provided by ISPs include:
- Web design - this service was provided by 68% of all ISPs
- Web hosting - provided by 94% of all ISPs
- Secure access or transactions capabilities - provided by 56% of all ISPs
- Network/systems integration - provided by 66% of all ISPs
- Training services - provided by 43% of all ISPs.

It should be noted that for some larger ISPs, these services were provided from other
parts of the business that were not covered by the Internet Activity Survey and have
therefore not been included in the statistics.

3.1 ACCESS SUPPORT PROVIDED BY ISPS(a)(b) ....

		Very small	Small	Medium	Large	Very large	Total
Type of support service							
Online support	no.	60	195	143	28	6	432
	%	59	77	83	97	100	77
Help desk							
Business hours	no.	86	238	161	26	4	515
	%	84	94	94	90	67	91
Extended hours	no.	66	178	127	28	4	403
	%	65	70	74	97	67	72
24 hours	no.	24	39	25	7	6	101
	%	24	15	15	24	100	18
Pager	no.	22	81	61	np	np	172
	%	22	32	35	np	np	31
Call out/on site	no.	65	193	117	np	np	388
	%	64	76	68	np	np	69
Start up disk/package	no.	15	141	119	21	6	302
	%	15	56	69	72	100	54

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

(a)   Proportions are of total ISPs in each size group.

(b)   See paragraph 7 of Explanatory Notes for description of ISPs.

3.2 RELATED SERVICES PROVIDED BY ISPS(a)(b) ....

		Very small	Small	Medium	Large	Very large	Total
Type of service							
Web design	no.	64	191	119	np	np	385
	%	63	75	69	np	np	68
Training services	no.	37	122	77	np	np	244
	%	36	48	45	np	np	43
Network/Systems integration	no.	69	185	106	12	2	374
	%	68	73	62	41	33	66
Secure access or transactions	no.	41	145	107	20	1	314
	%	40	57	62	69	17	56
ISPs providing Web hosting	no.	87	248	162	25	5	527
	%	85	98	94	86	83	94

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

(a)   Proportions are of total ISPs in each size group.

(b)   See paragraph 7 of Explanatory notes for descriptions of size of ISPs.

DATA DOWNLOADED

There were 2,351 million megabytes (Mbs) of data downloaded by Internet subscribers during the three months ended 30 September 2002, this represented an average of 526 Mbs per subscriber (an increase of 94 Mbs or 22% per subscriber over the revised March quarter 2002 figure).

Household subscribers downloaded 1,531 million Mbs (65% of all data downloaded), resulting in an average of 397 Mbs per household subscriber (an increase of 47 Mbs or 13% per household subscriber from the revised March quarter 2002 figure of 1,303 million Mbs). Business and government subscribers downloaded 820 million Mbs, yielding an average of 1,336 Mbs per business and government subscriber (an increase of 310 Mbs or 43% per business and government subscriber from the revised March quarter 2002 figure of 528 million Mbs).

The average Mbs downloaded per household subscriber serviced by Large and Very Large ISPs was 409 Mbs per subscriber, this is significantly higher than the average Mbs downloaded by household subscribers serviced by all other ISPs (304 Mbs per subscriber).

The increase in the volume of data downloaded and the average per subscriber reflects the increasing uptake of broadband, where faster connections allow increased data downloads without the usual time penalties. In particular, the larger averages for data downloaded for householders serviced by Large and Very Large ISPs are indicative of more widespread broadband service availability offered and the more intensive levels of marketing employed by these ISPs.

4.1 VOLUME OF DATA DOWNLOADED(a)(b) ....

	SEPTEMBER QUARTER 2001		MARCH QUARTER 2002		SEPTEMBER QUARTER 2002	
	Data downloaded	*Data downloaded*	*Data downloaded*	*Data downloaded*	*Data downloaded*	*Data downloaded*
	million Mbs.	%	million Mbs.	%	million Mbs.	%
BUSINESS AND GOVERNMENT SUBSCRIBERS						
ISPs						
Very small	4	1	r10	r2	14	2
Small	36	7	r34	r6	36	4
Medium	r52	10	r68	r13	175	21
Large	r240	r47	r226	r43	260	32
Very large	r174	r34	r190	r36	335	41
Total	*r506*	*100*	*r528*	*100*	*820*	*100*
HOUSEHOLD SUBSCRIBERS						
ISPs						
Very small	—	—	1	—	—	—
Small	18	r2	26	r2	20	1
Medium	r79	r10	r103	r8	123	8
Large	r181	r23	r193	r15	306	20
Very large	r502	r64	r980	r75	1 081	71
Total	*r780*	*100*	*r1 303*	*100*	*1 531*	*100*
ALL SUBSCRIBERS						
ISPs						
Very small	4	—	r10	r1	15	1
Small	54	r4	r60	r3	57	2
Medium	r130	r10	r172	r9	299	13
Large	r421	r33	r420	r23	566	24
Very large	r676	r53	r1 170	r64	1 416	60
Total	*r1 286*	*100*	*r1 831*	*100*	*2 351*	*100*

r   revised

—   nil or rounded to zero (including null cells)

(a)   Volume of data downloaded during the three months of the reference quarter.

(b)   See paragraph 7 of Explanatory Notes for description of ISPs.

INTRODUCTION

The details presented on access lines, Internet subscribers and volume of data downloaded in the following table relate to a combination of data for dial-up and permanent subscribers, as well as household and business and government subscribers. Accordingly, the details should be used with caution as the proportions of types of subscribers varies between regional areas.

STATISTICAL DIVISIONS

There was a wide distribution of ISPs across Statistical Divisions (SDs) in Australia with the highest concentrations occurring in the Capital City SDs. Capital City SDs accounted for 81% of access lines, 78% of subscribers and 84% of Mbs downloaded.

5.1 INTERNET ACTIVITY BY STATISTICAL DIVISION ....

	ISPs(a)(b)	POPs(b)	Access lines(b)	All subscribers(b)	Data downloaded by subscribers(c)	Average number of subscribers per access line(b)	Average data downloaded per subscriber(d)
	no.	no.	no.	'000	million Mbs	no.	Mbs
New South Wales							
Sydney	175	258	197 390	1 199	766	6.1	657
Hunter	34	51	11 410	98	43	8.6	449
Illawarra	31	48	7 511	72	25	9.6	366
Richmond-Tweed	23	25	3 228	29	9	8.9	312
Mid-North Coast	24	66	6 681	54	19	8.1	354
Northern	12	52	3 009	26	8	8.7	294
North Western	16	30	1 944	17	6	8.7	346
Central West	24	42	3 411	27	9	7.9	360
South Eastern	14	25	1 140	10	3	8.7	338
Murrumbidgee	16	28	2 363	18	7	7.8	347
Murray	20	23	2 917	28	8	9.5	273
Far West	13	14	537	5	2	8.5	350
Total	*240*	*662*	*241 541*	*1 583*	*906*	*6.6*	*585*
Victoria							
Melbourne	169	217	146 040	1 021	518	7.0	527
Barwon	31	35	4 896	36	14	7.3	387
Western District	12	17	633	6	np	10.2	np
Central Highlands	25	27	2 365	26	7	11.0	285
Wimmera	3	6	np	np	np	np	np
Mallee	14	16	1 041	10	4	9.8	348
Loddon	15	22	2 619	24	8	9.3	310
Goulburn	19	30	1 862	17	5	9.3	249
Ovens-Murray	10	10	800	7	2	8.9	263
East Gippsland	6	12	np	np	np	np	—
Gippsland	14	24	2 819	23	8	8.3	354
Total	*198*	*416*	*163 855*	*1 180*	*569*	*7.2*	*496*
Queensland							
Brisbane	98	108	63 828	518	283	8.1	559
Moreton	52	77	17 088	135	49	7.9	335
Wide Bay-Burnett	19	36	2 918	25	8	8.5	332
Darling Downs	20	21	3 694	27	10	7.4	348
South West	np	np	np	np	np	np	np
Fitzroy	16	28	3 925	28	12	7.0	382
Central West	np	np	np	np	np	np	np
Mackay	17	22	2 202	19	7	8.7	343
Northern	14	17	3 842	29	12	7.6	375
Far North	20	30	4 637	np	13	np	np
North West	np	np	np	np	np	np	np
Total	*150*	*357*	*102 767*	*822*	*396*	*8.0*	*475*

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

—   nil or rounded to zero (including null cells)

(a)   ISPs are counted in each SD where that ISP has a presence.

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

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

(d)   Care should be taken in comparing figures with those in previous issues of this publication due to changes in the method of calculation. See paragraph 12 of the Explanatory Notes for details.

5.1 INTERNET ACTIVITY BY STATISTICAL DIVISION *continued* ....

	ISPs(a)(b)	POPs(b)	Access lines(b)	All subscribers(b)	Data downloaded by subscribers(c)	Average number of subscribers per access line(b)	Average data downloaded per subscriber(d)
	no.	no.	no.	'000	million Mbs	no.	Mbs
South Australia							
Adelaide	57	70	31 251	290	110	9.3	389
Outer Adelaide	5	8	244	3	1	13.8	243
Yorke and Lower North	5	12	301	3	1	10.0	216
Murray Lands	9	19	612	8	2	13.1	210
South East	13	18	783	7	3	8.6	397
Eyre	7	15	327	4	1	10.9	308
Northern	13	30	1 289	13	4	10.4	336
Total	*65*	*172*	*34 807*	*328*	*121*	*9.4*	*378*
Western Australia							
Perth	86	111	53 926	346	208	6.4	615
South West	20	35	4 248	25	13	5.8	498
Lower Great Southern	8	13	1 190	7	np	6.1	np
Upper Great Southern	np	np	np	np	np	np	np
Midlands	np	np	np	np	np	5.7	np
South Eastern	11	16	1 832	11	6	5.9	553
Central	9	14	1 292	8	6	6.2	770
Pilbara	8	13	874	5	np	5.3	np
Kimberley	6	10	np	2	np	np	np
Total	*92*	*221*	*65 044*	*411*	*248*	*6.3*	*612*
Tasmania							
Greater Hobart	26	28	7 991	59	28	7.4	482
Northern	13	16	1 620	14	5	8.8	331
Mersey-Lyell	8	17	2 793	25	8	8.9	352
Total	*28*	*61*	*12 404*	*98*	*41*	*7.9*	*426*
Northern Territory							
Darwin	23	24	3 544	29	13	8.1	445
Northern Territory - Bal	10	11	1 157	9	4	7.4	467
Total	*23*	*35*	*4 701*	*37*	*17*	*7.9*	*450*
Australian Capital Territory							
Canberra	44	48	14 078	95	54	6.7	608
Total	*44*	*48*	*14 078*	*95*	*54*	*6.7*	*608*
Total Australia	**563**	**1 972**	**639 197**	**4 555**	**2 351**	**7.1**	**526**

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

(a)   ISPs are counted in each SD where that ISP has a presence.

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

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

(d)   Care should be taken in comparing figures with those in previous issues of this publication due to changes in the method of calculation. See paragraph 12 of the Explanatory Notes for details.

EXPLANATORY NOTES ....

INTRODUCTION

1 This publication presents results from the Internet Activity Survey (IAS) in respect of the three months ending 30 September 2002. 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 during 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.

3 The primary source of the census population frame is the Telecommunications Industry Ombudsman (TIO) with which ISPs are required to register. The TIO list is supplemented where required with ISPs identified from other sources such as Internet association membership lists and industry media.

4 The IAS is conducted as a mail-out, mail-back census.

SUBSCRIBERS

5 Active subscribers are defined as customers having accounts with ISPs who have accessed the Internet or paid for access to the Internet during the 90 days 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 and conversely an ISP subscriber account may provide Internet access (and email addresses) for several people/organisations.

STATISTICAL UNIT

6 The unit for which statistics were reported in the census was the legal entity providing Internet access.

7 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

GEOGRAPHICAL CLASSIFICATIONS

8 The data contained in table 5.1 have been classified on a geographical basis by allocating Points of Presence (POP) details to Statistical Divisions (SDs) within states and territories, as set out in the *Australian Standard Geographical Classification (ASGC)* (cat. no. 1216.0). The SD is the largest and most stable geographical unit within each State and Territory. The Reference map at the back of this publication shows the SD boundaries.

POINTS OF PRESENCE

9 The number of POPs relates to the sum of POPs made available by individual ISPs. This may be more than the number of physical POPs due to the sharing of POPs between ISPs. It should be noted that Virtual POPs are an emerging method of providing local access. Virtual POPs utilise shared, often Australian-wide, infrastructure and a local server is not essential. Similarly the emergence of Virtual ISPs is being observed. These ISPs do not need to set up their own POPs, instead utilising those of other ISPs or specialist infrastructure businesses that provide POP services only.

ACCESSIBILITY/REMOTENESS INDEX OF AUSTRALIA

10 Previous issues of this publication included experimental estimates on accessibility/remoteness (ARIA) based on methodology developed by the National Key Centre for Social Applications of Geographic Information Systems at the University of Adelaide.

11 On 1 July 2001, the ABS introduced a new classification of remoteness. The publication *Information Paper: ABS Views on Remoteness* (cat. No. 1244.0) details the proposed classification. It is currently being considered how the data collected in the IAS may be approximately presented using this new classification.

CALCULATING AVERAGE DATA DOWNLOADED

12 Prior to March 2002, average data downloaded by Internet subscribers, as reported in Table 5.1, was calculated from the number of subscribers at the end of the reference period and the data downloaded over the three months of the reference period. In the current issue, this figure has instead been calculated from an estimate of the number of subscribers at the mid point of the reference period.

REFERENCE PERIOD

13 Data contained in this publication relate to ISPs which were operating in Australia at the end of the reference quarter. Counts of ISPs reflect only those businesses operating at the end of the reference quarter. Volume of data downloaded figures relate to data downloaded during the three months of the reference quarter.

RELIABILITY OF DATA

14 As the census does not have a sample component, the data are not subject to sampling variability. However, other inaccuracies collectively referred to as non-sampling error 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
- definition and classification errors.

15 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.

ACKNOWLEDGEMENT

16 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*.

17 In particular, the ABS acknowledges the assistance of the Telecommunications Industry Ombudsman (TIO) in providing regular lists of registered ISPs.

RELATED PUBLICATIONS

18 Other ABS publications on information technology and telecommunications in Australia are:
Business Use of Information Technology, 2001-02, cat. no. 8129.0
Computing Services Industry, Australia, 1998-99, cat. no. 8669.0
Government Use of Information Technology, Australia, 1999-2000, cat. no. 8119.0
Household Use of Information Technology, Australia, 2000, cat. no. 8146.0
Information Technology, Australia 2000-01, cat. no. 8126.0
Use of Information Technology on Farms, Australia, June 2000, cat. no. 8150.0
Use of the Internet by Householders, Australia, November 2000, cat. no. 8147.0

AVAILABILITY OF UNPUBLISHED STATISTICS

19 The ABS may make available on request certain unpublished statistics from this census, subject to the application of confidentiality provisions.

MORE INFORMATION ON ABS
INFORMATION TECHNOLOGY
STATISTICS

20 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. Details of other ABS publications relating to the production and use of information technologies in Australia can be found in paragraph 15 of the Explanatory Notes of this publication.
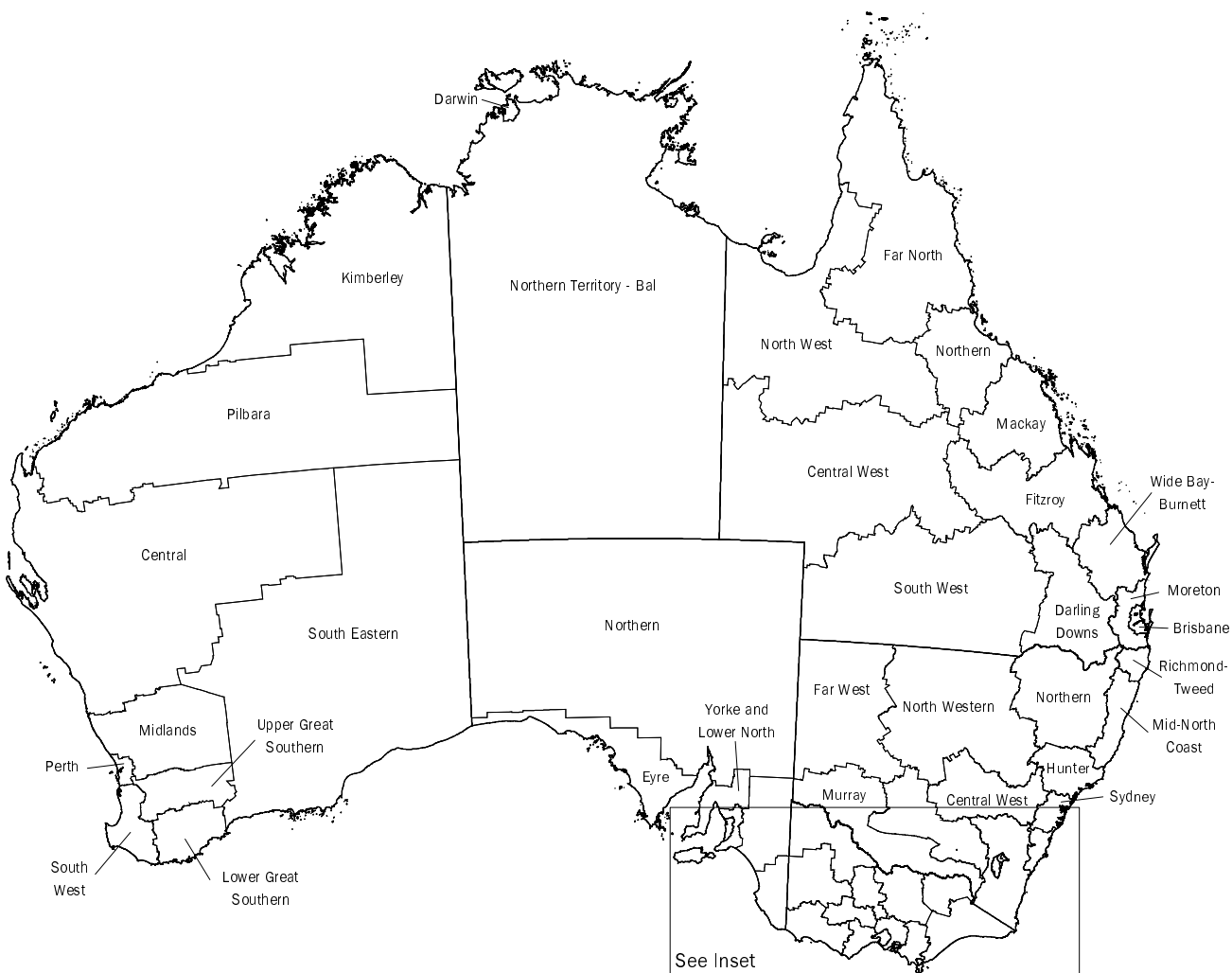
ABBREVIATIONS

ABS Australian Bureau of Statistics
ARIA Accessibility/Remoteness Index of Australia
ISP internet service provider
Mb megabyte
POP point of presence
SD Statistical Division
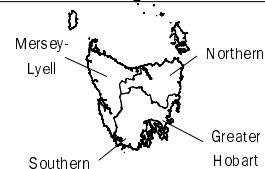TIO Telecommunication Industry Ombudsman

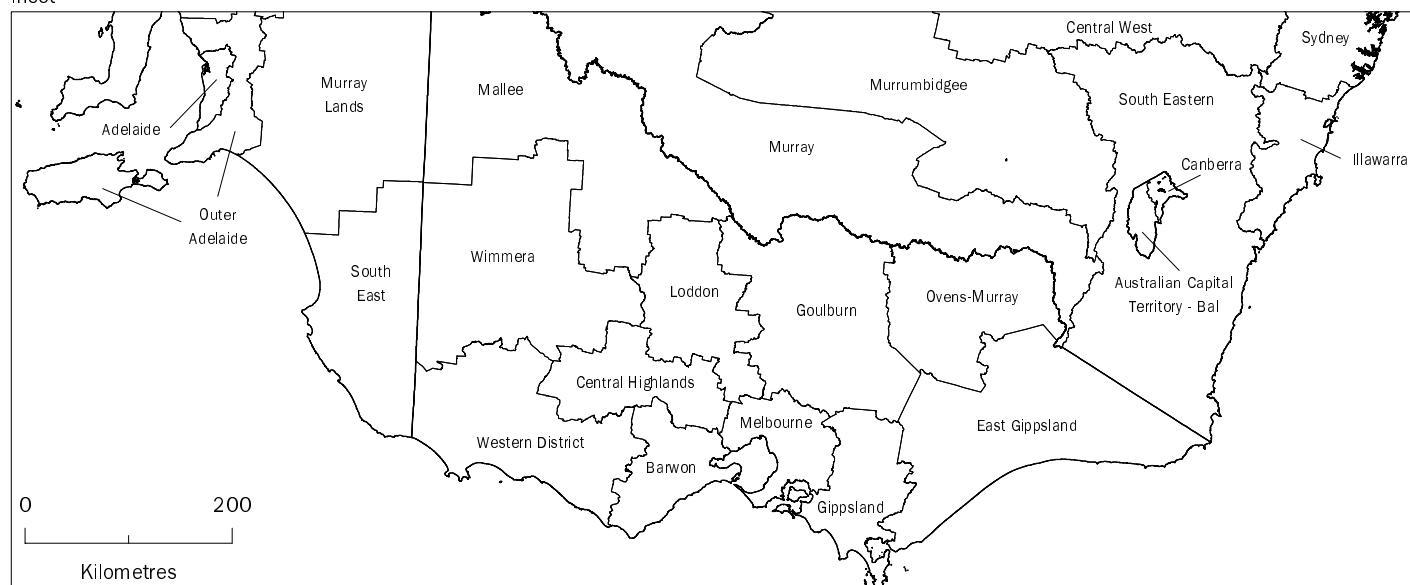|	
Access plan	The Internet access package options available to subscribers from ISPs.
Access lines	Lines, points, ports, modem access points available to subscribers to access their ISP.
Active subscribers	Subscribers who have accessed the Internet or paid for access to the Internet through an ISP in 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 middle 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.
Broadband	Internet connection with an access speed equal to or greater than 256kbs.
Business and government subscribers	All businesses, corporations, non-profit organisations and government organisations who obtain access to the Internet through an ISP.
Business hours telephone service	A telephone support service which operates during normal business hours.
Cable modem	A modem that sends and receives data through a coaxial cable television network instead of through telephone lines as do conventional modems. Cable modems, which have speeds of 500 Kbps, can transmit data faster than current conventional modems.
Data downloaded	Volume of data downloaded by subscribers from the Internet in megabytes (Mbs).
Dial-up subscribers	Subscribers who connect to the Internet via modem and dial-up software.
Digital/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. Integrated Services Digital Network (ISDN) enables digital transmission over the PSTN.
Digital Subscriber Line (DSL)	Often referred to as xDSL and refers to 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.
Hosted websites	Customer websites maintained by ISPs on their servers.
Hourly access plan	A subscription option where customers pay for dial-up access on an hourly basis.
Household subscribers	Households and private individuals who subscribe to Internet access via an ISP. This may include some home based businesses.
Internet	This is a world-wide public computers 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.

ISDN	See Digital/Integrated Services Digital Network (ISDN).
Megabyte (Mb)	A data unit of 1,048, 576 bytes, sometimes interpreted as 1 million bytes.
Microwave radio	A communication link that uses point-to-point radio transmission.
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.
On-line support service	The ability to get support from an ISP on-line either through search facilities or on-line dialogue with ISPs help desk staff on-line.
Permanent connections	Permanent subscriber access to the Internet via permanent modem, Integrated Services Digital Network, dedicated data service, frame relay, etc.
Point of Presence (POP)	A server in a geographic location where an ISP can be accessed by a subscriber via access lines.
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.
Start up disk/package	A CD-ROM or floppy disk containing software for Windows or Macintosh systems that includes configuration information for the dial-up software plus an email 'client' program (e.g. Eudora/Pegasus) plus a navigator package.
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 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 (POPs) but instead relies on infrastructure provided by a third party.
Virtual POP	A POP which is provided by a third party infrastructure business or another ISP for use by multiple ISPs including those used by Virtual ISPs.
Web hosting	See Hosted websites
Wireless Application Protocol (WAP)	A standard for providing Internet access and other data-based services, such as e-mail, electronic transactions, news and weather reports, over wireless networks.

Darwin

Kimberley

Northern Territory - Bal

Far North

North West

Northern

Pilbara

Mackay

Central West

Fitzroy

Wide Bay-
Burnett

Central

South West

Moreton

Darling
Downs

Brisbane

South Eastern

Northern

Richmond-
Tweed

Mid-North
Coast

Midlands

Upper Great
Southern

Yorke and
Lower North

Far West

North Western

Northern

Perth

Eyre

Hunter

Murray

Central West

Sydney

South
West

Lower Great
Southern

This map does not show the Statistical Division of Other Territories

See Inset

Mersey-
Lyell

Northern

Southern

Greater
Hobart

Inset

Central West

Sydney

Murray
Lands

Mallee

Murrumbidgee

South Eastern

Adelaide

Murray

Canberra

Illawarra

Outer
Adelaide

Wimmera

Australian Capital
Territory - Bal

South
East

Loddon

Goulburn

Ovens-Murray

Central Highlands

Melbourne

East Gippsland

Western District

Barwon

Gippsland

0   200

Kilometres

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DIAL-A-STATISTIC For the latest figures for National Accounts, Balance of Payments, Labour Force, Average Weekly Earnings, Estimated Resident Population and the Consumer Price Index call 1900 986 400 (call cost 77c per minute).

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