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INTERNET ACTIVITY *AUSTRALIA*

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■ 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

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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 December 2000.

ABOUT THE SURVEY

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 numbers 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.

ROUNDING

Where figures have been rounded, discrepancies may occur between the sum of the component items and the total.

CHANGES IN THIS ISSUE

The following changes to tables in Chapter 2 have been made since the September quarter 2000 issue.
- Table 2.1 — no change.
- Table 2.2 — Internet Access Plans (previously Table 2.3). Subscriber churn rate table not published this quarter.
- Table 2.3 — Internet Access Technology (previously Table 2.4)

HISTORICAL COMPARISONS

Statistics in table 1.1 and 1.2 have been presented to allow comparison of data between current and previous quarter.

Dennis Trewin
Australian Statistician

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CHANGES OVER
DECEMBER QUARTER

- The number of ISPs in Australia fell 3% to 696.
- The number of POPs rose by 7% mainly due to smaller ISPs.
- The number of access lines available to subscribers was down slightly (1%) from September levels. The reduction in access lines was due to the rationalisation of POPs by larger ISPs.
- There was virtually no change in the volume of data downloaded.
- The number of Web sites hosted by ISPs was down 4%. 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 696 Internet Service Providers (ISPs) in Australia supplying Internet access services to 3.9 million active subscribers at the end of December quarter 2000. There were:

- 6 Very large ISPs (with more than 100,000 subscribers) which provided Internet access to 53% (2 million) of all Internet subscribers.
- 31 Large ISPs (with 10,001 to 100,000 subscribers) with 30% (1.2 million) of subscribers.
- 171 Medium ISPs (with 1,001 to 10,000 subscribers) with 13% (0.5 million) of subscribers.
- 359 Small ISPs (with 101 to 1,000 subscribers) with 4% (0.15 million) of subscribers.
- 129 Very small ISPs (with 100 or fewer subscribers) with only 0.1% (4,700) of subscribers.

Over the December quarter 2000, there was a decrease of 22 ISPs overall. The majority of these being in the Small size range (decrease of 18). The change may be attributed to a combination of ISPs leaving the industry and structural changes within the industry (e.g. takeovers and franchising).

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 3.9 million Internet subscribers in Australia, there were 3.4 million Household subscribers and 512,000 Business and government subscribers.

At the end of the December quarter 2000, there were 7,000 less Household Internet subscribers and 80,000 more Business and Government Internet subscribers. The overall decrease in Household subscribers was caused by a drop in free Internet accounts of 307,000 but there was an almost corresponding increase in the number of fee paying Internet subscribers.

WEB SITES HOSTED

At the end of December quarter 2000, ISPs hosted 97,165 Business and government Web sites of which 4,233 (4%) provided an environment for secure transactions. Web hosting services were provided by 93% of ISPs and secure access transaction capabilities were provided by 49% 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 2,394 Points of presence (POPs) and 515,740 access lines, which indicates that on average there were 7.6 subscribers per Internet access line. The increase in POPs indicates greater use and renting of infrastructure between ISPs.

DATA DOWNLOADED

There were 1,050 million megabytes (Mbs) of data downloaded by Internet subscribers during the December quarter 2000, which is an average of 268 Mbs per subscriber. This is slightly lower from the September quarter. Household subscribers downloaded 583 million Mbs (average of 171 Mbs per Household subscriber) and Business and government subscribers downloaded 467 million Mbs (average of 912 Mbs per Business and government subscriber).

REGIONAL DATA

From the September quarter 2000 to the December quarter 2000, the following changes occurred at a regional level:

- New South Wales — ISPs decreased by 8, POPs increased by 66, access lines increased by 11,072, subscribers increased by 17,000 and data downloaded by subscribers decreased by 27 million Mbs
- Victoria — ISPs decreased by 3, POPs increased by 43, access lines decreased by 13,873, subscribers increased by 65,000 and data downloaded by subscribers increased by 6 million Mbs
- Queensland — ISPs decreased by 1, POPs increased by 11, access lines increased by 5,594, subscribers decreased by 19,000 and data downloaded by subscribers decreased by 7 million Mbs
- South Australia — ISPs remained constant at 78, POPs increased by 9, access lines increased by 3,138, subscribers increased by 8,000 and data downloaded by subscribers increased by 25 million Mbs
- Western Australia — ISPs increased by 7, POPs increased by 22, access lines decreased by 10,031, subscribers remained the same at 318,000 and data downloaded by subscribers increased by 2 million Mbs
- Tasmania — ISPs increased by 3, POPs increased by 6, access lines increased by 2,169, subscribers increased by 7,000 and data downloaded by subscribers increased by 2 million Mbs
- Northern Territory — ISPs increased by 1, POPs remained the same at 30, access lines increased by 912, subscribers increased by 6,000 and data downloaded by subscribers increased by 1 million Mb.
- Australia Capital Territory — ISPs decreased by 2, POPs decreased by 7, access lines decreased by 4,886, subscribers decreased by 12,000 and data downloaded by subscribers decreased by 3 million Mbs.

Capital city Statistical Divisions (SDs) accounted for 74% of subscribers, 75% of access lines and 79% of Mbs downloaded. Only 1% of subscribers accessed the Internet via POPs located in Very remote or Remote regions in Australia.

1.1 INTERNET ACTIVITY SUMMARY, AUSTRALIA ....

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

(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 millions Mb
NEW SOUTH WALES					
2000					
September	299	738	176 078	1 301	336
December	291	804	187 150	1 318	309
VICTORIA					
2000					
September	267	505	148 583	1 020	327
December	264	548	134 710	1 085	333
QUEENSLAND					
2000					
September	177	427	96 035	771	181
December	176	438	101 629	752	174
SOUTH AUSTRALIA					
2000					
September	78	176	28 324	246	59
December	78	185	31 462	254	84
WESTERN AUSTRALIA					
2000					
September	113	233	47 891	318	99
December	120	255	37 860	318	101
TASMANIA					
2000					
September	30	66	8 458	76	14
December	33	72	10 627	83	16
NORTHERN TERRITORY					
2000					
September	17	30	3 183	30	8
December	18	30	4 095	36	9
AUSTRALIAN CAPITAL TERRITORY					
2000					
September	58	69	13 093	86	27
December	56	62	8 207	74	24
TOTAL FOR AUSTRALIA					
2000					
September	718	2 244	521 645	3 849	1 052
December	696	2 394	515 740	3 921	1 050

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 December quarter, there were 3.9 million active Internet subscribers in Australia comprising 3.4 million Household Internet subscribers and 512,000 Business and government Internet subscribers.

Only 3% of subscribers had permanent access to the Internet, with the remaining having dial-up access.

SUBSCRIBER GROWTH

At the of the December quarter 2000, there were 7,000 less Household Internet subscribers and 80,000 more Business and Government Internet subscribers. The overall decrease in Household subscribers was affected by a drop in free Internet accounts of 307,000 but there was an almost corresponding increase in the number of fee paying Internet subscribers.

ACCESS TECHNOLOGY

The principal Internet access technology utilised by subscribers for the December quarter was analog connection with 97% (3.7 million) of dial-up and 31% (41,000) of permanent subscribers connected to the Internet by an analog line.

ACCESS PLANS

Of the 3.9 million Internet subscribers, 9.6% (377,000) were on a free Internet access plan. This was a decrease of 308,000 from the September quarter. Nearly all (98%) of the free Internet access plans related to Household subscribers.

The majority of Internet subscribers were either on a monthly/quarterly/annual access plan (66% or 2.6 million subscribers), or an hourly access plan (21% or 0.8 million subscribers).

There were 74% (377,000) of Business and government subscribers on a monthly/quarterly/annual access plan, while 65% (2.2 million subscribers) of Household subscribers used these plans. Hourly access plans accounted for 19% (95,000 subscribers) of Business and government subscribers and 22% (746,000) of Household subscribers.

There was a decrease in subscribers on other access plans from the September quarter. Part of this can be attributed to 27,000 household and 13,000 business subscribers accessing the Internet on a volume only account, which was not collected for the September quarter.

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

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

SUBSCRIBERS AT BEGINNING OF REFERENCE PERIOD

Dial-up access	np	np	3 745
Permanent access	np	np	105
Total	**432**	**3 417**	**3 849**

NEW SUBSCRIBERS DURING REFERENCE PERIOD

Dial-up access	np	np	1 364
Permanent access	np	np	29
Total	**108**	**1 285**	**1 394**

SUBSCRIBERS WHO LEFT DURING THE REFERENCE PERIOD

Dial-up access	67	1 325	1 321
Permanent access	21	1	1
Total	**28**	**1 292**	**1 322**

SUBSCRIBERS AT END OF REFERENCE PERIOD

Dial-up access	np	np	3 788
Permanent access	np	np	133
Total	**512**	**3 410**	**3 921**

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.

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	—	3	1	78	—	10
Small ISPs	—	—	22	66	9	28
Medium ISPs	1	1	65	50	62	48
Large ISPs	np	np	138	78	21	12
Very large ISPs	np	np	151	89	3	1
Total	**7**	**1**	**377**	**74**	**95**	**19**
HOUSEHOLD						
Very small ISPs	—	5	2	74	—	15
Small ISPs	4	3	80	67	31	26
Medium ISPs	3	1	240	63	130	34
Large ISPs	265	26	443	44	289	29
Very large ISPs	98	5	1 453	76	295	16
Total	**371**	**11**	**2 218**	**65**	**746**	**22**
ALL						
Very small ISPs	—	4	4	75	1	13
Small ISPs	4	3	101	67	41	27
Medium ISPs	4	1	304	60	192	38
Large ISPs	np	np	582	49	311	26
Very large ISPs	np	np	1 604	77	298	14
Total	**377**	**10**	**2 595**	**66**	**841**	**21**

—   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	—	3	—	7	2	100
Small ISPs	1	3	1	3	33	100
Medium ISPs	np	np	np	np	130	100
Large ISPs	16	9	np	np	177	100
Very large ISPs	np	np	np	np	170	100
Total	**27**	**5**	**6**	**1**	**512**	**100**
HOUSEHOLD						
Very small ISPs	—	—	—	6	3	100
Small ISPs	2	1	2	2	119	100
Medium ISPs	2	—	6	2	381	100
Large ISPs	9	1	—	—	1 007	100
Very large ISPs	—	—	54	3	1 900	100
Total	**13**	**—**	**62**	**2**	**3 410**	**100**
ALL						
Very small ISPs	—	1	—	6	5	100
Small ISPs	3	2	3	2	152	100
Medium ISPs	np	np	np	np	510	100
Large ISPs	26	2	np	np	1 184	100
Very large ISPs	np	np	np	np	2 070	100
Total	**39**	**1**	**68**	**2**	**3 921**	**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 ....

	Subscribers	Subscribers	ISPs providing subscribers with this access(a)
	'000	%	no.
Dial-up access			
Analog	3 688	97	632
DSL	np	np	20
Digital	60	2	99
Wireless	np	np	20
Satellite	2	—	11
Other	np	np	4
Total dial-up	*3 788*	*100*	*664*
Permanent access			
Analog	41	31	383
DSL	7	5	38
Digital	np	np	171
Cable	np	np	14
Satellite	np	np	13
Microwave	—	—	31
Other	2	1	24
Total permanent	*133*	*100*	*472*
Total	**3 921**	**100**	**696**

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. .

CHAPTER **3**   TECHNICAL AND OTHER SERVICES PROVIDED BY
ISPs ....

ACCESS SUPPORT

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

On-line support services were provided by 80% of ISPs with the larger ISPs (Very large ISPs 100% and Large ISPs 87%) more likely to provide this service than smaller ISPs (Very small ISPs 71% and Small ISPs 79%).

Different levels of help desk support were offered by ISPs, with the larger ISPs generally more likely to provide this service:
- business hours — provided by 90% of ISPs;
- extended hours — provided by 66% of ISPs; and
- 24 hours — provided by 17% of ISPs.

Call out/on-site support services were provided by 70% of ISPs.

Other technical services provided by ISPs were start up disk/package services (provided by 49% of ISPs) and pager services (provided by 24% of ISPs).

RELATED SERVICES

Other related services provided by ISPs include:
- Web design — provided by 69% of ISPs;
- Web hosting — provided by 93% of ISPs;
- secure access or transactions capabilities — provided by 49% of ISPs;
- network/systems integration — provided by 62% of ISPs; and
- training services — provided by 46% 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.	90	286	148	27	6	557
	%	71	79	86	87	100	80
Business hours help desk							
	no.	100	330	162	26	6	624
	%	79	91	94	84	100	90
Extended hours help desk							
	no.	69	232	125	25	6	457
	%	55	64	73	81	100	66
24 hour help desk support service							
	no.	27	48	25	16	5	121
	%	21	13	15	52	83	17
Pager service							
	no.	25	90	40	np	np	166
	%	20	25	23	np	np	24
Call out/on site support services							
	no.	84	259	127	np	np	489
	%	67	72	74	np	np	70
Start up disk/package							
	no.	27	177	111	18	6	339
	%	21	49	65	58	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 ....

		Very small ISPs	Small ISPs	Medium ISPs	Large ISPs	Very large ISPs	Total
Web design							
	no.	89	267	110	np	np	477
	%	71	74	64	np	np	69
Training services							
	no.	56	189	69	np	np	323
	%	44	52	40	np	np	46
Network/systems integration							
	no.	76	229	102	17	5	429
	%	60	63	59	55	83	62
Secure access or transactions							
	no.	48	164	108	15	3	338
	%	38	45	63	48	50	49
Web hosting							
	no.	113	343	161	24	6	647
	%	90	95	94	77	100	93

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

CHAPTER **4**   **SELECTED ACTIVITY DATA** ....

DATA DOWNLOADED

There were 1,050 million megabytes (Mbs) of data downloaded by Internet subscribers during the December quarter 2000. Household subscribers downloaded 583 million Mbs (56%) while Business and government subscribers downloaded 467 million Mbs (44%). The majority of the Mbs downloaded came from the larger ISPs. Downloads from Very large ISPs accounted for 34% of the Mbs downloaded by subscribers, with Large ISPs and Medium ISPs accounting for 43% and 20% respectively.

There was an average of 268 Mbs of data downloaded per Internet subscriber during the three months of the December quarter 2000. Household subscribers downloaded an average of 171 Mbs of data and Business and government subscribers downloaded an average of 912 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 224 Mbs for Small ISPs) than subscribers serviced by larger ISPs (170 Mbs for Very large ISPs and 378 Mbs for Large ISPs).

4.1 VOLUME OF DATA DOWNLOADED ....

	Data downloaded	Data downloaded
	millions Mb	%

BUSINESS AND GOVERNMENT SUBSCRIBERS

Very small ISPs	3	1
Small ISPs	np	np
Medium ISPs	58	12
Large ISPs	309	66
Very large ISPs	np	np
Total	**467**	**100**

HOUSEHOLD SUBSCRIBERS

Very small ISPs	1	—
Small ISPs	np	np
Medium ISPs	154	26
Large ISPs	138	24
Very large ISPs	np	np
Total	**583**	**100**

ALL SUBSCRIBERS

Very small ISPs	4	—
Small ISPs	34	3
Medium ISPs	211	20
Large ISPs	447	43
Very large ISPs	353	34
Total	**1 050**	**100**

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

—   nil or rounded to zero (including null cells)

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 75% of access lines, 74% of subscribers, 79% of Mbs downloaded. They recorded an average of 7.6 subscribers per access line and an average of 286 Mbs of data downloaded per subscriber. This compares with 7.6 subscribers per access line and an average of 215 Mbs of data downloaded per subscriber for all other SDs across Australia.

- New South Wales — Sydney SD had 222 ISPs servicing 973,000 subscribers (74% of State subscribers). All other SDs in the State had 124 ISPs servicing 345,000 subscribers.
- Victoria — Melbourne SD had 228 ISPs servicing 871,000 subscribers (80% of State subscribers). All other SDs in the State had 72 ISPs servicing 214,000 subscribers.
- Queensland — Brisbane SD had 117 ISPs servicing 451,000 subscribers (60% of State subscribers). All other SDs in the State had 98 ISPs servicing 301,000 subscribers.
- South Australia — Adelaide SD had 65 ISPs servicing 215,000 subscribers (85% of State subscribers). All other SDs in the State had 21 ISPs servicing 40,000 subscribers.
- Western Australia — Perth SD had 101 ISPs servicing 241,000 subscribers (76% of State subscribers). All other SDs in the State had 32 ISPs servicing 77,000 subscribers.
- Tasmania — Greater Hobart SD had 30 ISPs servicing 53,000 subscribers (64% of State subscribers). All other SDs in the State had 18 ISPs servicing 30,000 subscribers.
- Northern Territory — Darwin SD had 17 ISPs servicing 28,000 subscribers (78% of Territory subscribers). In the other SDs in the Territory there were 13 ISPs servicing 8,000 subscribers.
- Australian Capital Territory — Canberra SD had 56 ISPs servicing 74,000 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 9 of the Explanatory notes.

Nearly all subscribers accessed a Point of presence (POP) located in either Highly accessible (90%) or Accessible (7%) regions in Australia. There was only 1% (44,000) of

ACCESSIBILITY *continued*

subscribers that accessed a POP in Very remote or Remote regions and 2% (78,000) in Moderately accessible regions. The number of subscribers per access line in Highly accessible regions was 7.5, in Accessible regions 8.3, Moderately accessible regions 8.5, Remote regions 9.1 and Very remote regions 6.7.

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)
					millions		
	no.	no.	no.	'000	Mb	no.	Mb
New South Wales							
Sydney	222	340	139 659	973	232	7.0	239
Hunter	47	66	10 099	79	16	7.9	206
Illawarra	52	68	10 888	60	14	5.6	239
Richmond-Tweed	27	32	2 937	29	15	9.9	506
Mid-North Coast	25	66	6 354	47	8	7.3	167
Northern	17	56	3 818	26	5	6.9	199
North Western	13	22	1 137	11	1	9.8	102
Central West	20	41	2 816	22	6	7.9	257
South Eastern	25	38	2 002	18	2	9.1	113
Murrumbidgee	17	32	1 994	19	3	9.8	174
Murray	26	31	4 749	29	5	6.2	180
Far West	11	12	697	3	1	4.8	152
Total	**291**	**804**	**187 150**	**1 318**	**309**	**7.0**	**234**
Victoria							
Melbourne	228	293	110 534	871	298	7.9	342
Barwon	37	45	6 624	44	8	6.6	186
Western District	11	16	1 428	16	2	11.4	93
Central Highlands	29	30	2 895	28	5	9.6	186
Wimmera	5	10	376	5	—	12.0	78
Mallee	13	16	1 556	14	2	9.0	150
Loddon	21	31	3 266	28	6	8.7	223
Goulburn	21	33	3 418	24	5	6.9	220
Ovens-Murray	12	14	898	7	1	7.6	159
East Gippsland	10	24	878	15	1	17.0	68
Gippsland	23	36	2 837	34	4	12.0	119
Total	**264**	**548**	**134 710**	**1 085**	**333**	**8.1**	**306**
Queensland							
Brisbane	117	137	57 969	451	106	7.8	235
Moreton	64	94	17 044	130	28	7.6	218
Wide Bay-Burnett	19	33	4 521	29	6	6.4	222
Darling Downs	24	41	5 101	26	7	5.0	257
South West	4	17	246	np	np	np	39
Fitzroy	16	28	6 117	32	7	5.2	222
Central West	3	5	np	np	np	13.3	40
Mackay	18	24	np	18	4	np	226
Northern	13	19	3 486	26	7	7.4	257
Far North	21	31	4 079	34	8	8.2	250
North West	6	9	795	5	np	6.2	np
Total	**176**	**438**	**101 629**	**752**	**174**	**7.4**	**232**

— nil or rounded to zero (including null cells)

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	millions Mb	no.	Mb
South Australia							
Adelaide	65	81	27 379	215	72	7.9	334
Outer Adelaide	7	11	436	6	2	14.0	373
Yorke and Lower North	5	10	443	3	1	7.7	375
Murray Lands	11	23	933	9	2	10.2	244
South East	10	19	876	8	2	9.1	264
Eyre	7	14	298	4	1	13.3	303
Northern	11	27	1 097	8	3	7.3	366
Total	**78**	**185**	**31 462**	**254**	**84**	**8.1**	**330**
Western Australia							
Perth	101	116	28 685	241	82	8.4	342
South West	23	35	3 084	28	7	9.1	248
Lower Great Southern	9	14	895	11	2	11.8	211
Upper Great Southern	np	np	np	np	np	5.4	139
Midlands	np	13	np	np	np	11.9	228
South Eastern	14	21	1 428	11	3	7.8	302
Central	11	19	1 226	8	2	6.8	183
Pilbara	8	20	1 040	4	np	3.8	np
Kimberley	7	np	391	3	1	8.9	187
Total	**120**	**255**	**37 860**	**318**	**101**	**8.4**	**319**
Tasmania							
Greater Hobart	30	35	6 304	53	11	8.4	200
Northern	17	18	2 288	15	4	6.5	251
Mersey-Lyell	9	19	2 035	15	2	7.6	122
Total	**33**	**72**	**10 627**	**83**	**16**	**7.8**	**195**
Northern Territory							
Darwin	17	18	3 298	28	7	8.4	249
Northern Territory — Balance	10	12	797	8	2	10.5	283
Total	**18**	**30**	**4 095**	**36**	**9**	**8.8**	**257**
Australian Capital Territory							
Canberra	56	62	8 207	74	24	9.1	321
Total	**56**	**62**	**8 207**	**74**	**24**	**9.1**	**321**
Total for Australia	**696**	**2 394**	**515 740**	**3 921**	**1 050**	**7.6**	**268**

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	millions Mb	no.	Mb
New South Wales							
Highly accessible	263	560	173 127	1 201	289	6.9	241
Accessible	62	198	12 590	105	17	8.3	167
Moderately accessible	21	36	1 354	11	2	8.4	172
Remote	np	np	79	np	np	np	np
Very remote	np	np	—	np	np	np	np
Total	**291**	**804**	**187 150**	**1 318**	**309**	**7.0**	**234**
Victoria							
Highly accessible	257	486	131 239	1 047	329	8.0	314
Accessible	34	47	3 157	33	4	10.5	112
Moderately accessible	6	15	314	5	—	16.0	59
Remote	—	—	—	—	—	—	—
Very remote	—	—	—	—	—	—	—
Total	**264**	**548**	**134 710**	**1 085**	**333**	**8.1**	**306**
Queensland							
Highly accessible	154	288	86 126	638	148	7.4	232
Accessible	26	54	8 707	61	16	7.1	258
Moderately accessible	27	63	5 517	43	10	7.9	220
Remote	8	np	np	np	np	7.2	116
Very remote	3	np	np	np	np	9.8	34
Total	**176**	**438**	**101 629**	**752**	**174**	**7.4**	**232**
South Australia							
Highly accessible	70	100	28 304	225	75	7.9	333
Accessible	14	43	np	np	np	7.2	362
Moderately accessible	11	np	750	10	2	13.2	201
Remote	np	14	314	4	1	11.9	354
Very remote	np	np	np	np	np	18.5	337
Total	**78**	**185**	**31 462**	**254**	**84**	**8.1**	**330**
Western Australia							
Highly accessible	107	144	31 441	266	89	8.4	335
Accessible	17	29	2 268	25	5	11.1	201
Moderately accessible	np	19	np	np	np	7.2	209
Remote	np	10	np	np	np	7.9	240
Very remote	19	53	2 852	18	5	6.2	301
Total	**120**	**255**	**37 860**	**318**	**101**	**8.4**	**319**

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 8 to 11 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)
					millions		
	no.	no.	no.	'000	Mb	no.	Mb
Tasmania							
Highly accessible	31	53	8 592	68	14	7.9	212
Accessible	np	np	np	np	np	np	np
Moderately accessible	np	np	np	np	np	np	np
Remote	—	—	—	—	—	—	—
Very remote	—	—	—	—	—	—	—
Total	**33**	**72**	**10 627**	**83**	**16**	**7.8**	**195**
Northern Territory							
Highly accessible	—	—	—	—	—	—	—
Accessible	np	np	3 298	28	7	8.4	249
Moderately accessible	—	—	—	—	—	—	—
Remote	10	11	np	np	np	10.4	290
Very remote	np	np	np	np	np	12.3	61
Total	**18**	**30**	**4 095**	**36**	**9**	**8.8**	**257**
Australian Capital Territory							
Highly accessible	56	62	8 207	74	24	9.1	321
Accessible	—	—	—	—	—	—	—
Moderately accessible	—	—	—	—	—	—	—
Remote	—	—	—	—	—	—	—
Very remote	—	—	—	—	—	—	—
Total	**56**	**62**	**8 207**	**74**	**24**	**9.1**	**321**
Total for Australia							
Highly accessible	624	1 693	467 036	3 519	968	7.5	275
Accessible	117	405	33 896	281	56	8.3	200
Moderately accessible	52	160	9 117	78	15	8.5	196
Remote	22	61	2 570	23	5	9.1	226
Very remote	22	75	3 121	21	6	6.7	273
Total	**696**	**2 394**	**515 740**	**3 921**	**1 050**	**7.6**	**268**

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 8 to 11 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 ··························

<table>
<tr><td>INTRODUCTION</td><td>1   This publication presents results from a survey covering all identified Internet Service Providers (ISPs), entitled the Internet Activity Survey, in respect of the December quarter 2000.</td></tr>
</table>

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:

· ·

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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.

ACCESSIBILITY/REMOTENESS INDEX OF AUSTRALIA

9   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.

10   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.

11   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.

12   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.

POINT OF PRESENCE

13   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.

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 mis-reported 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	Megabytes
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.

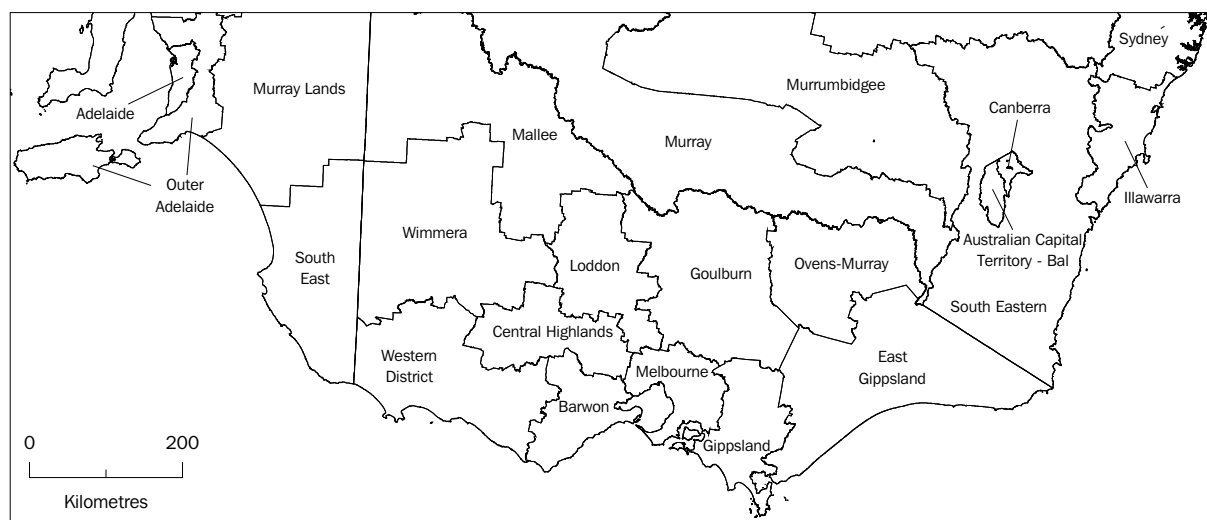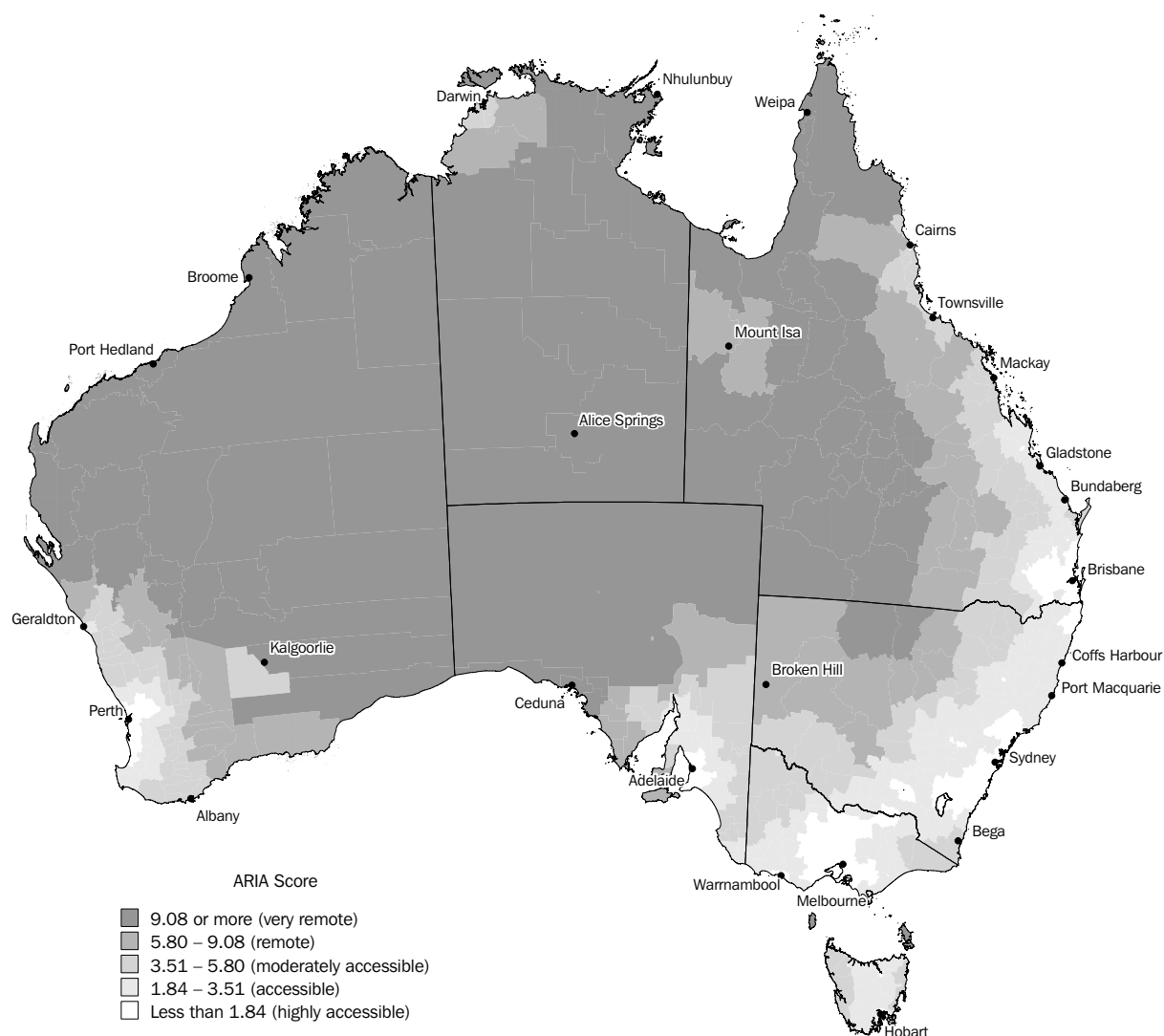|	
Microwave radio	A communication link that uses point-to-point radio transmission.
Monthly/quarterly/annual access plan	A subscription option where customers pay a flat monthly/quarterly/annual fee, and receive either a set period of time on-line during the month/quarter/year, usually with additional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

Far North

North West

Northern

Pilbara

Mackay

Central West

Fitzroy

Wide Bay-
Burnett

Central

South West

Moreton

Darling
Downs

Brisbane

South Eastern

Northern

Richmond-
Tweed

Northern

Mid-North
Coast

Midlands

Upper Great
Southern

Yorke and
Lower North

Far West

North Western

Hunter

Perth

Eyre

Murray

Central West

Lower Great
Southern

South
West

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

Canberra

Outer
Adelaide

Mallee

Murray

Illawarra

Wimmera

Australian Capital
Territory - Bal

South
East

Loddon

Goulburn

Ovens-Murray

South Eastern

Central Highlands

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)

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

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