Australian Bureau of Statistics

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 March 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.

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 19 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 two previous quarters.

Dennis Trewin
Australian Statistician

LIST OF TABLES ....

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

HIGHLIGHTS
- The number of ISPs in Australia fell 4% to 665 during the March quarter following a fall of 3% between September and December 2000.
- The number of Points of Presence (POPs) fell 4%.
- The number of access lines available to subscribers was down 5% from the December number.
- The number of subscribers increased by 47,000.
- There was virtually no change in the volume of data downloaded.
- The number of Web sites hosted by ISPs was down 9%. This was mainly due to some businesses falling out of the scope of the survey because they now concentrate on hosting Web sites and no longer provide Internet access.

ISPs
There were 665 ISPs in Australia supplying Internet access services to 4 million active subscribers at the end of March quarter 2001. There were:
- 6 Very large ISPs (with more than 100,000 subscribers) which provided Internet access to 56% (2.2 million) of all Internet subscribers.
- 31 Large ISPs (with 10,001 to 100,000 subscribers) with 28% (1.1 million) of subscribers.
- 169 Medium ISPs (with 1,001 to 10,000 subscribers) with 12% (0.5 million) of subscribers.
- 330 Small ISPs (with 101 to 1,000 subscribers) with 4% (0.14 million) of subscribers.
- 129 Very small ISPs (with 100 or fewer subscribers) with only 0.1% (5,000) of subscribers.

Over the March quarter 2001, there was a decrease of 31 ISPs overall. The majority of these were in the Small size range (decrease of 29). 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 4.0 million Internet subscribers in Australia, there were 3.5 million Household subscribers and 482,000 Business and government subscribers.

At the end of the March quarter 2001, there were 76,000 more Household Internet subscribers and 30,000 less Business and government Internet subscribers than at the end of the December quarter 2000. Note that some of this movement is due to the way some ISPs classify subscribers.

WEB SITES HOSTED
At the end of March quarter 2001, ISPs hosted 88,722 Business and government Web sites of which 3,966 (4%) provided an environment for secure transactions. The drop from the December quarter 2000 can be attributed to former ISPs ceasing to provide ISP

WEB SITES HOSTED
continued

services and no longer being in scope of the survey. Web hosting services were provided by 93% of ISPs and secure access transaction capabilities were provided by 50% of ISPs.

POPS AND ACCESS LINES

A POP is a geographical location where a subscriber can access (connect to) an ISP via access lines. Across Australia, ISPs provided 2,310 POPs and 490,108 access lines, which indicates that on average there were 8.1 subscribers per Internet access line.

DATA DOWNLOADED

There were 1,040 million megabytes (Mbs) of data downloaded by Internet subscribers during the March quarter 2001, which is an average of 262 Mbs per subscriber. This is slightly lower than the December quarter 2000 level. Household subscribers downloaded 611 million Mbs (average of 175 Mbs per subscriber) and Business and government subscribers downloaded 428 million Mbs (average of 888 Mbs per subscriber).

REGIONAL DATA

From the December quarter 2000 to the March quarter 2001, the following changes occurred at a regional level:
- New South Wales — ISPs decreased by 8, POPs decreased by 23, access lines decreased by 29,897, subscribers decreased by 34,000 and data downloaded by subscribers increased by 28 million Mbs.
- Victoria — ISPs decreased by 16, POPs decreased by 48, access lines increased by 2,755, subscribers decreased by 38,000 and data downloaded by subscribers decreased by 83 million Mbs.
- Queensland — ISPs decreased by 6, POPs decreased by 1, access lines decreased by 2,394, subscribers increased by 51,000 and data downloaded by subscribers increased by 27 million Mbs.
- South Australia — ISPs decreased by 5, POPs increased by 1, access lines increased by 206, subscribers increased by 24,000 and data downloaded by subscribers increased by 4 million Mbs.
- Western Australia — ISPs decreased by 11, POPs decreased by 16, access lines increased by 3,001, subscribers increased by 39,000 and data downloaded by subscribers increased by 12 million Mbs.
- Tasmania — ISPs decreased by 1, POPs increased by 1, access lines increased by 166, subscribers increased by 5,000 and data downloaded by subscribers increased by 1 million Mbs.
- Northern Territory — ISPs increased by 2, POPs increased by 2, access lines increased by 428, subscribers increased by 2,000 and data downloaded by subscribers remained constant at 9 million Mbs.
- Australia Capital Territory — ISPs increased by 1, POPs remained constant at 62, access lines increased by 103, subscribers decreased by 1,000 and data downloaded by subscribers remained constant at 24 million Mbs.

1.1 INTERNET ACTIVITY SUMMARY, AUSTRALIA ....

		September Quarter 2000	December Quarter 2000	March Quarter 2001
ISPs(a)				
Very small	no.	132	129	129
Small	no.	377	359	330
Medium	no.	173	171	169
Large	no.	28	31	31
Very large	no.	8	6	6
Total	no.	718	696	665
Internet access				
Points of Presence	no.	2 244	2 394	2 310
Access lines	no.	521 645	515 740	490 108
Subscribers				
Business and government	'000	432	512	482
Household	'000	3 417	3 410	3 486
All	'000	3 849	3 921	3 968
Data downloaded				
Business and government subscribers	million Mbs	457	467	428
Household subscribers	million Mbs	595	583	611
Total	million Mbs	1 052	1 050	1 040
Web sites hosted				
Business and government	no.	101 235	97 165	88 722
Business and government with secure transaction capabilities	no.	3 710	4 233	3 966

(a)   See paragraph 7 of Explanatory notes.

1.2 STATE AND TERRITORY SUMMARY ....

	ISPs	POPs	Access lines	All subscribers	Data downloaded by subscribers
	no.	no.	no.	'000	million Mbs

NEW SOUTH WALES

2001					
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					
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					
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					
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					
March	109	239	40 861	357	113
2000					
December	120	255	37 860	318	101
September	113	233	47 891	318	99

TASMANIA

2001					
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* ....

	ISPs	POPs	Access lines	All subscribers	Data downloaded by subscribers
	no.	no.	no.	'000	million Mbs

NORTHERN TERRITORY

2001					
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					
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					
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**　　　　　SUBSCRIBER CHARACTERISTICS ....

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 March quarter 2001, there were 4.0 million active Internet subscribers in Australia comprising 3.5 million Household Internet subscribers and 482,000 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 March quarter 2001, there were 76,000 more Household Internet subscribers and 30,000 less Business and government Internet subscribers. When compared to December quarter levels, there were 123,000 fewer free Internet accounts but there was an increase in the number of fee paying Internet subscribers.

ACCESS TECHNOLOGY

The principal Internet access technology utilised by subscribers for the March quarter 2001 was analog connection with 97% (3.7 million) of dial-up and 26% (40,000) of permanent subscribers connected to the Internet by an analog line.

ACCESS PLANS

Of the 4.0 million Internet subscribers, 6% (254,000) were on a free Internet access plan. This was a decrease of 123,000 from the December 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 (68% or 2.7 million subscribers), or an hourly access plan (22% or 0.9 million subscribers).

There were 66% (320,000) of Business and government subscribers on a monthly/quarterly/annual access plan, while 69% (2.4 million subscribers) of Household subscribers used these plans. Hourly access plans accounted for 26% (125,000 subscribers) of Business and government subscribers and 22% (766,000) 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	3 788
Permanent access	np	np	133
Total	*512*	*3 410*	*3 921*

NEW SUBSCRIBERS DURING REFERENCE PERIOD

Dial-up access	np	np	562
Permanent access	np	np	23
Total	*79*	*495*	*574*

SUBSCRIBERS AT END OF REFERENCE PERIOD

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

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

(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						
Very small ISPs	—	—	1	50	—	—
Small ISPs	—	—	22	69	9	28
Medium ISPs	np	np	65	52	57	46
Large ISPs	np	np	79	53	50	34
Very large ISPs	np	np	152	87	9	5
Total	*7*	*1*	*320*	*66*	*125*	*26*
HOUSEHOLD						
Very small ISPs	—	5	2	77	—	17
Small ISPs	4	4	74	67	30	27
Medium ISPs	3	1	219	59	140	38
Large ISPs	146	15	564	59	246	26
Very large ISPs	94	5	1 538	75	350	17
Total	*247*	*7*	*2 397*	*69*	*766*	*22*
ALL						
Very small ISPs	—	4	4	76	1	18
Small ISPs	4	3	96	67	39	27
Medium ISPs	np	np	285	58	197	40
Large ISPs	np	np	643	58	296	27
Very large ISPs	np	np	1 690	76	359	16
Total	*254*	*6*	*2 717*	*68*	*891*	*22*

—   nil or rounded to zero (including null cells)

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

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						
Very small ISPs	—	—	—	—	2	100
Small ISPs	—	—	1	3	32	100
Medium ISPs	np	np	np	np	125	100
Large ISPs	np	np	np	np	148	100
Very large ISPs	np	np	np	np	175	100
Total	*np*	*np*	*np*	*np*	*482*	*100*
HOUSEHOLD						
Very small ISPs	—	—	—	1	3	100
Small ISPs	2	2	1	1	110	100
Medium ISPs	3	1	3	1	369	100
Large ISPs	3	—	—	—	958	100
Very large ISPs	—	—	67	3	2 046	100
Total	*8*	*—*	*71*	*2*	*3 486*	*100*
ALL						
Very small ISPs	—	1	—	1	5	100
Small ISPs	2	2	2	1	143	100
Medium ISPs	np	np	np	np	493	100
Large ISPs	np	np	np	np	1 106	100
Very large ISPs	np	np	np	np	2 222	100
Total	*np*	*np*	*np*	*np*	*3 968*	*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	3 707	97	605
Digital	56	1	83
Wireless	np	np	21
Satellite	2	—	np
Other	np	np	np
Total dial-up	*3 814*	*100*	*631*
Permanent access			
Analog	40	26	365
DSL(b)	27	18	52
Digital	np	np	155
Cable	np	np	10
Satellite	2	1	18
Microwave	—	—	27
Other	1	1	29
Total permanent	*154*	*100*	*453*
Total	**3 968**	**100**	**665**

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.

(b)   DSL dial-up was published in Table 2.3 in the December issue. Investigations have revealed that DSL is only available as a permanent connection. As a result this category is now included only under the permanent access sub-heading.

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 March quarter 2001 showed little change from the December quarter 2000.

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 67% and Small ISPs 81%).

Different levels of help desk support offered by ISPs were:
- business hours — provided by 89% of ISPs;
- extended hours — provided by 67% of ISPs; and
- 24 hours — provided by 18% of ISPs.

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

Other technical services provided by ISPs were start up disk/package services (provided by 50% of ISPs) and pager services (provided by 25% of ISPs).

RELATED SERVICES

Other related services provided by ISPs include:
- Web design — provided by 67% of ISPs;
- Web hosting — provided by 93% of ISPs;
- secure access or transactions capabilities — provided by 50% of ISPs;
- network/systems integration — provided by 62% of ISPs; and
- training services - provided by 48% 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.	87	267	146	29	6	535
	%	67	81	86	94	100	80
Business hours help desk							
	no.	103	299	157	29	6	594
	%	80	91	93	94	100	89
Extended hours help desk							
	no.	66	219	126	29	6	446
	%	51	66	75	94	100	67
24 hour help desk support service							
	no.	31	40	26	14	6	117
	%	24	12	15	45	100	18
Pager service							
	no.	31	85	42	np	np	167
	%	24	26	25	np	np	25
Call out/on site support service							
	no.	82	238	125	np	np	461
	%	64	72	74	np	np	69
Start up disk/package							
	no.	34	156	117	20	6	333
	%	26	47	69	65	100	50

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.	79	245	116	np	np	448
	%	61	74	69	np	np	67
Training services							
	no.	54	175	77	np	np	316
	%	42	53	46	np	np	48
Network/systems integration							
	no.	78	209	103	14	5	409
	%	60	63	61	45	83	62
Secure access or transactions							
	no.	44	166	104	17	3	334
	%	34	50	62	55	50	50
Web hosting							
	no.	112	320	155	25	6	618
	%	87	97	92	81	100	93

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**   **SELECTED ACTIVITY DATA** ....

DATA DOWNLOADED

There were 1,040 million Mbs of data downloaded by Internet subscribers during the March quarter 2001. Household subscribers downloaded 611 million Mbs (59%) while Business and government subscribers downloaded 428 million Mbs (41%) . The majority of the Mbs downloaded came from the larger ISPs. Downloads from Very large ISPs accounted for 36% of the Mbs downloaded by subscribers, with Large ISPs and Medium ISPs accounting for 49% and 12% respectively.

There was an average of 262 Mbs of data downloaded per Internet subscriber during the three months of the March quarter 2001. Household subscribers downloaded an average of 175 Mbs of data and Business and government subscribers downloaded an average of 888 Mbs of data.

Internet subscribers serviced by smaller ISPs tended to have higher average Mbs download levels (an average of 800 Mbs for Very small ISPs and 217 Mbs for Small ISPs) than subscribers serviced by larger ISPs (167 Mbs for Very large ISPs and 457 Mbs for Large ISPs).

4.1 VOLUME OF DATA DOWNLOADED ....

	Data downloaded million Mbs	Data downloaded %
BUSINESS AND GOVERNMENT SUBSCRIBERS		
Very small ISPs	np	np
Small ISPs	12	3
Medium ISPs	48	11
Large ISPs	292	68
Very large ISPs	np	np
Total	*428*	*100*
HOUSEHOLD SUBSCRIBERS		
Very small ISPs	np	np
Small ISPs	18	3
Medium ISPs	80	13
Large ISPs	213	35
Very large ISPs	np	np
Total	*611*	*100*
ALL SUBSCRIBERS		
Very small ISPs	4	—
Small ISPs	31	3
Medium ISPs	128	12
Large ISPs	505	49
Very large ISPs	371	36
Total	*1 040*	*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**   R E G I O N A L   D A T A   ....

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 71% of access lines, 73% of subscribers and 76% of Mbs downloaded. They recorded an average of 8.4 subscribers per access line and an average of 276 Mbs of data downloaded per subscriber. This compares with 7.7 subscribers per access line and an average of 231 Mbs of data downloaded per subscriber for all other SDs across Australia.

- New South Wales — Sydney SD had 213 ISPs servicing 929,000 subscribers (72% of State subscribers). All other SDs in the State had 121 ISPs servicing 355,000 subscribers.
- Victoria — Melbourne SD had 217 ISPs servicing 830,000 subscribers (79% of State subscribers). All other SDs in the State had 68 ISPs servicing 217,000 subscribers.
- Queensland — Brisbane SD had 110 ISPs servicing 465,000 subscribers (58% of State subscribers). All other SDs in the State had 98 ISPs servicing 338,000 subscribers.
- South Australia — Adelaide SD had 64 ISPs servicing 237,000 subscribers (85% of State subscribers). All other SDs in the State had 20 ISPs servicing 41,000 subscribers.
- Western Australia — Perth SD had 94 ISPs servicing 271,000 subscribers (76% of State subscribers). All other SDs in the State had 31 ISPs servicing 86,000 subscribers.
- Tasmania — Greater Hobart SD had 29 ISPs servicing 54,000 subscribers (61% of State subscribers). All other SDs in the State had 18 ISPs servicing 34,000 subscribers.
- Northern Territory — Darwin SD had 18 ISPs servicing 29,000 subscribers (76% of Territory subscribers). In the other SDs in the Territory there were 13 ISPs servicing 9,000 subscribers.
- Australian Capital Territory — Canberra SD had 57 ISPs servicing 73,000 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 (8%) regions in Australia. Only 1% (49,000) of subscribers

ACCESSIBILITY *continued*

accessed a POP in Very remote or Remote regions and 2% (84,000) in Moderately accessible regions. The number of subscribers per access line in Highly accessible regions was 8.1, in Accessible regions 8.2, Moderately accessible regions 8.8, Remote regions 9.3 and Very remote regions 7.5.

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	213	315	107 421	929	254	8.6	274
Hunter	41	61	10 791	71	15	6.6	207
Illawarra	52	69	10 743	65	16	6.1	239
Richmond-Tweed	25	30	2 737	27	14	9.9	514
Mid-North Coast	25	70	7 436	51	12	6.9	228
Northern	18	56	3 654	28	6	7.7	212
North Western	14	25	1 273	13	2	10.2	177
Central West	19	39	2 769	22	5	7.9	210
South Eastern	26	41	2 376	20	3	8.4	151
Murrumbidgee	16	32	2 246	22	4	9.8	192
Murray	24	31	5 121	31	6	6.1	193
Far West	11	12	686	4	1	5.8	204
Total	*283*	*781*	*157 253*	*1 284*	*337*	*8.2*	*262*
Victoria							
Melbourne	217	268	111 661	830	206	7.4	249
Barwon	32	39	5 988	36	7	6.0	206
Western District	10	14	1 113	14	2	12.6	109
Central Highlands	29	30	4 160	32	6	7.7	191
Wimmera	5	10	371	5	1	13.5	105
Mallee	14	17	2 032	17	3	8.4	200
Loddon	19	28	3 394	32	8	9.4	239
Goulburn	21	35	4 176	34	9	8.1	262
Ovens-Murray	11	13	980	8	1	8.2	180
East Gippsland	7	15	539	9	1	16.7	108
Gippsland	19	31	3 051	32	5	10.5	168
Total	*248*	*500*	*137 465*	*1 047*	*250*	*7.6*	*238*
Queensland							
Brisbane	110	132	54 003	465	123	8.6	265
Moreton	62	91	16 948	141	30	8.3	212
Wide Bay-Burnett	17	32	4 417	30	7	6.8	227
Darling Downs	23	41	4 440	29	7	6.5	252
South West	4	17	239	np	np	np	186
Fitzroy	18	33	7 269	44	11	6.1	253
Central West	3	5	np	np	np	np	266
Mackay	18	23	np	22	np	np	np
Northern	12	17	3 185	24	7	7.5	273
Far North	23	35	4 994	40	9	8.0	231
North West	6	11	852	6	1	7.0	187
Total	*170*	*437*	*99 235*	*803*	*201*	*8.1*	*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	64	85	27 585	237	74	8.6	312
Outer Adelaide	6	10	429	6	3	14.0	435
Yorke and Lower North	5	10	417	4	1	9.6	305
Murray Lands	11	22	927	10	2	10.8	222
South East	10	19	878	8	2	9.1	256
Eyre	7	14	286	4	2	14.0	384
Northern	11	26	1 146	9	4	7.9	498
Total	*73*	*186*	*31 668*	*278*	*88*	*8.8*	*317*
Western Australia							
Perth	94	115	30 648	271	92	8.8	340
South West	21	32	4 120	33	8	8.0	235
Lower Great Southern	8	13	885	11	2	12.4	190
Upper Great Southern	np	3	np	np	np	7.9	np
Midlands	np	13	808	np	np	np	216
South Eastern	13	23	np	np	np	8.5	356
Central	9	15	1 171	9	1	7.7	156
Pilbara	7	17	1 002	5	1	5.0	273
Kimberley	6	8	350	3	1	8.6	244
Total	*109*	*239*	*40 861*	*357*	*113*	*8.7*	*317*
Tasmania							
Greater Hobart	29	34	6 585	54	11	8.2	198
Northern	17	20	2 138	16	5	7.5	283
Mersey-Lyell	9	19	2 070	18	2	8.7	119
Total	*32*	*73*	*10 793*	*88*	*17*	*8.2*	*197*
Northern Territory							
Darwin	18	19	3 675	29	7	7.9	241
Northern Territory — Balance	11	13	848	9	2	10.6	214
Total	*20*	*32*	*4 523*	*38*	*9*	*8.4*	*234*
Australian Capital Territory							
Canberra	57	62	8 310	73	24	8.8	328
Total	*57*	*62*	*8 310*	*73*	*24*	*8.8*	*328*
Total for Australia	**665**	**2 310**	**490 108**	**3 968**	**1 040**	**8.1**	**262**

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 subscriber per access line(d)	Average data downloaded per subscriber(d)
	no.	no.	no.	'000	million Mbs	no.	Mb
New South Wales							
Highly accessible	254	527	141 280	1 155	311	8.2	269
Accessible	59	203	14 434	114	23	7.9	202
Moderately accessible	22	39	np	13	3	np	203
Remote	np	np	np	np	np	10.5	279
Very remote	np	np	np	np	np	44.6	—
Total	*283*	*781*	*157 253*	*1 284*	*337*	*8.2*	*262*
Victoria							
Highly accessible	241	445	133 843	1 009	244	7.5	241
Accessible	32	43	3 379	34	5	10.1	153
Moderately accessible	5	12	243	4	1	16.5	223
Remote	—	—	—	—	—	—	—
Very remote	—	—	—	—	—	—	—
Total	*248*	*500*	*137 465*	*1 047*	*250*	*7.6*	*238*
Queensland							
Highly accessible	149	282	82 319	676	171	8.2	252
Accessible	28	56	9 603	68	17	7.1	255
Moderately accessible	27	62	6 024	49	11	8.1	226
Remote	8	np	np	np	np	7.2	220
Very remote	3	np	np	np	np	10.8	246
Total	*170*	*437*	*99 235*	*803*	*201*	*8.1*	*251*
South Australia							
Highly accessible	66	102	28 507	248	76	8.7	313
Accessible	14	42	2 063	16	6	7.8	390
Moderately accessible	11	24	750	10	np	13.3	np
Remote	7	14	np	np	2	12.8	np
Very remote	3	4	np	np	np	20.1	np
Total	*73*	*186*	*31 668*	*278*	*88*	*8.8*	*317*
Western Australia							
Highly accessible	99	142	34 448	301	100	8.7	331
Accessible	15	24	2 257	np	5	np	np
Moderately accessible	7	18	np	np	1	8.2	np
Remote	3	10	np	3	1	np	285
Very remote	17	45	2 969	21	6	7.1	309
Total	*109*	*239*	*40 861*	*357*	*113*	*8.7*	*317*

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 subscriber 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 Statistical Division (SD) 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 subscriber per access line(d)	Average data downloaded per subscriber(d)
	no.	no.	no.	'000	million Mbs	no.	Mb
Tasmania							
Highly accessible	31	52	8 646	70	15	8.1	215
Accessible	9	16	1 871	np	np	np	125
Moderately accessible	3	5	276	np	np	np	90
Remote	—	—	—	—	—	—	—
Very remote	—	—	—	—	—	—	—
Total	*32*	*73*	*10 793*	*88*	*17*	*8.2*	*197*
Northern Territory							
Highly accessible	—	—	—	—	—	—	—
Accessible	18	19	3 675	29	np	7.9	np
Moderately accessible	—	—	—	—	—	—	—
Remote	np	np	np	np	2	10.9	np
Very remote	np	np	np	np	np	11.3	66
Total	*20*	*32*	*4 523*	*38*	*9*	*8.4*	*234*
Australian Capital Territory							
Highly accessible	57	62	8 310	73	24	8.8	328
Accessible	—	—	—	—	—	—	—
Moderately accessible	—	—	—	—	—	—	—
Remote	—	—	—	—	—	—	—
Very remote	—	—	—	—	—	—	—
Total	*57*	*62*	*8 310*	*73*	*24*	*8.8*	*328*
Total for Australia							
Highly accessible	598	1 612	437 353	3 531	941	8.1	267
Accessible	114	403	37 282	304	66	8.2	216
Moderately accessible	53	160	9 585	84	19	8.8	220
Remote	23	63	2 675	25	7	9.3	265
Very remote	20	72	3 213	24	7	7.5	307
Total	*665*	*2 310*	*490 108*	*3 968*	*1 040*	*8.1*	*262*

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 subscriber 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 Statistical Division (SD) 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 a survey covering all identified Internet Service Providers (ISPs), entitled the Internet Activity Survey, in respect of the March quarter 2001.

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. The ABS is investigating secure means of capturing this data electronically for future iterations of this 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

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:

STATISTICAL UNIT *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.

POINT 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.

13 On 15 January 2001, the ABS released an information paper on plans to introduce a classification of remoteness. The publication, *Information Paper: ABS Views on Remoteness* (Cat. no. 1244.0), details the proposed classification and invites comments from potential users of the remoteness classification and other interested parties.

REFERENCE PERIOD

14 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

15 As the survey does not have a sample component, the data are not subject to sampling variability. However, other inaccuracies collectively referred to as

RELIABILITY OF DATA *continued* 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.

16 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

17 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*.

18 In particular, the ABS acknowledges the assistance of the Telecommunications Industry Ombudsman in providing regular lists of registered ISPs.

RELATED PUBLICATIONS

19 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

20 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
Mb	Megabyte
n.p.	not available for publication but included in totals where applicable
POP	Point of Presence
SD	Statistical Division
TIO	Telecommunications Industry Ombudsman

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 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.
Megabyte (Mb)	A data unit of 1,048,576 bytes, sometimes interpreted as 1 million bytes.

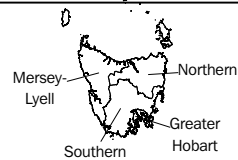|	
Microwave radio	A communication link that uses point-to-point radio transmission.
Monthly/quarterly/annual access plan	A subscription option where customers pay a flat monthly/quarterly/annual fee, and receive either a set period of time on-line during the month/quarter/year, usually with additional 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.
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

North West

Far North

Northern

Mackay

Pilbara

Central West

Fitzroy

Wide Bay-Burnett

Central

South West

Darling Downs

Moreton

Brisbane

South Eastern

Northern

Northern

Richmond-Tweed

Midlands

Upper Great Southern

Perth

Yorke and Lower North

Far West

North Western

Mid-North Coast

Eyre

Murray

Central West

Hunter

Lower Great Southern

See enlargement

South West

This map does not show the Statistical Division of Other Territories

Mersey-Lyell

Northern

Greater Hobart

Southern

Enlargement

Sydney

Adelaide

Murray Lands

Murrumbidgee

Canberra

Mallee

Murray

Outer Adelaide

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)
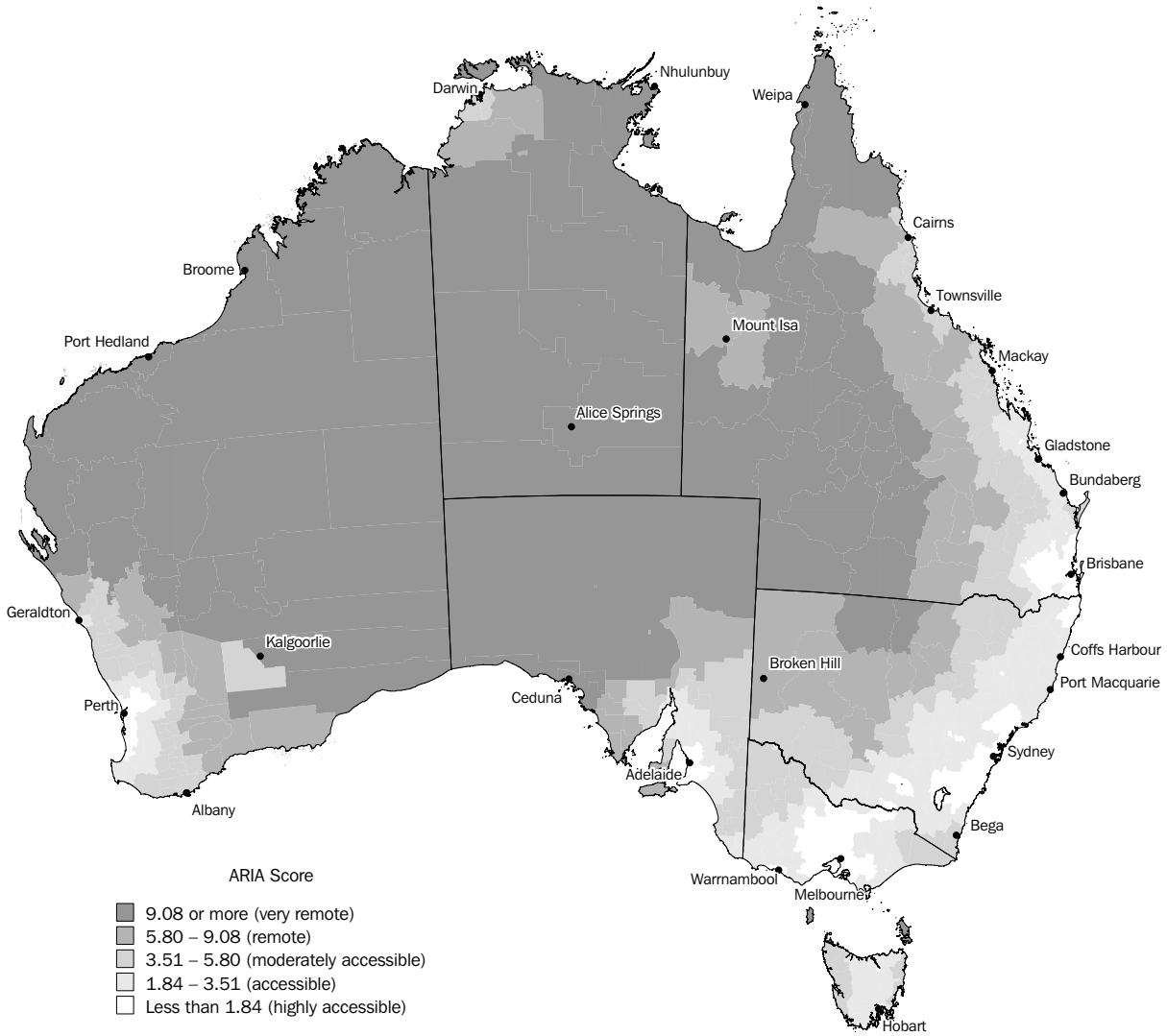
FOR MORE INFORMATION . . .

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.
LIBRARY	A range of ABS publications is available from public and tertiary libraries Australia-wide. Contact your nearest library to determine whether it has the ABS statistics you require, or visit our web site for a list of libraries.
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).

INFORMATION SERVICE

Data that is already published and can be provided within five minutes is free of charge. Our information consultants can also help you to access the full range of ABS information—ABS user pays services can be tailored to your needs, time frame and budget. Publications may be purchased. Specialists are on hand to help you with analytical or methodological advice.

PHONE	**1300 135 070**
EMAIL	**client.services@abs.gov.au**
FAX	1300 135 211
POST	Client Services, ABS, GPO BOX 796, Sydney NSW 1041

WHY NOT SUBSCRIBE?

ABS subscription services provide regular, convenient and prompt deliveries of ABS publications and products as they are released. Email delivery of monthly and quarterly publications is available.

PHONE	1300 366 323
EMAIL	subscriptions@abs.gov.au
FAX	03 9615 7848
POST	Subscription Services, ABS, GPO BOX 2796Y, Melbourne Vic 3001

2815300003013

RRP $19.50