



BUSINESS USE OF INFORMATION TECHNOLOGY

AUSTRALIA

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I N Q U I R I E S

- For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070 or Bethany Smithson on Perth 08 9360 5913.

CHANGES IN THIS ISSUE

This publication presents the first release of estimates for the Business Use of IT (BUIIT) survey compiled using new statistical infrastructure arising from *The New Tax System* (TNTS). The new infrastructure is described in an information paper, *Information Paper, Improvements in ABS Economic Statistics [Arising from the New Tax System]* (cat. no. 1372.0) released by the ABS in May 2002. One of the infrastructure changes is the introduction of a new ABS business register. The main effect of the introduction of the new ABS business register, for the BUIIT survey, is a changed population from which the survey frame has been drawn.

Changes resulting from TNTS are evident in the estimates of business counts published in this issue compared to those published in 2001-02. Two characteristics used in designing the sample for the BUIIT survey were updated when the ABS Business Register was created. These are employment and industry; these changes have resulted in major compositional changes to the survey population. For these reasons, comparisons of business counts in this publication to those previously published should not generally be made.

For core data items of computer use, Internet use and web presence, the 2001-02 BUIIT survey results were recompiled to incorporate the impact of the new infrastructure. Analysis of these estimates shows that the impact of TNTS is nil or less than one percentage point change for each of these items and is lower than the Relative Standard Error (RSE) achieved in 2001-02, therefore, revised estimates have not been published.

TNTS has had a significant impact on the population from which the sample is drawn, particularly composition by business size and industry. These changes to the population have resulted in a higher than usual sample rotation rate. For 2002-03, approximately two thirds of the sample were new businesses to the survey; this rate is normally one third. The size of this rotation has impacted on the accuracy of survey estimates for 2002-03.

When comparing estimates from 2002-03 to those published for 2001-02, changes of a small magnitude are more than likely to have resulted from changes to the survey population rather than actual changes in the characteristic being measured. For example, the estimate shows that 83% of all businesses used a computer in 2002-03. This is a decrease of one percentage point from the estimate published for 2001-02. It is highly likely that this decrease is due to the impact of infrastructure changes rather than a decrease in the use of computers by business. Where the change is of a larger magnitude, it should be treated as an indicator of the trend of movement rather than an absolute change in percentage terms.

While the impact of TNTS is significant, it does not represent an actual break in series. However, comparisons between 2002-03 estimates and previously published data should be made with caution. For more information about changes, please refer to the Explanatory Notes.

Dennis Trewin
Australian Statistician

INTRODUCTION

This summary of findings focuses on the main outputs of an Australian Bureau of Statistics (ABS) survey of business use of information technology (IT) conducted in respect of 2002-03. The context described in the Notes section on page two and the information provided in the Explanatory Notes must be taken into consideration when interpreting these results, particularly if making comparisons to those reported for previous periods. Any references made in this publication to movements in proportions between those recorded for 2002-03 and earlier periods have been qualified with reference to reliability.

ADOPTION OF INFORMATION TECHNOLOGY

The following table shows trends over time for the proportions of businesses using a computer, the Internet or having a web presence. Taking into consideration information provided in the Notes section on page two and in the Explanatory Notes, the estimates as at the end of June 2003 show the proportions of businesses using these technologies remained relatively unchanged from those at the end of June 2002.

BUSINESS USE OF SELECTED TECHNOLOGIES (a)

	1998	2000	2001	2002	2003(b)
	%	%	%	%	%
Businesses using a computer	63	76	84	84	83
Businesses using the Internet	29	56	69	72	71
Businesses with a web presence	6	16	22	24	23

- (a) Proportions are of businesses at 30 June.
- (b) Affected by TNTS - see Explanatory Notes 5 to 15

IT SECURITY

Only 11% of businesses using a computer reported having no IT security measures in place at June 2003. The most common form of IT security was anti-virus software or virus scanner (82%).

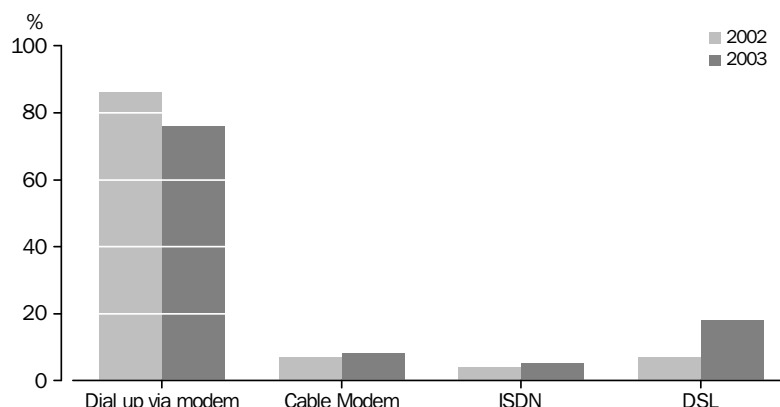
Of those businesses using a computer, 38% reported some form of IT security incident or breach which was not intercepted by the business's security measures during the year ended June 2003. A virus (34%) was the most common IT security incident or breach reported by businesses, followed by a worm (17%).

METHOD OF INTERNET ACCESS

Businesses were asked to identify all methods of Internet access used. Between June 2002 and June 2003 there was an increase in the proportion of businesses accessing the Internet by Digital Subscriber Line (DSL), from 7% to 18%, and a decrease in dial-up via modem, from 86% to 76%. While movements between the 2002-03 survey and previous surveys should be viewed with caution, the direction and approximate magnitude of these changes are considered reliable. They are consistent with other data published by the ABS, for example, results published in *Internet Activity, Australia* (cat. no. 8153.0).

METHOD OF INTERNET ACCESS *continued*

USE OF SELECTED INTERNET ACCESS CONNECTION TYPES (a), AS AT 30 JUNE



(a) Proportions are of all businesses with Internet access for each type of connection

ORDERS FOR GOODS AND SERVICES VIA THE INTERNET

The 2002-03 survey measured the number of Australian businesses using the Internet or web to place and/or receive orders, with or without online payment, and the value of Internet or web orders received by businesses (Internet income). Caution should be used when interpreting values of Internet income, please refer to Explanatory Notes paragraphs 17 - 20.

While caution needs to be exercised in comparing survey results for 2002-03 with earlier periods, the movements for the proportions of businesses receiving orders and for the value of Internet income are considered to be reliable indicators of the direction and approximate magnitude of movement. In 2002-03, the proportion of Australian businesses receiving orders via the Internet or web was 13%; this was approximately double that recorded for 2001-02. Consistent with this, Internet income more than doubled between 2001-02 and 2002-03, with Internet income earned by Australian businesses reaching approximately \$24.3 billion for 2002-03.

ORDERS FOR GOODS AND SERVICES VIA THE INTERNET OR WEB(a)

		2000-01	2001-02	2002-03(b)
Businesses who placed orders via the Internet	%	20	25	28
Businesses who received orders via the Internet	%	9	6	13
Internet income	\$b	9.4	11.3	24.3

- (a) Proportions are of all businesses
- (b) Affected by TINTS - see Explanatory Notes 5 to 15

CHAPTER 2

USE OF IT BY AUSTRALIAN BUSINESSES

BUSINESS SIZE

A strong relationship exists between the employment size of a business and the likelihood that the business is using IT. As employment size increases, so does the proportion of Australian businesses making use of IT. For example, during the year ended 30 June 2003 all large businesses (100 or more persons employed) used computers (100%), 99% used the Internet, while 80% had a web presence. Micro businesses (0-4 persons employed) had a much lower level of IT adoption: 78% used computers, 65% used the Internet and only 15% had a web presence.

A similar relationship exists between the total income of businesses and the use of IT. For example, 61% of businesses with income of \$5 million or more had a web presence while only 11% of businesses with income less than \$100,000 had a web presence.

INDUSTRY

During the year ended June 2003, the proportion of Australian businesses using information technologies varied considerably across industries. The proportion of businesses using computers or the Internet was lowest in the Accommodation, cafes and restaurants industry (71% and 58% respectively) and in the Personal and other services industry (72% and 58% respectively). Computer use and Internet use was highest in the Property and business services industry (93% and 89% respectively). The highest proportion of businesses with a web presence was in Cultural and recreational services (37%), while the lowest proportion was in the Construction industry (11%).

REGIONAL DATA

The proportion of businesses with computer use, Internet use and web presence was similar in New South Wales, Victoria, Queensland, South Australia and Western Australia. Of all states and territories, the adoption of IT by businesses remained highest in the Australian Capital Territory, with 88% using computers, 80% using the Internet and 33% having a web presence. The lowest proportions of business computer use and web presence were in the Northern Territory (81% and 15% respectively) while businesses with the lowest proportion of Internet use were in Tasmania (63%).

Use of IT by businesses in capital cities was higher than other areas but the differences in computer use, Internet use and web presence continued to be small. The use of computers, the Internet and web presence were 84%, 73% and 25% respectively for capital cities, compared to 81%, 68% and 19% respectively for other areas.

ORDERS FOR GOODS OR SERVICES VIA THE INTERNET OR WEB

The proportions referred to in this subsection relate to all Australian businesses. Further commentary pertaining to placing and receiving orders via the Internet or web by more restricted populations (e.g. businesses with Internet access) is provided in chapters 3 and 4.

During 2002-03, 28% of businesses placed orders for goods or services via the Internet or web, while 13% received orders.

ORDERS FOR GOODS OR SERVICES VIA THE INTERNET OR WEB
continued

The likelihood of a business placing or receiving orders increases with the employment size and total income of the business. For example, in 2002-03, 25% of large businesses received orders via the Internet or web compared to 11% of micro businesses.

In 2002-03, the receipt of orders was most common in the Wholesale trade and Manufacturing industries (29% and 24% respectively).

IT SECURITY

Statistics presented in this publication on IT security are based on values reported by businesses. In some cases a business may not be aware of a security incident or breach or the presence of an IT security measure. Survey results may therefore understate the actual levels of IT security measures, incidents or breaches.

SECURITY MEASURES

Only 11% of businesses with a computer reported having no IT security measures in place at June 2003. The most common form of IT security reported was anti-virus software or a virus scanner (82%). The next most common form of IT security was authentication software or hardware (45%), followed by physical security (33%) and firewall (28%).

Approximately 13% of micro businesses reported having no IT security measures at June 2003. For all forms of IT security, a strong relationship existed between the employment size of the business and the likelihood that the business reported the security measure, with security measures much more common in larger businesses.

IT SECURITY INCIDENTS OR BREACHES

For the 2002-03 survey, businesses were asked to indicate if they experienced an IT security incident or breach which was not intercepted by the business's security measures. Therefore, the estimates do not refer to attempts to breach security measures. In 2001-02, the clarification requiring businesses to only report on those IT security incidents or breaches which were not intercepted by security measures in place, was not present. Therefore, data from 2001-02 are not comparable.

Of those businesses using a computer, 38% reported experiencing some form of IT security incident or breach. A virus was the most common IT security incident or breach reported by businesses using a computer (34%), followed by a worm (17%) and trojan (6%). The level of unauthorised network access and attacks resulting in denial of service were small, with only 2% of businesses reporting each of these forms of IT security incidents or breaches.

A strong relationship exists between the employment size of a business and the likelihood that the business reported experiencing an IT security incident or breach. For example, 66% of large businesses using a computer reported an IT security incident or breach during 2002-03. In contrast, 34% of micro businesses using a computer reported an IT security incident or breach in the same period.

2.1 BUSINESS USE OF SELECTED TECHNOLOGIES (a), by selected business characteristics

	BUSINESSES WITH				BUSINESSES WHICH	
	<i>Number of businesses</i>	<i>Computer use</i>	<i>Internet use</i>	<i>Web presence</i>	<i>Placed orders via the Internet or web</i>	<i>Received orders via the Internet or web</i>
	'000	%	%	%	%	%
Employment size						
0–4 persons	441	78	65	15	24	11
5–19 persons	190	92	81	33	33	17
20–99 persons	41	96	91	51	41	23
100 or more persons	8	100	99	80	63	^ 25
Total income						
Less than \$100,000	156	71	58	11	20	^ 8
\$100,000 - \$999,999	395	83	71	21	27	13
\$1m - \$4.9m	99	95	85	41	37	21
\$5m or more	30	99	95	61	52	27
Industry						
Mining	3	87	78	31	28	^ 4
Manufacturing	58	84	73	29	30	^ 24
Electricity, gas and water supply	1	90	79	35	33	13
Construction	101	77	61	11	14	^ 6
Wholesale trade	42	88	79	33	36	29
Retail trade	114	78	60	19	22	^ 9
Accommodation, cafes and restaurants	35	71	58	29	17	15
Transport and storage	34	82	67	20	23	^ 12
Communication services	6	81	63	22	25	^ 11
Finance and insurance	28	83	77	26	33	^ 11
Property and business services	155	93	89	28	43	16
Health and community services	52	86	72	16	25	^ 5
Cultural and recreational services	18	88	81	37	31	^ 15
Personal and other services	33	72	58	25	22	^ 11
State						
New South Wales	244	83	72	24	28	13
Victoria	178	82	70	23	25	12
Queensland	125	85	73	22	30	13
South Australia	43	83	70	24	31	^ 17
Western Australia	63	84	73	21	27	^ 15
Tasmania	12	83	63	^ 19	^ 24	^ 16
Northern Territory	^ 4	81	^ 66	*15	^ 33	*4
Australian Capital Territory	11	88	80	^ 33	^ 40	*17
Region						
Capital cities	469	84	73	25	29	14
Other areas	211	81	68	19	25	12
Total (b)	680	83	71	23	28	13

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

* estimate has a relative standard error of 25% to 50% and should be used with caution

(a) Proportions are of all businesses in each category

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

2.2 IT SECURITY MEASURES AND INCIDENTS OR BREACHES (a)(b), by employment size

	EMPLOYMENT SIZE					Total
	0-4 persons	5-19 persons	20-99 persons	100 or more persons		
IT security measures						
Physical security	%	24	41	61	81	33
Anti virus software or virus scanner	%	81	82	92	99	82
Firewall	%	25	28	48	77	28
Authentication software or hardware	%	36	56	70	87	45
Intrusion detection system	%	8	10	[^] 15	[^] 38	9
Network sniffer software	%	[^] 2	[^] 3	[^] 7	[^] 28	[^] 3
Written IT security policy	%	[^] 2	[^] 6	[^] 17	55	5
No IT security measures	%	13	9	[^] 4	**1	11
Security incidents or breaches(c)						
Virus	%	31	36	51	59	34
Trojan	%	[^] 5	[^] 6	[^] 10	[^] 16	6
Worm	%	14	19	23	[^] 35	17
Unauthorised network access	%	[^] 2	[^] 3	*3	*8	[^] 2
Attack resulting in a denial of service	%	[^] 2	[^] 2	*2	*5	[^] 2
No security incident or breach	%	66	60	46	[^] 34	62
Number of businesses using a computer	'000	343	175	39	8	565

[^] estimate has a relative standard error of 10% to less than 25% and should be used with caution

* estimate has a relative standard error of 25% to 50% and should be used with caution

** estimate has a relative standard error greater than 50% and is considered too unreliable for general use

(a) Proportions are of businesses using a computer in each employment size category

(b) Businesses could identify more than one incident or breach or security measure

(c) Excludes incidents or breaches intercepted by IT security measures used by businesses

METHOD OF INTERNET ACCESS

In the 2002-03 survey, businesses which used the Internet were asked to identify methods of Internet access. Businesses were not asked to identify those methods for which the level of Internet activity was greatest. Statistics presented in this publication therefore show the extent to which businesses are connected via different methods, but not the degree to which these methods are used.

Dial-up via modem was the most common method of Internet access used by Australian businesses (76%). Less common was the use of Digital Subscriber Line (DSL) (18%), cable modem (8%) and Integrated Services Digital Network (ISDN) (5%). Only a very small percentage of businesses had access to the Internet via a wireless connection (1%).

The proportion of large businesses (100 or more persons employed) using DSL (41%) to access the Internet at June 2003 was greater than the proportion using dial-up via modem (39%). For businesses with employment of 0-4 persons, 5-19 persons and 20-99 persons, the proportion accessing the Internet by dial-up via modem was significantly higher than for any other type of access.

Additionally, there was greater variation in methods of access for larger businesses than for smaller businesses. While 41% of large businesses had access to the Internet via DSL, other methods of access included: dial-up via modem (39%), ISDN (33%), and other high speed access (22%), which includes frame relay and ATM (Asynchronous Transfer Mode). In contrast, 80% of micro businesses (0-4 persons employed) used dial-up via modem, with other forms of Internet access being far less common.

WEB PRESENCE AND FEATURES

As at 30 June 2003, approximately 23% of Australian businesses reported having a web presence, either with their own web site or a presence on another entity's web site. Businesses with a web presence were asked to indicate the features of their web presence. The web features listed in table 3.3 are presented in ascending order of sophistication. The proportion of businesses reporting an inquiry or contact facility and online ordering were relatively homogenous across the range of business sizes. Differences in web features across employment sizes of businesses were more significant as features increased in sophistication. While approximately 8% of all businesses with a web presence reported the capability for secure access or transactions, this proportion was more than double for large businesses. Similarly, while integration with back end systems was reported as a web feature by 10% of all businesses with web presence, the proportion of large businesses who reported this feature was 20%.

ORDERS FOR GOODS AND SERVICES VIA THE INTERNET OR WEB

The proportion of businesses with Internet use which reported placing orders for goods and services over the Internet during 2002-03 was 39%. For this same period, 19% of businesses with Internet use indicated that they had received orders via the Internet or web. This is approximately double the proportion of businesses with Internet use who reported receiving orders via the Internet or web during 2001-02. Within the context of

ORDERS FOR GOODS AND SERVICES VIA THE INTERNET OR WEB
continued

changes to the survey resulting from TNS, and while caution should be taken in comparing estimates for 2002-03 with those of previous surveys, this change is considered to be a good indicator of increasing practices of Internet commerce.

Of those businesses placing orders via the Internet, more than three-quarters also made online payments for ordered goods and services. In contrast, approximately one-sixth of businesses receiving orders for goods and services also received online payments.

BENEFITS OF PLACING ORDERS VIA THE INTERNET OR WEB

During 2002-03, for businesses placing orders for goods or services via the Internet or web, the most common benefit reported was saving time (86%). Having access to a wider range of suppliers was the second most common benefit (40%). Approximately 6% of businesses placing orders via the Internet or web reported no benefit achieved.

3.1 METHOD OF INTERNET ACCESS (a)(b),
by employment size

		EMPLOYMENT SIZE					
		0-4	5-19	20-99	100 or more		Total
		persons	persons	persons	persons		
Dial-up via modem	%	80	73	62	^ 39		76
Cable modem	%	10	^ 6	^ 5	* 8		8
ISDN (Integrated Services Digital Network)	%	^ 4	^ 6	^ 13	^ 33		5
Digital Subscriber Line, e.g. ADSL	%	14	23	28	^ 41		18
Wireless connection	%	* 1	* 1	* 2	* 8		^ 1
Other high speed access	%	* 1	* 1	^ 6	^ 22		^ 1
Don't know	%	^ —	* 1	* 2	* 2		^ 1
Businesses using the Internet	'000	286	155	37	8		485

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

* estimate has a relative standard error of 25% to 50% and should be used with caution

— nil or rounded to zero (including null cells)

(a) Proportions are of businesses with Internet use in each employment size category

(b) Businesses could identify more than one method of Internet access

3.2 SELECTED BUSINESS INTERNET ACTIVITIES (a),
by employment size

		EMPLOYMENT SIZE				
		0-4 persons	5-19 persons	20-99 persons	100 or more persons	Total
Government services(b)(c)						
Accessed any government service	%	67	75	85	95	71
Electronic lodgement of						
Taxation forms	%	18	20	35	57	21
Claims for grants or benefits	%	^ 1	^ 3	^ 6	^ 8	^ 2
Applications for licenses or permits	%	^ 6	^ 6	^ 11	^ 15	6
Payments	%	27	29	27	^ 29	28
Sought information or services relating to						
Taxation	%	39	43	60	86	42
Employment	%	19	35	43	53	26
Regulations	%	30	38	52	74	35
Purchasing related activities						
Placed orders for goods or services	%	36	41	45	63	39
Made online payments(d)	%	30	31	34	43	31
Selling related activities(e)						
Received orders for goods or services	%	16	21	25	^ 25	19
Received online payments(d)	%	^ 2	^ 3	*6	^ 6	^ 3
Businesses using the Internet	'000	286	155	37	8	485

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

* estimate has a relative standard error of 25% to 50% and should be used with caution

(a) Proportions are of businesses with Internet use in each employment size category

(b) Includes all levels of government

(c) Businesses could identify more than one activity

(d) Includes online payments for goods and services ordered via the Internet or web. Excludes online payments for goods and services not ordered via the Internet or web

(e) Estimates related to receiving orders for goods and services via the Internet or web should be used with caution. See Explanatory Notes paragraphs 17 to 20

3.3 SELECTED BUSINESS WEB FEATURES(a)(b), by employment size

		EMPLOYMENT SIZE				Total
		0-4 persons	5-19 persons	20-99 persons	100 or more persons	
Inquiry or contact facility	%	90	92	92	93	91
Online ordering	%	24	24	^20	^23	23
Shopping cart facilities	%	^5	^3	*5	^7	^4
Online payment capabilities(c)	%	^9	^8	^11	^12	9
Capability for secure access or transactions	%	^9	^6	^9	^18	^8
Account information	%	^8	^7	*7	^9	^7
Facility to track orders	%	*2	^3	*5	^6	^3
Personalised page for repeat customers	%	^5	^5	*4	^7	^5
Integration with back end systems	%	^8	^9	^13	^20	10
Businesses with a web presence	'000	67	62	21	6	157

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

* estimate has a relative standard error of 25% to 50% and should be used with caution

(a) Proportions are of businesses with a web presence in each employment size category

(b) Businesses could identify more than one feature

(c) Online payment capabilities for goods and services irrespective of whether ordered via the Internet or web

3.4 BENEFITS OF PLACING ORDERS VIA THE INTERNET OR WEB(a)(b), by employment size

		EMPLOYMENT SIZE				Total
		0-4 persons	5-19 persons	20-99 persons	100 or more persons	
Lower product costs	%	30	26	36	^29	29
Lower transaction costs	%	28	26	^29	^37	28
Time saving	%	87	83	89	91	86
Access to a wider range of suppliers	%	44	33	36	50	40
Ability to track orders	%	20	^18	^25	^30	20
Any benefits achieved(c)	%	95	91	95	97	94
No benefit achieved	%	^5	^9	*5	*3	^6
Businesses placing orders via Internet or web	'000	104	63	17	5	189

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

* estimate has a relative standard error of 25% to 50% and should be used with caution

(a) Proportions are of businesses placing orders via the Internet or web in each employment size category

(b) Businesses could identify more than one benefit

(c) Includes "other" category which is not listed separately

INTERNET COMMERCE

The ABS uses the OECD definition of Internet commerce as the basis for collecting data about the receipt of orders via the Internet or web (more broadly referred to as Internet or web selling). This definition reads "An Internet transaction is the sale or purchase of goods or services, whether between businesses, households, individuals, governments, and other public or private organisations, conducted over Internet-protocol based networks. The goods and services are ordered over those networks, but the payment and the ultimate delivery of the good or services may be conducted on or off line".

Over several cycles of the BUIT survey, the definition of order has been progressively refined and now includes those transactions where the final commitment to purchase occurs via the Internet or web only. Survey questions used to collect these data have evolved over the last few years, and while care is taken to address the impact of these changes, there may be impacts on final estimates (non-sampling error). There continue to be measurement issues associated with Internet income. As a consequence of this refinement over several survey cycles, caution should be used when interpreting values of Internet income or making observations about change over time. Further information can be found in paragraphs 17 to 20 of the Explanatory Notes.

VALUE OF INTERNET INCOME

The 2002-03 survey measured the number of Australian businesses using the Internet or web to receive orders, with or without online payment, and the value of income earned from Internet or web orders received by businesses (Internet income).

The estimated value of Internet income for the year ended 30 June 2003 was \$24.3 billion. This represented approximately 1.4% of total income for all businesses surveyed, and approximately 4.9% of total income reported by those businesses surveyed who received orders via the Internet or web during the period. The proportion of Australian businesses receiving orders via the Internet or web was 13%.

Of the 91,000 businesses estimated to be receiving Internet income in 2002-03, 43% generated 5% or more of their total income in this manner. Micro businesses (0 - 4 persons employed) were more likely to receive a higher proportion of their total income from orders via the Internet than larger businesses. Of micro businesses who received orders via the Internet or web in 2002-03, 57% indicated earning 5% or more of their total income in this way, compared with 28% of businesses who employed 5-19 persons or 20-99 persons, and 27% of large businesses (100 or more persons employed).

BUSINESS SYSTEMS SUPPORTING RECEIPT OF ORDERS

In the 2002-03 survey, for the first time businesses who received orders via the Internet or web were asked to identify ways in which these orders were received. Email not linked to a web site was the most common method (68% of businesses received orders in this way). Orders received by an email facility linked to a web site was reported by 40% of businesses and 14% of businesses received orders through a web site with online ordering.

BUSINESS SYSTEMS
SUPPORTING RECEIPT OF
ORDERS *continued*

Businesses who received orders via the Internet or web were also asked to specify types of automated links between systems used to receive orders and other business systems. Of these businesses, 84% indicated their systems used to receive orders did not have automated links to any other business system. The most common automated links reported were links to invoicing and payment systems of the business and links to systems used for marketing operations of the business (6% each).

BENEFITS OF AND
BARRIERS TO RECEIPT OF
ORDERS VIA THE
INTERNET OR WEB

For businesses receiving orders via the Internet or web in 2002-03, being able to achieve faster business processes and improved quality of customer service were the two most commonly reported benefits, at 53% and 51% respectively. Approximately 13% of businesses receiving order via the Internet or web indicated they did not achieve any benefits.

In 2002-03, for the first time the survey collected reasons why businesses did not receive orders via the Internet or web. Reasons were collected from businesses which used the Internet or had a web presence with the most common being that goods or services sold by the business were not suitable (63%), followed by a preference to maintain the current business model (39%) and a lack of customer demand (24%). This ranking was consistent across businesses with different employment sizes.

4.1 INTERNET INCOME AS A PROPORTION OF TOTAL INCOME(a)(b),
by employment size

	INTERNET INCOME AS A PERCENTAGE OF TOTAL INCOME				
	Number of businesses (c)	less than 1%	1% to	5% to	50% or more
			less than 5%	less than 50%	
'000	%	%	%	%	
Employment size					
0–4 persons	47	^ 19	^ 24	46	^ 11
5–19 persons	33	45	^ 27	^ 25	*3
20–99 persons	^ 9	54	^ 18	^ 25	**3
100 or more persons	^ 2	^ 56	^ 17	*18	**9
Total	91	33	24	36	^ 7

- ^ estimate has a relative standard error of 10% to less than 25% and should be used with caution
- * estimate has a relative standard error of 25% to 50% and should be used with caution
- ** estimate has a relative standard error greater than 50% and is considered too unreliable for general use
- (a) Proportions are of businesses earning income via the Internet or web in each employment size category
- (b) Estimates related to Internet income should be used with caution. See Explanatory Notes paragraphs 17 - 20
- (c) Where figures have been rounded, discrepancies may occur between the sum of component items and the total

4.2

METHOD OF RECEIVING ORDERS AND SUPPORTING BUSINESS SYSTEMS(a)

		<i>Total</i>
.....		
Method of receiving orders via Internet or web(b)		
Web site with online ordering(c)(d)	%	14
Web site with an email facility	%	40
Email not linked to web site	%	68
Other	%	*1
Automated links between systems used to receive orders and other business systems		
Suppliers' business systems	%	^ 5
Customers' business systems	%	^ 4
Own business systems for reordering replacement supplies	%	^ 3
Own business systems for invoicing or payment	%	^ 6
Own business systems for production or service operations	%	^ 4
Own business systems for logistics	%	*3
Own business systems for marketing operations	%	^ 6
No automated links with other business systems	%	84
Businesses receiving orders via the Internet or web	'000	91

-
- ^ estimate has a relative standard error of 10% to less than 25% and should be used with caution
 - * estimate has a relative standard error of 25% to 50% and should be used with caution
 - (a) Proportions are of businesses receiving orders via the Internet or web
 - (b) Businesses could identify more than one method
 - (c) Includes shopping cart
 - (d) This is restricted to the methods used by businesses actually receiving orders and will differ to proportions of businesses where web site functionality may include online ordering or a shopping cart but who did not receive orders during the reference period

4.3 BENEFITS OF RECEIVING ORDERS VIA THE INTERNET OR WEB (a)(b),
by employment size

		EMPLOYMENT SIZE				Total
		0-4 persons	5-19 persons	20-99 persons	100 or more persons	
Improved quality of customer service	%	57	45	^ 47	^ 55	51
Lower transaction costs	%	32	^ 22	^ 31	^ 35	28
Increased sales	%	35	^ 29	^ 30	^ 43	33
Increased number of customers	%	^ 29	^ 26	^ 26	^ 33	28
Faster business processes	%	54	49	62	^ 52	53
Keeping pace with competitors	%	36	37	^ 37	^ 43	36
Any benefits achieved (c)	%	92	80	87	90	87
No benefits achieved	%	^ 8	^ 20	*12	**10	^ 13
Businesses receiving orders via Internet or web		47	33	^ 9	^ 2	91

- ^ estimate has a relative standard error of 10% to less than 25% and should be used with caution
- * estimate has a relative standard error of 25% to 50% and should be used with caution
- ** estimate has a relative standard error greater than 50% and is considered too unreliable for general use
- (a) Proportions are of businesses receiving orders via the Internet or web in each employment size category
- (b) Businesses could identify more than one benefit
- (c) Includes "other" category which is not listed separately

4.4 BARRIERS TO RECEIVING ORDERS VIA THE INTERNET OR WEB (a)(b),
by employment size

		EMPLOYMENT SIZE				Total
		0-4 persons	5-19 persons	20-99 persons	100 or more persons	
Goods or services not suitable	%	64	63	58	62	63
No customer demand	%	26	21	^ 23	*16	24
Security concerns	%	8	^ 7	^ 8	*9	8
Costs to develop and maintain technology too high	%	14	13	^ 13	*9	14
Lack of skilled employees to develop, maintain and use the technology	%	13	13	^ 15	**7	13
Timing, e.g. technology currently under development or in future work program	%	^ 5	^ 6	^ 10	^ 12	6
Prefer to retain current business model	%	41	38	32	^ 30	39
Businesses with Internet use or web presence not receiving orders		241	123	28	6	398

- ^ estimate has a relative standard error of 10% to less than 25% and should be used with caution
- * estimate has a relative standard error of 25% to 50% and should be used with caution
- ** estimate has a relative standard error greater than 50% and is considered too unreliable for general use
- (a) Proportions are of businesses with Internet use or a web presence, but are not receiving orders via the Internet or web, in each employment size category
- (b) Businesses could identify more than one barrier

EXPLANATORY NOTES

INTRODUCTION

1 This publication presents results from the *2002-03 Business Use of Information Technology* (BUI) survey. This survey measured the use of computers, Internet and web technologies by Australian businesses. It also collected data relating to information technology (IT) security and ordering of goods and services via the Internet or web.

2 Since 1999-2000, the BUI survey has been conducted on an annual basis. The survey has a set of core items for which data is collected each year. The remainder of survey content is dynamic and is updated each survey cycle to reflect emerging and changing uses of IT.

SCOPE AND COVERAGE

3 The scope of the BUI survey is all employing businesses in Australia with the exception of businesses classified to:

- SISCAs 3000 General Government
- SISCAs 6000 Rest of the world
- ANZSIC Division A Agriculture, Forestry and Fishing
- ANZSIC Division M Government Administration and Defence
- ANZSIC Division N Education
- ANZSIC Sub-division 97 Private Households Employing Staff
- ANZSIC 9610 Religious organisations

4 The frame for the BUI survey, like most ABS economic collections, is taken from the ABS Business Register. The register provides a list of employing businesses, primarily based on registrations to the Australian Taxation Office's (ATO) Pay As You Go Withholding (PAYGW) scheme. The frame is updated quarterly to take account of new businesses, businesses which have ceased employing, changes in employment levels, changes in industry and other general business changes. Businesses which have ceased employing are identified when the ATO cancels their Australian Business Number (ABN) and/or PAYGW registration. In addition, businesses with less than 50 employees which did not remit under the PAYGW scheme in each of the previous five quarters are removed from the frame. The estimates in this publication include an allowance for the time it takes a newly registered business to get on to the survey frame.

CHANGES TO THE ABS BUSINESS REGISTER

5 The introduction of The New Tax System (TNTS) has a number of significant implications for ABS business statistics. These are discussed in *Information Paper, Improvements in ABS Economic Statistics [Arising from the New Tax System]* (cat. no. 1372.0). The replacement of the Group Employer registration process by PAYGW registration resulted in a number of changes to most business survey frames. The changes included the statistical units model; update of industry for some businesses by the ATO; and, availability of different measures of business size.

STATISTICAL UNITS DEFINED ON THE ABS BUSINESS REGISTER

6 The ABS uses an economic statistics units model on the ABS Business Register to describe the characteristics of businesses, and the structural relationships between businesses. The units model is also used to break groups of related businesses into relatively homogenous components that can provide data to the ABS.

7 In mid 2002, to better use the information available as a result of TNTS, the ABS changed its economic statistics units model. The new units model allocates businesses to one of two sub-populations. The vast majority of businesses are in what is called the ATO Maintained Population, while the remaining businesses are in the ABS Maintained

STATISTICAL UNITS DEFINED ON THE ABS BUSINESS REGISTER *continued*

Population. Together, these two sub-populations make up the ABS Business Register population.

ATO MAINTAINED POPULATION

8 Most businesses and organisations in Australia need to obtain an ABN, and are then included on the ATO Australian Business Register. Most of these businesses have simple structures; therefore the unit registered for an ABN will satisfy ABS statistical requirements. For these businesses, the ABS has aligned its statistical units structure with the ABN unit. The businesses with simple structures constitute the ATO Maintained Population, and the ABN unit is used as the statistical unit for all economic collections.

ABS MAINTAINED POPULATION

9 For the population of businesses where the ABN unit is not suitable for ABS statistical requirements, the ABS maintains its own units structure through direct contact with each business. These businesses constitute the ABS Maintained Population. This population consists typically of large, complex and diverse businesses. The new statistical units model described below has been introduced to cover such businesses.

Enterprise Group: This is a unit covering all the operations in Australia of one or more legal entities under common ownership and/or control. It covers all the operations in Australia of legal entities which are related in terms of the current Corporations Law (as amended by the Corporations Legislation Amendment Act 1991), including legal entities such as companies, trusts, and partnerships. Majority ownership is not required for control to be exercised.

Enterprise: The enterprise is an institutional unit comprising (i) a single legal entity or business entity, or (ii) more than one legal entity or business entity within the same Enterprise Group and in the same institutional sub-sector (i.e. they are all classified to a single Standard Institutional Sector Classification of Australia sub-sector).

Type of Activity Unit (TAU): The TAU is comprised of one or more business entities, sub-entities or branches of a business entity within an Enterprise Group that can report production and employment data for similar economic activities. When a minimum set of data items are available, a TAU is created which covers all the operations within an industry sub-division (and the TAU is classified to the relevant sub-division of the ANZSIC). Where a business cannot supply adequate data for each industry, a TAU is formed which contains activity in more than one industry sub-division.

IMPACT ON BUIT OF CHANGES ARISING FROM TNTS

10 The main impact of the introduction of TNTS for the BUIT survey is a changed population from which the survey frame has been drawn. This has had several effects on the estimates contained within this publication including:

- smaller survey frame with a decrease of approximately 6% in the number of businesses on the ABS register in scope of the survey;
- compositional change to the survey frame, particularly in employment size categories (predominantly caused by a change in the employment variable used for survey selection) and industry (caused by utilisation of ATO industry codes for the ATO maintained component of the population); and
- higher than average sample rotation.

11 As part of TNTS changes to the ABS Business Register, two of the characteristics updated (also used in the design of the sample for BUIT) included employment and industry. These updates have resulted in major compositional changes to the survey frame from which the sample is drawn. The number of businesses in scope for the 0-4 persons, 5-19 persons, 20-99 persons, and 100 or more persons employed size groups changed by -4%, -16%, +16%, and +20% respectively. The changes at the industry level ranged from a decrease of 16% in the number of businesses classified to the Wholesale trade industry to an increase of 66% in the number of businesses classified to the

IMPACT ON BUIT OF CHANGES
ARISING FROM TNTS *continued*

Electricity, gas and water supply industry. More information about these compositional changes is available upon request.

12 The impact of TNTS on the total in-scope population, particularly composition by business size and industry, has resulted in a higher than usual sample rotation rate. The usual sample rotation rate is approximately one third of businesses in the sampled component of the survey. However, this rate doubled for 2002-03. Businesses rotated into the survey can report differently from those businesses they replace or those already in the sample, however, these differences are usually not noticeable on survey estimates and are taken into account when calculating sampling error. While every attempt has been made to take into account the larger than usual sample rotation in survey design and estimate of sampling error, the size of the rotation may have impacted on survey estimates for 2002-03. Please refer to the Technical Note section for more information about the RSEs for 2002-03.

13 For the core data items of computer use, Internet use and web presence, the 2001-02 BUIT survey results have been recompiled to incorporate the impact of the new infrastructure. Analysis of these estimates shows that the impact of TNTS is less than one percent for each of these items (-0.07%, +0.04% and +0.9% for computer use, Internet use and web presence respectively) and is lower than the Relative Standard Error (RSE) achieved in 2001-02 (0.6%, 0.9% and 2.7% for computer use, Internet use and web presence respectively). The change would be considered statistically significant if the estimated change was greater than two RSEs (i.e. greater than the 95% confidence interval). Due to the small magnitude of these changes, revised estimates have not been published. Information on the impact for each of these variables by industry or state/territory is available upon request.

14 In interpreting the results of the published estimates and, in particular, if attempting to compare to the results published for earlier surveys, these changes must be taken into consideration. It is highly likely that changes of a small magnitude between 2001-02 and 2002-03 have resulted from changes to the survey population rather than actual changes in the characteristic being measured. For example, when comparing the percentage of businesses using a computer, the estimate for 2002-03 shows that 83% of all business used a computer, this is a decrease of one percentage point from the estimate published for 2001-02. It is more than likely that this decrease is due to the impact of infrastructure changes rather than a decrease in the proportion of businesses using computers. Where the change is of a larger magnitude, other sources have been taken into consideration and these changes may be treated as an indicator of the trend of movement rather than an absolute change in percentage terms. Where this has occurred, specific references are made in the commentary.

15 While the impact of TNTS is significant, it does not represent an actual break in series. However, comparisons between 2002-03 estimates and previously published data should be made with caution and in the context of the changes outlined.

SURVEY METHODOLOGY

16 The BUIT survey is conducted by mail. It is based on a random sample of approximately 12,500 businesses which is stratified by industry, state/territory and number of employees. All manufacturing businesses with 500 or more employees and all other businesses with 200 or more employees are included in the sample.

ORDERS FOR GOODS AND
SERVICES VIA THE INTERNET
AND INTERNET INCOME

17 The concept of Internet income presented in this publication relates to income from all orders for goods or services where the order is received, and the commitment to purchase is made via the Internet or web, with or without online payment. Like previous surveys, the 2002-03 BUIT survey has highlighted issues which affect the quality and interpretation of estimates of Internet income and the proportion of businesses receiving orders for goods and services via the Internet or web. Readers should consider these issues when using these estimates.

ORDERS FOR GOODS AND SERVICES VIA THE INTERNET AND INTERNET INCOME

continued

18 The ABS uses the Organisation for Economic Co-operation and Development (OECD) definition of an Internet commerce transaction and therefore measures the income resulting from Internet orders for goods and services. For the purposes of the BUIT survey, this definition has been refined to only include orders (and resultant income) where the commitment to purchase is made via the Internet or web. An important element of the definition remains that payment and the ultimate delivery of the good or service is not relevant, that is, either or both may be conducted off line. ABS experience in collecting Internet income continues to highlight the difficulty of defining an Internet commerce transaction in a way which is understood by businesses and suits all forms of Internet commerce. For instance, for some businesses, the Internet transaction initiates and completes the purchase, while for others the Internet transaction finalises details of a purchase which was initiated by a non-Internet based agreement or contract.

19 Some orders for goods and services are initiated over the Internet and are then subject to ongoing payments. Ongoing payments may occur over a long period of time and via non-Internet based media. For consistency in compiling the income measure and to ensure that it covers all income flowing from the initial order over the Internet, the ABS would ideally like to include ongoing payments via the Internet, but recognises that most businesses are unable to track these payments. Survey estimates for the 2002-03 survey and previous collections may be understated due to this measurement issue.

20 As in previous surveys, many businesses surveyed in the 2002-03 survey did not maintain records on the basis of the Internet income measure described in paragraph 18 and therefore needed to estimate its value. For some large businesses, the estimation of Internet income continues to be difficult and in some instances responses were inconsistent with those of previous surveys. While the ABS has reduced this error through analysis of responses and consultation with businesses, this form of error cannot be completely eliminated.

OUTPUT CLASSIFICATIONS

21 For output purposes, businesses are classified to employment and income size groups based on actual data reported in the survey. For other output groups (industry, State or Territory, capital city/other areas) the classification is drawn from information held about the business on the ABS Business Register.

RELATED PUBLICATIONS

22 The most recent issue of other ABS publications on the use and production of information and communication technologies in Australia are listed below:

Government Use of Information Technology, Australia, 1999-2000 (cat. no. 8119.0)

Household Use of Information Technology, Australia, 2001-02 (cat. no. 8146.0)

Information Technology, Australia, 2000-01 (cat. no. 8126.0)

Internet Activity, Australia, September 2003 (cat. no. 8153.0)

Use of Information Technology on Farms, Australia, June 2002 (cat. no. 8150.0)

ABS WEB SITE

23 The summary of findings from this publication are published on the ABS web site <www.abs.gov.au>. Other information relating to information and communication technologies can be found on the web site, see the Science and Technology Home page under Themes.

DATA AVAILABLE ON REQUEST

24 As well as the statistics included in this publication, the ABS may have relevant data available on request. The availability of more detailed data are subject to confidentiality and quality checks. Inquiries should be made to the National Information and Referral Service on 1300 135 070.

ROUNDING

25 Where figures have been rounded, discrepancies may occur between the sum of the components/items and the total. In addition, percentages have been calculated using the unrounded figures.

COMMENTS

26 The ABS welcomes comments and suggestions from users regarding future surveys of IT use by businesses. These comments should be addressed to the Director, Innovation and Technology Business Statistics Centre, Australian Bureau of Statistics, GPO Box K881, Perth, WA, 6842.

ABBREVIATIONS

\$b	billion (thousand million) dollars
\$m	million dollars
ABS	Australian Bureau of Statistics
ADSL	asymmetric digital subscriber line
ANZSIC	Australian and New Zealand Standard Industrial Classification
ATM	asynchronous transfer mode
ATO	Australian Taxation Office
DSL	digital subscriber line
ISDN	integrated service digital network
IT	information technology
OECD	Organisation for Economic Co-operation and Development
PAYGW	pay-as-you-go withholding
RSE	relative standard error
SE	standard error
SISCA	Standard Institutional Sector Classification of Australia
TNTS	The New Tax System

RELIABILITY OF THE ESTIMATES

1 When interpreting the results of a survey it is important to take into account factors that may affect the reliability of the estimates. Estimates provided in this publication are subject to non-sampling and sampling errors.

NON-SAMPLING ERRORS

2 Non-sampling errors may arise as a result of errors in the reporting, recording or processing of the data and can occur even if there is a complete enumeration of the population. These errors can be introduced through inadequacies in the questionnaire, treatment of non-response, inaccurate reporting by respondents, errors in the application of survey procedures, incorrect recording of answers and errors in data capture and processing.

3 The extent to which non-sampling error affects the results of the survey is difficult to measure. Every effort is made to minimise non-sampling error by careful design and testing of the questionnaire, efficient operating procedures and systems, and the use of appropriate methodology.

4 The BUIT survey is dynamic in nature and the concepts measured are subject to evolution and refinement over time. This results in regular changes to questions used to measure the various attributes and features of IT use. The potential impact of these changes on survey outputs are assessed during questionnaire testing and where these changes impact on data continuity, they are referred to in the publication commentary or Explanatory Notes.

5 The 2002-03 survey had a lower than usual response rate of approximately 88%. The average for the previous three survey periods was 93%. The lower response rate in 2002-03 was addressed by utilising improved and more comprehensive methods of imputation.

STANDARD ERRORS

6 The estimates presented in this publication are based on information obtained from a sample of businesses in the surveyed population. Consequently, the estimates are subject to sampling variability, that is, they may differ from the figures that would have been obtained if all units had been included in the survey. One measure of the likely difference is given by the standard error (SE), which indicates the extent to which an estimate might have varied by chance because only a sample was taken. There are about two chances in three that a sample estimate will differ by less than one SE from the figure that would have been obtained if a census had been conducted, and approximately 19 chances in 20 that the difference will be less than two SEs.

7 In this publication, sampling variability is measured by the relative standard error (RSE) which is obtained by expressing the SE as a percentage of the estimate to which it refers. The RSE is a useful measure in that it provides an immediate indication of the sampling error in percentage terms, and this avoids the need to refer also to the size of the estimate.

8 To illustrate, the estimated percentage of businesses with a web presence is 23% and the RSE is 2.7%, giving a standard error of 0.6 percentage points (2.7% of 23%). Therefore, there would be two chances in three that, if all units had been included in the survey, a figure in the range of 22.4% to 23.6% would have been obtained, and 19 chances in 20 (i.e. a confidence interval of 95%) that the figure would have been within

STANDARD ERRORS *continued*

the range of 21.8% to 24.2%. For more information about RSEs for estimates presented in this publication, please telephone the contact shown on the front page.

9 Most published estimates have RSEs less than 10%. Estimates that have a RSE between 10% and 25% are annotated with the symbol '^'. These estimates should be used with caution as they are subject to sampling variability too high for some purposes. Estimates with an RSE between 25% and 50% are annotated with the symbol '*', indicating that the estimates should be used with caution as they are subject to sampling variability too high for most practical purposes. Estimates with an RSE greater than 50% are annotated with the symbol '**' indicating that the sampling variability causes the estimates to be considered too unreliable for general use.

10 The sampling variability for estimates at the state/territory or industry level is higher than that for Australian level aggregates. Within states/territories, the sampling variability, and therefore the RSEs of estimates for Tasmania, Northern Territory and the Australian Capital Territory are higher than for other states. Survey estimates for these states should therefore be viewed with more caution than those for other states.

11 Estimates of RSEs for the key indicators in this publication are shown in the following table:

RELATIVE STANDARD ERRORS OF BUSINESS USE OF TECHNOLOGIES,
 by selected business characteristics

	Number of businesses	BUSINESSES WITH			BUSINESSES WHICH	
		Computer use	Internet use	Web presence	Placed orders via the Internet or web	Received orders via the Internet or web
	%	%	%	%	%	%
Employment size						
0–4 persons	1.0	0.9	1.3	4.6	3.6	5.8
5–19 persons	2.2	0.7	1.2	3.9	3.9	6.1
20–99 persons	4.2	1.3	1.7	5.1	6.0	9.5
100 or more persons	7.4	—	0.6	4.9	7.5	11.1
Total Income						
Less than \$100,000	2.8	1.9	2.5	9.2	6.7	11.4
\$100,000 - \$999,999	1.3	0.8	1.2	4.1	3.5	5.5
\$1m - \$4.9m	3.2	0.8	1.4	4.5	4.8	7.2
\$5m or more	4.4	0.4	1.1	4.7	5.4	9.3
Industry						
Mining	1.4	1.6	2.1	5.6	6.4	19.8
Manufacturing	1.7	2.7	3.6	8.8	8.9	10.2
Electricity, gas and water supply	0.5	0.7	1.0	1.9	2.0	4.0
Construction	0.8	1.8	2.6	8.9	8.0	12.7
Wholesale trade	1.4	1.8	2.6	6.6	6.5	7.7
Retail trade	0.9	1.9	2.8	7.0	6.5	10.8
Accommodation, cafes and restaurants	1.2	2.4	3.2	5.8	8.2	8.9
Transport and storage	1.5	2.7	3.9	10.0	9.7	14.4
Communication services	1.4	2.1	3.3	7.8	7.4	11.9
Finance and insurance	3.2	2.0	2.6	8.4	7.3	14.2
Property and business services	1.2	1.3	1.6	6.8	5.0	9.6
Health and community services	0.8	1.7	2.6	8.9	7.1	17.6
Cultural and recreational services	1.8	2.1	2.8	7.3	8.4	13.7
Personal and other services	1.1	2.4	3.2	6.3	7.0	10.4
State						
New South Wales	0.8	1.1	1.4	4.5	4.1	6.5
Victoria	0.8	1.3	1.8	5.3	5.1	8.1
Queensland	0.9	1.2	1.8	6.2	5.3	8.7
South Australia	1.5	2.4	3.3	9.0	8.3	13.1
Western Australia	1.4	2.0	2.9	8.7	8.4	12.4
Tasmania	6.7	4.5	7.2	14.6	15.3	20.8
Northern Territory	13.8	7.6	10.7	25.9	22.1	46.5
Australian Capital Territory	7.3	3.8	5.9	18.2	15.5	29.7
Region						
Capital cities	1.0	0.7	1.0	3.1	2.9	4.6
Other areas	2.1	1.2	1.7	5.1	4.5	7.2
Total	0.4	0.6	0.9	2.7	2.4	3.8

— nil or rounded to zero (including null cells)

GLOSSARY

Authentication software or hardware	A system which verifies the identity of a user (e.g. by password or user id), user device, or other entity, to allow access to those eligible.
Back end systems	Accounting, stock control and ordering computer systems used to manage non-Internet based aspects of a business.
Denial of service	Any action which deliberately restricts access to an information system such that it becomes unavailable for its intended purpose.
Digital Subscriber Line (DSL)	More properly referred to as xDSL as this covers several digital technologies (e.g. Asymmetric DSL or ADSL and Symmetric DSL or SDSL) for fast two-way data connections over the public switched telephone network.
Firewall	A system or combination of systems that enforces a boundary between two or more networks, limiting and monitoring access.
Integrated Services Digital Network (ISDN)	A digital access technique for both voice and data. Digital alternative to an analog public switched telephone service and carries data or voltages consisting of discrete steps or levels, as opposed to continuously variable analog data. ISDN enables digital transmission over the public switched telephone network.
Internet	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.
Intrusion detection system	Any system which attempts to detect intrusion into a computer or network by observation of actions, security logs or audit data.
Network sniffer software	A program used to monitor network traffic.
Online payments	Payments made via the Internet or a web site for goods and services. These payments generally require customers to provide their credit/debit card details online. Includes real time online payments.
Order	A commitment to purchase goods or services.
Secure access/transactions	A web site has a capability for secure access or transactions when it allows customers to submit orders for goods, requests for services and credit/debit card details over a secure link that cannot be accessed by unauthorised persons. Secure Sockets Layer (SSL) is a common protocol used in this type of web site as it enables encryption of data such as credit card details and customer information sent over the Internet.
Trojan	A computer program containing an apparent or actual useful function that contains additional (hidden) functions that allow unauthorised collection, falsification or destruction of data.
Virus	A self-replicating, malicious program that attaches itself to an application or other executable system component.
Web presence	Web presence includes a web site, home page or presence on another entity's web site. A web site or home page is an electronic document that is accessed via a unique address on the World Wide Web. The document provides information in a textual, graphical or multimedia format.
Worm	An independent and malicious program that self-replicates across network boundaries, often clogging networks and information systems as it spreads.

FOR MORE INFORMATION . . .

- INTERNET* **www.abs.gov.au** the ABS web site is the best place to start for access to summary data from our latest publications, information about the ABS, advice about upcoming releases, our catalogue, and Australia Now—a statistical profile.
- LIBRARY* A range of ABS publications is available from public and tertiary libraries Australia-wide. Contact your nearest library to determine whether it has the ABS statistics you require, or visit our web site for a list of libraries.
- CPI INFOLINE* For current and historical Consumer Price Index data, call 1902 981 074 (call cost 77c per minute).
- DIAL-A-STATISTIC* For the latest figures for National Accounts, Balance of Payments, Labour Force, Average Weekly Earnings, Estimated Resident Population and the Consumer Price Index call 1900 986 400 (call cost 77c per minute).

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