INTERNET ACTIVITY *AUSTRALIA*

CONTENTS

■ For further information about these and related statistics, contact the National Information Service on 1300 135 070 or Dean Bloom on Brisbane 07 3222 6404.

NOTES

ABOUT THIS PUBLICATION

This publication presents a detailed analysis of 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 June 2001.

The Internet Activity Survey is a quarterly survey which collects details on the access characteristics of ISPs in Australia. The survey population includes all ISPs registered with the Telecommunications Industry Ombudsman (TIO) and those identified from other sources.

The quarterly frequency of the collection will help measure changes in the structure of the ISP industry and the number of Australian households and organisations 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 NOTES

During the June quarter 2001 a significant ISP ceased trading which has contributed to the fall in the number of Points of Presence (POPs) and the number of access lines recorded, particularly in NSW. There is also expected to be a lag effect in subscribers formerly with this ISP moving to another ISP.

MORE INFORMATION ON ABS INFORMATION TECHNOLOGY STATISTICS

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 <URL: 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 18 of the Explanatory Notes of this publication.

COMMENTS

The ABS welcomes comments and suggestions from users regarding survey content and publication presentation. These comments should be addressed to the Director, Science and Technology Statistics Section, Australian Bureau of Statistics, PO Box 10 Belconnen, ACT, 2616.

HISTORICAL COMPARISONS

Statistics in tables 1.1 and 1.2 have been presented to allow comparison of data between current and three previous quarters.

R.W. Edwards
Acting Australian Statistician

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

HIGHLIGHTS
- The number of ISPs in Australia fell 6% to 628 during the June quarter following a fall of 4% between December 2000 and March 2001.
- The number of Points of Presence (POPs) fell 5%.
- The number of access lines available to subscribers was down 2% from the March number.
- The number of subscribers increased by 213,000 (5.4%).
- The volume of data downloaded for the June quarter 2001 increased by 164 million Mbs (16%).

ISPs
There were 628 ISPs in Australia supplying Internet access services to 4.2 million active subscribers at the end of June quarter 2001. There were:
- 5 Very large ISPs (with more than 100,000 subscribers) which provided Internet access to 57% (2.4 million) of all Internet subscribers.
- 32 Large ISPs (with 10,001 to 100,000 subscribers) with 29% (1.2 million) of subscribers.
- 156 Medium ISPs (with 1,001 to 10,000 subscribers) with 11% (0.5 million) of subscribers.
- 321 Small ISPs (with 101 to 1,000 subscribers) with 3% (0.14 million) of subscribers.
- 114 Very small ISPs (with 100 or fewer subscribers) with only 0.1% (5,000) of subscribers.

There was a decrease of 37 ISPs overall from the March quarter 2001. The majority of these were in the Very Small size range (decrease of 15). The change can be attributed to ISPs leaving the industry.

INTERNET SUBSCRIBERS
Internet subscribers are customers (individuals or businesses) with ISP accounts. Counts of subscribers differ from counts of people/organisations/households with Internet access. See paragraph 5 of the Explanatory Notes for more information.

Of the 4.2 million Internet subscribers in Australia, there were 3.7 million Household subscribers and 508,000 Business and government subscribers.

At the end of the June quarter 2001, there were 187,000 more Household Internet subscribers and 26,000 more Business and government Internet subscribers than at the end of the March quarter 2001. Note that some of this movement is due to the way some ISPs classify subscribers.

POPs AND ACCESS LINES
A POP is a geographical location where a subscriber can access (connect to) an ISP via access lines. POPs and access lines continue to decrease as ISPs leave the industry. Across Australia, ISPs provided 2,200 POPs and 480,600 access lines, which indicates that on average there were 8.7 subscribers per Internet access line.

DATA DOWNLOADED

There were 1,204 million megabytes (Mbs) of data downloaded by Internet subscribers during the June quarter 2001, which is an average of 288 Mbs per subscriber. This is slightly higher than the March quarter 2001 level. Household subscribers downloaded 648 million Mbs (average of 176 Mbs per subscriber) and Business and government subscribers downloaded 557 million Mbs (average of 1,096 Mbs per subscriber). Volume of data downloaded has increased with an increase in subscribers.

STATE DATA

From the March quarter to the June quarter 2001, the following changes occurred at a regional level:

- New South Wales — ISPs decreased by 17, POPs decreased by 45, access lines decreased by 14,653, subscribers increased by 19,000 and data downloaded by subscribers increased by 55 million Mbs.
- Victoria — ISPs decreased by 22, POPs decreased by 41, access lines increased by 4,902, subscribers increased by 107,000 and data downloaded by subscribers increased by 76 million Mbs.
- Queensland — ISPs decreased by 3, POPs decreased by 8, access lines increased by 650, subscribers increased by 53,000 and data downloaded by subscribers increased by 14 million Mbs.
- South Australia — ISPs decreased by 2, POPs decreased by 5, access lines decreased by 76, subscribers increased by 14,000 and data downloaded by subscribers increased by 14 million Mbs.
- Western Australia — ISPs decreased by 7, POPs decreased by 6, access lines increased by 108, subscribers increased by 16,000 and data downloaded by subscribers increased by 2 million Mbs.
- Tasmania — ISPs decreased by 4, POPs remained constant at 73, access lines decreased by 470, subscribers increased by 6,000 and data downloaded by subscribers increased by 2 million Mbs.
- Northern Territory — ISPs decreased by 1, POPs decreased by 1, access lines decreased by 434, subscribers increased by 2,000 and data downloaded by subscribers remained constant at 9 million Mbs.
- Australia Capital Territory — ISPs decreased by 5, POPs decreased by 4, access lines increased by 465, subscribers decreased by 4,000 and data downloaded by subscribers increased by 2 million Mbs.

1.1 INTERNET ACTIVITY SUMMARY, AUSTRALIA ....

		September Quarter 2000	December Quarter 2000	March Quarter 2001	June Quarter 2001
ISPs(a)					
Very small	no.	132	129	129	114
Small	no.	377	359	330	321
Medium	no.	173	171	169	156
Large	no.	28	31	31	32
Very large	no.	8	6	6	5
Total	no.	718	696	665	628
Internet access					
Points of Presence	no.	2 244	2 394	2 310	2 200
Access lines	no.	521 645	515 740	490 108	480 600
Subscribers					
Business and government	'000	432	512	482	508
Household	'000	3 417	3 410	3 486	3 673
All	'000	3 849	3 921	3 968	4 181
Data downloaded					
Business and government	million Mbs	457	467	428	557
Household	million Mbs	595	583	611	648
Total	million Mbs	1 052	1 050	1 040	1 204

(a)   See paragraph 7 of Explanatory notes.

1.2 STATE AND TERRITORY SUMMARY ....

Quarter	ISPs no.	POPs no.	Access lines no.	All subscribers '000	Data downloaded by subscribers million Mbs
NEW SOUTH WALES					
2001					
June	266	736	142 600	1 303	392
March	283	781	157 253	1 284	337
2000					
December	291	804	187 150	1 318	309
September	299	738	176 078	1 301	336
VICTORIA					
2001					
June	226	459	142 367	1 154	326
March	248	500	137 465	1 047	250
2000					
December	264	548	134 710	1 085	333
September	267	505	148 583	1 020	327
QUEENSLAND					
2001					
June	167	429	99 885	856	215
March	170	437	99 235	803	201
2000					
December	176	438	101 629	752	174
September	177	427	96 035	771	181
SOUTH AUSTRALIA					
2001					
June	71	181	31 592	292	102
March	73	186	31 668	278	88
2000					
December	78	185	31 462	254	84
September	78	176	28 324	246	59
WESTERN AUSTRALIA					
2001					
June	102	233	40 969	373	115
March	109	239	40 861	357	113
2000					
December	120	255	37 860	318	101
September	113	233	47 891	318	99
TASMANIA					
2001					
June	28	73	10 323	94	19
March	32	73	10 793	88	17
2000					
December	33	72	10 627	83	16
September	30	66	8 458	76	14

1.2 STATE AND TERRITORY SUMMARY *continued* ....

Quarter	ISPs no.	POPs no.	Access lines no.	All subscribers '000	Data downloaded by subscribers million Mbs
NORTHERN TERRITORY					
2001					
June	19	31	4 089	40	9
March	20	32	4 523	38	9
2000					
December	18	30	4 095	36	9
September	17	30	3 183	30	8
AUSTRALIAN CAPITAL TERRITORY					
2001					
June	52	58	8 775	69	26
March	57	62	8 310	73	24
2000					
December	56	62	8 207	74	24
September	58	69	13 093	86	27
TOTAL AUSTRALIA					
2001					
June	628	2 200	480 600	4 181	1 204
March	665	2 310	490 108	3 968	1 040
2000					
December	696	2 394	515 740	3 921	1 050
September	718	2 244	521 645	3 849	1 052

CHAPTER **2**   S U B S C R I B E R C H A R A C T E R I S T I C S   . . . .

SUBSCRIBERS

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 differ from counts of people/organisations/households with Internet access. See paragraph 5 of the Explanatory Notes for more information.

At the end of the June quarter 2001, there were 4.2 million active Internet subscribers in Australia comprising 3.7 million Household Internet subscribers and 508,000 Business and government Internet subscribers.

Only 4% of subscribers had permanent access to the Internet, with the remainder having dial-up access.

SUBSCRIBER GROWTH

At the end of the June quarter 2001, there were 187,000 more Household Internet subscribers and 26,000 more Business and government Internet subscribers.

ACCESS TECHNOLOGY

The principal Internet access technology utilised by subscribers for the June quarter 2001 was analog connection with 97% (3.9 million) of dial-up and 29% (55,000) of permanent subscribers connected to the Internet by an analog line.

ACCESS PLANS

Of the 4.2 million Internet subscribers, 7% (277,000) were on a free Internet access plan. This was an increase of 23,000 from the March quarter. Nearly all (97%) of the free Internet access plans related to Household subscribers.

The majority of Internet subscribers were either on a monthly/quarterly/annual access plan (73% or 3 million subscribers), or an hourly access plan (19% or 0.8 million subscribers).

There were 73% (373,000) of Business and government subscribers on a monthly/quarterly/annual access plan, while 73% (2.7 million) of Household subscribers used these plans. Hourly access plans accounted for 19% (97,000) of Business and government subscribers and 19% (708,000) of Household subscribers.

2.1 SELECTED CHARACTERISTICS OF INTERNET SUBSCRIBERS(a)(b) ....

	Business and government subscribers	Household subscribers	Total
	'000	'000	'000

SUBSCRIBERS AT BEGINNING OF REFERENCE PERIOD

Dial-up access	np	np	3 814
Permanent access	np	np	154
Total	*482*	*3 486*	*3 968*

NEW SUBSCRIBERS DURING REFERENCE PERIOD

Dial-up access	np	np	843
Permanent access	np	np	42
Total	*58*	*827*	*884*

SUBSCRIBERS AT END OF REFERENCE PERIOD

Dial-up access	np	np	3 993
Permanent access	np	np	188
Total	*508*	*3 673*	*4 181*

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

— nil or rounded to zero (including null cells)

(a) 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 differ from counts of people/organisations/households with Internet access. See paragraph 5 of the Explanatory Notes for more information.

(b) Subscribers at the beginning of the reference period plus new subscribers do not equal subscribers at the end of the reference period as this does not take into account subscribers who leave.

2.2 INTERNET ACCESS PLANS ....

	FREE ACCESS .		MONTHLY/QUARTERLY/ ANNUAL ACCESS		HOURLY ACCESS	
	Subscribers	*Subscribers*	*Subscribers*	*Subscribers*	*Subscribers*	*Subscribers*
	'000	%	'000	%	'000	%
BUSINESS AND GOVERNMENT SUBSCRIBERS						
Very small ISPs	np	np	1	50	np	np
Small ISPs	—	—	23	71	9	28
Medium ISPs	np	np	60	53	49	43
Large ISPs	np	np	108	66	35	21
Very large ISPs	np	np	180	91	np	np
Total	*7*	*1*	*373*	*73*	*97*	*19*
HOUSEHOLD SUBSCRIBERS						
Very small ISPs	—	5	2	78	1	18
Small ISPs	3	2	79	71	29	26
Medium ISPs	3	1	225	65	112	32
Large ISPs	167	16	624	61	232	22
Very large ISPs	98	4	1 751	80	335	15
Total	*270*	*7*	*2 681*	*73*	*708*	*19*
ALL						
Very small ISPs	np	np	4	77	np	np
Small ISPs	3	2	102	71	37	26
Medium ISPs	np	np	285	62	161	35
Large ISPs	np	np	732	61	267	22
Very large ISPs	np	np	1 931	81	np	np
Total	*277*	*7*	*3 053*	*73*	*805*	*19*

np   not available for publication but included in totals where applicable, unless otherwise
      indicated
—   nil or rounded to zero (including null cells)

2.2 INTERNET ACCESS PLANS *continued* ....

	VOLUME ACCESS		OTHER ACCESS		ALL ACCESS PLANS	
	Subscribers	*Subscribers*	*Subscribers*	*Subscribers*	*Subscribers*	*Subscribers*
	'000	%	'000	%	'000	%
BUSINESS AND GOVERNMENT SUBSCRIBERS						
Very small ISPs	—	—	—	—	2	100
Small ISPs	np	np	np	np	32	100
Medium ISPs	3	3	np	np	113	100
Large ISPs	np	np	np	np	164	100
Very large ISPs	np	np	np	np	197	100
Total	np	np	np	np	*508*	*100*
HOUSEHOLD SUBSCRIBERS						
Very small ISPs	—	—	—	—	3	100
Small ISPs	1	1	—	—	111	100
Medium ISPs	5	1	—	—	345	100
Large ISPs	7	1	1	—	1 031	100
Very large ISPs	—	—	—	—	2 184	100
Total	*12*	—	*2*	—	*3 673*	*100*
ALL						
Very small ISPs	—	2	—	—	5	100
Small ISPs	np	np	np	np	143	100
Medium ISPs	8	2	np	np	458	100
Large ISPs	np	np	np	np	1 195	100
Very large ISPs	np	np	np	np	2 381	100
Total	np	np	np	np	*4 181*	*100*

— nil or rounded to zero (including null cells)

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

2.3 INTERNET ACCESS TECHNOLOGY(a) ....

	Subscribers	Subscribers	ISPs providing subscribers with this access
	'000	%	no.
Dial-up access			
Analog	3 879	97	571
Digital	63	2	82
Wireless	np	np	17
Satellite	np	np	9
Other	—	—	—
Total dial-up	*3 993*	*100*	*602*
Permanent access			
Analog	55	29	363
DSL	27	14	47
Digital	17	9	149
Cable	np	np	10
Satellite	np	np	19
Microwave	—	—	25
Other	2	1	19
Total permanent	*188*	*100*	*441*
Total	**4 181**	**100**	**628**

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 its components.

TECHNICAL AND OTHER SERVICES PROVIDED BY ISPs ....

ACCESS SUPPORT

ISPs provided a variety of technical support services to their subscribers, including on-line, help desk and call out/on-site services. The support offered for the June quarter 2001 showed little change from the March quarter 2001.

On-line support services were provided by 80% of ISPs with the larger ISPs (Very large ISPs 100% and Large ISPs 94%) more likely to provide this service than smaller ISPs (Very small ISPs 73% and Small ISPs 80%).

Different levels of help desk support offered by ISPs were:
- business hours — provided by 91% of ISPs;
- extended hours — provided by 69% of ISPs; and
- 24 hours — provided by 19% of ISPs.

Call out/on-site support services were provided by 68% of ISPs.

Other technical services provided by ISPs were start up disk/package services (provided by 49% of ISPs) and pager services (provided by 26% of ISPs).

RELATED SERVICES

Other related services provided by ISPs include:
- Web design — provided by 70% of ISPs;
- Web hosting — provided by 94% of ISPs;
- secure access or transactions capabilities — provided by 53% of ISPs;
- network/systems integration — provided by 63% of ISPs; and
- training services — provided by 49% of 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) ....

		Very small ISPs	Small ISPs	Medium ISPs	Large ISPs	Very large ISPs	Total
Online support service							
	no.	83	257	130	30	5	505
	%	73	80	83	94	100	80
Business hours help desk							
	no.	96	293	148	27	5	569
	%	84	91	95	84	100	91
Extended hours help desk							
	no.	65	216	117	27	5	433
	%	57	67	75	84	100	69
24 hour help desk support service							
	no.	25	53	23	13	5	119
	%	22	17	15	41	100	19
Pager service							
	no.	28	84	41	np	np	164
	%	25	26	26	np	np	26
Call out/on site support service							
	no.	74	227	110	np	np	429
	%	65	71	71	np	np	68
Start up disk/package							
	no.	24	148	108	23	5	308
	%	21	46	69	72	100	49

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

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

3.2 RELATED SERVICES PROVIDED BY ISPs(a) ....

		Very small ISPs	Small ISPs	Medium ISPs	Large ISPs	Very large ISPs	Total
Web design							
	no.	80	245	104	np	np	441
	%	70	76	67	np	np	70
Training services							
	no.	51	174	71	8	3	307
	%	45	54	46	25	60	49
Network/systems integration							
	no.	73	205	100	15	4	397
	%	64	64	64	47	80	63
Secure access or transactions							
	no.	41	162	105	19	3	330
	%	36	50	67	59	60	53
Web hosting							
	no.	103	311	146	28	5	593
	%	90	97	94	88	100	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.

CHAPTER **4**   S E L E C T E D   A C T I V I T Y   D A T A ....

DATA DOWNLOADED

1,204 million Mbs of data were downloaded by Internet subscribers during the June quarter 2001. Household subscribers downloaded 648 million Mbs (54%) while Business and government subscribers downloaded 557 million Mbs (46%). The majority of the Mbs downloaded came from the larger ISPs. Downloads from Very large ISPs accounted for 35% of the Mbs downloaded by subscribers, with Large ISPs and Medium ISPs accounting for 52% and 10% respectively.

There was an average of 288 Mbs of data downloaded per Internet subscriber during the three months of the June quarter 2001. Household subscribers downloaded an average of 176 Mbs of data and Business and government subscribers downloaded an average 1,096 Mbs of data.

Internet subscribers serviced by smaller ISPs tended to have higher average Mbs downloaded levels (an average of 800 Mbs for Very small ISPs and 238 Mbs for Small ISPs) than subscribers serviced by larger ISPs (178 Mbs for Very large ISPs and 524 Mbs for Large ISPs).

4.1 VOLUME OF DATA DOWNLOADED ....

	Data downloaded	Data downloaded
	million Mbs	%
BUSINESS AND GOVERNMENT SUBSCRIBERS		
Very small ISPs	3	1
Small ISPs	np	np
Medium ISPs	43	8
Large ISPs	384	69
Very large ISPs	np	np
Total	*557*	*100*
HOUSEHOLD SUBSCRIBERS		
Very small ISPs	1	—
Small ISPs	np	np
Medium ISPs	74	11
Large ISPs	242	37
Very large ISPs	np	np
Total	*648*	*100*
ALL SUBSCRIBERS		
Very small ISPs	4	—
Small ISPs	34	3
Medium ISPs	116	10
Large ISPs	626	52
Very large ISPs	424	35
Total	*1 204*	*100*

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

—   nil or rounded to zero (including null cells)

CHAPTER **5**   REGIONAL DATA ....

INTRODUCTION   The details presented on access lines, Internet subscribers and volume of data
                          downloaded in the following tables 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 would vary between regional areas.

STATISTICAL DIVISIONS   There was a wide distribution of ISPs across Statistical Divisions (SDs) in Australia, with
                          the highest concentration occurring in the Capital city SDs. Capital city SDs accounted
                          for 72% of access lines, 74% of subscribers and 82% of Mbs downloaded. They recorded
                          an average of 8.9 subscribers per access line and an average of 317 Mbs of data
                          downloaded per subscriber. This compares with 8.2 subscribers per access line and an
                          average of 205 Mbs of data downloaded per subscriber for all other SDs across Australia.

                          ■ New South Wales — Sydney SD had 202 ISPs servicing 943,000 subscribers (72% of
                            State subscribers). All other SDs in the State had 114 ISPs servicing 360,000
                            subscribers.
                          ■ Victoria — Melbourne SD had 195 ISPs servicing 939,000 subscribers (81% of State
                            subscribers). All other SDs in the State had 63 ISPs servicing 215,000 subscribers.
                          ■ Queensland — Brisbane SD had 109 ISPs servicing 512,000 subscribers (60% of State
                            subscribers). All other SDs in the State had 96 ISPs servicing 344,000 subscribers.
                          ■ South Australia — Adelaide SD had 63 ISPs servicing 250,000 subscribers (86% of
                            State subscribers). All other SDs in the State had 19 ISPs servicing 42,000
                            subscribers.
                          ■ Western Australia — Perth SD had 85 ISPs servicing 282,000 subscribers (76% of
                            State subscribers). All other SDs in the State had 30 ISPs servicing 91,000
                            subscribers.
                          ■ Tasmania — Greater Hobart SD had 26 ISPs servicing 64,000 subscribers (68% of
                            State subscribers). All other SDs in the State had 18 ISPs servicing 30,000
                            subscribers.
                          ■ Northern Territory — Darwin SD had 18 ISPs servicing 31,000 subscribers (78% of
                            Territory subscribers). In the other SDs in the Territory there were 12 ISPs servicing
                            9,000 subscribers.
                          ■ Australian Capital Territory — Canberra SD had 52 ISPs servicing 69,000 subscribers
                            (100% of Territory subscribers).

ACCESSIBILITY   The accessibility of regions across Australia has been categorised according to their
                          remoteness. This categorisation is based on a region's Accessibility/Remoteness Index of
                          Australia (ARIA) score. For more details on the ARIA refer to paragraph 10 of the
                          Explanatory notes.

                          Nearly all subscribers accessed a Point of Presence (POP) located in either Highly
                          accessible (89%) or Accessible (7%) regions in Australia. Only 1% (50,000) of subscribers

ACCESSIBILITY *continued*

accessed a POP in Very remote or Remote regions and 2% (77,000) in Moderately accessible regions. The number of subscribers per access line in Highly accessible regions was 8.7, in Accessible regions 8.8, Moderately accessible regions 9.6, Remote regions 11.3 and Very remote regions 5.3.

5.1 SELECTED INTERNET ACTIVITY BY STATISTICAL DIVISION(a) ....

	ISPs(b)	POPs	Access lines	All subscribers	Data downloaded by subscribers	Average number of subscribers per access line(c)	Average data downloaded per subscriber(c)
	no.	no.	no.	'000	million Mbs	no.	Mb
New South Wales							
Sydney	202	297	96 987	943	311	9.7	330
Hunter	38	57	9 916	76	14	7.7	184
Illawarra	45	64	9 493	60	14	6.3	233
Richmond-Tweed	24	29	2 993	29	14	9.7	483
Mid-North Coast	24	68	6 455	52	11	8.1	212
Northern	16	54	3 841	31	8	8.1	258
North Western	15	26	1 439	16	3	11.1	188
Central West	17	37	2 705	21	4	7.8	190
South Eastern	19	33	1 298	16	3	12.3	188
Murrumbidgee	15	31	1 916	23	4	12.0	174
Murray	22	29	4 917	31	6	6.3	194
Far West	10	11	640	4	1	6.3	250
Total	*266*	*736*	*142 600*	*1 303*	*392*	*9.1*	*301*
Victoria							
Melbourne	195	249	118 722	939	291	7.9	310
Barwon	30	35	6 419	38	6	5.9	158
Western District	9	12	1 011	14	2	13.8	143
Central Highlands	24	25	3 202	31	6	9.7	194
Wimmera	5	10	393	5	1	12.7	200
Mallee	14	17	1 995	19	3	9.5	158
Loddon	18	26	3 199	32	5	10.0	156
Goulburn	19	30	3 375	28	4	8.3	143
Ovens-Murray	9	11	610	5	1	8.2	200
East Gippsland	7	15	541	9	1	16.6	111
Gippsland	18	29	2 900	32	5	11.0	156
Total	*226*	*459*	*142 367*	*1 154*	*326*	*8.1*	*282*
Queensland							
Brisbane	109	130	55 189	512	147	9.3	287
Moreton	62	89	17 004	147	25	8.6	170
Wide Bay-Burnett	16	31	4 261	26	4	6.1	154
Darling Downs	24	44	4 274	32	7	7.5	219
South West	4	17	np	np	np	5.8	165
Fitzroy	17	30	6 685	43	12	6.4	279
Central West	3	5	np	np	np	14.6	309
Mackay	17	26	2 607	23	np	8.8	np
Northern	11	14	2 869	24	4	8.4	167
Far North	21	33	4 808	43	9	8.9	209
North West	5	10	np	4	1	np	250
Total	*167*	*429*	*99 885*	*856*	*215*	*8.6*	*251*

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

(a)   Subscribers and data downloaded has been apportioned to a Statistical Division (SD) according to the location of their POP where the activity took place.

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

(c)   Average figures are calculated using actual data as opposed to rounded figures.

5.1 SELECTED INTERNET ACTIVITY BY STATISTICAL DIVISION (a) *continued* ....

	ISPs(b)	POPs	Access lines	All subscribers	Data downloaded by subscribers	Average number of subscribers per access line(c)	Average data downloaded per subscriber(c)
	no.	no.	no.	'000	million Mbs	no.	Mb
South Australia							
Adelaide	63	83	27 559	250	92	9.1	368
Outer Adelaide	7	11	479	7	2	14.6	286
Yorke and Lower North	5	10	459	4	1	8.7	250
Murray Lands	10	20	841	9	1	10.7	111
South East	10	16	804	8	1	9.9	125
Eyre	7	14	291	5	1	17.2	200
Northern	11	27	1 159	10	4	8.6	400
Total	*71*	*181*	*31 592*	*292*	*102*	*9.2*	*349*
Western Australia							
Perth	85	104	30 343	282	94	9.3	333
South West	23	35	4 455	36	7	8.1	194
Lower Great Southern	8	13	881	10	2	11.3	200
Upper Great Southern	np	np	np	np	np	7.9	175
Midlands	np	np	np	np	np	12.1	209
South Eastern	14	24	1 903	17	5	8.9	294
Central	9	15	1 172	9	2	7.7	222
Pilbara	7	17	1 016	np	1	np	np
Kimberley	6	np	np	3	np	np	np
Total	*102*	*233*	*40 969*	*373*	*115*	*9.1*	*308*
Tasmania							
Greater Hobart	26	32	6 662	64	14	9.6	219
Northern	16	21	1 760	15	4	8.5	267
Mersey-Lyell	8	20	1 901	16	1	8.4	62
Total	*28*	*73*	*10 323*	*94*	*19*	*9.1*	*202*
Northern Territory							
Darwin	18	19	3 314	31	7	9.4	226
Northern Territory — Balance	10	12	775	9	2	11.6	222
Total	*19*	*31*	*4 089*	*40*	*9*	*9.8*	*225*
Australian Capital Territory							
Canberra	52	58	8 775	69	26	7.9	377
Total	*52*	*58*	*8 775*	*69*	*26*	*7.9*	*377*
Total Australia	**628**	**2 200**	**480 600**	**4 181**	**1 204**	**8.7**	**288**

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

(a) Subscribers and data downloaded has been apportioned to a Statistical Division (SD) according to the location of their POP where the activity took place.

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

(c) Average figures are calculated using actual data as opposed to rounded figures.

5.2 SELECTED INTERNET ACTIVITY BY ARIA CATEGORY(a)(b) ....

	ISPs(c)	POPs	Access lines	All subscribers	Data downloaded by subscribers	Average number of subscribers per access line(d)	Average data downloaded per subscriber(d)
	no.	no.	no.	'000	million Mbs	no.	Mb
New South Wales							
Highly accessible	242	498	128 300	1 175	366	9.2	313
Accessible	51	191	13 098	116	23	8.9	198
Moderately accessible	18	35	1 114	11	np	9.9	np
Remote	np	np	np	np	np	np	244
Very remote	np	np	np	np	np	np	220
Total	*266*	*736*	*142 600*	*1 303*	*392*	*9.1*	*301*
Victoria							
Highly accessible	219	406	138 835	1 115	320	8.0	287
Accessible	31	41	3 305	35	5	10.6	143
Moderately accessible	5	12	227	4	—	17.6	81
Remote	—	—	—	—	—	—	—
Very remote	—	—	—	—	—	—	—
Total	*226*	*459*	*142 367*	*1 154*	*326*	*8.1*	*282*
Queensland							
Highly accessible	148	278	82 760	730	190	8.8	260
Accessible	28	56	9 863	73	14	7.4	192
Moderately accessible	25	59	4 943	45	8	9.1	178
Remote	7	np	710	np	np	np	143
Very remote	3	np	1 609	np	np	np	250
Total	*167*	*429*	*99 885*	*856*	*215*	*8.6*	*251*
South Australia							
Highly accessible	65	101	28 543	262	95	9.2	362
Accessible	13	41	2 038	np	np	np	294
Moderately accessible	10	21	656	9	1	13.7	111
Remote	7	14	318	5	1	15.7	200
Very remote	3	4	37	np	np	np	262
Total	*71*	*181*	*31 592*	*292*	*102*	*9.2*	*349*
Western Australia							
Highly accessible	92	133	34 389	315	101	9.2	321
Accessible	16	25	2 328	26	5	11.2	192
Moderately accessible	7	18	851	np	2	np	np
Remote	3	10	336	np	np	np	333
Very remote	18	47	3 065	22	np	7.2	np
Total	*102*	*233*	*40 969*	*373*	*115*	*9.1*	*308*

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

—   nil or rounded to zero (including null cells)

(a)   Subscribers and data downloaded by subscribers has been apportioned to an Accessibility/Remoteness Index of Australia (ARIA) category according to the location of the POP where the activity took place. For a description of ARIA refer to paragraphs 10 to 13 of the Explanatory notes.

(b)   Some States/Territories do not have regions coded to all ARIA categories.

(c)   ISPs are counted in each ARIA category where that ISP has a presence.

(d)   Average figures are calculated using actual data as opposed to rounded figures.

5.2 SELECTED INTERNET ACTIVITY BY ARIA CATEGORY(a)(b) *continued* ....

	ISPs(c)	POPs	Access lines	All subscribers	Data downloaded by subscribers	Average number of subscribers per access line(d)	Average data downloaded per subscriber(d)
	no.	no.	no.	'000	million Mbs	no.	Mb
Tasmania							
Highly accessible	28	50	8 325	78	18	9.4	231
Accessible	8	16	1 731	np	np	np	67
Moderately accessible	3	7	267	np	np	np	103
Remote	—	—	—	—	—	—	—
Very remote	—	—	—	—	—	—	—
Total	*28*	*73*	*10 323*	*94*	*19*	*9.1*	*202*
Northern Territory							
Highly accessible	—	—	—	—	—	—	—
Accessible	18	19	3 314	31	7	9.3	226
Moderately accessible	—	—	—	—	—	—	—
Remote	np	np	755	np	np	np	222
Very remote	np	np	20	np	np	np	63
Total	*19*	*31*	*4 089*	*40*	*9*	*9.8*	*225*
Australian Capital Territory							
Highly accessible	52	58	8 775	69	26	7.9	377
Accessible	—	—	—	—	—	—	—
Moderately accessible	—	—	—	—	—	—	—
Remote	—	—	—	—	—	—	—
Very remote	—	—	—	—	—	—	—
Total	*52*	*58*	*8 775*	*69*	*26*	*7.9*	*377*
Total Australia							
Highly accessible	565	1 524	429 927	3 742	1 116	8.7	298
Accessible	107	389	35 677	313	61	8.8	195
Moderately accessible	49	152	8 058	77	14	9.6	182
Remote	21	61	2 204	25	6	11.3	240
Very remote	21	74	4 734	25	8	5.3	320
Total	*628*	*2 200*	*480 600*	*4 181*	*1 204*	*8.7*	*288*

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

—   nil or rounded to zero (including null cells)

(a)   Subscribers and data downloaded by subscribers has been apportioned to an Accessibility/Remoteness Index of Australia (ARIA) category according to the location of the POP where the activity took place. For a description of ARIA refer to paragraphs 10 to 13 of the Explanatory notes.

(b)   Some States/Territories do not have regions coded to all ARIA categories.

(c)   ISPs are counted in each ARIA category where that ISP has a presence.

(d)   Average figures are calculated using actual data as opposed to rounded figures.

EXPLANATORY NOTES ....

INTRODUCTION

1   This publication presents results from the Internet Activity Survey in respect of the June quarter 2001. The survey covers all identified Internet Service Providers (ISPs) providing Internet access in Australia.

SURVEY SCOPE AND METHODOLOGY

2   The scope of the Internet Activity Survey 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 survey.

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

4   The Internet Activity Survey is conducted as a mail-out, mail-back survey.

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 survey was the trading entity providing Internet access. In most cases this equates with the ABS concept of the management unit. The management unit is the highest-level accounting unit within a business or organisation, having regard for industry homogeneity, for which accounts are maintained. In nearly all cases it coincides with the legal entity owning the business (i.e. company, partnership, trust, sole operator etc.).

7   ISPs in this survey have been classified by size according to the number of subscribers ISPs reported for at the end of the reporting 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

REGIONAL CLASSIFICATION OF DATA

8   The data contained in tables 5.1 and 5.2 have been classified on a geographical basis by allocating Point of Presence (POP) details:

REGIONAL CLASSIFICATION
OF DATA *continued*

- 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. Reference map 1 at the back of this publication shows the SD boundaries; and
- to Accessibility/Remoteness Index of Australia (ARIA) categories, as outlined in *Accessibility/Remoteness Index of Australia (ARIA)*, Department of Health and Aged Care Occasional Papers, Series No. 6, March 1999. The results in table 5.2 are experimental in nature as the classification of remoteness is still in its early stages of development. Reference map 2 at the back of this publication shows the ARIA boundaries.

POINTS OF PRESENCE

9 Numbers of POPs is equal to the number of POPs made available by ISPs. This may be more than the number of physical POPs due to the sharing of POPs between ISPs.

ACCESSIBILITY/REMOTENESS
INDEX OF AUSTRALIA

10 The ARIA methodology was developed by the National Key Centre for Social Applications of Geographical Information Systems at the University of Adelaide. The work was funded by the Commonwealth Department of Health and Aged Care and a number of organisations, including the ABS, helped develop the final product.

11 The ARIA defines remoteness in terms of accessibility to defined service centres. Remoteness values for 11,338 populated localities are derived in terms of road distance to those service centres. Localities which are more remote have less access to service centres and conversely, those which are less remote have greater access to service centres. The Department of Health and Aged Care recommends the following five categories of remoteness:

- Highly Accessible (ARIA score: less than 1.84) — relatively unrestricted accessibility to a wide range of goods and services and opportunities for social interaction.
- Accessible (ARIA score: 1.84 – 3.51) — some restrictions to accessibility of some goods, services and opportunities for social interaction.
- Moderately Accessible (ARIA score: 3.51 – 5.80) — significantly restricted accessibility of goods, services and opportunities for social interaction.
- Remote (ARIA score: 5.80 – 9.08) — very restricted accessibility of goods, services and opportunities for social interaction.
- Very Remote (ARIA score: 9.08 or more) — locally disadvantaged, with very little accessibility of goods, services and opportunities for social interaction.

12 In order to classify POP details to ARIA categories, they were first coded to Statistical Local Area (SLA) based on their location. The average ARIA index value for the SLA was then used to derive an ARIA category for each POP.

REFERENCE PERIOD

13 Data contained in this publication relate to ISPs which operated in Australia at any time during the reference quarter. However, counts of ISPs reflect only those businesses operating at the end of the reference period.

RELIABILITY OF DATA

14 As the survey 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 misreported data; and
- definition and classification errors.

RELIABILITY OF DATA *continued* **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.

ACKNOWLEDGMENT **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 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, Australia,1999–2000 (Cat. no. 8129.0).
   Computing Services Industry, Australia, 1998–99 (Cat. no. 8669.0).
   Government Use of Information Technology, Australia, 1997–98 (Cat. no. 8119.0).
   Household Use of Information Technology, Australia, 1999 (Cat. no. 8146.0).
   Information Technology, Australia 1998–99 (Cat. no. 8126.0).
   Use of Information Technology on farms, Australia,1998–99 (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 survey, subject to the application of confidentiality provisions.

ABBREVIATIONS

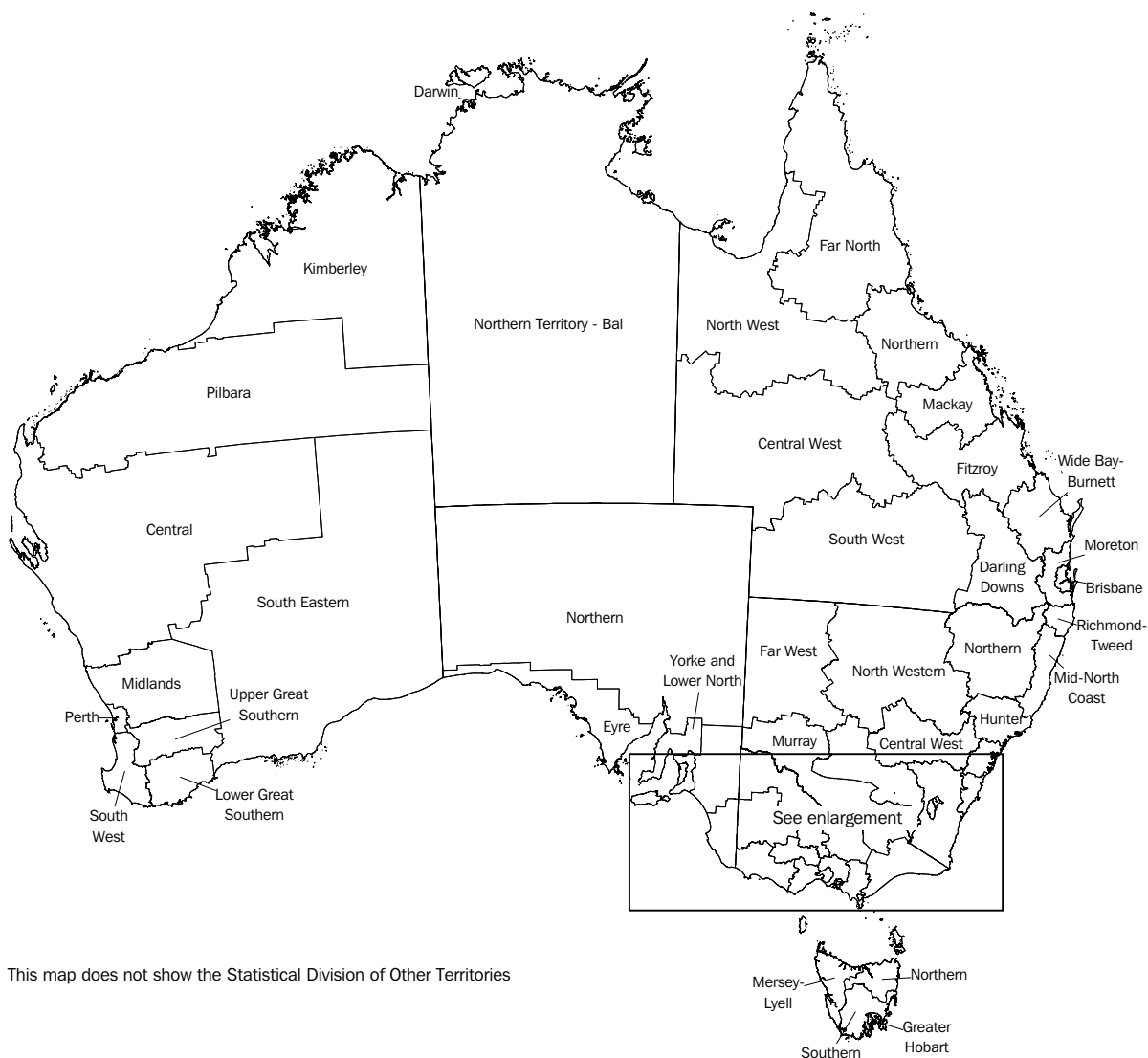|	
—	nil or rounded to zero (including null cells)
ABS	Australian Bureau of Statistics
ARIA	Accessibility/Remoteness Index of Australia
ISPs	Internet Service Providers
Mbs	Megabytes
n.p.	not available for publication but included in totals where applicable
POPs	Points of Presence
SD	Statistical Division
TIO	Telecommunications Industry Ombudsman

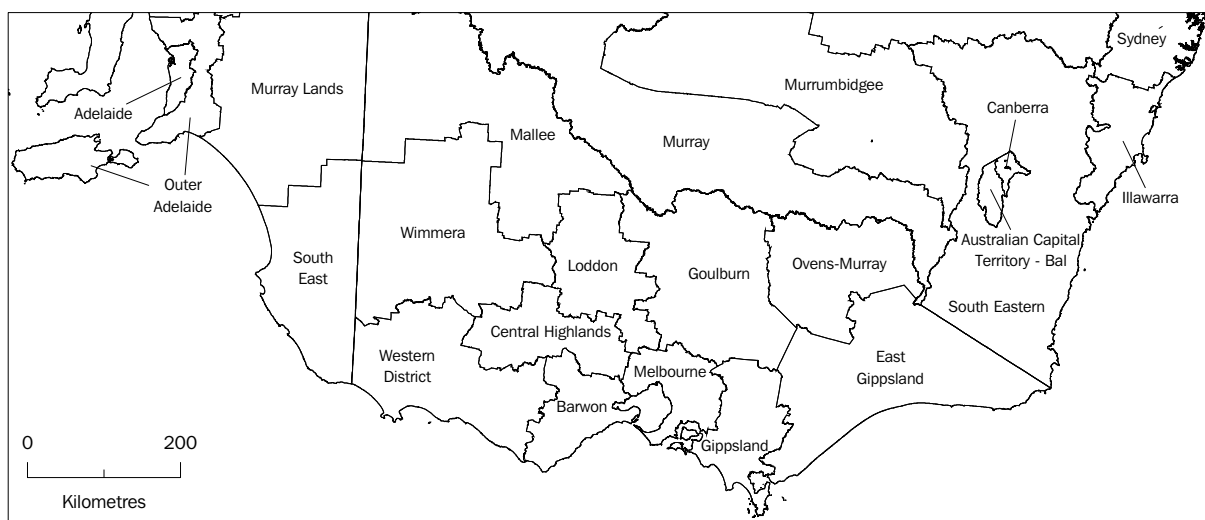|	
Access plan	The Internet access package options available to subscribers from ISPs.
Access lines	Lines, points, ports, modem access points available to subscribers to access their ISP.
Active subscribers	Subscribers who have accessed the Internet or paid for access to the Internet through an ISP in 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 and carries continuously variable signals or data.
Business and government subscribers	All businesses, corporations, nonprofit 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.
Dial-up access	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 analogue 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 Web sites	Customer Web sites maintained by ISP 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 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 cafe	A venue that offers access to personal computers or other terminals that are connected to the Internet and paid for on a non-subscription basis.
Internet Service Provider (ISP)	Resident Australian individuals or businesses offering Internet access services to customers.
ISDN	See Digital/Integrated Services Digital Network (ISDN).

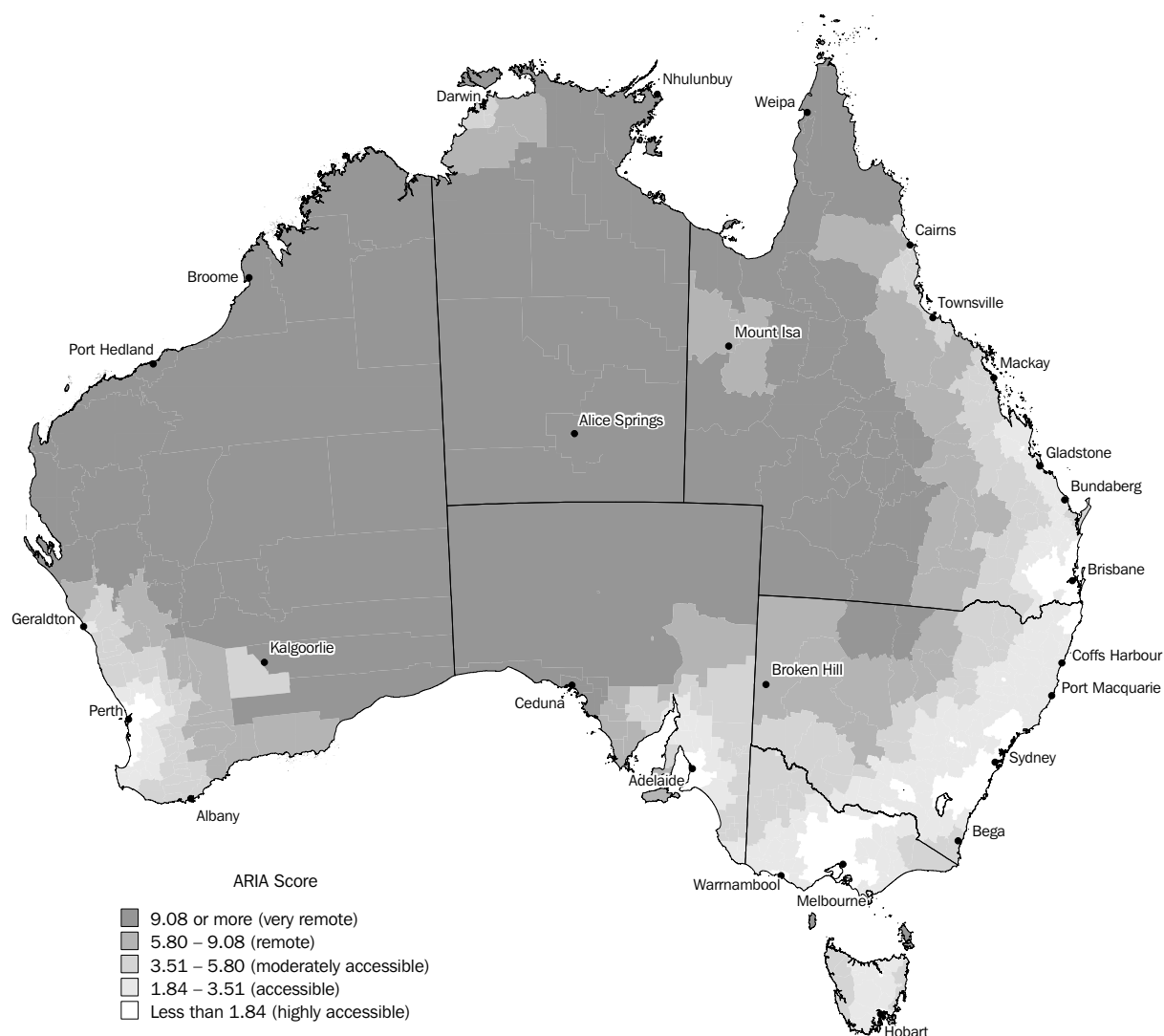|	
Megabyte (Mb)	A data unit of 1,048,576 bytes, sometimes interpreted as 1 million bytes.
Microwave radio	A communication link that uses point-to-point radio transmission.
Monthly/quarterly/annual access plan	A subscription option where customers pay a flat monthly/quarterly/annual fee, and receive 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.
Nonprofit organisations	Industry and trade associations, clubs, cultural organisations, community service organisations and similar organisations.
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 access	Permanent subscriber access to the Internet via permanent modem, Integrated Services Digital Network, dedicated data service, frame relay, etc.
Point of Presence (POP)	A geographic location where an ISP can be accessed by a subscriber.
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.
Secure transaction capabilities	Includes Web sites with on-line payment facilities (e.g. payments performed on-line in a web browser using secure protocols to protect the information) and Web sites with the ability to conduct real time on-line payments (e.g. on-line payments for which there is a real time connection to credit/debit card processing networks).
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.
Subscribers who left during the reference period	Is calculated by adding the number of new subscribers during the reference period to the number of subscribers of the start of the reference period, then subtracting the number of subscribers at the end of the reference period.
Web hosting	See Hosted Web sites.
Wireless Application Protocol (WAP)	A standard for providing Internet access and other data-based services, such as email, electronic transactions, news and weather reports, over wireless networks.
24 hr telephone service	A telephone support service which operates around the clock.

REFERENCE MAPS ....

A1 STATISTICAL DIVISIONS—1 July, 2000

Darwin

Kimberley

Northern Territory - Bal

Far North

North West

Northern

Pilbara

Mackay

Central West

Central

Fitzroy

Wide Bay-
Burnett

South West

Moreton

Darling
Downs

Brisbane

South Eastern

Northern

Northern

Richmond-
Tweed

Midlands

Upper Great
Southern

Yorke and
Lower North

Far West

North Western

Mid-North
Coast

Perth

Eyre

Hunter

Murray

Central West

South
West

Lower Great
Southern

See enlargement

This map does not show the Statistical Division of Other Territories

Mersey-
Lyell

Northern

Greater
Hobart

Southern

Enlargement

Adelaide

Murray Lands

Sydney

Murrumbidgee

Outer
Adelaide

Mallee

Murray

Canberra

Illawarra

Wimmera

Loddon

Goulburn

Ovens-Murray

Australian Capital
Territory - Bal

South
East

Central Highlands

South Eastern

Western
District

Melbourne

East
Gippsland

Barwon

Gippsland

0   200

Kilometres

A2   ACCESSIBILITY/REMOTENESS INDEX OF AUSTRALIA, By Statistical Local Area

ARIA Score

- 9.08 or more (very remote)
- 5.80 – 9.08 (remote)
- 3.51 – 5.80 (moderately accessible)
- 1.84 – 3.51 (accessible)
- Less than 1.84 (highly accessible)

FOR MORE INFORMATION . . .

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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CPI INFOLINE For current and historical Consumer Price Index data, call 1902 981 074 (call cost 77c per minute).

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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