

**INTERNET ACTIVITY****AUSTRALIA**

EMBARGO: 11.30AM (CANBERRA TIME) THURS 3 JAN 2002

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

## NOTES

### NEXT ISSUE

The next issue of this publication is planned for August 2002.

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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 September 2001.

The survey population includes all ISPs registered with the Telecommunications Industry Ombudsman (TIO) and those identified from other sources.

### CHANGES TO FUTURE ISSUES

The ABS has recently conducted a review of the collection. The survey will change to a biannual collection, with the results from the next survey being available by August 2002.

The biannual collection will continue to measure changes in the structure of the ISP industry and the number of Australian households and organisations obtaining access to the Internet through ISPs. 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 18 of the Explanatory Notes of this publication.

### COMMENTS

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

### HISTORICAL COMPARISONS

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

Dennis Trewin  
Australian Statistician

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# CHAPTER 1

## SUMMARY OF INTERNET ACTIVITY FINDINGS . . . . .

### HIGHLIGHTS

- The number of ISPs in Australia fell 4% to 603 during the September quarter following a fall of 6% between March 2001 and June 2001.
- The number of Points of Presence (POPs) fell 3%.
- The number of access lines available to subscribers did not change substantially from the June quarter.
- The number of subscribers increased by 92,000 (2.2%).

### ISP s

There were 603 ISPs in Australia supplying Internet access services to 4.3 million active subscribers at the end of September quarter 2001. There were:

- 6 Very large ISPs (with more than 100,000 subscribers) which provided Internet access to 64% (2.8 million) of all Internet subscribers.
- 30 Large ISPs (with 10,001 to 100,000 subscribers) with 22% (0.9 million) of subscribers.
- 150 Medium ISPs (with 1,001 to 10,000 subscribers) with 10% (0.4 million) of subscribers.
- 303 Small ISPs (with 101 to 1,000 subscribers) with 3% (0.14 million) of subscribers.
- 114 Very small ISPs (with 100 or fewer subscribers) with only 0.1% (4,000) of subscribers.

There was a decrease of 25 ISPs overall from the June quarter 2001. The majority of these were in the Small size range (decrease of 18). There was an increase of one Very large ISP during the quarter due to the subscriber base for one of the large units surpassing the 100,000 subscriber cut-off for the category.

### 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 4.3 million Internet subscribers in Australia, there were 3.7 million Household subscribers and 544,000 Business and government subscribers.

At the end of the September quarter 2001, there were 56,000 more Household Internet subscribers and 36,000 more Business and government Internet subscribers than at the end of the June quarter 2001. Note that some of this movement is due to the way some ISPs classify subscribers.

### POPS AND ACCESS LINES

A POP is a server in a geographic location where a subscriber can access (connect to) an ISP via access lines. Across Australia, ISPs provided 2,140 POPs and 482,702 access lines, which indicates that on average there were 8.9 subscribers per Internet access line.

### DATA DOWNLOADED

There were 1,201 million megabytes (Mbs) of data downloaded by Internet subscribers during the September quarter 2001, which is an average of 281 Mbs per subscriber. This

## DATA DOWNLOADED

*continued*

is slightly lower than the June quarter 2001 level. Household subscribers downloaded 652 million Mbs (average of 175 Mbs per subscriber) and Business and government subscribers downloaded 550 million Mbs (average of 1,011 Mbs per subscriber).

## STATE DATA

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

- New South Wales — ISPs decreased by 16, POPs decreased by 33, access lines increased by 12,169, subscribers increased by 132,000 and data downloaded by subscribers increased by 11 million Mbs.
- Victoria — ISPs decreased by 4, POPs increased by 6, access lines decreased by 487, subscribers increased by 21,000 and data downloaded by subscribers increased by 5 million Mbs.
- Queensland — ISPs decreased by 14, POPs decreased by 21, access lines decreased by 9,313, subscribers decreased by 36,000 and data downloaded by subscribers decreased by 22 million Mbs.
- South Australia — ISPs decreased by 3, POPs increased by 5, access lines decreased by 555, subscribers decreased by 12,000 and data downloaded by subscribers decreased by 1 million Mbs.
- Western Australia — ISPs decreased by 7, POPs decreased by 13, access lines decreased by 594, subscribers decreased by 16,000 and data downloaded by subscribers decreased by 3 million Mbs.
- Tasmania — ISPs remained constant at 28, POPs increased by 3, access lines decreased by 305, subscribers decreased by 2,000 and data downloaded by subscribers increased by 7 million Mbs.
- Northern Territory — ISPs decreased by 2, POPs decreased by 2, access lines decreased by 28, subscribers increased by 4,000 and data downloaded by subscribers remained constant at 9 million Mbs.
- Australia Capital Territory — ISPs decreased by 3, POPs decreased by 5, access lines increased by 1,215, subscribers increased by 2,000 and data downloaded by subscribers increased by 1 million Mbs.

**1.1**

## INTERNET ACTIVITY SUMMARY, AUSTRALIA

|                         |             | <i>September<br/>Quarter<br/>2000</i> | <i>December<br/>Quarter<br/>2000</i> | <i>March<br/>Quarter<br/>2001</i> | <i>June<br/>Quarter<br/>2001</i> | <i>September<br/>Quarter<br/>2001</i> |
|-------------------------|-------------|---------------------------------------|--------------------------------------|-----------------------------------|----------------------------------|---------------------------------------|
| <b>ISPs(a)</b>          |             |                                       |                                      |                                   |                                  |                                       |
| Very small              | no.         | 132                                   | 129                                  | 129                               | 114                              | 114                                   |
| Small                   | no.         | 377                                   | 359                                  | 330                               | 321                              | 303                                   |
| Medium                  | no.         | 173                                   | 171                                  | 169                               | 156                              | 150                                   |
| Large                   | no.         | 28                                    | 31                                   | 31                                | 32                               | 30                                    |
| Very large              | no.         | 8                                     | 6                                    | 6                                 | 5                                | 6                                     |
| Total                   | no.         | 718                                   | 696                                  | 665                               | 628                              | 603                                   |
| <b>Internet access</b>  |             |                                       |                                      |                                   |                                  |                                       |
| Points of Presence      | no.         | 2 244                                 | 2 394                                | 2 310                             | 2 200                            | 2 140                                 |
| Access lines            | no.         | 521 645                               | 515 740                              | 490 108                           | 480 600                          | 482 702                               |
| <b>Subscribers</b>      |             |                                       |                                      |                                   |                                  |                                       |
| Business and government | '000        | 432                                   | 512                                  | 482                               | 508                              | 544                                   |
| Household               | '000        | 3 417                                 | 3 410                                | 3 486                             | 3 673                            | 3 729                                 |
| All                     | '000        | 3 849                                 | 3 921                                | 3 968                             | 4 181                            | 4 273                                 |
| <b>Data downloaded</b>  |             |                                       |                                      |                                   |                                  |                                       |
| Business and government | million Mbs | 457                                   | 467                                  | 428                               | 557                              | 550                                   |
| Household               | million Mbs | 595                                   | 583                                  | 611                               | 648                              | 652                                   |
| Total                   | million Mbs | 1 052                                 | 1 050                                | 1 040                             | 1 204                            | 1 201                                 |

(a) See paragraph 7 of Explanatory notes.

**1.2**

## STATE AND TERRITORY SUMMARY

|                   | <i>ISPs</i> | <i>POPs</i> | <i>Access<br/>lines</i> | <i>All<br/>subscribers</i> | <i>Data<br/>downloaded<br/>by<br/>subscribers</i> |
|-------------------|-------------|-------------|-------------------------|----------------------------|---|
| <i>Quarter</i>    | <i>no.</i>  | <i>no.</i>  | <i>no.</i>              | <i>'000</i>                | <i>million<br/>Mbs</i>                            |
| NEW SOUTH WALES   |             |             |                         |                            |   |
| <b>2000</b>       |             |             |                         |                            |   |
| September         | 299         | 738         | 176 078                 | 1 301                      | 336   |
| December          | 291         | 804         | 187 150                 | 1 318                      | 309   |
| <b>2001</b>       |             |             |                         |                            |   |
| March             | 283         | 781         | 157 253                 | 1 284                      | 337   |
| June              | 266         | 736         | 142 600                 | 1 303                      | 392   |
| September         | 250         | 703         | 154 769                 | 1 435                      | 403   |
| VICTORIA          |             |             |                         |                            |   |
| <b>2000</b>       |             |             |                         |                            |   |
| September         | 267         | 505         | 148 583                 | 1 020                      | 327   |
| December          | 264         | 548         | 134 710                 | 1 085                      | 333   |
| <b>2001</b>       |             |             |                         |                            |   |
| March             | 248         | 500         | 137 465                 | 1 047                      | 250   |
| June              | 226         | 459         | 142 367                 | 1 154                      | 326   |
| September         | 222         | 465         | 141 880                 | 1 175                      | 331   |
| QUEENSLAND        |             |             |                         |                            |   |
| <b>2000</b>       |             |             |                         |                            |   |
| September         | 177         | 427         | 96 035                  | 771                        | 181   |
| December          | 176         | 438         | 101 629                 | 752                        | 174   |
| <b>2001</b>       |             |             |                         |                            |   |
| March             | 170         | 437         | 99 235                  | 803                        | 201   |
| June              | 167         | 429         | 99 885                  | 856                        | 215   |
| September         | 153         | 408         | 90 572                  | 820                        | 193   |
| SOUTH AUSTRALIA   |             |             |                         |                            |   |
| <b>2000</b>       |             |             |                         |                            |   |
| September         | 78          | 176         | 28 324                  | 246                        | 59  |
| December          | 78          | 185         | 31 462                  | 254                        | 84  |
| <b>2001</b>       |             |             |                         |                            |   |
| March             | 73          | 186         | 31 668                  | 278                        | 88  |
| June              | 71          | 181         | 31 592                  | 292                        | 102   |
| September         | 68          | 186         | 31 037                  | 280                        | 101   |
| WESTERN AUSTRALIA |             |             |                         |                            |   |
| <b>2000</b>       |             |             |                         |                            |   |
| September         | 113         | 233         | 47 891                  | 318                        | 99  |
| December          | 120         | 255         | 37 860                  | 318                        | 101   |
| <b>2001</b>       |             |             |                         |                            |   |
| March             | 109         | 239         | 40 861                  | 357                        | 113   |
| June              | 102         | 233         | 40 969                  | 373                        | 115   |
| September         | 95          | 220         | 40 375                  | 357                        | 112   |



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

|                              | ISPs | POPs  | Access<br>lines | All<br>subscribers | Data<br>downloaded<br>by<br>subscribers |
|------------------------------|------|-------|-----------------|--------------------|---|
|                              | no.  | no.   | no.             | '000               | million<br>Mbs                          |
| TASMANIA                     |      |       |                 |                    |   |
| <b>2000</b>                  |      |       |                 |                    |   |
| September                    | 30   | 66    | 8,458           | 76                 | 14                                      |
| December                     | 33   | 72    | 10,627          | 83                 | 16                                      |
| <b>2001</b>                  |      |       |                 |                    |   |
| March                        | 32   | 73    | 10,793          | 88                 | 17                                      |
| June                         | 28   | 73    | 10,323          | 94                 | 19                                      |
| September                    | 28   | 76    | 10,018          | 92                 | 26                                      |
| NORTHERN TERRITORY           |      |       |                 |                    |   |
| <b>2000</b>                  |      |       |                 |                    |   |
| September                    | 17   | 30    | 3,183           | 30                 | 8                                       |
| December                     | 18   | 30    | 4,095           | 36                 | 9                                       |
| <b>2001</b>                  |      |       |                 |                    |   |
| March                        | 20   | 32    | 4,523           | 38                 | 9                                       |
| June                         | 19   | 31    | 4,089           | 40                 | 9                                       |
| September                    | 17   | 29    | 4,061           | 44                 | 9                                       |
| AUSTRALIAN CAPITAL TERRITORY |      |       |                 |                    |   |
| <b>2000</b>                  |      |       |                 |                    |   |
| September                    | 58   | 69    | 13,093          | 86                 | 27                                      |
| December                     | 56   | 62    | 8,207           | 74                 | 24                                      |
| <b>2001</b>                  |      |       |                 |                    |   |
| March                        | 57   | 62    | 8,310           | 73                 | 24                                      |
| June                         | 52   | 58    | 8,775           | 69                 | 26                                      |
| September                    | 49   | 53    | 9,990           | 71                 | 27                                      |
| TOTAL AUSTRALIA              |      |       |                 |                    |   |
| <b>2000</b>                  |      |       |                 |                    |   |
| September                    | 718  | 2,244 | 521,645         | 3,849              | 1,052                                   |
| December                     | 696  | 2,394 | 515,740         | 3,921              | 1,050                                   |
| <b>2001</b>                  |      |       |                 |                    |   |
| March                        | 665  | 2,310 | 490,108         | 3,968              | 1,040                                   |
| June                         | 628  | 2,200 | 480,600         | 4,181              | 1,204                                   |
| September                    | 603  | 2,140 | 482,702         | 4,273              | 1,201                                   |

## 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 September quarter 2001, there were 4.3 million active Internet subscribers in Australia comprising 3.7 million Household Internet subscribers and 544,000 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 September quarter 2001, there were 56,000 more Household Internet subscribers and 36,000 more Business and government Internet subscribers.

### ACCESS TECHNOLOGY

The principal Internet access technology utilised by subscribers for the September quarter 2001 was analog connection with 97% (4.0 million) of dial-up and 21% (39,000) of permanent subscribers connected to the Internet by an analog line.

### ACCESS PLANS

Of the 4.3 million Internet subscribers, 4% (192,000) were on a free Internet access plan. This was an decrease of 85,000 from the June quarter. Nearly all (91%) of the free Internet access plans related to Household subscribers.

The majority of Internet subscribers were either on a monthly/quarterly/annual access plan (75% or 3.2 million subscribers), or an hourly access plan (19% or 0.8 million subscribers).

There were 67% (364,000) of Business and government subscribers on a monthly/quarterly/annual access plan, while 76% (2.9 million) of Household subscribers used these plans. Hourly access plans accounted for 24% (132,000) of Business and government subscribers and 19% (693,000) of Household subscribers.

**2.1**

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

|   | <i>Business<br/>and<br/>government<br/>subscribers</i> | <i>Household<br/>subscribers</i> | <i>Total</i> |
|---|--|----------------------------------|--------------|
|   | '000   | '000                             | '000         |
| .....   |  |                                  |              |
| SUBSCRIBERS AT BEGINNING OF<br>REFERENCE PERIOD |  |                                  |              |
| Dial-up access                                  | np   | np                               | 3 993        |
| Permanent access                                | np   | np                               | 188          |
| <i>Total</i>                                    | 508  | 3 673                            | 4 181        |
| .....   |  |                                  |              |
| NEW SUBSCRIBERS DURING REFERENCE<br>PERIOD      |  |                                  |              |
| Dial-up access                                  | np   | np                               | 925          |
| Permanent access                                | np   | np                               | 15           |
| <i>Total</i>                                    | 123  | 817                              | 940          |
| .....   |  |                                  |              |
| SUBSCRIBERS AT END OF REFERENCE<br>PERIOD       |  |                                  |              |
| Dial-up access                                  | np   | np                               | 4 088        |
| Permanent access                                | np   | np                               | 185          |
| <i>Total</i>                                    | 544  | 3 729                            | 4 273        |

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/<br>ANNUAL ACCESS |                    | HOURLY<br>ACCESS   |                    |
|-------------------------------------|--------------------|--------------------|-------------------------------------|--------------------|--------------------|--------------------|
|                                     | <i>Subscribers</i> | <i>Subscribers</i> | <i>Subscribers</i>                  | <i>Subscribers</i> | <i>Subscribers</i> | <i>Subscribers</i> |
|                                     | '000               | %                  | '000                                | %                  | '000               | %                  |
| BUSINESS AND GOVERNMENT SUBSCRIBERS |                    |                    |                                     |                    |                    |                    |
| Very small ISPs                     | np                 | np                 | 2                                   | 99                 | np                 | np                 |
| Small ISPs                          | —                  | —                  | 21                                  | 70                 | 8                  | 27                 |
| Medium ISPs                         | 1                  | 2                  | 53                                  | 52                 | 45                 | 45                 |
| Large ISPs                          | np                 | np                 | 80                                  | 57                 | 40                 | 28                 |
| Very large ISPs                     | np                 | np                 | 208                                 | 77                 | np                 | np                 |
| <i>Total</i>                        | 17                 | 3                  | 364                                 | 67                 | 132                | 24                 |
| HOUSEHOLD SUBSCRIBERS               |                    |                    |                                     |                    |                    |                    |
| Very small ISPs                     | —                  | 5                  | 2                                   | 69                 | 1                  | 26                 |
| Small ISPs                          | 2                  | 2                  | 76                                  | 72                 | 27                 | 25                 |
| Medium ISPs                         | 9                  | 2                  | 229                                 | 66                 | 104                | 30                 |
| Large ISPs                          | 65                 | 8                  | 539                                 | 68                 | 183                | 23                 |
| Very large ISPs                     | 99                 | 4                  | 2 006                               | 81                 | 379                | 15                 |
| <i>Total</i>                        | 174                | 5                  | 2 851                               | 76                 | 693                | 19                 |
| ALL                                 |                    |                    |                                     |                    |                    |                    |
| Very small ISPs                     | np                 | np                 | 3                                   | 74                 | np                 | np                 |
| Small ISPs                          | 3                  | 2                  | 97                                  | 72                 | 35                 | 26                 |
| Medium ISPs                         | 10                 | 2                  | 282                                 | 63                 | 149                | 34                 |
| Large ISPs                          | np                 | np                 | 619                                 | 66                 | 223                | 24                 |
| Very large ISPs                     | np                 | np                 | 2 214                               | 80                 | np                 | np                 |
| <i>Total</i>                        | 192                | 4                  | 3 215                               | 75                 | 825                | 19                 |

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

— nil or rounded to zero (including null cells)

**2.2****INTERNET ACCESS PLANS** *continued*

|  | VOLUME<br>ACCESS . . . . . |                    | OTHER ACCESS       |                    | ALL ACCESS<br>PLANS . . . . . |                    |
|--|----------------------------|--------------------|--------------------|--------------------|-------------------------------|--------------------|
|  | <i>Subscribers</i>         | <i>Subscribers</i> | <i>Subscribers</i> | <i>Subscribers</i> | <i>Subscribers</i>            | <i>Subscribers</i> |
|  | '000                       | %                  | '000               | %                  | '000                          | %                  |
| <b>BUSINESS AND GOVERNMENT SUBSCRIBERS</b> |                            |                    |                    |                    |                               |                    |
| Very small ISPs                            | —                          | —                  | —                  | —                  | 2                             | 100                |
| Small ISPs                                 | np                         | np                 | np                 | np                 | 30                            | 100                |
| Medium ISPs                                | np                         | np                 | np                 | np                 | 101                           | 100                |
| Large ISPs                                 | np                         | np                 | —                  | —                  | 141                           | 100                |
| Very large ISPs                            | np                         | np                 | np                 | np                 | 271                           | 100                |
| <i>Total</i>                               | np                         | np                 | np                 | np                 | 544                           | 100                |
| <b>HOUSEHOLD SUBSCRIBERS</b>               |                            |                    |                    |                    |                               |                    |
| Very small ISPs                            | —                          | —                  | —                  | —                  | 3                             | 100                |
| Small ISPs                                 | 1                          | 1                  | —                  | —                  | 105                           | 100                |
| Medium ISPs                                | 3                          | 1                  | —                  | —                  | 345                           | 100                |
| Large ISPs                                 | 7                          | 1                  | —                  | —                  | 793                           | 100                |
| Very large ISPs                            | —                          | —                  | —                  | —                  | 2 483                         | 100                |
| <i>Total</i>                               | 11                         | —                  | —                  | —                  | 3 729                         | 100                |
| <b>ALL</b>                                 |                            |                    |                    |                    |                               |                    |
| Very small ISPs                            | —                          | 2                  | —                  | —                  | 4                             | 100                |
| Small ISPs                                 | np                         | np                 | np                 | np                 | 135                           | 100                |
| Medium ISPs                                | np                         | np                 | np                 | np                 | 446                           | 100                |
| Large ISPs                                 | np                         | np                 | —                  | —                  | 934                           | 100                |
| Very large ISPs                            | np                         | np                 | np                 | np                 | 2 754                         | 100                |
| <i>Total</i>                               | np                         | np                 | np                 | np                 | 4 273                         | 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)

|                         | <i>Subscribers</i> | <i>Subscribers</i> | <i>ISPs providing<br/>subscribers<br/>with this<br/>access</i> |
|-------------------------|--------------------|--------------------|--|
|                         | '000               | %                  | no.  |
| <b>Dial-up Access</b>   |                    |                    |  |
| Analog                  | 3 981              | 97                 | 559  |
| Digital                 | 64                 | 2                  | 82   |
| Wireless                | np                 | np                 | 16   |
| Satellite               | np                 | np                 | 14   |
| Other                   | —                  | —                  | —  |
| Total dial-up           | 4 088              | 100                | 589  |
| <b>Permanent access</b> |                    |                    |  |
| Analog                  | 39                 | 21                 | 337  |
| DSL                     | 30                 | 16                 | 62   |
| Digital                 | 16                 | 9                  | 140  |
| Cable                   | np                 | np                 | 16   |
| Satellite               | np                 | np                 | 26   |
| Microwave               | —                  | —                  | 22   |
| Other                   | np                 | np                 | 7  |
| Total permanent         | 185                | 100                | 418  |
| <b>Total</b>            | <b>4 273</b>       | <b>100</b>         | <b>603</b>   |

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 support services to their subscribers, including on-line, help desk and call out/on-site services. The support offered for the September quarter 2001 showed little change from the June quarter 2001.

On-line support services were provided by 78% of ISPs with the larger ISPs (Very large ISPs 100% and Large ISPs 90%) more likely to provide this service than smaller ISPs (Very small ISPs 68% and Small ISPs 75%).

Different levels of help desk support offered by ISPs were:

- business hours — provided by 90% of ISPs;
- extended hours — provided by 70% of ISPs; and
- 24 hours — provided by 19% of ISPs.

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

Other technical services provided by ISPs were start up disk/package services (provided by 51% of ISPs) and pager services (provided by 26% 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 52% 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)

|  |     | <i>Very<br/>small<br/>ISPs</i> | <i>Small<br/>ISPs</i> | <i>Medium<br/>ISPs</i> | <i>Large<br/>ISPs</i> | <i>Very<br/>large<br/>ISPs</i> | <i>Total</i> |
|--|-----|--------------------------------|-----------------------|------------------------|-----------------------|--------------------------------|--------------|
| <b>Online support service</b>            |     |                                |                       |                        |                       |                                |              |
|  | no. | 77                             | 228                   | 132                    | 27                    | 6                              | 470          |
|  | %   | 68                             | 75                    | 88                     | 90                    | 100                            | 78           |
| <b>Business hours help desk</b>          |     |                                |                       |                        |                       |                                |              |
|  | no. | 94                             | 276                   | 143                    | 26                    | 6                              | 545          |
|  | %   | 82                             | 91                    | 95                     | 87                    | 100                            | 90           |
| <b>Extended hours help desk</b>          |     |                                |                       |                        |                       |                                |              |
|  | no. | 66                             | 204                   | 117                    | 26                    | 6                              | 420          |
|  | %   | 58                             | 67                    | 78                     | 87                    | 100                            | 70           |
| <b>24 hour help desk support service</b> |     |                                |                       |                        |                       |                                |              |
|  | no. | 30                             | 46                    | 22                     | 10                    | 6                              | 114          |
|  | %   | 26                             | 15                    | 15                     | 33                    | 100                            | 19           |
| <b>Pager service</b>                     |     |                                |                       |                        |                       |                                |              |
|  | no. | 32                             | 80                    | 35                     | np                    | np                             | 157          |
|  | %   | 28                             | 26                    | 23                     | np                    | np                             | 26           |
| <b>Call out/on site support service</b>  |     |                                |                       |                        |                       |                                |              |
|  | no. | 68                             | 220                   | 108                    | np                    | np                             | 413          |
|  | %   | 60                             | 73                    | 72                     | np                    | np                             | 68           |
| <b>Start up disk/package</b>             |     |                                |                       |                        |                       |                                |              |
|  | no. | 28                             | 144                   | 105                    | 23                    | 6                              | 306          |
|  | %   | 25                             | 48                    | 70                     | 77                    | 100                            | 51           |

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)

|  |     | <i>Very<br/>small<br/>ISPs</i> | <i>Small<br/>ISPs</i> | <i>Medium<br/>ISPs</i> | <i>Large<br/>ISPs</i> | <i>Very<br/>large<br/>ISPs</i> | <i>Total</i> |
|--|-----|--------------------------------|-----------------------|------------------------|-----------------------|--------------------------------|--------------|
| <b>Web design</b>                        | no. | 80                             | 224                   | 104                    | np                    | np                             | 419          |
|  | %   | 70                             | 74                    | 69                     | np                    | np                             | 69           |
| <b>Training services</b>                 | no. | 51                             | 157                   | 70                     | 6                     | 3                              | 287          |
|  | %   | 45                             | 52                    | 47                     | 20                    | 50                             | 48           |
| <b>Network/systems<br/>integrations</b>  | no. | 75                             | 191                   | 89                     | 14                    | 4                              | 373          |
|  | %   | 66                             | 63                    | 59                     | 47                    | 67                             | 62           |
| <b>Secure access<br/>or transactions</b> | no. | 48                             | 146                   | 98                     | 19                    | 3                              | 314          |
|  | %   | 42                             | 48                    | 65                     | 63                    | 50                             | 52           |
| <b>Web hosting</b>                       | no. | 99                             | 289                   | 144                    | 25                    | 6                              | 563          |
|  | %   | 87                             | 95                    | 96                     | 83                    | 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.

**DATA DOWNLOADED**

1,201 million Mbs of data were downloaded by Internet subscribers during the September quarter 2001. Household subscribers downloaded 652 million Mbs (54%) while Business and government subscribers downloaded 550 million Mbs (46%). The majority of the Mbs downloaded came from the larger ISPs. Downloads from Very large ISPs accounted for 38% of the Mbs downloaded by subscribers, with Large ISPs and Medium ISPs accounting for 47% and 11% respectively.

There was an average of 281 Mbs of data downloaded per Internet subscriber during the three months of the September quarter 2001. Household subscribers downloaded an average of 175 Mbs of data and Business and government subscribers downloaded an average 1,011 Mbs of data.

Internet subscribers serviced by smaller ISPs tended to have higher average Mbs downloaded levels (an average of 1,000 Mbs for Very small ISPs and 400 Mbs for Small ISPs) than subscribers serviced by larger ISPs (164 Mbs for Very large ISPs and 602 Mbs for Large ISPs).

**4.1****VOLUME OF DATA DOWNLOADED**

|  | <i>Data<br/>downloaded</i> | <i>Data<br/>downloaded</i> |
|--|----------------------------|----------------------------|
|  | million<br>Mbs             | %                          |
| .....                                  |                            |                            |
| BUSINESS AND GOVERNMENT<br>SUBSCRIBERS |                            |                            |
| Very small ISPs                        | 4                          | 1                          |
| Small ISPs                             | 36                         | 7                          |
| Medium ISPs                            | 53                         | 10                         |
| Large ISPs                             | 373                        | 68                         |
| Very large ISPs                        | 83                         | 15                         |
| <i>Total</i>                           | 550                        | 100                        |
| .....                                  |                            |                            |
| HOUSEHOLD SUBSCRIBERS                  |                            |                            |
| Very small ISPs                        | —                          | —                          |
| Small ISPs                             | 18                         | 3                          |
| Medium ISPs                            | 75                         | 11                         |
| Large ISPs                             | 189                        | 29                         |
| Very large ISPs                        | 370                        | 57                         |
| <i>Total</i>                           | 652                        | 100                        |
| .....                                  |                            |                            |
| ALL SUBSCRIBERS                        |                            |                            |
| Very small ISPs                        | 4                          | —                          |
| Small ISPs                             | 54                         | 5                          |
| Medium ISPs                            | 128                        | 11                         |
| Large ISPs                             | 562                        | 47                         |
| Very large ISPs                        | 453                        | 38                         |
| <i>Total</i>                           | 1 201                      | 100                        |

.....

— nil or rounded to zero (including null cells)

## CHAPTER 5

## REGIONAL DATA .....

### INTRODUCTION

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

### STATISTICAL DIVISIONS

There was a wide distribution of ISPs across Statistical Divisions (SDs) in Australia, with the highest concentration occurring in the Capital city SDs. Capital city SDs accounted for 73% of access lines, 73% of subscribers and 81% of Mbs downloaded. They recorded an average of 8.9 subscribers per access line and an average of 309 Mbs of data downloaded per subscriber. This compares with 8.7 subscribers per access line and an average of 204 Mbs of data downloaded per subscriber for all other SDs across Australia.

New South Wales — Sydney SD had 191 ISPs servicing 1,047,000 subscribers (73% of State subscribers). All other SDs in the State had 114 ISPs servicing 388,000 subscribers.

Victoria — Melbourne SD had 194 ISPs servicing 962,000 subscribers (82% of State subscribers). All other SDs in the State had 63 ISPs servicing 213,000 subscribers.

Queensland — Brisbane SD had 98 ISPs servicing 460,000 subscribers (56% of State subscribers). All other SDs in the State had 96 ISPs servicing 360,000 subscribers.

South Australia — Adelaide SD had 56 ISPs servicing 237,000 subscribers (85% of State subscribers). All other SDs in the State had 19 ISPs servicing 43,000 subscribers.

Western Australia — Perth SD had 80 ISPs servicing 269,000 subscribers (75% of State subscribers). All other SDs in the State had 30 ISPs servicing 88,000 subscribers.

Tasmania — Greater Hobart SD had 26 ISPs servicing 55,000 subscribers (60% of State subscribers). All other SDs in the State had 18 ISPs servicing 37,000 subscribers.

Northern Territory — Darwin SD had 16 ISPs servicing 34,000 subscribers (77% of Territory subscribers). In the other SDs in the Territory there were 12 ISPs servicing 10,000 subscribers.

Australian Capital Territory — Canberra SD had 49 ISPs servicing 71,000 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 to 12 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% (50,000) of subscribers

ACCESSIBILITY *continued*

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 8.8, in Accessible regions 9.3, Moderately accessible regions 9.5, Remote regions 11.3 and Very remote regions 7.3.

**5.1**

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

|                        | <i>ISPs(b)</i> | <i>POPs</i> | <i>Access<br/>lines</i> | <i>All<br/>subscribers</i> | <i>Data<br/>downloaded<br/>by<br/>subscribers</i> | <i>Average<br/>number of<br/>subscribers per<br/>access line(c)</i> | <i>Average data<br/>downloaded<br/>per<br/>subscriber(c)</i> |
|------------------------|----------------|-------------|-------------------------|----------------------------|---|---|--|
|                        | no.            | no.         | no.                     | '000                       | million<br>Mbs                                    | no.   | Mbs  |
| <b>New South Wales</b> |                |             |                         |                            |   |   |  |
| Sydney                 | 191            | 280         | 107 329                 | 1 047                      | 319   | 9.8   | 304  |
| Hunter                 | 35             | 57          | 10 151                  | 84                         | 16  | 8.3   | 191  |
| Illawarra              | 36             | 53          | 12 005                  | 67                         | 14  | 5.6   | 211  |
| Richmond-Tweed         | 22             | 25          | 2 752                   | 29                         | 11  | 10.5  | 367  |
| Mid-North Coast        | 25             | 68          | 6 516                   | 57                         | 11  | 8.8   | 187  |
| Northern               | 17             | 55          | 3 826                   | 34                         | 7   | 8.8   | 194  |
| North Western          | 15             | 27          | 1 497                   | 16                         | 3   | 10.7  | 163  |
| Central West           | 16             | 35          | 2 495                   | 21                         | 4   | 8.2   | 183  |
| South Eastern          | 18             | 31          | 1 149                   | 22                         | 5   | 19.4  | 239  |
| Murrumbidgee           | 15             | 32          | 1 989                   | 24                         | 6   | 12.3  | 248  |
| Murray                 | 22             | 29          | 4 458                   | 30                         | 7   | 6.6   | 231  |
| Far West               | 10             | 11          | 602                     | 4                          | 1   | 7.1   | 287  |
| <i>Total</i>           | <i>250</i>     | <i>703</i>  | <i>154 769</i>          | <i>1 435</i>               | <i>403</i>  | <i>9.3</i>  | <i>281</i>   |
| <b>Victoria</b>        |                |             |                         |                            |   |   |  |
| Melbourne              | 194            | 246         | 120 626                 | 962                        | 291   | 8.0   | 302  |
| Barwon                 | 31             | 36          | 4 256                   | 38                         | 8   | 8.8   | 215  |
| Western District       | 10             | 13          | 1 063                   | 15                         | 3   | 14.3  | 178  |
| Central Highlands      | 26             | 27          | 3 191                   | 30                         | 6   | 9.3   | 199  |
| Wimmera                | 5              | 10          | 417                     | 5                          | np  | 13.2  | np   |
| Mallee                 | 14             | 17          | 1 937                   | 19                         | 4   | 9.7   | 223  |
| Loddon                 | 17             | 27          | 2 860                   | 30                         | 5   | 10.4  | 170  |
| Goulburn               | 19             | 32          | 3 482                   | 29                         | 5   | 8.4   | 170  |
| Ovens-Murray           | 10             | 12          | 690                     | 6                          | np  | 8.9   | np   |
| East Gippsland         | 7              | 16          | 608                     | 10                         | 2   | 16.1  | 252  |
| Gippsland              | 17             | 29          | 2 750                   | 31                         | 6   | 11.2  | 184  |
| <i>Total</i>           | <i>222</i>     | <i>465</i>  | <i>141 880</i>          | <i>1 175</i>               | <i>331</i>  | <i>8.3</i>  | <i>282</i>   |
| <b>Queensland</b>      |                |             |                         |                            |   |   |  |
| Brisbane               | 98             | 119         | 48 454                  | 460                        | 127   | 9.5   | 276  |
| Moreton                | 57             | 82          | 16 147                  | 152                        | 29  | 9.4   | 192  |
| Wide Bay-Burnett       | 16             | 30          | 4 116                   | 26                         | 4   | 6.3   | 149  |
| Darling Downs          | 22             | 41          | 4 392                   | 35                         | 6   | 7.9   | 186  |
| South West             | 4              | 17          | 248                     | np                         | np  | np  | 36   |
| Fitzroy                | 16             | 32          | 6 710                   | 45                         | 10  | 6.7   | 215  |
| Central West           | 3              | 5           | np                      | np                         | np  | 11.7  | 50   |
| Mackay                 | 17             | 23          | 2 495                   | 23                         | 4   | 9.2   | 186  |
| Northern               | 11             | 15          | 3 143                   | 30                         | 4   | 9.4   | 137  |
| Far North              | 19             | 32          | 4 302                   | 43                         | 8   | 10.1  | 192  |
| North West             | 5              | 12          | np                      | 4                          | np  | np  | np   |
| <i>Total</i>           | <i>153</i>     | <i>408</i>  | <i>90 572</i>           | <i>820</i>                 | <i>193</i>  | <i>9.1</i>  | <i>236</i>   |

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<br>lines | All<br>subscribers | Data<br>downloaded<br>by<br>subscribers | Average<br>number of<br>subscribers per<br>access line(c) | Average data<br>downloaded<br>per<br>subscriber(c) |
|-------------------------------------|------------|--------------|-----------------|--------------------|---|---|--|
|                                     | no.        | no.          | no.             | '000               | million<br>Mbs                          | no.   | Mbs  |
| <b>South Australia</b>              |            |              |                 |                    |   |   |  |
| Adelaide                            | 56         | 77           | 26 858          | 237                | 88                                      | 8.8   | 371  |
| Outer Adelaide                      | 6          | 10           | 414             | 6                  | 2                                       | 13.7  | 306  |
| Yorke and Lower                     |            |              |                 |                    |   |   |  |
| North                               | 6          | 11           | 450             | 4                  | 2                                       | 7.9   | 568  |
| Murray Lands                        | 10         | 20           | 842             | 10                 | 1                                       | 11.6  | 134  |
| South East                          | 16         | 25           | 1 031           | 10                 | 2                                       | 9.5   | 226  |
| Eyre                                | 7          | 14           | 305             | 5                  | 1                                       | 16.7  | 291  |
| Northern                            | 14         | 29           | 1 137           | 10                 | 5                                       | 8.5   | 482  |
| <i>Total</i>                        | 68         | 186          | 31 037          | 280                | 101                                     | 9.0   | 361  |
| <b>Western Australia</b>            |            |              |                 |                    |   |   |  |
| Perth                               | 80         | 101          | 29 654          | 269                | 93                                      | 9.1   | 345  |
| South West                          | 22         | 33           | 4 214           | 35                 | 7                                       | 8.4   | 209  |
| Lower Great                         |            |              |                 |                    |   |   |  |
| Southern                            | 8          | 14           | 1 156           | 11                 | 2                                       | 9.2   | 197  |
| Upper Great                         |            |              |                 |                    |   |   |  |
| Southern                            | np         | np           | np              | np                 | np                                      | 5.1   | 165  |
| Midlands                            | np         | 11           | 753             | np                 | np                                      | np  | 225  |
| South Eastern                       | 13         | 20           | 1 681           | 15                 | 4                                       | 8.8   | 241  |
| Central                             | 9          | 12           | 1 323           | 10                 | 1                                       | 7.4   | 145  |
| Pilbara                             | 7          | 18           | 965             | np                 | np                                      | np  | 347  |
| Kimberley                           | 5          | np           | np              | 3                  | np                                      | np  | np   |
| <i>Total</i>                        | 95         | 220          | 40 375          | 357                | 112                                     | 8.8   | 313  |
| <b>Tasmania</b>                     |            |              |                 |                    |   |   |  |
| Greater Hobart                      | 26         | 34           | 6 323           | 55                 | 17                                      | 8.8   | 307  |
| Southern                            | np         | np           | np              | np                 | np                                      | 8.1   | 322  |
| Northern                            | 16         | 23           | np              | np                 | np                                      | 9.0   | 310  |
| Mersey-Lyell                        | np         | np           | 1 884           | 20                 | 4                                       | 10.8  | 206  |
| <i>Total</i>                        | 28         | 76           | 10 018          | 92                 | 26                                      | 9.2   | 285  |
| <b>Northern Territory</b>           |            |              |                 |                    |   |   |  |
| Darwin                              | 16         | 17           | 3 291           | 34                 | 7                                       | 10.3  | 197  |
| — Balance                           | 10         | 12           | 770             | 10                 | 2                                       | 12.8  | 197  |
| <i>Total</i>                        | 17         | 29           | 4 061           | 44                 | 9                                       | 10.8  | 197  |
| <b>Australian Capital Territory</b> |            |              |                 |                    |   |   |  |
| Canberra                            | 49         | 53           | 9 990           | 71                 | 27                                      | 7.1   | 375  |
| <i>Total</i>                        | 49         | 53           | 9 990           | 71                 | 27                                      | 7.1   | 375  |
| <b>Total Australia</b>              | <b>603</b> | <b>2 140</b> | <b>482 702</b>  | <b>4 273</b>       | <b>1 201</b>                            | <b>8.9</b>  | <b>281</b>   |

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

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

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

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

**5.2**

## SELECTED INTERNET ACTIVITY BY ARIA CATEGORY(a)(b)

|                          | ISPs(c) | POPs | Access lines | All subscribers | Data downloaded by subscribers | Average number of subscribers per access line(d) | Average data downloaded per subscriber(d) |
|--------------------------|---------|------|--------------|-----------------|--------------------------------|--|---|
|                          | no.     | no.  | no.          | '000            | million Mbs                    | no.  | Mbs                                       |
| <b>New South Wales</b>   |         |      |              |                 |                                |  |   |
| Highly accessible        | 225     | 468  | 140 701      | 1 302           | 378                            | 9.3  | 290                                       |
| Accessible               | 51      | 189  | 12 967       | 122             | 23                             | 9.4  | 192                                       |
| Moderately accessible    | 17      | 33   | np           | 10              | np                             | np   | np  |
| Remote                   | np      | np   | np           | np              | —                              | np   | 36  |
| Very remote              | np      | np   | np           | np              | np                             | np   | np  |
| Total                    | 250     | 703  | 154 769      | 1 435           | 403                            | 9.3  | 281                                       |
| <b>Victoria</b>          |         |      |              |                 |                                |  |   |
| Highly accessible        | 216     | 413  | 138 335      | 1 134           | 324                            | 8.2  | 286                                       |
| Accessible               | 30      | 40   | 3 263        | 36              | 7                              | 11.1   | 187                                       |
| Moderately accessible    | 5       | 12   | 282          | 4               | 1                              | 14.9   | 181                                       |
| Remote                   | —       | —    | —            | —               | —                              | —  | —   |
| Very remote              | —       | —    | —            | —               | —                              | —  | —   |
| Total                    | 222     | 465  | 141 880      | 1 175           | 331                            | 8.3  | 282                                       |
| <b>Queensland</b>        |         |      |              |                 |                                |  |   |
| Highly accessible        | 135     | 259  | 75 315       | 689             | 172                            | 9.1  | 249                                       |
| Accessible               | 25      | 53   | 9 462        | 77              | 14                             | 8.2  | 182                                       |
| Moderately accessible    | 25      | 56   | 4 799        | 44              | 7                              | 9.3  | 148                                       |
| Remote                   | 8       | np   | np           | np              | np                             | np   | np  |
| Very remote              | 3       | np   | np           | np              | np                             | np   | np  |
| Total                    | 153     | 408  | 90 572       | 820             | 193                            | 9.1  | 236                                       |
| <b>South Australia</b>   |         |      |              |                 |                                |  |   |
| Highly accessible        | 57      | 94   | 27 762       | 247             | 90                             | 8.9  | 365                                       |
| Accessible               | 20      | 50   | 2 215        | 19              | np                             | 8.5  | np  |
| Moderately accessible    | 10      | 22   | 661          | np              | 2                              | 12.7   | 206                                       |
| Remote                   | 7       | 15   | np           | 5               | 4                              | np   | 722                                       |
| Very remote              | 4       | 5    | np           | np              | np                             | np   | np  |
| Total                    | 68      | 186  | 31 037       | 280             | 101                            | 9.0  | 361                                       |
| <b>Western Australia</b> |         |      |              |                 |                                |  |   |
| Highly accessible        | 86      | 129  | 33 481       | 300             | 100                            | 9.0  | 332                                       |
| Accessible               | 13      | np   | 2 484        | 25              | np                             | 10.2   | np  |
| Moderately accessible    | 7       | 18   | np           | np              | np                             | np   | np  |
| Remote                   | np      | np   | np           | np              | np                             | np   | np  |
| Very remote              | np      | 44   | np           | 21              | 5                              | np   | 241                                       |
| Total                    | 95      | 220  | 40 375       | 357             | 112                            | 8.8  | 313                                       |

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

— nil or rounded to zero (including null cells)

(a) Subscribers and data downloaded by subscribers has been apportioned to an Accessibility/Remoteness Index of Australian (ARIA) category according to the location of the POP where the activity took place. For

a description of ARIA refer to paragraphs 10 to 12 of the Explanatory notes.

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

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

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



## 5.2

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

|   | ISPs(c) | POPs  | Access<br>lines | All<br>subscribers | Data<br>downloaded<br>by<br>subscribers | Average<br>number of<br>subscribers per<br>access line(d) | Average data<br>downloaded<br>per<br>subscriber(d) |
|---|---------|-------|-----------------|--------------------|---|---|--|
|   | no.     | no.   | no.             | '000               | million<br>Mbs                          | no.   | Mbs  |
| <b>Tasmania</b>                         |         |       |                 |                    |   |   |  |
| Highly accessible                       | 28      | 50    | 7 664           | 68                 | 21                                      | 8.9   | 307  |
| Accessible                              | 9       | 19    | 2 042           | 21                 | 4                                       | 10.2  | 202  |
| Moderately<br>accessible                | 3       | 7     | 312             | 3                  | 1                                       | 10.5  | 358  |
| Remote                                  | —       | —     | —               | —                  | —                                       | —   | —  |
| Very remote                             | —       | —     | —               | —                  | —                                       | —   | —  |
| <i>Total</i>                            | 28      | 76    | 10 018          | 92                 | 26                                      | 9.2   | 285  |
| <b>Northern Territory</b>               |         |       |                 |                    |   |   |  |
| Highly accessible                       | —       | —     | —               | —                  | —                                       | —   | —  |
| Accessible                              | 16      | np    | 3 291           | 34                 | 7                                       | 10.3  | 197  |
| Moderately<br>accessible                | —       | —     | —               | —                  | —                                       | —   | —  |
| Remote                                  | np      | 11    | np              | np                 | np                                      | np  | np   |
| Very remote                             | np      | np    | np              | np                 | np                                      | np  | np   |
| <i>Total</i>                            | 17      | 29    | 4 061           | 44                 | 9                                       | 10.8  | 197  |
| <b>Australian Capital<br/>Territory</b> |         |       |                 |                    |   |   |  |
| Highly accessible                       | 49      | 53    | 9 990           | 71                 | 27                                      | 7.1   | 375  |
| Accessible                              | —       | —     | —               | —                  | —                                       | —   | —  |
| Moderately<br>accessible                | —       | —     | —               | —                  | —                                       | —   | —  |
| Remote                                  | —       | —     | —               | —                  | —                                       | —   | —  |
| Very remote                             | —       | —     | —               | —                  | —                                       | —   | —  |
| <i>Total</i>                            | 49      | 53    | 9 990           | 71                 | 27                                      | 7.1   | 375  |
| <b>Total Australia</b>                  |         |       |                 |                    |   |   |  |
| Highly accessible                       | 538     | 1 466 | 433 248         | 3 812              | 1 111                                   | 8.8   | 291  |
| Accessible                              | 104     | 390   | 35 724          | 334                | 65                                      | 9.3   | 195  |
| Moderately<br>accessible                | 49      | 148   | 8 216           | 78                 | 13                                      | 9.5   | 170  |
| Remote                                  | 21      | 61    | 2 256           | 26                 | 7                                       | 11.3  | 269  |
| Very remote                             | 20      | 75    | 3 258           | 24                 | 5                                       | 7.3   | 219  |
| <i>Total</i>                            | 603     | 2 140 | 482 702         | 4 273              | 1 201                                   | 8.9   | 281  |

— 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 by subscribers has been apportioned to an Accessibility/Remoteness Index of Australian (ARIA) category according to the location of the POP where the activity took place. For

a description of ARIA refer to paragraphs 10 to 12 of the Explanatory notes.

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

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

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

**EXPLANATORY NOTES** .....

## INTRODUCTION

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

## SURVEY SCOPE AND METHODOLOGY

**2** The scope of the Internet Activity Survey is all Australian based ISPs operating during the reference period. ISPs are defined as businesses that supply Internet connectivity services to individuals, households, businesses and other organisations. Libraries, Internet kiosks and Internet cafes which provide Internet access on a casual basis are excluded from the survey.

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

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

## SUBSCRIBERS

5 Active subscribers are defined as customers having accounts with ISPs who have accessed the Internet or paid for access to the Internet during the 90 days of the reference period. Counts of subscribers are not the same as counts of people/organisations with Internet access because subscribers may have accounts with more than one ISP and conversely an ISP subscriber account may provide Internet access (and email addresses) for several people/organisations.

## STATISTICAL UNIT

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

**7** ISPs in this survey have been classified by size according to the number of subscribers ISPs reported for at the end of the reporting period. The size categories are defined as follows:

|                |                            |
|----------------|----------------------------|
| Very small ISP | 1–100 subscribers          |
| Small ISP      | 101–1,000 subscribers      |
| Medium ISP     | 1,001–10,000 subscribers   |
| Large ISP      | 10,001–100,000 subscribers |
| Very large ISP | 100,001+ subscribers       |

REGIONAL CLASSIFICATION  
OF DATA

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

## REGIONAL CLASSIFICATION OF DATA *continued*

- to Statistical Divisions (SDs) within States and Territories, as set out in the *Australian Standard Geographical Classification* (ASGC) (Cat. no. 1216.0). The SD is the largest and most stable geographical unit within each State and Territory. Reference map 1 at the back of this publication shows the SD boundaries; and
- to Accessibility/Remoteness Index of Australia (ARIA) categories, as outlined in *Accessibility/Remoteness Index of Australia (ARIA)*, Department of Health and Aged Care Occasional Papers, Series No. 6, March 1999. The results in table 5.2 are experimental in nature as the classification of remoteness is still in its early stages of development. Reference map 2 at the back of this publication shows the ARIA boundaries.

## POINTS OF PRESENCE

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

## ACCESSIBILITY/REMOTENESS INDEX OF AUSTRALIA

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

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

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

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

## REFERENCE PERIOD

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

## RELIABILITY OF DATA

**14** As the survey does not have a sample component, the data are not subject to sampling variability. However, other inaccuracies collectively referred to as non-sampling error may affect the data. These non-sampling errors may arise from a number of sources, including:

- errors in the reporting of data by respondents;
- errors in capturing or processing of data;
- estimation for missing or misreported data; and
- definition and classification errors.

RELIABILITY OF DATA *continued*

**15** Every effort has been made to reduce non-sampling error to a minimum by careful design and testing of questionnaires, efficient operating procedures and systems, and appropriate methodology.

## ACKNOWLEDGMENT

**16** ABS publications draw extensively on information provided freely by individuals, businesses, governments and other organisations. Their continued cooperation is very much appreciated. Without it, the wide range of statistics published by the ABS would not be available. Information received by the ABS is treated in strict confidence as required by the *Census and Statistics Act 1905*.

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

## RELATED PUBLICATIONS

**18** Other ABS publications on information technology and telecommunications in Australia are:

*Business Use of Information Technology, Australia, 1999–2000*  
(Cat. no. 8129.0).

*Computing Services Industry, Australia, 1998–99* (Cat. no. 8669.0).

*Government Use of Information Technology, Australia, 1997–98*  
(Cat. no. 8119.0).

*Household Use of Information Technology, Australia, 1999*  
(Cat. no. 8146.0).

*Information Technology, Australia 1998–99* (Cat. no. 8126.0).

*Use of Information Technology on farms, Australia, 1998–99*  
(Cat. no. 8150.0).

*Use of the Internet by Householders, Australia, November 2000*  
(Cat. no. 8147.0).

AVAILABILITY OF  
UNPUBLISHED STATISTICS

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

## ABBREVIATIONS

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

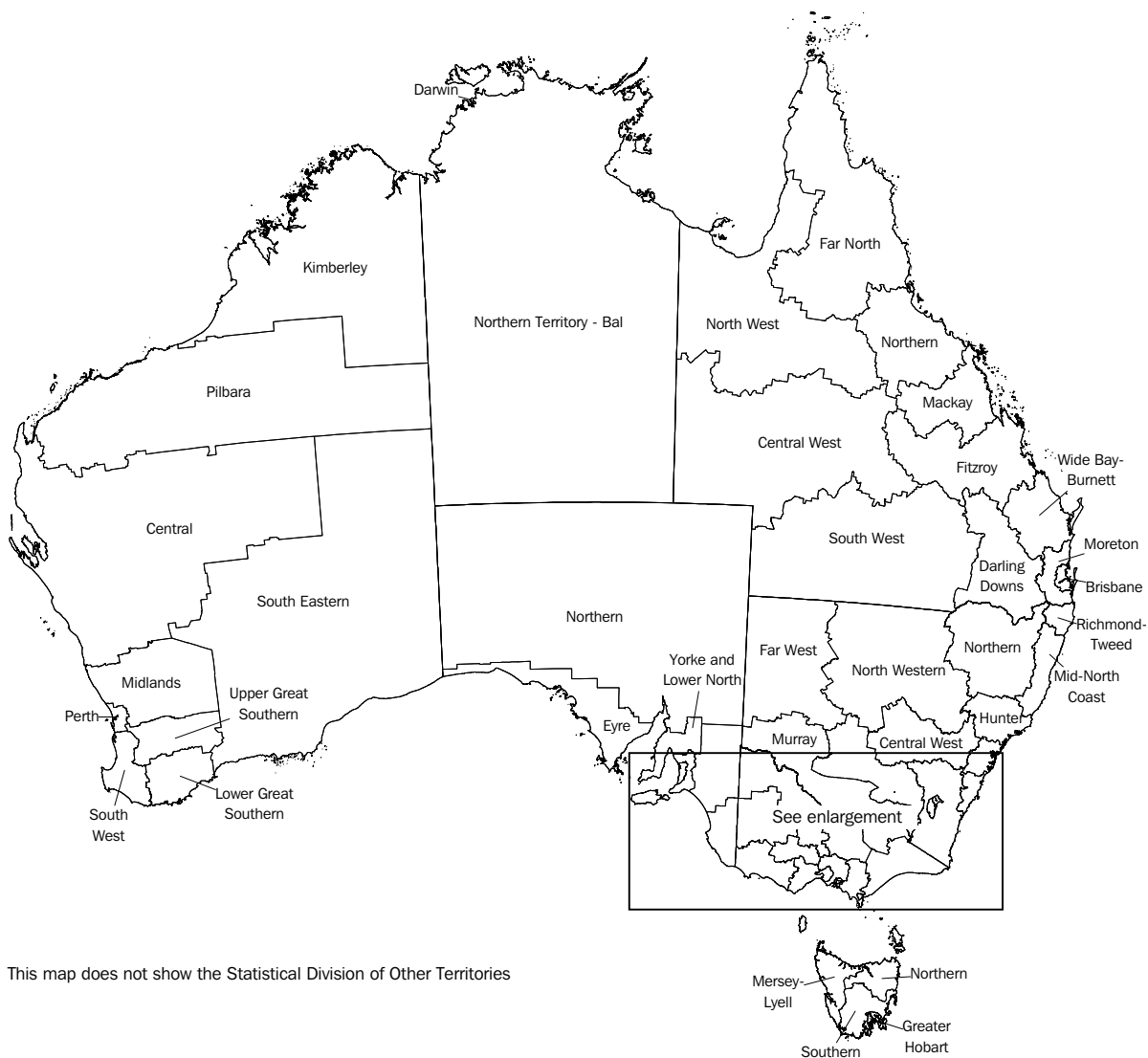
## GLOSSARY . . . . .

|   |   |
|---|---|
| <b>Access plan</b>  | The Internet access package options available to subscribers from ISPs.   |
| <b>Access lines</b>                                       | Lines, points, ports, modem access points available to subscribers to access their ISP.   |
| <b>Active subscribers</b>                                 | Subscribers who have accessed the Internet or paid for access to the Internet through an ISP in the 90 days during the reference period.  |
| <b>Analog/Public Switched Telephone Network (PSTN)</b>    | A telecommunications network operated by a carrier to provide services to the public and carries continuously variable signals or data.   |
| <b>Business and government subscribers</b>                | All businesses, corporations, nonprofit organisations and government organisations who obtain access to the Internet through an ISP.  |
| <b>Business hours telephone service</b>                   | A telephone support service which operates during normal business hours.  |
| <b>Cable modem</b>  | 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.   |
| <b>Data downloaded</b>                                    | Volume of data downloaded by subscribers from the Internet.   |
| <b>Dial-up access</b>                                     | Subscribers who connect to the Internet via modem and dial-up software.   |
| <b>Digital/Integrated Services Digital Network (ISDN)</b> | 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.             |
| <b>Digital Subscriber Line (DSL)</b>                      | 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.   |
| <b>Free access</b>  | Free access to an email and Web browsing account.   |
| <b>Hosted Web sites</b>                                   | Customer Web sites maintained by ISP on their servers.  |
| <b>Hourly access plan</b>                                 | A subscription option where customers pay for dial-up access on an hourly basis.  |
| <b>Household subscribers</b>                              | Households and private individuals who subscribe to Internet access via an ISP. This may include some home based businesses.  |
| <b>Internet</b>   | 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. |
| <b>Internet cafe</b>                                      | 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.  |
| <b>Internet Service Provider (ISP)</b>                    | Resident Australian individuals or businesses offering Internet access services to customers.   |
| <b>ISDN</b>   | See Digital/Integrated Services Digital Network (ISDN).   |

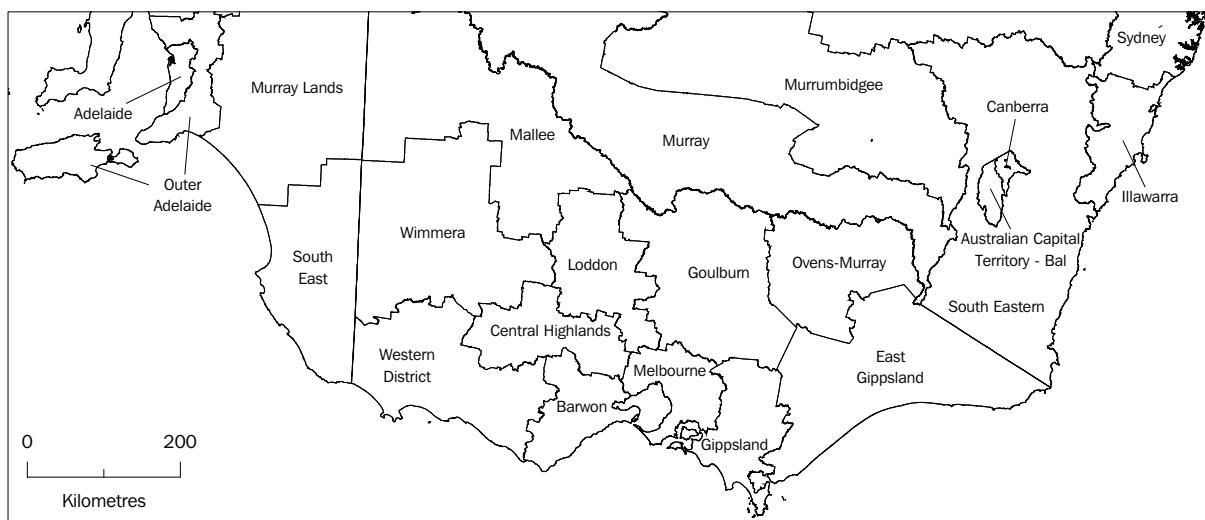
|   |   |
|---|---|
| <b>Megabyte (Mb)</b>                                    | A data unit of 1,048,576 bytes, sometimes interpreted as 1 million bytes.   |
| <b>Microwave radio</b>                                  | A communication link that uses point-to-point radio transmission.   |
| <b>Monthly/quarterly/annual access plan</b>             | 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. |
| <b>Nonprofit organisations</b>                          | Industry and trade associations, clubs, cultural organisations, community service organisations and similar organisations.  |
| <b>On-line support service</b>                          | 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.  |
| <b>Permanent access</b>                                 | Permanent subscriber access to the Internet via permanent modem, Integrated Services Digital Network, dedicated data service, frame relay, etc.   |
| <b>Point of Presence (POP)</b>                          | A server in a geographic location where an ISP can be accessed by a subscriber via access lines.  |
| <b>PSTN</b>   | See Analog/Public Switched Telephone Network (PSTN).  |
| <b>Satellite/communications satellite</b>               | 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.   |
| <b>Secure transaction capabilities</b>                  | 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).  |
| <b>Start up disk/package</b>                            | 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.  |
| <b>Subscriber</b>                                       | 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.  |
| <b>Subscribers who left during the reference period</b> | 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.   |
| <b>Web hosting</b>                                      | See Hosted Web sites.   |
| <b>Wireless Application Protocol (WAP)</b>              | A standard for providing Internet access and other data-based services, such as email, electronic transactions, news and weather reports, over wireless networks.   |
| <b>24 hr telephone service</b>                          | A telephone support service which operates around the clock.  |

**REFERENCE MAPS .....**

**A1** STATISTICAL DIVISIONS—1 July, 2000



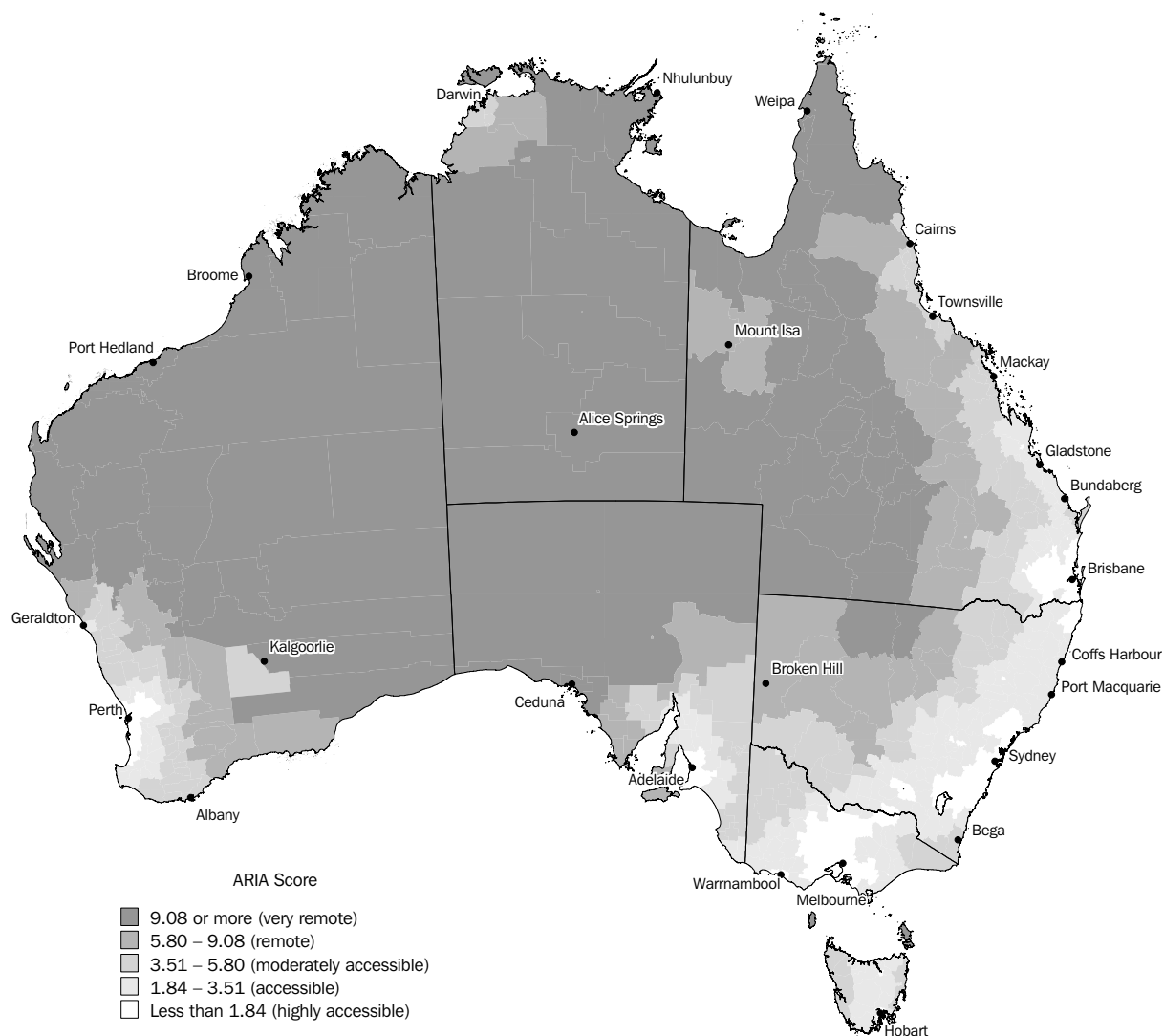
Enlargement





**A2**

ACCESSIBILITY/REMOTENESS INDEX OF AUSTRALIA, By Statistical Local Area







|                         |   |
|-------------------------|---|
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| <i>CPI INFOLINE</i>     | For current and historical Consumer Price Index data, call 1902 981 074 (call cost 75c per minute).   |
| <i>DIAL-A-STATISTIC</i> | 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 75c per minute).                            |

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