

INFORMATION TECHNOLOGY AUSTRALIA

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■ For further information about these and related statistics, contact the National Information Service on 1300 135 070 or Lynne Bismire on Melbourne 03 9615 7977.

NOTES

INTRODUCTION

This publication presents results, in respect of the 1998–99 financial year, from an Australian Bureau of Statistics (ABS) survey on the production and distribution of information technology and telecommunication (IT&T) goods and services by businesses in Australia. This is the third ABS survey of IT&T production and distribution, with the previous collection being conducted in respect of the 1995–96 financial year. The survey scope and definitions are broadly consistent with those used in the previous survey. A separate survey of the telecommunication services industry was also conducted in respect of 1996–97.

Some of the statistics presented in this publication have been revised significantly since the 1998–99 preliminary results were released in May 2000. These revisions have resulted from the additional response after the initial release of data and amendments made to data items as a result of more intensive data editing. Some revisions have also been made to earlier years' results.

Information in this publication covers the main industries involved in the production and distribution of IT&T goods and services. This industry view draws together a number of standard industries that generally comply with the international definition of industries that specialise in IT&T activity. More information about the definition of IT&T, the industries involved, and related publications can be found in paragraphs 2–5, and 23–24 of the Explanatory Notes.

COMMENTS ON THIS PUBLICATION

The ABS welcomes comments and suggestions from users regarding data items for inclusion in future surveys. Comments should be addressed to the Director, Science and Technology Statistics Section, Australian Bureau of Statistics, PO Box 10, Belconnen ACT 2616.

ROUNDING

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

ABBREVIATIONS

ABS Australian Bureau of Statistics

ANZSIC Australian and New Zealand Standard Industrial Classification

f.o.b. free on board

IT&T Information technology and telecommunications

n.e.c. not elsewhere classifiedOPBT operating profit before tax

PAYE Pay As You Earn

RSE relative standard error

SAR Special Administrative Region

SE standard error

Rob Edwards

Acting Australian Statistician

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CHAPTER 1

SUMMARY OF FINDINGS

INTRODUCTION

This publication presents final results, in respect of the 1998–99 financial year, from an Australian Bureau of Statistics (ABS) survey of the production and distribution of information technology and telecommunications (IT&T) goods and services by businesses in Australia. Note that financial data are presented in current price terms.

Table 1.1 contains summary information from the survey. Tables 2.1–2.11 present statistics related to IT&T specialist businesses and tables 3.1–3.4 present more detailed statistics on the telecommunication services industry. Tables 4.1–4.4 provide international trade statistics on selected IT&T goods and services and table 5.1 provides statistics on IT&T specialist businesses in the recorded media manufacturing and publishing industry.

There has been significant change in the information technology and telecommunications (IT&T) industry in Australia over the three years to 1998–99, as outlined in the summary below.

BUSINESSES

At the end of June 1999, there were 18,072 IT&T specialist businesses in the industries surveyed. This was an increase of 34% (or 4,537 businesses) since the last survey in 1995–96, with the number of computer consultancy businesses increasing by 59% (or 5,219 businesses). There were only 1,659 other businesses in the industries surveyed and these had IT&T income less than 50% of their total income.

Of the 18,072 specialists, 14,056 (78%) were in the computer consultancy services industry, 1,575 (9%) in the computer wholesaling industry and 869 (5%) in the telecommunication services industry. The remaining 1,572 (9%) were spread across the other industries surveyed.

EMPLOYMENT

There were 199,341 persons working in IT&T specialist businesses at the end of June 1999, a 2% decrease since 1995–96. This 2% overall decrease in employment in IT&T specialist businesses consisted of a 39% decrease across the manufacturing industries, a 19% decrease in the telecommunication services industry with an offsetting 35% increase in the computer services industries and a 1% increase in the wholesale industries.

INCOME

During 1998–99, the total income for IT&T specialists was \$62,616 million, an increase of 28% since 1995–96. The industries contributing to this outcome were telecommunication services with an increase in total income of 39% since 1995–96, wholesale trade with a rise of 31%, computer services with a rise of 30% and manufacturing with a fall of 31%.

INCOME continued

INCOME, IT&T industries—1998-99

IT&T Other Total income income income \$m \$m Business type \$m IT&T specialists 4 109 62 616 58 506 9 661 10 270 Other businesses 609 All businesses 59 115 13 770 72 885

Specialist businesses had IT&T income of \$58,506 million which represented 93% of their total income. The largest contributors to IT&T income were businesses classified to the telecommunication services industry (\$25,071 million) which accounted for 43% of the total. The computer wholesaling industry contributed \$13,918 million (24%) and the computer consultancy services industry contributed \$8,494 million (15%).

EXPENDITURE

Total expenses for IT&T specialist businesses during 1998–99 were \$55,420 million, an increase of 24% since 1995–96. Purchases was the highest single expense (\$20,556 million), accounting for 37% of total expenses during 1998–99.

DOMESTIC PRODUCTION, IMPORTS AND EXPORTS

Total income from the domestic production of IT&T goods and services was \$39,864 million in 1998–99, an increase of 28% since 1995–96. Computer services and telecommunication services recorded increases of 41% and 40% respectively, however, production of packaged software and manufactured IT&T goods declined by 43% and 24% respectively over the three year period. The decline in domestic production of packaged software and manufactured IT&T goods was offset by an increase in imports of these products.

Exports (including re-exports) of selected IT&T goods and services totalled \$4,386 million in 1998–99, an 11% increase since 1995–96. Imports of these items were valued at \$13,534 million, a 26% increase since 1995–96. This represents a trade deficit for 1998–99 of \$9,148 million and compares with \$6,765 million in 1995–96.

It should be noted that the imports and exports details include amounts for re-exports, which are goods imported into Australia and subsequently exported in the same condition, or after undergoing minor operations which leave them essentially unchanged. After excluding these re-export goods from the IT&T imports and exports details, the value of exports was equivalent to 8% of income from domestic production in 1998–99, while imports were equivalent to 31%.



1.1 SUMMARY OF OPERATIONS

	Businesses at end June	Employment at end June	IT&T income	Total income	Wages and salaries	Wages and salaries per person employed
Industry	no.	no.	\$m	\$m	\$m	\$'000
•••••	• • • • • • • • •	• • • • • • • • • • • • •	• • • • • • • • • •	• • • • • • • • • • • •	•••••	•••••
	IT&T	SPECIALIST	S			
Manufacturing						
Computer and business machines Telecommunication, broadcasting and	122	2 461	1 126.8	1 146.4	95.2	38.7
transceiving equipment	68	5 125	1 204.3	1 507.7	272.9	53.2
Electronic equipment n.e.c.	77	1 959	330.9	344.8	68.7	35.1
Electric cable and wire	27	997	280.5	307.3	48.8	48.9
Total	294	10 542	2 942.4	3 306.2	485.5	46.0
Wholesale trade						
Computers	1 575	27 212	13 918.3	15 748.4	1 560.6	57.4
Business machines and electrical and						
electronic equipment n.e.c.	602	12 725	6 320.9	7 004.0	770.9	60.6
Total	2 177	39 936	20 239.2	22 752.4	2 331.6	58.4
Telecommunication services Computer services	869	74 467	25 071.4	26 083.0	3 687.1	49.5
Data processing	239	7 174	np	np	np	np
Information storage and retrieval	*101	908	93.9	99.8	32.0	35.2
Computer maintenance	335	2 519	np	np	np	np
Computer consultancy	14 056	63 794	8 494.0	8 680.4	3 178.4	49.8
Total	14 731	74 395	10 253.1	10 474.0	3 710.7	49.9
Total	18 072	199 341	58 506.1	62 615.5	10 214.8	51.2
•••••	•••••			•••••	•••••	•••••
	OTHE	R BUSINESSE	<u>-</u> S			
Manufacturing						
Computer and business machines Telecommunication, broadcasting and	14	454	4.3	128.0	16.7	36.7
transceiving equipment	*5	np	np	np	np	37.4
Electronic equipment n.e.c. Electric cable and wire	175 25	5 775	np	1 423.7	247.7	42.9 50.4
Total	25 218	np 8 974	np 161.0	np 2 487.9	np 402.4	50.4 44.8
Total	210	8 97 4	101.0	2 401.9	402.4	44.0
Wholesale trade						
Computers	_	_	_	_	_	_
Business machines and electrical and	4 440	23 223	447.0	7 781.8	914.4	39.4
electronic equipment n.e.c. Total	1 440 1 440	23 223 23 223	447.9 447.9	7 781.8 7 781.8	914.4	39.4 39.4
Total	1 440	25 225	441.5	7 701.0	314.4	39.4
Telecommunication services	_	_	_	_	_	_
Computer services	_	_	_	_	_	_
Total	1 659	32 198	608.9	10 269.6	1 316.8	40.9

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

 $^{^{\}star}$ estimate has a relative standard error of between 25% and 50% and should be used with caution

[—] nil or rounded to zero (including null cells)

1.1 SUMMARY OF OPERATIONS continued

Industry no. no. \$m \$m \$m ALL BUSINESSES Manufacturing	es and ies person loyed
	\$'000
	••••
Manufacturing	
Computer and business machines 136 2 915 1 131.1 1 274.4 111.8	38.4
Telecommunication, broadcasting and	
transceiving equipment 73 np np np np	53.2
Electronic equipment n.e.c. 252 7 734 np 1 768.5 316.4	40.9
Electric cable and wire 52 np np np np np	50.0
Total 513 19 517 3 103.3 5 794.1 887.9	45.5
Wholesale trade	
Computers 1 575 27 212 13 918.3 15 748.4 1 560.6	57.4
Business machines and electrical and	
electronic equipment n.e.c. 2 043 35 948 6 768.9 14 785.7 1 685.3	46.9
Total 3 617 63 160 20 687.1 30 534.1 3 245.9	51.4
Telecommunication services 869 74 467 25 071.4 26 083.0 3 687.1	49.5
Computer services 14 731 74 395 10 253.1 10 474.0 3 710.7	49.9
Total 19 730 231 539 59 115.0 72 885.2 11 531.6	49.8

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

CHAPTER 2

IT&T SPECIALISTS

INTRODUCTION

This section of the publication presents information about businesses which specialised in the production and distribution of IT&T goods and services during 1998–99.

EMPLOYMENT

There were 199,341 persons working in IT&T specialist businesses at the end of June 1999, a 2% decrease since 1995–96. This 2% overall decrease in employment in IT&T specialist businesses consisted of a 39% decrease across the manufacturing industries, a 19% decrease in the telecommunication services industry with an offsetting 35% increase in the computer services industries and a 1% increase in the wholesale industries.

The majority (89%) of the 199,341 persons employed in IT&T specialist businesses worked on a permanent full-time basis, with the computer services industry having the largest proportion (8%) of permanent part-time employees and the manufacturing industry having the largest proportion (9%) of casual/temporary employees.

Male staff accounted for 67% (133,749) of the persons employed in IT&T specialist businesses, almost all of whom (93%) worked full time. Of the 10,739 persons who worked on a part-time basis, 77% (8,290) were females. Males employed as computing and technical staff accounted for 40% (80,106) of total employment in IT&T specialist businesses. Over half (54%) of the males employed as computing and technical staff were in the computer services industry.

SOURCES OF INCOME

In 1998–99, the total income of the 18,072 IT&T specialist businesses was \$62,616 million, of which 93% (\$58,506 million) was IT&T income. In 1995–96 and 1992–93, total IT&T income for IT&T specialists was \$46,977 million and \$26,889 million respectively. The largest contributors to IT&T income were businesses classified to the telecommunication services industry (\$25,071 million) which accounted for 43% of the total. The computer wholesaling industry contributed \$13,918 million (24%) and the computer consultancy services industry contributed \$8,494 million (15%).

Total income for IT&T specialist manufacturers amounted to \$3,306 million in 1998–99. The main components of manufacturing income were from the sale of PCs and similar desktop computers (\$747 million), other telecommunications and transceiving equipment (\$569 million), and telephone and telegraph equipment, excluding parts (\$523 million).

Total income for IT&T specialist wholesalers was \$22,752 million. The major sources of this income were from the sale of computer hardware, excluding parts and components (\$7,260 million) and communications hardware, excluding parts and components (\$5,542 million).

Total income for telecommunication services specialists was \$26,083 million in 1998–99.

SOURCES OF INCOME

In 1998–99, total income for IT&T specialist businesses classified to the computer services industry was \$10,474 million. The main components of this income were from the provision of bundled computer services (\$3,354 million), non-bundled customised software and solutions (\$2,556 million), and computer processing services (\$1,106 million).

EXPENDITURE

continued

In 1998–99, expenses for IT&T specialist businesses totalled \$55,420 million. In 1995–96 and 1992–93, total expenses for these businesses was \$44,637 million and \$24,950 million respectively.

Purchases was the highest single expense (\$20,556 million), accounting for 37% of total expenses during 1998–99. Purchases in the wholesale industries accounted for 81% (\$16,646 million) of total purchases.

The second most significant item of expenditure was labour costs, which accounted for 20% (\$10,920 million) of total expenses.

The telecommunication services industry contributed \$20,602 million (37%) to total IT&T specialist expenses in 1998–99. The computer wholesaling industry was the second largest contributor to expenses with \$15,142 million (27%).

Wages and salaries per person employed for IT&T specialist businesses was \$51,200. The industries with the largest wages and salaries per person employed were the business machines and electrical and electronic equipment n.e.c. wholesaling industry (\$60,600) and the computer wholesaling industry (\$57,400). The industries with the lowest wages and salaries per person employed were the electronic equipment n.e.c. manufacturing industry (\$35,100) and the information storage and retrieval industry (\$35,200).

PROFITABILITY
MEASURES

During 1998–99, IT&T specialist businesses generated earnings before interest and tax of \$8,467 million, and an operating profit before tax of \$7,501 million. In both cases, the telecommunication services industry contributed the major proportion, generating 75% (\$6,372 million) of total earnings before interest and tax, and 74% (\$5,549 million) of total operating profit before tax.

The operating profit margin in 1998–99 was 12.2%, which was an increase on the operating profit margin of 9.5% recorded in 1995–96. Most businesses (54%) achieved an operating profit margin between 0–24%, with 28% of businesses incurring an operating loss before tax.

STATE AND TERRITORY DIMENSION

New South Wales had the largest number of IT&T specialist businesses in 1998–99. There were 7,735 of these businesses operating in New South Wales (43% of all IT&T specialist businesses), which accounted for 42% of all employment and 44% of wages and salaries within the IT&T industries.

Victoria, with 5,803 IT&T specialist businesses, made the second largest contribution to employment and wages and salaries and, together with New South Wales, accounted for 75% of businesses, 72% of employment and 75% of wages and salaries.

BUSINESS SIZE

Small businesses employing fewer than 20 persons made up 96% (17,327) of the 18,072

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BUSINESS SIZE continued

IT&T specialist businesses in 1998–99. These businesses, however, accounted for only 24% of employment and 12% of total income.

There were 155 IT&T specialist businesses with employment of 100 persons or more, accounting for 1% of IT&T specialist businesses. These large businesses accounted for 65% of employment and 76% of total income. The average income of these large businesses during 1998–99 was \$307.6 million.



2.1 HISTORICAL DATA(a), IT&T Specialists

1998–99 Manufacturing Computer and business machines 122 2 461 1 126.8 1 146.4 1 125.8 37. Telecommunication, broadcasting and transceiving equipment 68 5 125 1 204.3 1 507.7 1 419.2 66.	
Industry no. no. \$m \$m \$m \$m 1998–99 Manufacturing Computer and business machines 122 2 461 1 126.8 1 146.4 1 125.8 37. Telecommunication, broadcasting and transceiving equipment 68 5 125 1 204.3 1 507.7 1 419.2 66.	\$m
Manufacturing Computer and business machines 122 2 461 1 126.8 1 146.4 1 125.8 37. Telecommunication, broadcasting and transceiving equipment 68 5 125 1 204.3 1 507.7 1 419.2 66.	•••
Manufacturing Computer and business machines 122 2 461 1 126.8 1 146.4 1 125.8 37. Telecommunication, broadcasting and transceiving equipment 68 5 125 1 204.3 1 507.7 1 419.2 66.	37.4
Manufacturing Computer and business machines 122 2 461 1 126.8 1 146.4 1 125.8 37. Telecommunication, broadcasting and transceiving equipment 68 5 125 1 204.3 1 507.7 1 419.2 66.	37.4
Computer and business machines 122 2 461 1 126.8 1 146.4 1 125.8 37. Telecommunication, broadcasting and transceiving equipment 68 5 125 1 204.3 1 507.7 1 419.2 66.	37.4
Telecommunication, broadcasting and transceiving equipment 68 5 125 1 204.3 1 507.7 1 419.2 66.	37.4
and transceiving equipment 68 5 125 1 204.3 1 507.7 1 419.2 66.	
Floring 1 2 4 0 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	66.4
Electronic equipment n.e.c. 77 1 959 330.9 344.8 340.8 **2.	*2.1
Electric cable and wire 27 997 280.5 307.3 286.1 28.	28.0
Total 294 10 542 2 942.4 3 306.2 3 172.0 133.	33.8
Wholesale trade	
Computers 1 575 27 212 13 918.3 15 748.4 15 141.8 678. Business machines and electrical	78.9
and electronic equipment n.e.c. 602 12 725 6 320.9 7 004.0 6 850.5 *303.	03.6
Total 2 177 39 936 20 239.2 22 752.4 21 992.2 982.	32.5
Telecommunication services 869 74 467 25 071.4 26 083.0 20 601.5 5 549.	49.2
Computer services Data processing 239 7 174 np np np np np	nn
Data processing 239 7 174 np np np np np r Information storage and retrieval *101 908 93.9 99.8 89.6 **10.	np 10 0
	np
Computer consultancy 14 056 63 794 8 494.0 8 680.4 7 938.5 759.	
Total 14 731 74 395 10 253.1 10 474.0 9 654.4 835.	35.6
Total 18 072 199 341 58 506.1 62 615.5 55 420.2 7 501.)1.2
1995-96	
Manufacturing	
Computer and business machines 237 5 ,755 1 ,875 1 ,935 1 ,910 9 Telecommunication, broadcasting	91
and transceiving equipment 134 7 ,335 1 ,565 1 ,660 1 ,347 28	285
	*8.6
	54
Total 473 17,295 4,566 4,766 4,395 43	437
Wholesale trade	
7	581
Business machines and electrical	
	291
7	873
Telecommunication services 410 91,701 17,938 18,734 15,934 2,78 Computer services	782
,	52
Information storage and retrieval *31 994 165 180 187 **-7.	
7	54
, , , , , , , , , , , , , , , , , , , ,	356
Total 9,673 55,028 7,795 8,088 7,641 45	455
Total 13 ,535 203 ,653 46 ,977 48 ,913 44 ,637 4 ,54	

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

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

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

⁽a) Total estimates for 1992–93 include the Plant hiring or leasing industry (ANZSIC Class 7743).

2.1 HISTORICAL DATA(a), IT&T Specialists continued

	Businesses at end June	Employment at end June	IT&T income	Total income	Total expenses	Operating profit before tax
Industry	no.	no.	\$m	\$m	\$m	\$m
••••	• • • • • • • •	• • • • • • • •	• • • • • • • • •	• • • • • • • • •	•••••	•••••
		1992-9	3			
Manufacturing						
Computer and business machines Telecommunication, broadcasting	120	np	np	np	np	np
and transceiving equipment	*69	7 705	1 752.4	1 802.7	1 730.1	93.8
Electronic equipment n.e.c.	*31	1 452	229.8	290.4	270.1	*-3 834.0
Electric cable and wire	*28	1 087	404.6	412.3	316.4	124.3
Total	248	np	np	np	np	np
Wholesale trade						
Computers	1 488	15 556	4 820.2	4 931.5	4 828.5	167.1
Business machines and electrical						
and electronic equipment n.e.c.	394	np	np	np	np	np
Total	1 882	np	np	np	np	np
Telecommunication services Computer services	189	np	np	np	np	np
Data processing	262	2 049	144.2	147.9	132.3	15.5
Information storage and retrieval	*67	636	102.6	103.8	93.0	10.8
Computer maintenance	242	4 778	1 082.3	1 085.2	1 007.0	92.5
Computer consultancy	4 315	22 605	2 701.7	2 763.8	2 517.2	246.2
Total	4 886	30 068	4 030.8	4 100.7	3 749.5	365.0
Total	7 243	136 788	26 888.8	27 502.1	24 950.1	2 736.0

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

^{*} estimate has a relative standard error of between 25% and 50% and should be used with caution

⁽a) Total estimates for 1992–93 include the Plant hiring or leasing industry (ANZSIC Class 7743).



EMPLOYMENT SIZE

					100 or	
		0–4	5–19	20-99	more	
		persons	persons	persons	persons	Total
• • • • • • • • • • • • • • • •	• • • • •	• • • • • • • •	• • • • • • •	• • • • • • •	•••••	•••••
		1998	-99			
Businesses at end June						
Manufacturing	no.	104	102	64	25	294
Wholesale trade	no.	1 250	659	222	46	2 177
Telecommunication						
services	no.	623	176	42	28	869
Computer services	no.	13 018	1 396	261	56	14 731
Total	no.	14 995	2 332	589	155	18 072
Employment at end June						
Manufacturing	no.	256	960	2 616	6 711	10 542
Wholesale trade Telecommunication	no.	2 259	6 089	7 864	23 725	39 936
services	no.	1 163	1 588	1 728	69 988	74 467
Computer services	no.	23 593	12 352	9 589	28 862	74 395
Total	no.	27 271	20 989	21 796	129 285	199 341
Total income						
Manufacturing	\$m	*36.2	185.6	630.4	2 453.9	3 306.2
Wholesale trade	\$m	*1 134.6	*2 680.1	*4 972.2	13 965.4	22 752.4
Telecommunication						
services	\$m	364.2	255.2	356.0	25 107.6	26 083.0
Computer services	\$m	1 631.6	1 292.3	1 402.9	6 147.2	10 474.0
Total	\$m	3 166.7	4 413.2	7 361.4	47 674.2	62 615.5
•••••	• • • • •	• • • • • • • •	• • • • • •	• • • • • • •	•••••	•••••
		1995	-96			
Businesses at end June						
Manufacturing	no.	163	174	105	31	473
Wholesale trade Telecommunication	no.	1 697	1 029	204	48	2 979
services	no.	279	*85	31	15	410
Computer services	no.	8 498	873	251	51	9 673
Total	no.	10 637	2 162	591	146	13 535
Employment at end June						
Manufacturing	no.	439	1 801	4 043	11 011	17 295
Wholesale trade	no.	3 650	8 772	7 534	19 672	39 629
Telecommunication						
services	no.	591	*798	1 280	89 032	91 701
Computer services	no.	14 997	7 354	9 571	23 105	55 028
Total	no.	19 678	18 725	22 429	142 820	203 653
Total income						
Manufacturing	\$m	73.6	*445.8	893.6	3 352.8	4 765.8
Wholesale trade	\$m	846.0	2 662.8	3 763.2	10 053.8	17 325.8
Telecommunication						
services	\$m	*43.8	*226.1	211.5	18 252.3	18 733.7
Computer services	\$m	1 156.5	855.6	1 342.4	4 733.3	8 087.8
Total	\$m	2 119.9	4 190.3	6 210.7	36 392.2	48 913.1

^{*} estimate has a relative standard error of between 25% and 50% and should be used with caution



2.3 CHARACTERISTICS OF EMPLOYMENT BY INDUSTRY, IT&T Specialists—at end June .

	MALES		FEMALE	ES .	TOTAL	
	no.	%	no.	%	no.	%
•••••	MANU	JFACTUR	ING	• • • • • • •	•••••	• • • • •
Working proprietors and partners of unincorporated businesses	105	1.4	52	1.6	157	1.5
Employees Permanent full time	6 524	88.9	2 635	82.3	9 159	86.9
Permanent part time	94	1.3	146	4.6	240	2.3
Total permanent	6 618	90.2	2 781	86.9	9 399	89.2
Casuals/temporaries	619	8.4	368	11.5	986	9.4
Total	7 236	98.6	3 149	98.4	10 385	98.5
Total employment at end						
June 1999	7 341	100.0	3 201	100.0	10 542	100.0
Percentage of total		69.6		30.4		100.0
Total employment at end June						
1996	11 924	68.9	5 371	31.1	17 295	100.0
• • • • • • • • • • • • • • • • • • • •	•••••	• • • • • • •	• • • • • • • •	• • • • • • •	• • • • • • • • •	• • • • •
	WHOLE	ESALE TI	RADE			
Working proprietors and partners						
of unincorporated businesses	*253	0.9	**64	0.5	*316	0.8
Employees						
Permanent full time	25 128	91.4	10 531	84.6	35 659	89.3
Permanent part time	714	2.6	926	7.4 92.0	1 640	4.1
Total permanent	25 842	94.0	11 457		37 299	93.4
Casuals/temporaries	1 392	5.1	929	7.5	2 321	5.8
Total	27 234	99.1	12 386	99.5	39 620	99.2
Total employment at end	a= 4a=	400.0	40.440	400.0		400.0
June 1999	27 487	100.0	12 449	100.0	39 936	100.0
Percentage of total		68.8		31.2		100.0
Total employment at end June	26 580	67.1	13 049	32.9	39 629	100.0
1996	20 360	07.1	13 049	32.9	39 029	100.0
				• • • • • • •	•••••	• • • • • •
TEL	ECOMMUN	NICATION	N SERVICE	S		
Working proprietors and partners						
of unincorporated businesses	365	0.7	74	0.3	440	0.6
Employees Permanent full time	47 856	96.9	21 700	86.5	69 556	94.0
Permanent part time	551	1.1	21 700	9.4	2 912	3.9
Total permanent	48 408	98.0	24 060	95.9	72 468	97.9
Casuals/temporaries	602	1.2	958	3.8	1 559	2.1
Total	49 009	99.3	25 018	99.7	74 027	100.0
Total employment at end						
June 1999	49 375	100.0	25 093	100.0	74 467	100.0
		66.3		33.7		100.0
Percentage of total Total employment at end June	• •	00.3	• •	33.1	• •	100.0
1996	63 641	69.4	28 060	30.6	91 701	100.0
•••••						

^{..} not applicable

estimate has a relative standard error of between 25% and 50% and should be used with caution
 estimate has a relative standard error greater than 50% and is considered too unreliable for general use

CHARACTERISTICS OF EMPLOYMENT BY INDUSTRY, IT&T Specialists—at end June continued

	MALES		FEMALE	S.	TOTAL				
	no.	%	no.	%	no.	%			
• • • • • • • • • • • • • • • • • • • •	•••••	•••••	• • • • • • • •	• • • • • • •	•••••	•••••			
COMPUTER SERVICES									
Working proprietors and partners									
of unincorporated businesses Employees	1 191	2.4	351	1.4	1 542	2.1			
Permanent full time	44 664	90.1	17 567	70.7	62 231	83.6			
Permanent part time	1 090	2.2	4 858	19.6	5 947	8.0			
Total permanent	45 753	92.3	22 424	90.2	68 178	91.6			
Casuals/temporaries	2 602	5.3	2 074	8.3	4 676	6.3			
Total	48 355	97.6	24 498	98.6	72 853	97.9			
Total employment at end									
June 1999	49 546	100.0	24 849	100.0	74 395	100.0			
Percentage of total Total employment at end June		66.6		33.4		100.0			
1996	36 354	66.1	18 673	33.9	55 028	100.0			
• • • • • • • • • • • • • • • • • • • •	•••••	TOTAL	• • • • • • • • •	• • • • • • • •	•••••	•••••			
		TOTAL							
Working proprietors and partners									
of unincorporated businesses Employees	1 914	1.4	541	0.8	2 455	1.2			
Permanent full time	124 172	92.8	52 433	79.9	176 605	88.6			
Permanent part time	2 449	1.8	8 290	12.6	10 739	5.4			
Total permanent	126 621	94.7	60 723	92.6	187 344	94.0			
Casuals/temporaries	5 214	3.9	4 328	6.6	9 542	4.8			
Total	131 835	98.6	65 051	99.2	196 886	98.8			
Total employment at end									
June 1999	133 749	100.0	65 592	100.0	199 341	100.0			
Percentage of total Total employment at end June		67.1		32.9		100.0			
1996	138 499	68.0	65 153	32.0	203 653	100.0			
• • • • • • • • • • • • • • • • • • • •	• • • • • • • •	• • • • • •	• • • • • • • •	• • • • • • •	• • • • • • • •	•••••			

^{..} not applicable



2.4 MAIN ACTIVITY OF PERSONS EMPLOYED, IT&T Specialists

	MALES		FEMALE	ES .	TOTAL	
	no.	%	no.	%	no.	%
•••••	•••••		• • • • • • •	• • • • • • •	•••••	• • • • •
	M	ANUFACT	URING			
Computing and technical	2 886	39.3	523	16.3	3 409	32.3
Other	4 455	60.7	2 678	83.7	7 133	67.7
Total	7 341	100.0	3 201	100.0	10 542	100.0
•••••		• • • • • • •		• • • • • • •	•••••	•••••
	WH	OLESALE	TRADE			
Computing and technical	13 486	49.1	3 421	27.5	16 907	42.3
Other	14 001	50.9	9 029	72.5	23 029	57.7
Total	27 487	100.0	12 449	100.0	39 936	100.0
• • • • • • • • • • • • • • • • • • • •	• • • • • • • •	•••••	• • • • • • • •	• • • • • • •	•••••	•••••
٦	TELECOM	JUNICAT	ION SERV	ICES		
Computing and technical	20 371	41.3	8 285	33.0	28 657	38.5
Other	29 004	58.7	16 807	67.0	45 811	61.5
Total	49 375	100.0	25 093	100.0	74 467	100.0
• • • • • • • • • • • • • • • • • • • •	•••••	• • • • • • •	• • • • • • • •	• • • • • • •	• • • • • • • •	•••••
	COM	PUTER S	ERVICES			
Computing and technical	43 362	87.5	12 829	51.6	56 191	75.5
Other	6 184	12.5	12 021	48.4	18 205	24.5
Total	49 546	100.0	24 849	100.0	74 395	100.0
• • • • • • • • • • • • • • • • • • • •	•••••	• • • • • • •	• • • • • • • •	• • • • • • •	•••••	•••••
		TOTA	L			
Computing and technical	80 106	59.9	25 058	38.2	105 164	52.8
Other	53 643	40.1	40 535	61.8	94 178	47.2
Total	133 749	100.0	65 592	100.0	199 341	100.0

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2.5 SOURCES OF INCOME, Manufacturing, IT&T Specialists

	Businesses at end June(a)	Value	Proportion of total income
	no.	\$m	%
	• • • • • • • • •	• • • • • • • •	•••••
1998-99			
Income from the sale of goods			
Computer and communications hardware, equipment and cables, etc. produced by this business			
Mainframe data processing machines	12	129.0	3.9
Laptop, notebook and similar portable computers	18	28.9	0.9
PCs and similar desktop computers	73	747.0	22.6
Laser and other printing systems	15	4.9	0.1
Other input-output devices and peripherals (including scanners, keyboards,	04	*0 F	0.2
monitors, etc.) Consumables (including removable storage media)	21 39	*8.5 *41.2	0.3 1.2
Other computer and communications hardware (excluding storage media)	79	189.2	5.7
Telephone and telegraph equipment (excluding parts)	*56	522.8	15.8
Mobile communications			
Mobile, celluar and car phones	7	30.5	0.9
CB and other mobile radio and transeiving equipment	*7	113.6	3.4
Total	13	144.1	4.4
Other telecommunications and transceiving equipment Cables	54	569.2	17.2
Insulated optical fibre cable	15	216.8	6.6
Co-axial cable and other co-axial electrical conductors	19	59.3	1.8
Total(b)	28	276.1	8.4
Total computer and communications hardware, equipment and cables, etc. produced by this business	290	2 661.1	80.5
Other manufactured goods produced by this business	61	308.1	9.3
Computer and communications hardware, parts, components, consumables and other goods not produced by this business			
Computer hardware (excluding parts and components)	59	*51.6	1.6
Communications hardware (excluding parts and components)	*42	59.3	1.8
Computer and communications parts, components and consumables	*39	32.8	1.0
Parts and components Consumables	*46	32.8 5.0	0.2
Total	59	37.9	1.1
Total computer and communications hardware, parts, components, consumables			
and other goods not produced by this business	92	148.8	4.5
Income from the sale and licensing of packaged software	58	19.0	0.6
Other income from the sale of goods	*17	8.5	0.3
Total income from the sale of goods	290	3 145.4	95.1
Income from the provision of computer services	(c)63	(c)27.4	(c)0.8
Income from the provision of telecommunications services	*36	78.4	2.4
Income from rent, leasing and hiring of computer and communications hardware Other income	*29 119	1.9 53.1	0.1 1.6
Outer income	113	55.1	1.0
Total	294	3 306.2	100.0

estimate has a relative standard error of between 25% and 50% and should be used with caution $\frac{1}{2}$

⁽a) Businesses may have more than one source of income. Hence, the counts of businesses for each income source do not sum to the total.

⁽b) Excludes income from production of cables that are not associated with IT&T.

 $[\]hbox{(c)} \quad \hbox{Includes income from developing packaged software.} \\$



	Businesses at end June(a)	Value	Proportion of total income
	no.	\$m	%
•••••	• • • • • • • • •	• • • • • • • •	•••••
1995-96			
Income from the sale of goods			
Computer and communications hardware, equipment and cables, etc. produced by this business			
Mainframe data processing machines	*25	np	np
Laptop, notebook and similar portable computers	83	np	np
PCs and similar desktop computers	65	628.6	13.2
Laser and other printing systems	*27	**21.4	0.4
Other input-output devices and peripherals (including scanners, keyboards,			
monitors, etc.)	*12 18	*11.5 81.5	0.2 1.7
Consumables (including removable storage media) Other computer and communications hardware (excluding storage media)	18 144	401.3	1.7 8.4
Telephone and telegraph equipment (excluding parts)	*48	767.7	16.1
Mobile communications			
Mobile, celluar and car phones	*8	np	np
CB and other mobile radio and transeiving equipment	2	np	np
Total	*8	124.9	2.6
Other telecommunications and transceiving equipment Cables	149	615.6	12.9
Insulated optical fibre cable	*19	np	np
Co-axial cable and other co-axial electrical conductors	*19	np	np
Total(b)	*26	432.2	9.1
Total computer and communications hardware, equipment and cables, etc. produced by this business	452	3 724.1	78.1
Other manufactured goods produced by this business	*42	520.5	10.9
Computer and communications hardware, parts, components, consumables and other goods not produced by this business			
Computer hardware (excluding parts and components)	69	*113.7	2.4
Communications hardware (excluding parts and components)	47	79.7	1.7
Computer and communications parts, components and consumables	na	na	na
Parts and components Consumables	na na	na na	na
Total	*52	**34.8	0.7
Total computer and communications hardware, parts, components, consumables			
and other goods not produced by this business	112	228.2	4.8
Income from the sale and licensing of packaged software	76	7.6	0.2
Other income from the sale of goods	na 470	na 4 400 4	na
Total income from the sale of goods	473	4 480.4	94.0
Income from the provision of computer services	131	48.5	1.0
Income from the provision of telecommunications services	27 *61	35.7	0.7
Income from rent, leasing and hiring of computer and communications hardware Other income	*61 315	2.0 199.1	4.2
Other mounte	313	199.1	7.2
Total	473	4 765.8	100.0

 $^{^{\}star}$ $\,\,$ estimate has a relative standard error of between 25% and 50% and should be used with caution

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

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

na not available

nil or rounded to zero (including null cells)

⁽a) Businesses may have more than one source of income. Hence, the counts of businesses for each income source do not sum to the total.

⁽b) Excludes income from production of cables that are not associated with IT&T.



2.6 SOURCES OF INCOME, Wholesale, IT&T Specialists

.....

	Businesses at end June(a)	Income	Proportion of total income
	no.	\$m	%
•••••	• • • • • • • • •	•••••	•••••
1998-99			
Income from the sale of goods purchased for resale Computer and communications hardware, parts, components and consumables Computer hardware (excluding parts and components)	1 128	7 260.4	31.9
Communications hardware (excluding parts and components)	812	*5 542.1	24.4
Computer and communications parts and components	394	1 087.1	4.8
Computer and communications consumables	368	*1 629.1	7.2
Total computer and communications hardware, parts, components and			
consumables	1 804	15 518.6	68.2
Income from the sale and licensing of packaged software			
Games and recreation	*63	334.0	1.5
Education and training	146	225.6	1.0
Communications	113	203.6	0.9
Other packaged software	699	1 174.7	5.2
Unspecified Total	1 806	1 938.0	— 8.5
Total			
Other income from the sale of goods purchased for resale	*327	1 224.8	5.4
Total income from the sale of goods purchased for resale	1 928	18 681.2	82.1
Income from the sale of computer and communications hardware, parts, components and consumables produced by this business	**62	*504.9	2.2
Income from the sale of software developed by this business	**59	38.2	0.2
Income from the provision of whole IT&T business functions	200	600.7	2.6
Income from the provision of computer services Customised software services and solutions (excluding maintenance)			
Digital/multi-media applications	4	0.8	_
Communications	**38	**4.8	_
Business applications and systems	177	281.5	1.2
Other Total income from customised software services and solutions (excluding	*60	16.9	0.1
maintenance)	236	303.9	1.3
Software maintenance services	403	243.2	1.1
Hardware consultancy services (excluding maintenance)	*116	234.6	1.0
Other computer consultancy services	*175	41.4	0.2 1.3
Hardware maintenance services	234 *113	288.4 101.4	0.4
Installation and cabling services for computers Computer processing services	*29	*1.8	0.4
Information storage and retrieval	3		_
Other computer services	*85	np	np
Unspecified	5	np	np
Total income from the provision of computer services	749	1 383.4	6.1
Income from the provision of telecommunications services	32	13.1	0.1
Other income	1 270	1 530.8	6.7
Total	2 177	22 752.4	100.0

 $^{^{\}star}$ $\,\,$ estimate has a relative standard error of between 25% and 50% and should be used with caution

nil or rounded to zero (including null cells)

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

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

⁽a) Businesses may have more than one source of income. Hence, the counts of businesses for each income source do not sum to the total.



	Businesses at end June(a)	Income	Proportion of total income
	no.	\$m	%
1995-96	••••••	•••••	•••••
Income from the sale of goods purchased for resale Computer and communications hardware, parts, components and consumables Computer hardware (excluding parts and components) Communications hardware (excluding parts and components) Computer and communications parts and components Computer and communications consumables Total computer and communications hardware, parts, components and	1 834 1 178 (b)689 na	7 454.8 3 402.1 (b)862.1 na	43.0 19.6 (b)5.0 na
consumables	2 509	11 719.0	67.6
Income from the sale and licensing of packaged software Games and recreation Education and training Communications Other packaged software Unspecified Total	225 na 329 1 190 na 1 379	127.9 na 134.8 *1 187.6 na 1 450.3	0.7 na 0.8 6.9 na 8.4
Other income from the sale of goods purchased for resale	na	na	na
Total income from the sale of goods purchased for resale	2 828	13 169.3	76.0
Income from the sale of computer and communications hardware, parts, components and consumables produced by this business Income from the sale of software developed by this business Income from the provision of whole IT&T business functions Income from the provision of computer services Customised software services and solutions (excluding maintenance) Digital/multi-media applications Communications Business applications and systems Other Total income from customised software services and solutions (excluding maintenance)	123 311 na na na na na	809.0 119.3 na na na na na	4.7 0.7 na na na na
Software maintenance services Hardware consultancy services (excluding maintenance) Other computer consultancy services Hardware maintenance services Installation and cabling services for computers Computer processing services Information storage and retrieval Other computer services Unspecified Total income from the provision of computer services	734 463 239 799 580 *56 *48 263 na 1 594	155.3 *172.8 **124.3 874.6 44.9 np **0.6 np na	0.9 1.0 0.7 5.0 0.3 np np na 10.1
Income from the provision of telecommunications services	427	236.2	1.4
Other income	2 110	1 244.6	7.2
Total	2 979	17 325.8	100.0

na not available

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

 $^{^{\}star\star}$ $\,\,$ estimate has a relative standard error greater than 50% and is considered too unreliable for general use

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

nil or rounded to zero (including null cells)

⁽a) Businesses may have more than one source of income. Hence, the counts of businesses for each income source do not sum to the total.

⁽b) Includes computer and communication consumables.



2.7 SOURCES OF INCOME, Computer Services, IT&T Specialists

.....

	1995-96			1998-99		
	Businesses at end June(a)	Income	Proportion of income	Businesses at end June(a)	Income	Proportion of income
	no.	\$m	%	no.	\$m	%
	110.	φιιι	/6	no.	фііі	/6
Income from the cole of goods			•••••		• • • • • • • •	•••••
Income from the sale of goods Computer and communications hardware, parts,						
components and consumables	1 649	1 047.8	13.0	1 936	525.1	5.0
Income from the sale and licensing of packaged software	1 043	1 047.0	13.0	1 950	323.1	5.0
Games and recreation	189	**25.3	0.3	*32	**1.8	_
Education and training	na	na	na	*95	*2.1	_
Communications	229	*109.6	1.4	226	26.0	0.2
Other business applications and systems	na	na	na	1 530	271.8	2.6
Other	1 609	589.2	7.3	210	37.2	0.4
Total income from the sale and licensing of packaged						
software	1 802	724.1	9.0	1 808	338.9	3.2
Other income from the sale of goods	na	na	na	233	15.1	0.1
Total income from the sale of goods	2 575	1 771.9	21.9	2 850	879.1	8.4
Income from the provision of computer services Income from the provision of bundled computer services	na	na	na	2 157	3 353.6	32.0
Customised software services and solutions (excluding	IIa	Tia	IIa	2 151	3 333.0	32.0
maintenance)						
Digital/multi-media applications	na	na	na	536	62.0	0.6
Communications	na	na	na	667	131.6	1.3
Business applications and systems	na	na	na	6 841	2 064.4	19.7
Other	na	na	na	1 149	297.7	2.8
Total customised software services and solutions						
(excluding maintenance)	7 134	2 098.5	25.9	7 966	2 555.6	24.4
Software maintenance services	2 862	521.1	6.4	4 279	737.5	7.0
Hardware consultancy services (excluding maintenance)	1 832	734.9	9.1	1 327	167.6	1.6
Other computer consultancy services	1 340	765.8	9.5	4 017	687.6	6.6
Hardware maintenance services	686	573.9	7.1	889	213.9	2.0
Installation and cabling services for computers	593	132.4	1.6	579	*72.4	0.7
Computer processing services	771	761.0	9.4	454	1 105.9	10.6
Information storage and retrieval services	105	161.6	2.0	*242	95.7	0.9
Other computer services	253	31.2	0.4	479	80.5	0.8
Total income from the provision of computer services	9 523	5 780.4	71.5	13 478	5 716.7	54.6
Income from the provision of telecommunications services	128	147.9	1.8	604	312.3	3.0
Other income	5 691	387.5	4.8	6 738	212.3	
Total	9 673	8 087.8	100.0	14 731	10 474.0	100.0

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

 $^{^{\}star}$ $\,\,$ estimate has a relative standard error of between 25% and 50% and should be used with caution

nil or rounded to zero (including null cells)

na not available

⁽a) Businesses may have more than one source of income. Hence, the counts of businesses for each income source do not sum to the total.



2.8 ITEMS OF EXPENDITURE, IT&T Specialists

					TELECON	1 M U N I -
	MANUFA	CTUR-	WHOLES	ALE	CATION	
	ING		TRADE .		SERVICE	s
		Proportion of total		Proportion of total		Proportion of total
	Expenditure	expenses	Expenditure	expenses	Expenditure	expenses
	\$m	%	\$m	%	\$m	%
•••••	• • • • • • • •	• • • • • • • •	• • • • • • • • • • • •	• • • • • • • • •	•••••	•••••
Labour costs						
Wages and salaries	485.5	15.3	2 331.6	10.6	3 687.1	17.9
Employer contribution to superannuation						
funds	35.2	1.1	172.5	0.8	90.5	0.4
Workers' compensation costs	6.1	0.2	15.7	0.1	30.5	0.1
Total	526.8	16.6	2 519.8	11.5	3 808.1	18.5
Selected expenses						
Payments to contractors and consultants						
for computing and communications						
services	23.6	0.7	75.7	0.3	490.0	2.4
Other payments for IT&T services	29.4	0.9	64.4	0.3	5 635.5	27.4
Rent, leasing and hiring expenses	71.0	2.2	292.5	1.3	459.4	2.2
Repair and maintenance expenses	15.7	0.5	*23.8	0.1	254.3	1.2
Recruitment services provided by other						
businesses	4.4	0.1	6.1	_	30.5	0.1
Travelling, accommodation and						
entertainment expenses	28.5	0.9	63.4	0.3	222.5	1.1
Other selected expenses	310.5	9.8	1 962.6	8.9	4 202.2	20.4
Total	483.1	15.2	2 488.5	11.3	11 294.4	54.8
Other costs						
Purchases						
Computer and communications hardware, components and						
consumables	np	np	*5 879.7	26.7	np	np
Packaged software and software						
licensing	np	np	632.7	2.9	np	np
Other purchases	467.4	14.7	10 133.5	46.1	5.3	<u>.</u>
Total	2 054.8	64.8	16 645.8	75.7	797.5	3.9
Depreciation and amortisation	np	np	245.8	1.1	np	np
Insurance premiums	5.5	0.2	29.2	0.1	8.0	_
Interest expenses	20.7	0.7	63.2	0.3	822.4	4.0
Bad and doubtful debts	np	np	_	_	np	np
Total	2 162.0	68.2	16 984.0	77.2	5 499.0	26.7
Total	3 172.0	100.0	21 992.2	100.0	20 601.5	100.0

 $^{^{\}star}$ $\,\,$ estimate has a relative standard error of between 25% and 50% and should be used with caution

nil or rounded to zero (including null cells)

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



2.8 ITEMS OF EXPENDITURE, IT&T Specialists continued

	COMPUT	ER		
	SERVICE	S	TOTAL .	
		Proportion		Proportion
		of total		of total
	Expenditure	expenses	Expenditure	expenses
	\$m	%	\$m	%
	φιιι	76	φιιι	/0
	••••••	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • •	•••••
Labour costs				
Wages and salaries	3 710.7	38.4	10 214.8	18.4
Employer contribution to superannuation				
funds	335.5	3.5	633.6	1.1
Workers' compensation costs	18.8	0.2	71.2	0.1
Total	4 065.0	42.1	10 919.6	19.7
Calcated aynanas				
Selected expenses				
Payments to contractors and consultants				
for computing and communications services	1 396.4	14.5	1 985.7	3.6
Other payments for IT&T services	387.5	4.0	6 116.9	11.0
	353.9	3.7	1 176.8	2.1
Rent, leasing and hiring expenses Repair and maintenance expenses	202.7	2.1	496.4	0.9
Recruitment services provided by other	202.1	2.1	490.4	0.9
businesses	49.9	0.5	90.9	0.2
Travelling, accommodation and	49.9	0.5	90.9	0.2
entertainment expenses	271.8	2.8	586.2	1.1
Other selected expenses	1 320.0	13.7	7 795.3	14.1
Total	3 982.2	41.2	18 248.2	32.9
iotai	3 902.2	41.2	10 240.2	32.9
Other costs				
Purchases				
Computer and communications				
hardware, components and				
consumables	663.0	6.9	8 743.3	15.8
Packaged software and software				
licensing	305.4	3.2	1 117.0	2.0
Other purchases	89.4	0.9	10 695.6	19.3
Total	1 057.8	11.0	20 555.9	37.1
Depreciation and amortisation	431.6	4.5	4 242.7	7.7
Insurance premiums	31.5	0.3	74.2	0.1
Interest expenses	59.3	0.6	965.6	1.7
Bad and doubtful debts	27.0	0.3	413.9	0.7
Total	1 607.3	16.6	26 252.3	47.4
Total	9 654.4	100.0	55 420.2	100.0



PROFITABILITY MEASURES, IT&T Specialists

	EARNIN BEFORE INTERE AND TA	E ST	OPERAT PROFIT BEFORE		OPERAT PROFIT MARGIN	
	1995–96	1998–99	1995–96	1998–99	1995–96	1998–99
	\$m	\$m	\$m	\$m	%	%
•••••	• • • • • • •	• • • • • • • •	• • • • • • • •	•••••	• • • • • • • • • •	•••••
Manufacturing	479.5	154.6	437.3	133.8	9.3	4.1
Wholesale trade	979.8	1 045.7	872.6	982.5	5.1	4.5
Telecommunication services	3 470.1	6 371.7	2 781.5	5 549.2	15.5	21.5
Computer services	519.9	894.9	455.3	835.6	5.7	8.1
Total	5 449.3	8 466.8	4 546.7	7 501.2	9.5	12.2



2.10 BUSINESSES BY INDUSTRY & PROFITABILITY, IT&T Specialists—at end June

Operating profit margin		Manufactur- ing	Wholesale trade	Telecommuni- cation services	Computer services	Total
• • • • • • • • • • •	•••••	• • • • • • • • • •	1998-99	9	• • • • • • • • • •	•••••
Loss	no.	116	571	369	4 089	5 145
	%	39.5	26.2	42.5	27.8	28.5
0%-24% profit	no.	125	1 442	402	7 824	9 794
	%	42.5	66.2	46.3	53.1	54.2
25%-49% profit	no.	*36	*86	83	1 968	2 174
	%	12.2	4.0	9.6	13.4	12.0
50% profit or more	no.	17	*78	14	850	958
	%	5.8	3.6	1.6	5.8	5.3
Total	no.	294	2 177	869	14 731	18 072
	%	100.0	100.0	100.0	100.0	100.0
•••••	•••••	• • • • • • • • • •	1995-96	6	• • • • • • • • • •	•••••
Loss	no.	145	885	140	2 348	3 518
	%	30.7	29.7	34.1	24.3	26.0
0%-24% profit	no.	249	1 833	189	5 527	7 799
	%	52.6	61.5	46.1	57.1	57.6
25%-49% profit	no.	*68	195	*79	1 297	1 639
	%	14.4	6.5	19.3	13.4	12.1
50% profit or more	no.	*11	**65	2	500	579
	%	2.3	2.2	0.5	5.2	4.3
Total	no.	473	2 979	410	9 673	13 535
	%	100.0	100.0	100.0	100.0	100.0

estimate has a relative standard error of between 25% and 50% and should be used with caution
 estimate has a relative standard error greater than 50% and is considered too unreliable for general use

2.11 STATE AND TERRITORY COMPARISONS, IT&T Specialists

		Manufactur- ing	Wholesale trade	Telecommuni- cation services	Computer services	Total
		IIIg	uaue	services	services	TOLAT
•••••	• • • • • • • • • •	•••••	•••••	•••••	• • • • • • • • • • • •	•••••
		19	998-99			
Businesses at end June	e(a)					
New South Wales	no.	128	842	402	6 362	7 735
Victoria	no.	116	850	249	4 589	5 803
Queensland	no.	53	415	170	1 760	2 398
South Australia	no.	35	*232	65	682	1 014
Western Australia	no.	43	356	112	1 024	1 535
Tasmania	no.	5	*63	25	111	205
Northern Territory	no.	5	**34	18	53	110
Australian Capital						
Territory	no.	22	*104	32	729	887
Australia	no.	294	2 177	869	14 731	18 072
Employment at end Jur	ne					
New South Wales	no.	5 748	15 945	28 401	32 743	82 837
Victoria	no.	2 678	14 772	21 540	21 410	60 401
Queensland	no.	540	3 595	10 848	8 005	22 987
South Australia	no.	np	1 577	np	3 626	10 680
Western Australia	no.	np	2 479	np	3 918	12 520
Tasmania	no.	12	np	np	376	2 399
Northern Territory	no.	17	np	np	112	906
Australian Capital						
Territory	no.	np	826	np	4 205	6 614
Australia	no.	10 542	39 936	74 467	74 395	199 341
Wages and salaries						
New South Wales	\$m	270.6	1 014.9	1 494.6	1 756.6	4 536.6
Victoria	\$m	137.8	870.2	1 054.8	1 054.5	3 117.3
Queensland	\$m	np	177.5	np	329.1	1 041.8
South Australia	\$m	np	75.7	np	167.7	485.0
Western Australia	\$m	np	103.6	np	162.1	537.8
Tasmania	\$m	0.2	np	np	10.6	97.0
Northern Territory Australian Capital	\$m	0.4	np	np	5.8	40.9
Territory	\$m	np	61.0	np	224.4	358.7
Australia	\$m	485.5	2 331.6	3 687.1	3 710.7	10 214.8

^{*} estimate has a relative standard error of between 25% and 50% and should be used with caution

 $^{^{\}star\star}$ $\,\,$ estimate has a relative standard error greater than 50% and is considered too unreliable for general use

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

nil or rounded to zero (including null cells)

⁽a) Multi-State organisations are counted in each State in which they operate. Hence, the counts of businesses for States and Territories do not sum to the total for Australia.

2.11 STATE AND TERRITORY COMPARISONS, IT&T Specialists continued

.....

				Telecommuni-		
		Manufactur-	Wholesale	cation	Computer	
		ing	trade	services	services	Total
		19	995-96			
Businesses at end June						
New South Wales	no.	202	1 343	267	4 123	5 935
Victoria	no.	194	928	110	3 437	4 669
Queensland	no.	83	548	46	1 031	1 707
South Australia	no.	55	242	17	530	844
Western Australia	no.	66	320	*46	704	1 136
Tasmania	no.	*8	70	5	95	178
Northern Territory	no.	_	21	5	36	62
Australian Capital						
Territory	no.	26	146	*24	392	589
Australia	no.	473	2 979	410	9 673	13 535
Employment at end June	е					
New South Wales	no.	9 979	17 597	33 180	25 509	86 265
Victoria	no.	np	13 151	np	16 724	61 508
Queensland	no.	898	np	np	4 682	24 042
South Australia	no.	np	1 604	np	2 437	11 007
Western Australia	no.	np	1 944	np	3 054	12 501
Tasmania	no.	*23	np	np	271	2 164
Northern Territory	no.	_	np	np	122	987
Australian Capital						
Territory	no.	np	r1 179	np	2 228	5 179
Australia	no.	17 295	39 629	91 701	55 028	203 653
Wages and salaries						
New South Wales	\$m	436.3	883.9	1 498.7	1 222.1	4 041.1
Victoria	\$m	np	620.2	np	778.6	2 807.9
Queensland	\$m	32.7	np	np	184.6	1 005.0
South Australia	\$m	31.7	np	np	96.6	471.3
Western Australia	\$m	32.9	np	np	117.4	531.2
Tasmania	\$m	**0.5	np	np	np	88.1
Northern Territory	\$m	_	np	np	np	44.6
Australian Capital	ΨΠ		, ib		٠.٢	0
Territory	\$m	np	71.7	np	106.8	258.6
Australia	\$m	np	1 867.1	np	2 519.1	9 247.8
	•	•		·		

^{*} estimate has a relative standard error of between 25% and 50% and should be used with caution

nil or rounded to zero (including null cells)

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

 $^{^{\}star\star}$ $\,\,$ estimate has a relative standard error greater than 50% and is considered too unreliable for general use

⁽a) Multi-State organisations are counted in each State in which they operate. Hence, the counts of businesses for States and Territories do not sum to the total for Australia.

CHAPTER 3 TELECOMMUNICATION SERVICES INDUSTRY

INTRODUCTION This section presents statistics which supplement those statistics on the

telecommunication services industry provided in Chapter 2. In 1996–97 and 1995–96, these statistics formed part of a separate publication, *Telecommunication Services*,

Australia (Cat. no. 8145.0).

BUSINESSES At the end of June 99, there were 869 businesses in the telecommunication services

industry. This was an increase of 111% since 1996–97. These 869 businesses comprised 19 licensed carriers, 520 Internet service providers (ISPs, including non-employing

businesses) and 331 other carriage service providers.

EMPLOYMENT The industry employed 74,467 persons at the end of June 1999, a 7% decrease since the

end of June 1997 and a 19% decrease since the end of June 1996.

INCOME AND EXPENSES During 1998–99, the telecommunication services industry generated \$26,083 million in

income, an increase of 25% since 1996-97.

Total expenses for the industry during 1998–99 were \$20,602 million, an increase of 6%

since 1996-97.

PERFORMANCE The 869 businesses in the industry generated a total income per person employed of

 $\$350,\!300$ and recorded labour costs per employee of $\$51,\!400$.

There were 28 businesses with employment of 100 persons or more, 3% of all businesses in the industry. These large businesses accounted for the majority of the industry's employment (94%) and income (96%). The total income per person employed in these

large businesses was \$358,700.

During 1998–99, the total industry operating profit before tax was \$5,549 million and the operating profit margin was 21.5%. This operating profit margin was significantly higher than the operating profit margin of 7.1% recorded in 1996–97. The highest operating profit margin of 22.0% came from businesses with 100 or more persons employed, while

businesses with employment of 5 to 99 persons made an operating loss before tax.

SELECTED ACTIVITIES During 1998–99, 10 businesses in the industry facilitated 11,453 million local calls. There

were 21 businesses which provided 18,790 million minutes of domestic long distance calls and 35 businesses which provided 2,715 million minutes of international long

distance calls.

A total of 23 businesses had 4,793,000 mobile services in operation at the end of

June 1999.

SELECTED ACTIVITIES continued

At the end of June 1999 there were 503 businesses which had 1,834,600 dial-up subscribers as part of their Internet service. There were 122 businesses which hosted 6,400 websites with secure on-line financial transactions.



		1995–96	1996–97	1998–99
• • • • • • • • • • • • • • • • • • • •	• • • • •	•••••	• • • • • • •	•••••
Businesses at end June				
Licensed carriers	no.	na	3	19
Carriage service providers	no.	na	102	331
Internet service providers	no.	na	306	520
Total	no.	410	411	869
Employment at end June Income	no.	91 701	79 654	74 467
IT&T income	\$m	17 937.5	19 761.9	25 071.4
Other income	\$m	796.2	1 165.2	1 011.8
Total	\$m	18 733.7	20 927.2	26 083.0
Expenses				
Labour costs Payments to contractors and consultants for computing and telecommunication	\$m	4 528.6	4 978.6	3 808.1
services Other payments for telecommunication	\$m	44.5	364.9	490.0
services(b)	\$m	na	3 571.1	5 635.5
Purchases(b)	\$m	2 226.0	1 246.7	797.5
Depreciation and amortisation	\$m	2 665.8	2 875.3	3 486.5
Interest	\$m	688.6	713.9	822.4
Other expenses	\$m	5 780.2	5 707.7	5 561.6
Total	\$m	15 933.6	19 458.2	20 601.5
Operating profit before tax	\$m	2 781.5	1 472.8	5 549.2
Operating profit margin	%	15.5	7.1	21.5

na not available

•••••

⁽a) Estimates for 1995–96 and 1996–97 are not strictly comparable owing to differences in scope; see Explanatory Notes paragraph 8.

⁽b) Some other payments for telecommunication expenses were included in purchases for 1995-96 and 1996-97.



3.2 PERFORMANCE INDICATORS BY EMPLOYMENT SIZE, Telecommunication Services .

EMPLOYMENT SIZE

		0–4 persons	5–19 persons	20–99 persons	100 or more persons	Total
	19	98-99	• • • • • •	• • • • • •	• • • • • • •	•••••
Businesses at end June Employment at end June Total income Total income per person employed Labour costs per employee Labour costs to total expenses Operating profit before tax per person employed	no. no. \$m \$'000 \$'000	623 1 163 364.2 313.1 34.7 9.3	176 1 588 255.2 160.7 32.4 17.8	42 1 728 356.0 206.0 37.5 16.6	28 69 988 25 107.6 358.7 52.4 18.7	869 74 467 26 083.0 350.3 51.4 18.5
Operating profit margin	%	14.6	*-5.4	*-9.1	22.2	21.5
•••••	19	96-97	• • • • • •	•••••	• • • • • • •	•••••
Businesses at end June Employment at end June Total income Total income per person employed Labour costs per employee Labour costs to total expenses Operating profit before tax per person employed Operating profit margin	no. no. \$m \$'000 % \$'000 %	252 378 159.3 421.0 38.1 6.1 -45.2 -10.8	110 1 047 133.3 127.3 23.9 17.0 -11.4 -9.1	30 1 347 482.9 358.4 41.4 11.5 **-3.2 **-0.9	19 76 882 20 151.6 262.1 63.6 26.2 19.6 7.5	411 79 654 20 927.2 262.7 62.6 25.6 18.5 7.1
•••••	•••••		• • • • • • •	• • • • • •	• • • • • • •	•••••
	19	95-96				
Businesses at end June Employment at end June Total income Total income per person employed Labour costs per employee Labour costs to total expenses Operating profit before tax per person employed	no. no. \$m \$'000 \$'000 %	279 591 *43.8 74.2 29.7 38.6 **-3.1	*85 *798 *226.1 *283.4 28.2 *10.1 **8.6	31 1 280 211.5 165.2 41.5 23.3 **-8.9	15 89 032 18 252.3 205.0 49.8 28.7	410 91 701 18 733.7 204.3 49.4 28.4
Operating profit margin	%	**-4.8	**3.0	**-5.5	15.9	15.5

^{*} estimate has a relative standard error of between 25% and 50% and should be used with caution

 $^{^{\}star\star}$ $\,\,$ estimate has a relative standard error greater than 50% and is considered too unreliable for general use



3.3 PERFORMANCE INDICATORS BY INCOME SIZE, Telecommunication Services

INCOME SIZE (\$M)

Businesses at end June no. 256 475 95 43 869 Employment at end June no. 359 2 989 2 110 69 008 74 467 Total income \$m 9.7 142.4 283.3 25 647.6 26 083.0 Total income per person employed \$'000 26.9 47.7 134.3 371.7 350.3 Labour costs per employee \$'000 17.7 14.8 31.2 53.6 51.4 Labour costs to total expenses % 20.8 28.0 19.3 18.4 18.5 Operating profit before tax per person employed \$'000 -17.0 **-1.0 -24.5 81.3 74.5 Operating profit margin % -63.3 **-2.1 -18.4 22.1 21.5
Employment at end June no. 359 2 989 2 110 69 008 74 467 Total income \$m 9.7 142.4 283.3 25 647.6 26 083.0 Total income per person employed \$'000 26.9 47.7 134.3 371.7 350.3 Labour costs per employee \$'000 17.7 14.8 31.2 53.6 51.4 Labour costs to total expenses % 20.8 28.0 19.3 18.4 18.5 Operating profit before tax per person employed \$'000 -17.0 **-1.0 -24.5 81.3 74.5 Operating profit margin % -63.3 **-2.1 -18.4 22.1 21.5
Employment at end June no. 359 2 989 2 110 69 008 74 467 Total income \$m 9.7 142.4 283.3 25 647.6 26 083.0 Total income per person employed \$'000 26.9 47.7 134.3 371.7 350.3 Labour costs per employee \$'000 17.7 14.8 31.2 53.6 51.4 Labour costs to total expenses % 20.8 28.0 19.3 18.4 18.5 Operating profit before tax per person employed \$'000 -17.0 **-1.0 -24.5 81.3 74.5 Operating profit margin % -63.3 **-2.1 -18.4 22.1 21.5
Total income \$m 9.7 142.4 283.3 25 647.6 26 083.0 Total income per person employed \$'000 26.9 47.7 134.3 371.7 350.3 Labour costs per employee \$'000 17.7 14.8 31.2 53.6 51.4 Labour costs to total expenses % 20.8 28.0 19.3 18.4 18.5 Operating profit before tax per person employed \$'000 -17.0 **-1.0 -24.5 81.3 74.5 Operating profit margin % -63.3 **-2.1 -18.4 22.1 21.5
Total income per person employed \$'000 26.9 47.7 134.3 371.7 350.3 Labour costs per employee \$'000 17.7 14.8 31.2 53.6 51.4 Labour costs to total expenses % 20.8 28.0 19.3 18.4 18.5 Operating profit before tax per person employed \$'000 -17.0 **-1.0 -24.5 81.3 74.5 Operating profit margin % -63.3 **-2.1 -18.4 22.1 21.5
Labour costs per employee \$'000 17.7 14.8 31.2 53.6 51.4 Labour costs to total expenses % 20.8 28.0 19.3 18.4 18.5 Operating profit before tax per person employed \$'000 -17.0 **-1.0 -24.5 81.3 74.5 Operating profit margin % -63.3 **-2.1 -18.4 22.1 21.5
Labour costs to total expenses % 20.8 28.0 19.3 18.4 18.5 Operating profit before tax per person employed \$'000 -17.0 **-1.0 -24.5 81.3 74.5 Operating profit margin % -63.3 **-2.1 -18.4 22.1 21.5
Operating profit before tax per person employed \$'000 -17.0 **-1.0 -24.5 81.3 74.5 Operating profit margin % -63.3 **-2.1 -18.4 22.1 21.5
person employed \$'000 -17.0 **-1.0 -24.5 81.3 74.5 Operating profit margin % -63.3 **-2.1 -18.4 22.1 21.5
Operating profit margin % -63.3 **-2.1 -18.4 22.1 21.5
1996-97
Businesses at end June no. 164 165 46 36 411
Employment at end June no. 252 928 902 77 572 79 654
Total income \$m 6.2 58.0 168.2 20 694.7 20 927.2
Total income per person employed \$'000 24.6 62.6 186.4 266.8 262.7
Labour costs per employee \$'000 16.0 20.2 32.3 63.5 62.6
Labour costs to total expenses % 21.2 24.4 18.0 25.7 25.6
Operating profit before tax per
person employed \$'000 -29.3 -16.5 *7.9 19.2 18.5
Operating profit margin % –119.9 –26.6 *4.3 7.3 7.1
Sporting Protection (1)
1995-96
Businesses at end June no. *122 197 70 21 410
Employment at end June no. *267 *732 1 431 89 271 91 701
Total income \$m *7.3 47.5 *336.7 18 342.3 18 733.7
Total income per person employed \$'000 27.2 64.9 *235.3 205.5 204.3
Labour costs per employee \$'000 20.2 25.1 40.7 49.8 49.4
Labour costs to total expenses % 61.4 34.6 16.8 28.6 28.4
Operating profit before tax per
person employed \$'000 **-4.3 **-6.4 **-6.4 31.3 30.3
Operating profit margin
Operating profit margin /0 -10.0 -0.0 -2.0 10.0 10.0

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

 $^{^{\}star}$ $\,\,$ estimate has a relative standard error of between 25% and 50% and should be used with caution



3.4 SELECTED ACTIVITY DATA, Telecommunication Services

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Activity during year ended 30 June Number of local calls (including facsimile, email, Internet, etc.) 10 11 452 684.0 Minutes of use of domestic long distance calls Inbound 15 1277 697.7 Outbound 34 1 437 388.4 Total 15 170 86.1 Number at end June 1999 Customers for basic telephony services 15 np Mobile services in operation 23 4 792.8 ISDN lines INTERNET SERVICES
CARRIAGE SERVICES Activity during year ended 30 June Number of local calls (including facsimile, email, Internet, etc.) 10 11 452 684.0 Minutes of use of domestic long distance calls Minutes of use of international long distance calls Inbound 15 1277 697.7 Outbound 34 1 437 388.4 Total 35 2 715 086.1 Number at end June 1999 Customers for basic telephony services 15 np Mobile services in operation 23 4 792.8 ISDN lines *87 725.7
CARRIAGE SERVICES Activity during year ended 30 June Number of local calls (including facsimile, email, Internet, etc.) 10 11 452 684.0 Minutes of use of domestic long distance calls 21 18 790 182.1 Minutes of use of international long distance calls Inbound 15 1277 697.7 Outbound 34 1 437 388.4 Total 35 2 715 086.1 Number at end June 1999 Customers for basic telephony services 15 np Mobile services in operation 23 4 792.8 ISDN lines *87 725.7
Activity during year ended 30 June Number of local calls (including facsimile, email, Internet, etc.) 10 11 452 684.0 Minutes of use of domestic long distance calls 21 18 790 182.1 Minutes of use of international long distance calls Inbound 15 1 277 697.7 Outbound 34 1 437 388.4 Total 35 2 715 086.1 Number at end June 1999 Customers for basic telephony services 15 np Mobile services in operation 23 4 792.8 ISDN lines *87 725.7
Activity during year ended 30 June Number of local calls (including facsimile, email, Internet, etc.) 10 11 452 684.0 Minutes of use of domestic long distance calls 21 18 790 182.1 Minutes of use of international long distance calls Inbound 15 1 277 697.7 Outbound 34 1 437 388.4 Total 35 2 715 086.1 Number at end June 1999 Customers for basic telephony services 15 np Mobile services in operation 23 4 792.8 ISDN lines *87 725.7
Number of local calls (including facsimile, email, Internet, etc.) 10 11 452 684.0 Minutes of use of domestic long distance calls 21 18 790 182.1 Minutes of use of international long distance calls Inbound 15 1 277 697.7 Outbound 34 1 437 388.4 Total 35 2 715 086.1 Number at end June 1999 Customers for basic telephony services 15 np Mobile services in operation 23 4 792.8 ISDN lines *87 725.7
email, Internet, etc.) 10 11 452 684.0 Minutes of use of domestic long distance calls 21 18 790 182.1 Minutes of use of international long distance calls 15 1 277 697.7 Inbound 15 1 437 388.4 Total 35 2 715 086.1 Number at end June 1999 2 Customers for basic telephony services 15 np Mobile services in operation 23 4 792.8 ISDN lines *87 725.7
email, Internet, etc.) 10 11 452 684.0 Minutes of use of domestic long distance calls 21 18 790 182.1 Minutes of use of international long distance calls 15 1 277 697.7 Inbound 15 1 277 697.7 Outbound 34 1 437 388.4 Total 35 2 715 086.1 Number at end June 1999 Customers for basic telephony services 15 np Mobile services in operation 23 4 792.8 ISDN lines *87 725.7
calls 21 18 790 182.1 Minutes of use of international long distance calls
calls 21 18 790 182.1 Minutes of use of international long distance calls
calls Inbound 15 1 277 697.7 Outbound 34 1 437 388.4 Total 35 2 715 086.1 Number at end June 1999 Customers for basic telephony services 15 np Mobile services in operation 23 4 792.8 ISDN lines *87 725.7
Inbound 15 1 277 697.7
Outbound Total 34 35 1 437 388.4 2 715 086.1 Number at end June 1999 Sustained on the services of the properties of the properties of the services of the properties of the
Total 35 2 715 086.1 Number at end June 1999 Customers for basic telephony services 15 np Mobile services in operation 23 4 792.8 ISDN lines *87 725.7
Number at end June 1999 Customers for basic telephony services 15 np Mobile services in operation 23 4 792.8 ISDN lines *87 725.7
Customers for basic telephony services 15 np Mobile services in operation 23 4 792.8 ISDN lines *87 725.7
Mobile services in operation 23 4 792.8 ISDN lines *87 725.7
ISDN lines *87 725.7
INTERNET SERVICES
INTERNET SERVICES
Number at end June 1999
Dial up subscribers 503 1 834.6
Hosted websites with secure on-line
financial transactions 122 6.4

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

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

CHAPTER 4

PRODUCTION IMPORTS AND EXPORTS OF SELECTED IT&T GOODS AND SERVICES

INTRODUCTION

This section compares 1998–99 income from domestic production of selected IT&T goods and services with imports and exports data compiled from sources other than this survey. These sources comprise information submitted by exporters, importers or their agents to the Australian Customs Service and the ABS Survey of International Trade in Services. Income from domestic production relates to all businesses in the industries generally included in the international definition of IT&T industries, together with businesses in the recorded media manufacturing and publishing industry.

SUMMARY

Total income from the domestic production of IT&T goods and services was \$39,864 million in 1998–99, an increase of 28% since 1995–96. Computer services and telecommunication services recorded increases of 41% and 40% respectively, however, production of packaged software and manufactured IT&T goods declined by 43% and 24% respectively over the three-year period. The decline in domestic production of packaged software and manufactured IT&T goods was offset by an increase in imports of these products.

Exports (including re-exports) of selected IT&T goods and services totalled \$4,386 million in 1998–99, an 11% increase since 1995–96. Imports of these items were valued at \$13,534 million, a 26% increase since 1995–96. This represents a trade deficit for 1998–99 of \$9,148 million and compares with \$6,765 million in 1995–96. It should be noted that the imports and exports details include amounts for re-exports, which are goods imported into Australia and subsequently exported in the same condition, or after undergoing minor operations which leave them essentially unchanged. After excluding these re-export goods from the IT&T imports and exports details, the value of exports was equivalent to 8% of the value of revenue from domestic production in 1998–99, while imports were equivalent to 31%.

With \$2,242 million in exports and \$10,757 million in imports of IT&T goods, Australia exports considerably fewer IT&T goods than it imports. The United States of America was the major source of imports, accounting for 24% (\$2,563 million) of all IT&T goods, followed by Singapore (13%) and Malaysia (10%).

Australia exported more IT&T goods to New Zealand and the United States of America than to any other country. Exports to New Zealand accounted for \$485 million or 22% of all IT&T goods, followed by the United States of America with \$422 million (19%).

The value of imports and exports was higher for computer parts and accessories than any other types of IT&T goods. Computer parts and accessories accounted for 44% (\$4,707 million) of imports and 57% (\$1,268 million) of exports.

PRODUCTION, IMPORTS & EXPORTS OF SELECTED IT&T GOODS & SERVICES

	INCOME FROM DOMESTIC PRODUCTION		•	IMPORTS (CUSTOMS VALUE)(a)		EXPORTS (F.O.B.) (a)	
	1995-96(b)	1998–99	1995–96	1998–99	1995–96	1998–99	
	\$m	\$m	\$m	\$m	\$m	\$m	
•••••	• • • • • • • • •	• • • • • • • • •	•••••	• • • • • • • •	• • • • • • • • • • • • • • • • • • • •	•••••	
Computer and communications hardware, equipment and cables, etc. Mainframe and data processing							
machines	np	129.0	454.0	448.0	159.9	185.0	
Laptop, notebook and similar		28.9		490.3		15.6	
portable computers PCs and similar desktop computers	np 628.6	28.9 747.0	na 1 121.0	1 065.9	na 139.7	30.6	
Laser and other printing systems	**21.4	4.9	388.4	403.4	139.7 na	40.8	
Other input-output devices and peripherals (including scanners,	21.4	4.9	366.4	403.4	ila.	40.6	
keyboards, monitors etc.)	*18.6	*8.5	626.6	665.5	70.0	na	
Consumables (including removable							
storage media)	85.0	*41.2	52.6	86.5	11.7	20.4	
Other computer and communications	404.0	100.0	4.077.0	4 000 4	4 400 0	1.010.0	
hardware (excluding storage media)	431.9	189.6	4 277.2	4 620.4	1 463.6	1 248.0	
Telephone and telegraph equipment (excluding parts)	770.6	522.9	41.4	161.9	71.5	20.3	
Mobile communications	110.6	522.9	41.4	101.9	71.5	20.3	
Mobile, cellular and car phones	np	30.5	590.8	768.2	na	na	
CB and other mobile radio	iip	30.3	330.0	100.2	na	iid	
transceiving equipment	np	113.6	65.7	74.7	na	na	
Total	126.1	144.1	656.5	842.9	na	na	
Other telegoppersupications and							
Other telecommunications and	627.0	571.1	1 154.6	1 866.0	567.0	624.1	
transceiving equipment Cables	021.0	371.1	1 134.0	1 000.0	367.0	024.1	
Insulated optical fibre cable Co-axial cable and other co-axial	np	272.9	33.6	30.0	36.1	14.0	
electrical conductors	np	98.6	98.4	76.1	23.5	43.2	
Total	(c)433.4	(c)371.5	132.0	106.1	59.6	57.2	
Unspecified	np	890.7	_	_	_	_	
Total	(c)4 805.0	(c)3 649.7	8 904.3	10 756.9	2 543.0	2 242.0	

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

na not available

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

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

 [—] nil or rounded to zero (including null cells)

⁽a) Import and export data are compiled by the ABS from information submitted by importers, exporters or their agents to the Australian Customs Service. Exports include exports of Australian commodities and re-exports of goods of foreign origin. Because of the sheer volume of transactions involved, it is inevitable that there will be some errors, misclassifications and approximations in the statistics. Due to changes in import and export commodity classifications, data for 1998–99 are not strictly comparable with 1995–96 data. Please contact ABS for further information.

⁽b) Data for 1995–96 have been revised to include data for the Recorded media manufacturing and publishing industry (ANZSIC Class 2430).

⁽c) Excludes income from production of cables that are not associated with IT&T.

PRODUCTION, IMPORTS & EXPORTS OF SELECTED IT&T GOODS & SERVICES continued

	INCOME FROM DOMESTIC PRODUCTION		IMPORTS (CUSTOMS		EXPORTS	
			VALUE) (a)	VALUE)(a)		(F.O.B.)(a)
	1995-96(b)	1998–99	1995–96	1998–99	1995–96	1998–99
	\$m	\$m	\$m	\$m	\$m	\$m
• • • • • • • • • • • • • • • • • • • •	• • • • • • • • •	•••••	•••••	• • • • • • • •	•••••	•••••
Packaged software and associated						
licensing	894.6	512.7	553.6	918.1	300.2	328.8
Income from the provision of computer						
services	7 688.0	10 829.6	191.0	392.0	205.0	662.0
Customised software services and						
solutions (excluding maintenance)	2 309.9	2 859.6	na	na	na	na
Software maintenance services	676.7	980.7	na	na	na	na
Hardware consultancy services						
(excluding maintenance)	911.1	402.1	na	na	na	na
Other computer consultancy services	410.8	729.0	na	na	na	na
Hardware maintenance services	1 466.5	502.3	na	na	na	na
Other computer services	1 913.0	5 098.9	na	na	na	na
Unspecified	na	257.0	na	na	na	na
Income from the provision of						
telecommunication services	17 773.0	24 871.5	(c)1 060.0	(c)1 467.0	(c)896.0	(c)1 153.0
Total	(d) 31 160.6	(d) 39 863.5	10 708.9	13 534.0	3 944.2	4 385.8

na not available

⁽a) Import and export data are compiled by the ABS from information submitted by importers, exporters or their agents to the Australian Customs Service. Exports include exports of Australian commodities and re-exports of goods of foreign origin. Because of the sheer volume of transactions involved, it is inevitable that there will be some errors, misclassifications and approximations in the statistics. Due to changes in import and export commodity classifications, data for 1998–99 are not strictly comparable with 1995–96 data. Please contact ABS for further information.

⁽b) Data for 1995–96 have been revised to include data for the Recorded media manufacturing and publishing industry (ANZSIC Class 2430).

⁽c) Includes both postal and telecommunication services data. Telecommunication services data are not separately available.

⁽d) Excludes income from production of cables that are not associated with IT&T.



4.2 IMPORTS AND EXPORTS(a), By Country of Origin/Destination(b)

TOTAL IT&T IMPORTS TOTAL IT&T EXPORTS

	(CUSTOMS VALUE)		(F.O.B.	(F.O.B.)		
	1995–96	1998–99	Change	1995–96	1998-99	Change
Country of origin/final destination	\$m	\$m	%	\$m	\$m	%
	ФШ	ФШ	70	фП	ФП	70
•••••	• • • • • • •	•••••	• • • • • • •	• • • • • • • • •	• • • • • • •	•••••
Oceania and Antarctica						
New Zealand	45.0	48.8	8.4	441.6	484.8	9.8
Papua New Guinea	0.1	_	-100.0	38.0	34.6	-8.9
Other Oceania and					40.5	
Antarctica	_	2.2		29.8	46.5	56.0
North-West Europe	418.2	421.8	0.9	97.2	60.3	-38.0
United Kingdom Ireland	418.2 78.9	421.8 144.3	82.9	97.2 5.7	6.6	-38.0 15.8
Austria	10.2	21.8	113.7	1.9	2.0	5.3
Belgium-Luxembourg	51.6	17.2	-66.7	13.8	8.2	-40.6
France	107.5	128.0	19.1	8.6	10.2	18.6
Germany	283.3	233.5	-17.6	25.9	74.5	187.6
Finland	101.8	68.8	-32.4	2.0	3.9	95.0
Sweden	352.1	295.5	-16.1	43.9	6.2	-85.9
Other North-West						
Europe	43.3	60.3	39.3	19.4	32.6	68.0
Southern and Eastern						
Europe						
Italy	40.0	39.7	-0.7	15.9	3.9	-75.5
Other Southern and						
Eastern Europe	22.8	87.1	282.0	7.2	7.8	8.3
North Africa and the Middle						
East						
Israel	31.7	60.2	89.9	3.5	7.8	122.9
Other North Africa and						
the Middle East	3.3	4.9	49.8	22.5	31.7	40.9
South-East Asia						
Thailand	123.8	172.5	39.3	42.1	21.7	-48.5
Malaysia	283.5	1 119.3	294.8	63.6	43.0	-32.4
Philippines	34.2 1 059.5	157.5	360.5	37.1	32.1	-13.5 -46.4
Singapore Other South-East Asia	7.3	1 424.3 32.3	34.4 342.5	336.3 51.3	180.4 25.6	-46.4 -50.1
North-East Asia	1.3	32.3	342.5	51.3	25.0	-50.1
China	168.3	393.4	133.7	55.4	47.4	-14.4
Hong Kong (SAR of	100.5	393.4	155.7	33.4	41.4	-14.4
China)	365.6	278.4	-23.9	260.6	136.0	-47.8
Taiwan	833.1	1 005.6	20.7	53.2	46.5	-12.6
Japan	1 057.8	1 000.6	-5.4	159.0	101.4	-36.2
Korea, Republic of	366.0	521.0	42.3	67.7	49.5	-26.9
Other North-East Asia	0.2	0.3	53.4	_	0.4	833.8
Southern-Central Asia						
Total Southern-Central						
Asia	1.1	2.9	163.6	31.7	24.7	-22.1

nil or rounded to zero (including null cells)

⁽a) Data in this table relate to merchandise trade and not to trade in services. Import and export data are compiled by the ABS from information submitted by importers, exporters or their agents to the Australian Customs Service. Exports include exports of Australian commodities and re-exports of goods of foreign origin. Because of the sheer volume of transactions involved, it is inevitable that there will be some errors, misclassifications and approximations in the statistics. Due to changes in import and export commodity classifications, data for 1998–99 are not strictly comparable with 1995–96 data. Please contact ABS for

⁽b) Countries are classified according to the 1998 Standard Australian Classification of Countries (SACC, Cat. no. 1269.0).



4.2 IMPORTS AND EXPORTS(a), By Country of Origin/Destination(b) continued

	TOTAL IT&T IMPORTS (CUSTOMS VALUE)				TOTAL IT&T EXPORTS (F.O.B.)		
	1995–96	1998–99	Change	1995–96	1998–99	Change	
Country of origin/final destination	\$m	\$m	%	\$m	\$m	%	
• • • • • • • • • • • • • • • • • • • •	• • • • • • •	•••••	• • • • • •	• • • • • • • •	• • • • • • •	• • • • • •	
Americas United States of							
America	2 682.6	2 563.2	-4.5	361.4	421.5	16.6	
Canada	290.5	257.3	-11.4	35.5	32.9	-7.3	
Mexico	27.0	119.8	343.7	0.4	7.5	1 768.9	
Other Americas	4.7	43.6	825.9	27.4	40.2	46.7	
Sub-Saharan Africa							
South Africa	1.9	2.8	49.0	30.0	18.3	-39.0	
Other Sub-Saharan							
Africa	0.2	0.7	205.5	5.7	4.7	-17.3	
Other							
Total other	(c)7.2	(c)27.1	276.4	(d)147.7	(d)186.6	26.3	
Total (e)	8 904.3	10 756.9	20.8	2 543.0	2 242.0	11.8	

- (a) Data in this table relate to merchandise trade and not to trade in services. Import and export data are compiled by the ABS from information submitted by importers, exporters or their agents to the Australian Customs Service. Exports include exports of Australian commodities and re-exports of goods of foreign origin. Because of the sheer volume of transactions involved, it is inevitable that there will be some errors, misclassifications and approximations in the statistics. Due to changes in import and export commodity classifications, data for 1998–99 are not strictly comparable with 1995–96 data. Please contact ABS for further information.
- (b) Countries are classified according to the 1998 Standard Australian Classification of Countries (SACC, Cat. no. 1269.0).
- (c) Includes re-imports and imports with country unknown.
- (d) Includes exports classified to International Waters, Ship and Aircraft Stores, Zone of Cooperation A in the $\label{thm:controlled} \mbox{Timor Gap, and a commodity subject to a 'no country details' confidentiality restriction.}$
- (e) Excludes packaged software.



4.3 IMPORTS OF SELECTED MERCHANDISE(a), By Major Country of Origin(b)

	Computers	Printers, input output devices and peripherals	Computer parts and accessories	Mobile communications	Other communications equipment and cables	Total(c)
Country of						
origin	\$m	\$m	\$m	\$m	\$m	\$m
• • • • • • • • • • • • • • •	• • • • • • • • • • • •	1	L998-99	•••••	• • • • • • • • • • • •	••••••
United States of						
America	451.9	100.2	1 434.8	62.1	514.3	2 563.2
Singapore	332.9	191.9	714.8	111.8	72.8	1 424.3
Malaysia	378.4	83.1	498.4	93.5	65.9	1 119.3
Taiwan	349.6	143.0	457.8	0.3	54.9	1 005.6
Japan	241.8	140.2	380.6	6.5	231.4	1 000.6
Korea, Republic of	10.3	94.8	57.6	309.3	49.1	521.0
United Kingdom	49.0	4.7	105.2	41.2	221.7	421.8
China	5.5	122.2	154.6	39.0	72.1	393.4
Sweden	13.8	9.1	17.8	42.8	212.1	295.5
Hong Kong (SAR						
of China)	5.2	23.6	227.3	2.3	20.0	278.5
Canada	6.8	4.8	38.7	1.6	205.4	257.3
Germany	23.1	6.4	86.5	45.9	71.7	233.5
Thailand	0.3	75.6	58.4	1.0	37.2	172.5
Philippines	3.0	8.9	118.5	17.5	9.6	157.5
Ireland	34.8	1.2	99.7	0.9	7.6	144.3
France	5.8	5.8	23.0	35.5	57.9	128.0
Mexico	74.0	7.4	36.3	0.1	1.9	119.8
Finland	0.9	0.1	1.4	9.1	57.3	68.8
Total (d)	2 004.2	1 068.9	4 706.9	842.9	2 134.0	10 756.9
•••••	• • • • • • • • • • • • • • • • • • • •		 1995-96	•••••	• • • • • • • • • • • • •	•••••
		٦	1995-90			
United States of						
America	471.1	224.8	1 542.2	98.3	346.3	2 682.6
Singapore	356.3	80.4	593.8	10.6	18.5	1 059.5
Japan	255.8	212.8	405.9	8.9	174.5	1 057.8
Taiwan	182.9	196.1	417.7	0.7	35.8	833.1
United Kingdom	60.3	14.2	117.9	85.8	140.0	418.2
Korea, Republic of	7.5	105.7	171.4	60.5	21.0	366.0
Hong Kong (SAR						
of China)	79.2	13.8	250.6	4.7	17.2	365.6
Sweden	11.1	0.4	40.6	132.6	167.4	352.1
Canada	5.5	4.1	232.3	0.6	48.0	290.5
Malaysia	62.9	40.5	157.7	3.0	19.4	283.5
Germany	9.0	4.9	55.4	148.3	65.7	283.3
China	10.7	29.9	78.9	3.4	45.4	168.3
Finland	5.7	1.4	8.8	66.1	19.8	101.8
Total (d)	1 575.0	1 015.0	4 329.8	656.5	1 327.8	8 904.3

⁽a) Data in this table relate to merchandise trade and not to trade in services. Where imports for an individual country exceed \$50m for any one category, data have been included against that country for all categories.

⁽b) Countries are classified according to the 1998 Standard Australian Classification of Countries (SACC, Cat. no. 1269.0).

⁽c) Excludes packaged software.

⁽d) Relates to all countries, not just those listed.

4.4 EXPORTS OF SELECTED MERCHANDISE(a), By Major Country of Destination(b)

		Printers,		Other	
		input output	Computer	communications	
		devices and	parts and	equipment and	
	Computers	peripherals	accessories	cables	Total(c)
Country of					
final					
destination	\$m	\$m	\$m	\$m	\$m
•••••					
		1998-9	99		
New Zealand	63.1	6.8	345.5	69.4	484.8
United States of					
America	19.1	4.9	328.6	68.9	421.5
Singapore	29.9	5.9	104.2	40.3	180.4
Hong Kong (SAR of					
China)	22.9	2.3	77.7	33.2	136.0
Japan	36.3	7.4	52.7	4.9	101.4
Germany	1.3	0.1	60.9	12.1	74.5
United Kingdom	2.3	0.2	37.9	19.9	60.3
China	0.8	0.8	10.1	35.8	47.4
Malaysia	4.1	0.2	30.2	8.5	43.0
Papua New Guinea	1.1	0.4	27.0	6.1	34.6
Philippines	1.2	0.2	5.1	25.6	32.1
Brazil		-	3.2	20.8	24.0
Diazii	_	_	5.2	20.0	24.0
Total (d)	231.3	40.8	1 268.3	701.5	2 242.0
Total(d)	231.3	40.8	1 268.3	701.5	2 242.0
Total(d)	231.3		• • • • • • • • •		2 242.0
•••••		1995-9	96	•••••	•••••
New Zealand	231.3 38.8	• • • • • • • • • •	• • • • • • • • •		2 242.0 441.6
New Zealand United States of	38.8	1995-9	350.9	46.1	441.6
New Zealand United States of America	38.8	1995-9 5.8 3.1	350.9 313.8	46.1 23.9	441.6
New Zealand United States of America Singapore	38.8	1995-9	350.9	46.1	441.6
New Zealand United States of America Singapore Hong Kong (SAR of	38.8 20.6 64.4	1995-9 5.8 3.1 4.5	350.9 313.8 235.5	46.1 23.9 31.9	441.6 361.4 336.3
New Zealand United States of America Singapore Hong Kong (SAR of China)	38.8 20.6 64.4 53.1	1995-9 5.8 3.1 4.5	350.9 313.8 235.5 96.0	46.1 23.9 31.9 106.2	441.6 361.4 336.3 260.6
New Zealand United States of America Singapore Hong Kong (SAR of China) Japan	38.8 20.6 64.4 53.1 42.4	1995-9 5.8 3.1 4.5 5.3 30.4	350.9 313.8 235.5 96.0 82.6	46.1 23.9 31.9 106.2 3.6	441.6 361.4 336.3 260.6 159.0
New Zealand United States of America Singapore Hong Kong (SAR of China) Japan United Kingdom	38.8 20.6 64.4 53.1 42.4 9.6	1995-9 5.8 3.1 4.5 5.3 30.4 0.3	350.9 313.8 235.5 96.0 82.6 67.6	46.1 23.9 31.9 106.2 3.6 19.7	441.6 361.4 336.3 260.6 159.0 97.2
New Zealand United States of America Singapore Hong Kong (SAR of China) Japan United Kingdom Korea, Republic of	38.8 20.6 64.4 53.1 42.4 9.6 37.3	1995-9 5.8 3.1 4.5 5.3 30.4 0.3 9.8	350.9 313.8 235.5 96.0 82.6 67.6 15.8	46.1 23.9 31.9 106.2 3.6 19.7 4.9	441.6 361.4 336.3 260.6 159.0 97.2 67.7
New Zealand United States of America Singapore Hong Kong (SAR of China) Japan United Kingdom Korea, Republic of Malaysia	38.8 20.6 64.4 53.1 42.4 9.6 37.3 2.8	1995-9 5.8 3.1 4.5 5.3 30.4 0.3 9.8 1.8	350.9 313.8 235.5 96.0 82.6 67.6 15.8 38.8	46.1 23.9 31.9 106.2 3.6 19.7 4.9 20.1	441.6 361.4 336.3 260.6 159.0 97.2 67.7 63.6
New Zealand United States of America Singapore Hong Kong (SAR of China) Japan United Kingdom Korea, Republic of Malaysia China	38.8 20.6 64.4 53.1 42.4 9.6 37.3 2.8 0.1	1995-9 5.8 3.1 4.5 5.3 30.4 0.3 9.8 1.8	350.9 313.8 235.5 96.0 82.6 67.6 15.8 38.8 5.9	46.1 23.9 31.9 106.2 3.6 19.7 4.9 20.1 49.4	441.6 361.4 336.3 260.6 159.0 97.2 67.7 63.6 55.4
New Zealand United States of America Singapore Hong Kong (SAR of China) Japan United Kingdom Korea, Republic of Malaysia China Taiwan	38.8 20.6 64.4 53.1 42.4 9.6 37.3 2.8 0.1 15.6	1995-9 5.8 3.1 4.5 5.3 30.4 0.3 9.8 1.8 — 3.6	350.9 313.8 235.5 96.0 82.6 67.6 15.8 38.8 5.9 31.8	46.1 23.9 31.9 106.2 3.6 19.7 4.9 20.1 49.4 2.1	441.6 361.4 336.3 260.6 159.0 97.2 67.7 63.6 55.4 53.2
New Zealand United States of America Singapore Hong Kong (SAR of China) Japan United Kingdom Korea, Republic of Malaysia China Taiwan Sweden	38.8 20.6 64.4 53.1 42.4 9.6 37.3 2.8 0.1 15.6 0.1	1995-9 5.8 3.1 4.5 5.3 30.4 0.3 9.8 1.8 - 3.6 0.1	350.9 313.8 235.5 96.0 82.6 67.6 15.8 38.8 5.9 31.8 1.6	46.1 23.9 31.9 106.2 3.6 19.7 4.9 20.1 49.4 2.1 42.1	441.6 361.4 336.3 260.6 159.0 97.2 67.7 63.6 55.4 53.2 43.9
New Zealand United States of America Singapore Hong Kong (SAR of China) Japan United Kingdom Korea, Republic of Malaysia China Taiwan Sweden Papua New Guinea	38.8 20.6 64.4 53.1 42.4 9.6 37.3 2.8 0.1 15.6 0.1 1.0	1995-9 5.8 3.1 4.5 5.3 30.4 0.3 9.8 1.8 - 3.6 0.1 0.8	350.9 313.8 235.5 96.0 82.6 67.6 15.8 38.8 5.9 31.8 1.6 28.7	46.1 23.9 31.9 106.2 3.6 19.7 4.9 20.1 49.4 2.1 42.1 7.4	441.6 361.4 336.3 260.6 159.0 97.2 67.7 63.6 55.4 53.2 43.9 38.0
New Zealand United States of America Singapore Hong Kong (SAR of China) Japan United Kingdom Korea, Republic of Malaysia China Taiwan Sweden Papua New Guinea Philippines	38.8 20.6 64.4 53.1 42.4 9.6 37.3 2.8 0.1 15.6 0.1 1.0	1995-9 5.8 3.1 4.5 5.3 30.4 0.3 9.8 1.8 - 3.6 0.1 0.8 0.7	350.9 313.8 235.5 96.0 82.6 67.6 15.8 38.8 5.9 31.8 1.6 28.7 5.5	46.1 23.9 31.9 106.2 3.6 19.7 4.9 20.1 49.4 2.1 42.1 7.4 29.9	441.6 361.4 336.3 260.6 159.0 97.2 67.7 63.6 55.4 53.2 43.9 38.0 37.1
New Zealand United States of America Singapore Hong Kong (SAR of China) Japan United Kingdom Korea, Republic of Malaysia China Taiwan Sweden Papua New Guinea Philippines Canada	38.8 20.6 64.4 53.1 42.4 9.6 37.3 2.8 0.1 15.6 0.1 1.0 1.0 1.1	1995-9 5.8 3.1 4.5 5.3 30.4 0.3 9.8 1.8 - 3.6 0.1 0.8	350.9 313.8 235.5 96.0 82.6 67.6 15.8 38.8 5.9 31.8 1.6 28.7 5.5 30.3	46.1 23.9 31.9 106.2 3.6 19.7 4.9 20.1 49.4 2.1 42.1 7.4 29.9 4.0	441.6 361.4 336.3 260.6 159.0 97.2 67.7 63.6 55.4 53.2 43.9 38.0 37.1 35.5
New Zealand United States of America Singapore Hong Kong (SAR of China) Japan United Kingdom Korea, Republic of Malaysia China Taiwan Sweden Papua New Guinea Philippines	38.8 20.6 64.4 53.1 42.4 9.6 37.3 2.8 0.1 15.6 0.1 1.0	1995-9 5.8 3.1 4.5 5.3 30.4 0.3 9.8 1.8 - 3.6 0.1 0.8 0.7	350.9 313.8 235.5 96.0 82.6 67.6 15.8 38.8 5.9 31.8 1.6 28.7 5.5	46.1 23.9 31.9 106.2 3.6 19.7 4.9 20.1 49.4 2.1 42.1 7.4 29.9	441.6 361.4 336.3 260.6 159.0 97.2 67.7 63.6 55.4 53.2 43.9 38.0 37.1

nil or rounded to zero (including null cells)

⁽a) Data in this table relate to merchandise trade and not to trade in services. Where exports for an individual country exceed \$20m for any one category, data have been included against that country for all categories.

⁽b) Countries are classified according to the 1998 Standard Australian Classification of Countries (SACC, Cat. no. 1269.0).

⁽c) Excludes packaged software.

⁽d) Relates to all countries, not just those listed.

CHAPTER 5

RECORDED MEDIA MANUFACTURING AND PUBLISHING INDUSTRY

INTRODUCTION

The recorded media manufacturing and publishing industry is not included in the main part of this publication as it does not form part of the international definition of industries which specialise in IT&T activity. Selected statistics about this industry, however, are presented below, given that the industry has significant IT&T activity. Details for this industry are also included in table 4.1 which provides a more comprehensive picture of domestic production of IT&T.

SUMMARY

The 302 IT&T specialist businesses in the recorded media manufacturing and publishing industry employed 3,045 persons during 1998–99.

During 1998–99, the total income for IT&T specialists in the industry was \$278 million. The majority of income, \$207 million (75%), was generated from the sale and licensing of packaged software produced by the business.

Total expenses for IT&T specialist businesses in the industry during 1998–99 were \$222 million. Labour costs was the highest single expense (\$95 million), representing 43% of total expenses.

IT&T specialist businesses in the recorded media manufacturing and publishing industry generated an operating profit before tax of \$56 million during 1998–99. The operating profit margin for these businesses was 12%.



		Value
•••••	••••	•••••
Businesses at end June 1999	no.	302
Employment at end June 1999	no.	3 045
Income		
Income from the sale of goods Produced by this business		
Computer hardware	\$m	_
Communications hardware	\$m	np
Computer and communications parts and	*	
components	\$m	_
Computer and communications consumables	\$m	_
Income from the sale and licensing of packaged		
software	\$m	207.3
Other goods	\$m	np
Total income from the sale of goods produced by this business	\$m	210.3
	ФПП	210.3
Not produced by this business	Φ	
Computer hardware Communications hardware	\$m \$m	np
Computer and communication parts and components	\$m	np —
Computer and communication consumables	\$m	_
Packaged software	\$m	3.9
Other goods	\$m	_
Total income from the sale of goods not produced by		
this business	\$m	6.1
Total income from the sale of goods	\$m	216.4
Income from the provision of computer services	\$m	40.9
Income from the provision of telecommunication services	\$m	**0.2
Other income	\$m	*20.3
Total	\$m	277.8
Expenses		
Labour costs	\$m	94.8
Payment to contractors and consultants for computing and		
telecommunication services	\$m	*20.0
Other payments for telecommunication services	\$m	12.0
Purchases Depreciation and amortisation	\$m \$m	17.6 10.1
Interest expenses	\$m	1.6
Other expenses	\$m	65.6
Total	\$m	221.7
On susting susfit before to.	φ	*EO 1
Operating profit before tax	\$m %	*56.1 *12.0
Operating profit margin	70	"12.U

nil or rounded to zero (including null cells)

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

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

 $^{^{\}star}$ $\,$ estimate has a relative standard error of between 25% and 50% and should be used with caution

EXPLANATORY NOTES

INTRODUCTION

- **1** This publication presents results, in respect of the 1998–99 financial year, from an Australian Bureau of Statistics (ABS) survey on the production and distribution of information technology and telecommunication (IT&T) goods and services by businesses in Australia. Also included in this publication are:
 - import and export data compiled by the ABS from information submitted by exporters, importers or their agents to the Australian Customs Service.
 Exports include both exports of Australian produce and re-exports of goods of foreign origin; and
 - data from the ABS Survey of International Trade in Services.
- 2 Information in this publication covers the main industries involved in the production and distribution of IT&T goods and services. This industry view draws together a number of standard industries that generally comply with the international definition of industries that specialise in IT&T activity. A complete list of these industries can be found in paragraph 5 of the Explanatory Notes. Within these industries, it is the subset of businesses which specialise in IT&T which are the prime interest and therefore the main focus of the statistics in the publication. Also presented in this publication are comparisons between selected IT&T goods and services produced in Australia and exports and imports of those goods and services. The recorded media manufacturing and publishing industry is included in a separate section of the publication, because it undertakes significant IT&T activity, but is not within the international definition of industries which specialise in IT&T activity.
- **3** The definition of information technology and telecommunications used in these statistics is based on a set of goods and services descriptions which have been agreed by major policy and industry organisations. It essentially covers computers and communications equipment and the services which facilitate the use of this equipment. Excluded from this definition are process control computers and other equipment in which the presence of microprocessors is predominantly for the control or setting of functions. Simple calculating devices are also excluded along with television and radio broadcasting goods and services and TV and radio receivers.
- **4** The survey complements other information produced as part of the ABS IT&T statistics work program. Related publications are listed in paragraphs 23 and 24 of the Explanatory Notes.
- **5** The scope of the survey was all employing businesses recorded on the ABS Business Register and classified to the following classes of the Australian and New Zealand Standard Industrial Classification (ANZSIC):
 - Class 2841, Computer and business machine manufacturing;
- Class 2842, Telecommunication, broadcasting and transceiving equipment manufacturing;
- Class 2849, Electronic equipment manufacturing;
- Class 2852, Electric cable and wire manufacturing;
- Class 4613, Computer wholesaling;
- Class 4614, Business machine wholesaling n.e.c.;
- Class 4615, Electrical and electronic equipment wholesaling n.e.c.;

SCOPE

SCOPE continued

- Class 7120, Telecommunication services;
- Class 7831, Data processing services;
- Class 7832, Information storage and retrieval services;
- Class 7833, Computer maintenance services; and
- Class 7834, Computer consultancy services.
- **6** A random sample of businesses recorded on the ABS Business Register that were classified to ANZSIC 2430, recorded media manufacturing and publishing, was also surveyed. This industry is not included in the main parts of this publication as it does not form part of the international definition of industries which specialise in IT&T activity. The only tables which incorporate statistics from this industry are Tables 4.1 (Production, imports and exports of selected IT&T goods and services) and 5.1 (Key figures, Recorded media manufacturing and publishing, IT&T specialists).
- 7 The ABS Business Register, in general, excludes businesses which do not have any employees. However, a sample of businesses recorded on the Telecommunication Industry Ombudsman list of employing and non-employing Internet service provider (ISP) businesses was also included in the survey.

COMPARABILITY BETWEEN
1995-96 AND 1996-97
TELECOMMUNICATIONS DATA

8 Estimates for the telecommunications services industry are not strictly comparable between 1995–96 and 1996–97 owing to differences in scope and coverage. The 1995–96 survey included telecommunications consultants which were excluded from the 1996–97 survey. In addition, the 1996–97 survey frame was supplemented by the Australian ISP list which was not the case in the 1995–96 survey. Care should therefore be taken when comparing estimates from the two surveys, in particular the number of businesses.

IMPROVEMENTS TO COVERAGE

- **9** Data in this publication have been adjusted to allow for lags in processing new businesses to the ABS Business Register, and the omission of some businesses from the Business Register. The majority of businesses affected and to which the adjustments apply are small in size.
- **10** Adjustments have been made to include new businesses in the estimates in the periods in which they commenced operations, rather than when they were processed to the Business Register. Adjustments of this type will continue to be applied in future periods.
- **11** Further adjustments have been made for businesses which had been in existence for several years, but, for various reasons, were not previously added to the ABS Business Register. The ABS is remedying these omissions.
- **12** For more information on these adjustments, please refer to the ABS publication *Information Paper: Improvements to ABS Economic Statistics, 1997* (Cat. no. 1357.0).

STATISTICAL UNIT

13 The unit for which statistics were reported in the survey was the management unit. The management unit is the highest-level accounting unit within a business or organisation, having regard to the required level of industry homogeneity, for which accounts are maintained. In most cases it coincides with the legal entity owning the business (i.e. company, partnership, trust, etc.). In the case of large diversified businesses, however, there may be more than one management unit, each coinciding with a 'division' or 'line of business'. A division or line of business is recognised where separate and comprehensive accounts are compiled for it.

REFERENCE PERIOD

14 Data contained in the tables in this publication relate to all IT&T businesses which operated in Australia at any time during the year ended 30 June 1999.

REFERENCE PERIOD continued

Counts of businesses and organisations, however, include only those that were operating at 30 June 1999.

RELIABILITY OF THE DATA

- **15** The estimates presented in this publication are subject to sampling and non-sampling error.
- **16** The estimates in this publication are based on information obtained from a sample of businesses in the surveyed population. Consequently, the estimates in this publication are subject to sampling variability, that is, they may differ from 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 of units was included.
- **17** There are about 2 chances in 3 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.
- **18** Sampling variability can be 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 percentage errors likely to have occurred due to sampling and thus avoids the need to refer also to the size of the estimate.
- **19** The following table contains estimates of RSEs for a selection of statistics presented in this publication.

RELATIVE STANDARD ERRORS

	Businesses at end June	Employment at end June	IT&T income	Total income	Wages & salaries	Wages & salaries per person employed
Industry	%	%	%	%	%	%
Manufacturing						
Computer and business machines	14	9	10	10	10	3
Telecommunication, broadcasting						
and transceiving equipment	18	3	5	4	3	2
Electronic equipment n.e.c.	15	16	17	16	12	4
Electric cable and wire	4	4	4	4	4	1
Total	8	4	5	4	3	2
Wholesale trade						
Computers	9	4	7	6	3	2
Business machines and electrical						
and electronic equipment n.e.c.	22	10	24	22	9	4
Total	9	4	9	8	3	2
Telecommunication services	6	1	_	_	1	1
Computer services						
Data processing	14	2	np	np	np	np
Information storage and retrieval	38	17	17	17	17	10
Computer maintenance	17	11	np	np	np	np
Computer consultancy	2	3	3	3	3	1
Total	2	2	2	2	2	1
Total	2	1	3	3	1	1

nil or rounded to zero (including null cells)

 $^{{\}sf np} \quad \text{ not available for publication but included in totals where applicable, unless otherwise indicated} \\$

RELIABILITY OF THE DATA continued

- **20** As an example of the above, an estimate of the total income of IT&T specialist businesses in the computer and business machines manufacturing industry is \$1,146.4 million and the RSE is 10%, giving a standard error of \$114.6 million. Therefore, there would be 2 chances in 3 that, if all units had been included in the survey, a figure in the range of \$1,031.8 million to \$1,261.0 million would have been obtained, and 19 chances in 20 (i.e. a confidence interval of 95%) that the figure would have been within the range of \$917.1 million to \$1,375.7 million.
- **21** Errors other than those due to sampling may occur because of deficiencies in the register of units from which the sample was selected, non-response and imperfections in reporting by respondents. Inaccuracies of this kind are referred to as non-sampling errors and they may occur in any collection, whether it be a census or a sample. 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.
- **22** 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*.
- **23** The most recent issue of other ABS publications on the use and production of information technology and telecommunication goods and services in Australia are listed below:

Business Use of Information Technology, Australia, 1997–98 (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) Telecommunication Services, Australia, 1996–97 (Cat. no. 8145.0) Use of Information Technology on Farms, Australia, 1998–99 (Cat. no. 8150.0)

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

Year 2000 Problem, Australia, June 1999 (Cat. no. 8152.0)

24 While there was a separate publication for the results from the 1996–97 Telecommunication services survey, the 1998–99 details for this industry are included in this publication (Cat no. 8126.0). More detailed information than presented in this publication regarding the computer services industry may be found in *Computing Services Industry, Australia, 1998–99* (Cat. no. 8669.0) which was released on 28 August 2000.

ACKNOWLEDGMENT

RELATED PUBLICATIONS

GLOSSARY

Bad and doubtful debts Bad and doubtful debts is the amount of accounts receivable that are either

written off, or estimated to be uncollectible during an accounting period, that are

expensed in a period's profit calculations.

Businesses at end June The number of management units operating at the end of June. A management

unit is the highest level accounting unit within a business, having regard for

industry homogeneity, for which accounts are maintained.

Carriage service providers Businesses which provide telecommunication services via an existing network

infrastructure. Typical services offered by these businesses include voice, mobile, data and Internet connectivity, transmission, networking and e-commerce

solutions.

Casual employees This item refers to employees not entitled to take paid holidays.

Computing and technical staff This item includes system information technology managers, electronics

engineers, systems managers and administrators, software designers, applications and analyst programmers, computer database managers, testers, controllers,

security auditors, electronic, computer and communication technicians.

Depreciation and amortisation These are the financial charges made to the accounts to reflect that part of the value of an asset which may be regarded as having been used up in producing

revenue in a particular accounting period.

Earnings before interest and A measure of profit prior to the deduction of interest expenses and income tax.

tax

Exports (f.o.b.)

Employees This item includes working directors, and other employees working for a

business during the last pay period in June. Employees absent on paid or prepaid leave are included. Also included are employees being paid a retainer plus commission. This item excludes working proprietors and partners of

unincorporated businesses.

Employer contributions toThese are the contributions by the employer to superannuation funds, including

superannuation funds the employer productivity contribution.

Employment at the end of June This item includes working proprietors and partners, working directors, and other employees (including casual employees) working for a business during the last pay period in June. Employees absent on paid or prepaid leave are included.

The value of exports is the free on board (f.o.b.) transaction value of the goods expressed in Australian dollars. The f.o.b. value includes the value of packaging

(other than containerisation) and excludes freight and insurance costs for the $\,$

overseas route.

Full-time employees Full-time employees are those who work 35 hours or more per week.

Imports (customs value) The value of imports is the Australian Customs value. Goods are valued at the

point of containerisation, or the port of shipment, or the customs frontier of the exporting country, whichever comes first. The customs value is generally the same as the transaction value unless Australian Customs considers the value reported to be an unfair estimate of market value. This can occur when the

transaction is between related companies.

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Income from domestic production

This includes income from the sale of computer and communication hardware manufactured in Australia, from packaged software developed in Australia, and from the provision of computer and communication services. This is not to be confused with gross domestic product, which is a national accounting concept.

Income from the provision of computer services

This item includes income from customised software development services and solutions, software and hardware maintenance services, hardware consultancy services, installation and cabling services, computer processing services, information storage and retrieval services and other computer services.

Income from the provision of bundled IT&T business functions This item includes income from the bundling of services such as help desk, hardware and software appraisal, configuration management, inventory management, software distribution, usage and maintenance, communication network management, facilities maintenance and management, etc. This item may also include computer and communications hardware and software purchased for resale and computer services provided in the course of the consultancy. For the wholesale industry, income from provision of bundled IT&T business functions includes income from the provision of bundled computer services and bundled telecommunications services.

Income from the provision of telecommunication services

This item includes income from voice services, data services, mobile voice services, Internet services, leased lines, mobile data services, electronic data interchange services, video conferencing, value added voice services, repair and maintenance of telecommunications equipment and telecommunications consultancy services.

Income from the sale of computer and communications hardware, parts, components and consumables This item includes income from the sale of the following goods, either manufactured in Australia by the business or purchased by it for resale, or both:

- computer hardware—laptops, notebook, portable computers, other PCs and desktop computers, mid range multi user systems, large scale multi user systems, input/output devices such as scanners, keyboards, video conference cameras, monitors, laser and other printer systems;
- communications hardware—switching and transmission equipment such as PABX, SBS and satellite equipment, fibre optic and coaxial communication cables, fixed and mobile phones and networks, radio, mobile, data and Internet transmission apparatus, Citizens' Band (CB) and other mobile radio equipment, modems, Local Area Network (LAN) equipment including multiplexors, servers, bridges, routers, hubs, facsimile machines, teleprinters and other line equipment;
- parts and components—printed circuit boards, integrated circuits, transformers and semi-conductors; and
- consumables—storage media such as floppy disks, compact disks (CDs), magnetic tape, toner and cartridges.

Income from the sale and licensing of packaged software

This item includes income from the sale of these goods, either developed in Australia by the business or purchased for resale or both. It includes income from packaged software used for business applications, communication, games and recreation, education, training and other purpose built software.

Information technology and telecommunications (IT&T)

Information technology and telecommunications (IT&T) refers to the services and technologies that enable information to be accessed, stored, processed, transformed, manipulated and disseminated, including the transmission or communication of voice and/or data over a variety of transmission media. Transmission media include telephone, facsimile, Internet data lines, satellite, microwave, radio, etc.

Insurance premiums

This item refers to expenses incurred by a business in respect of different types of insurance policies but excluding workers' compensation and compulsory third party motor vehicle insurance.

Interest expenses

This includes interest on bank loans, interest on loans made to the business from related and unrelated businesses, interest in respect of finance leases, interest paid on loans from partners, and interest equivalents such as hedging costs and expenses associated with discounted bills.

Internet service providers (ISPs)

Businesses which provide access to the Internet or World Wide Web, to other ISPs, businesses or to the public. Typical services provided by these businesses include dial up Internet access, permanent connection, virtual web and web hosting, domain name hosting, web page design and other Internet services.

IT&T goods and services

IT&T goods and services are defined to include:

- computer hardware, communications hardware, parts, components and consumables;
- packaged and customised software;
- computer and data processing services;
- information storage and retrieval services;
- installation and cabling services;
- hardware and software maintenance services;
- computer consultancy services such as hardware and software appraisal, facilities management, network management, etc.; and
- telecommunication services such as Internet services, data services, telephony and mobile phone services.

IT&T income

This item includes income from the manufacture and wholesale of IT&T goods, and income from the supply of services related to the IT&T industry.

IT&T specialists

This item refers to those businesses whose IT&T income (as defined above) is 50% or more of the total income of the business.

Labour costs

These include wages and salaries, provision expenses for employee entitlements, employer contributions to superannuation, and workers' compensation costs.

Licensed carriers

Businesses which provide a wide range of value added telecommunication services operating under the *Telecommunication Act 1991*. These organisations are licensed to own and build network infrastructure within Australia and have a Telecommunications Licence.

Operating profit before tax

(OPBT)

This is a measure of profit before extraordinary items are brought to account and prior to the deduction of income tax and appropriations to owners, e.g. dividends paid.

Operating profit margin

This is the percentage of sales of goods and services available as operating profit before tax i.e. OPBT times 100 divided by sales of goods and services.

Other businesses

These are businesses whose majority income (i.e. 50% or more) is earned from the sale of non-IT&T goods and/or services.

Other payments for IT&T

services

This includes payments for network interconnection and transmission expenses, telephone, facsimile, Internet access and usage, commission and rebate expenses.

Part-time employees

Part-time employees are those who work less than 35 hours per week.

Payments to subcontractors and consultants for computing and communications services

These are payments to subcontractors and consultants for computer and communication services and related to work. Payments to subcontractors for non-computing work (e.g. cleaning services) are not included.

Purchases

This item includes purchases of computer and communications hardware components and consumables, packaged software and software licences as well as items such as materials, components, parts, containers and packaging materials.

Rent, leasing and hiring

expenses

This item includes expenses incurred from the rental of land, buildings and other structures, motor vehicles and equipment used by the business.

Total expenses

The sum of all expense items. This includes labour costs, purchases of goods and materials, rent, leasing and hiring expenses, royalties expenses, telecommunication services, repair and maintenance, advertising expenses and

any other operating expenses incurred.

Total income

The sum of all income items. This includes IT&T income, rent, leasing and hiring income, funding from government, interest income and other operating and non-operating income.

Unspecified

This represents uncategorised income which cannot be attributed to any of the components under the relevant heading in the table.

Wages and salaries

This item includes severance, termination and redundancy payments, and provision expenses for employee entitlements. It excludes payments to subcontractors and consultants, and drawings of working proprietors and partners of unincorporated businesses.

Working proprietors and partners of unincorporated businesses

This item includes working proprietors and partners who own/operate their own business in a profession or trade (a sole proprietorship) or, along with one or more other partners, operate a partnership. Working proprietors and working partners as owners are not considered to be employees of the business.

Workers' compensation costs

These include insurance premiums/levies and non-payroll costs incurred by a business and not reimbursed by an insurance company.

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