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Australian Sea Freight
2003-2004
Information Paper 56

FOREWORD

This is the latest in a series of Bureau of Transport and Regional Economics (BTRE) papers that provide information on Australian sea freight movements between, to and from Australian ports. This paper covers all sea freight activity around Australia during 2002–2003. Previous Information Papers in this series are available at http://www.btre.gov.au/index.aspx under Publications, Information Papers.

Mark Cregan and Stephen Wheatstone compiled the data and tables in this publication, Stephen Wheatstone was the project manager.

As the BTRE intends to continue to produce annual updates of this publication to meet the needs of users, comments would be greatly appreciated.

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SCOPE AND COVERAGE

This edition of *Australian Sea Freight*, 2003–2004 is an update of *Australian Sea Freight, 2002–2003* (Information paper 53). The paper is set out in six chapters.

- Chapter 1 is a summary chapter.

- Chapter 2 covers international sea freight into and out of Australia.

- Chapter 3 contains details of interstate and intrastate cargo loaded and discharged at Australian ports for the financial year *2002–2003*. It excludes some trade from small craft at isolated locations in northern and western regions of Australia. Cargo loaded or discharged at Christmas Island, the Cocos (Keeling) Islands and Norfolk Island is also excluded.

- Chapter 4 covers single and continuing voyage permits.

- Chapter 5 covers information about ship and cargo movements through Australian ports.

- Chapter 6 covers details of the Australian trading fleet as at 30 June 2004.

CHAPTER 1:   OVERVIEW

In 2003−2004, 730.7 million tonnes of cargo moved across Australian wharves. This represented a 2.6 per cent increase over 2002-2003. 76.4 per cent of this cargo was international exports, 8.8 per cent international imports, 7.4 per cent was coastal cargo loaded and 7.4 per cent was coastal cargo discharged.

INTERNATIONAL FREIGHT

In 2003−2004, 622.5 million tonnes of international cargo moved across Australian wharves (Table 1.1). This represents a 5.5 per cent increase in exports and a 3.2 per cent increase in imports by weight. However, in terms of value there was a 4.4 per cent decrease in exports, and a 1.6 per cent decrease in imports.

TABLE 1.1:   INTERNATIONAL SEA FREIGHT, 1994−1995 TO 2003−2004

Year	Value ($billion)			Weight (million tonnes)		
	Exports	Imports	Total	Exports	Imports	Total
1994–1995	53.0	54.5	107.6	362.4	45.9	408.3
1995–1996	60.0	55.8	115.8	372.9	47.1	420.0
1996–1997	63.4	56.9	120.4	404.0	49.8	453.8
1997–1998	69.6	64.1	133.7	427.1	51.9	479.0
1998–1999	68.2	68.5	136.7	431.8	56.3	488.1
1999–2000	78.2	76.5	154.6	462.0	56.7	518.7
2000–2001	99.4	83.0	182.3	495.0	55.0	550.0
2001–2002	99.5	85.2	184.7	501.0	57.8	558.7
2002–2003	93.4	94.9	188.4	529.4	62.2	591.6
2003–2004	89.3	93.5	182.8	558.3	64.2	622.5

Source: ABS, International Cargo Statistics, unpublished

COASTAL FREIGHT

In 2003−2004, 108.3 million tonnes of coastal cargo was handled through Australian ports. This made up 14.8 per cent of all cargo moved across Australian wharves. Of this amount, 53.2 million tonnes of coastal cargo was loaded and 55.1 million tonnes was discharged, as illustrated in Table 1.2. The reasons for the discrepancy between loaded and discharged is due primarily to ships in transit at the start and end of the year. For further information, see the section on statistical issues at the end of the paper.

TABLE 1.2:   AUSTRALIAN COASTAL FREIGHT SUMMARY, 1994–1995 TO 2003–2004

Year	Loaded (million tonnes)			Discharged (million tonnes)		
	Interstate	Intrastate	Total	Interstate	Intrastate	Total
1994–1995	33.692	15.498	49.190	34.180	16.286	50.466
1995–1996	31.982	15.815	47.797	31.808	16.229	48.037
1996–1997	32.581	16.562	49.143	32.505	17.530	50.035
1997–1998	34.322	18.200	52.522	34.741	18.968	53.709
1998–1999	31.934	16.454	48.388	31.047	17.053	48.100
1999–2000	32.743	18.582	51.325	32.359	18.369	50.728
2000–2001	33.216	18.786	52.003	32.783	18.692	51.475
2001–2002	32.484	19.949	52.432	33.183	19.652	52.835
2002–2003	34.274	18.551	52.825	34.993	18.507	53.501
2003–2004	34.801	18.393	53.194	35.454	19.637	55.091

Source: BTRE, Domestic sea freight collection——survey of Australian port authorities, unpublished

Coastal cargo tonnages are up by nearly 1.8 per cent overall or 0.7 per cent for loaded cargo and 3.0 per cent for discharged cargo. In terms of task performed, based on cargo loaded, the Australian coastal fleet performed 117.5 billion tonne kilometres, which is up 2.3 per cent on the previous year.

In 2003–2004, 12.2 million tonnes of freight was estimated to have moved around the Australian coast (Table 1.3) using SVPs and CVPs[1], down from 12.3 million tonnes in 2002–2003. Overall coastal permits carried 22.1 per cent of the loaded coastal task.

TABLE 1.3:   SUMMARY OF VOYAGE PERMITS USED, 2003–2004

Permit type	No of voyages	Tonnes carried	TEUs Carried
SVP	681	10 430 190	7 908
CVP	350	1 755 127	38 810
Total	1 031	12 185 318	46 718

Source: Department of Transport and Regional Services (DOTARS), SVP and CVP Registers, unpublished

AUSTRALIAN PORT ACTIVITY

In 2002-2003 there was an increase in the number of international trading ships entering Australia, the number of international voyages that trading ships made to Australia and the number of ports they visited (Table 1.4).

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[1]   Note that information provided in this paper on voyage permits is different from that appearing in the BTRE's *Waterline* series. Figures in *Waterline* report tonnes as specified on the permits when issued, while in this paper the figures reported are in actual tonnes and TEUs, as notified by the permit holders after they have used the permit. In addition, *Waterline* reports on numbers of permits issued within a given period, whereas this paper reports on cargo carried subject to the actual CVP or SVP sail date where it falls within that period.

TABLE 1.4:   SUMMARY OF AUSTRALIAN PORT VISITS [a,]
1996–1997 TO 2003–2004

Year	Number of ships entering Australia from overseas [b]	Number of voyages into Australia from overseas [b]	Number of ship calls at Australian ports (includes coastal) [c]
1996–1997	2 870	8 138	18 643
1997–1998	3 239	9 706	20 322
1998–1999	3 187	9 744	20 899
1999–2000	3 165	9 893	21 683
2000–2001	3 162	9 738	21 542
2001–2002	3 103	8 779	21 358
2002–2003	3 140	8 935	23 454
2003–2004	3 363	9 261	23 436

a.   Standard visits, as defined by Lloyd's Marine Information Unit
b.   Excludes ships that do not leave the Australian coast
c.   Ship calls includes ships coasting around Australia
Note   A ship which sails to Australia 3 times and makes a total of 15 port calls in Australia in a year, counts as 1 ship, 3 voyages and 15 ship calls or visits.
Source: Lloyd's Marine Information Unit, Lloyd's Voyage Record, unpublished.

In 2003–2004 the number of international voyages increased by 3.6 per cent, while ship calls were stable. In line with an increase in ship activity, the amount of cargo that moved across Australian wharves increased by 2.6 per cent making 2003–2004 the busiest period yet recorded.

AUSTRALIAN FLEET

The Australian merchant fleet increased in size in 2003–2004, in terms of gross tonnage, but decreased in deadweight (Table 1.5). In terms of ship numbers, the number of ships in the Australian trading fleet increased by 8 to 82 vessels.

TABLE 1.5:   AUSTRALIAN TRADING SUMMARY, 1994 TO 2004

Year as at 30 June	Number of ships	Deadweight (tonnes)	Gross Tonnage (tons)
1994	90	3 499 527	2 414 844
1995	85	3 203 623	2 298 894
1996	82	3 303 294	2 267 719
1997	76	3 164 568	2 238 141
1999	77	2 505 369	1 864 976
2000	77	2 283 336	1 729 770
2001	81	2 323 983	1 764 298
2002	77	2 028 637	1 587 743
2003	74	2 135 982	1 628 203
2004	82	2 052 795	1 643 709

Note: Data for 1998 was not collected.
Sources: Department of Transport and Regional Services—personal communications; Lloyd's Maritime
           Information Unit, Lloyd's Voyage Record, unpublished; Lloyd's Register Fairplay, World
           Shipping Directory 2004-2005; AMSA, List of Ships Registered, 2004 and 2005,
           http://www.amsa.gov.au/Shipping_Registration/List_of_Registered_Ships/;
           Shipping, companies (various)—personal communications.

CHAPTER 2: INTERNATIONAL SEA FREIGHT

In 2003–2004 international sea freight to/from Australia decreased by 3.0 per cent by value, and increased 5.2 per cent by weight compared to 2002–2003[2]. The international sea freight task for exports in the same period was dominated by a noticeable drop in the value of exports, which decreased by 4.4 per cent, while the weight increased by 5.5 per cent. International sea imports decreased by 1.6 per cent by value and increased by 3.2 per cent by weight.

The largest exporting state (by weight and value) continues to be Western Australia (Table 2.1), with New South Wales emerging as the largest importing state by weight and value. Queensland is now the second largest importing state by weight while Victoria remains the second largest importing state by value.

TABLE 2.1:   INTERNATIONAL SEA FREIGHT BY AUSTRALIAN STATE OF ORIGIN / FINAL DESTINATION, 2003–2004

State	Value ($'000s)		Tonnes	
	Imports	**Exports**	**Imports**	**Exports**
New South Wales	32 546 488	15 900 578	16 801 036	95 946 678
Victoria	31 828 906	15 151 715	15 471 074	13 852 753
Queensland	14 774 334	19 274 183	16 578 894	155 627 242
South Australia	4 548 014	6 815 959	2 658 281	9 177 298
Western Australia	8 351 206	25 123 723	10 450 495	267 110 707
Tasmania	503 318	2 005 134	672 133	7 691 137
Northern Territory	912 884	1 684 961	1 549 816	6 884 816
ACT	2 089	319	71	15
State Confidential	0	343 575	197	1 443 040
Foreign Origin		3 003 298		562 121
Total	93 467 240	89 303 445	64 181 995	558 295 807

Note   Where cells are blank it means no data was recorded for this category, while cells that are listed as 0 means that data was recorded but rounded to zero.
Source: ABS, International Cargo Statistics, unpublished

AUSTRALIAN PORTS

In terms of Australian port of loading/unloading (Table 2.2), very little has changed since 1999–2000[3] with Sydney continuing to be the largest importer by weight and

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[2]   BTRE 2005a, *Australian Sea Freight 2002–2003*, Information paper 53, Canberra

[3]   BTRE 2002, *Australian Sea Freight 1999–2000*, Information paper 47, Canberra

value, and Melbourne being the largest exporter by value and Dampier the largest exporter by weight.

TABLE 2.2: INTERNATIONAL SEA FREIGHT LOADED AND DISCHARGED BY AUSTRALIAN PORTS, 2003–2004

Australian port	Value ($'000s)		Tonnes	
	Imports	Exports	Imports	Exports
Abbot Point	0	536 368	0	11 791 826
Adelaide	2 359 946	4 749 632	1 940 123	3 734 715
Albany	39 028	570 583	159 638	2 697 009
Brisbane	12 690 919	7 614 644	10 087 420	8 404 906
Broome	1 156	72 319	9 520	113 063
Bunbury	107 078	2 237 682	953 935	9 260 343
Bundaberg	829	40 399	5 061	154 139
Burnie	79 134	225 779	198 149	1 668 921
Cairns	166 618	528 439	344 147	2 654 794
Cape Cuvier	0	37 590	0	2 269 806
Carnarvon	0	3 728	0	179 405
Coffs Harbour	549	14	290	16
Confidential Australian Ports	0	343 575	197	1 443 040
Confidential NT Ports	172 982	732 436	932 940	5 074 404
Dampier	267 769	8 369 114	390 871	100 213 978
Darwin	721 264	796 386	582 884	296 973
Derby	0	38 677	0	94 586
Devonport	14 285	5 177	55 322	5 694
Edithburg	0	146 253	0	644 119
Esperance	132 073	1 095 151	300 245	6 801 116
Fremantle/Perth	7 755 995	7 864 650	8 356 389	11 093 169
Geelong	1 959 173	638 147	5 375 861	2 650 883
Geraldton	48 705	1 081 363	184 539	3 957 609
Gladstone	222 598	3 551 123	1 078 649	44 623 143
Grafton	26	11 309	2	10 764
Hay Point	0	4 511 741	0	77 962 368

TABLE 2.2: INTERNATIONAL SEA FREIGHT LOADED AND DISCHARGED BY AUSTRALIAN PORTS, 2003–2004 (continued)

Australian port	Value ($'000s)		Tonnes	
	Imports	Exports	Imports	Exports
Hobart	33 641	306 334	136 687	785 941
Innisfail	0	51 951	0	271 767
Karumba	2 197	364 861	298	843 236
Launceston	178 616	864 054	237 859	3 358 351
Lucinda	0	98 226	0	428 553
Mackay	83 290	217 853	282 120	879 155
Melbourne	31 975 172	16 978 923	9 825 768	8 776 828
Newcastle	385 330	4 422 412	973 443	79 340 601
Other Ports NSW	1 811	1 920	15	182
Other Ports NT	0	66 853	0	266 442
Other Ports Qld	0	26	0	0
Other Ports SA	95	13 693	356	87 103
Other Ports Tas	0	8	0	0
Other Ports Vic	0	19	0	1
Other Ports WA	0	560	0	631
Port Bonython	0	193 463	0	463 095
Port Hedland	132 899	2 543 741	226 285	85 034 467
Port Kembla	236 740	1 830 785	2 204 234	10 366 888
Port Latta	0	43 406	0	906 721
Port Lincoln	37 978	501 814	114 391	1 881 610
Port Pirie	4 294	132 002	6 041	430 704
Port Walcott	9 364	926 298	24 567	43 872 829
Portland	109 392	1 064 665	453 831	2 533 327
Rockhampton	211	68 419	9	42 766
Spring Bay	0	10 099	0	126 692
Stanley	0	48 292	0	573 125
Sydney	32 570 827	8 673 760	13 703 790	4 337 723
Thevenard	0	40 177	0	502 735
Thursday Island	731	314	106	36

TABLE 2.2: INTERNATIONAL SEA FREIGHT LOADED AND DISCHARGED BY AUSTRALIAN PORTS, 2002–2004 (continued)

Australian port	Value ($'000s)		Tonnes	
	Imports	Exports	Imports	Exports
Townsville	663 574	2 460 963	4 468 833	4 032 598
Twofold Bay	23	61 624	40	769 804
Useless Loop	0	17 965	0	1 085 712
Wallaroo	3 527	121 165	16 002	508 443
Weipa	20 571	86 282	60 281	3 746 709
Westernport	259 772	629 598	323 227	1 548 808
Whyalla	2 966	50 625	132 908	662 863
Wyndham	14 093	594 278	34 722	1 532 651
Yampi Sound	0	13 738	0	495 923
Total	93 467 240	89 303 445	64 181 995	558 295 807

Note   *Where cells are blank it means no data was recorded for this category, while cells that are listed as 0 means that data was recorded but rounded to zero.*
Source: *ABS, International Cargo Statistics, unpublished*

INTERNATIONAL TRADING PARTNERS BY REGION

In terms of region of origin of Australian imports, Europe maintains its place as our largest supplier by value, followed by Japan / North Asia and South East Asia. South East Asia also dominated our imports in terms of weight (Table 2.3). Figure 2.1 shows this information for value by region of loading/unloading, but it also reflects Australia's trading patterns, which continue to be dominated by the Asia Pacific nations. In terms of exports, Japan/North Asia was Australia's largest export market by both weight (286.5 million tonnes) and value (AU$26.0 billion), followed by East Asia and South East Asia (3rd in value, 4th in weight).

INTERNATIONAL FREIGHT BY REGION OF LOADING

Not surprisingly, the situation does not change when we examine Australian sea trade in terms of region of origin/final destination, by weight and value. The same patterns are present, with Europe dominating as the source of Australian imports by value, South East Asia by weight (Table 2.4 and Figure 2.2) and Japan/North Asia dominating as the destination for exports by weight and value.

The difference between Table 2.3 and Table 2.4 is that:

- Table 2.3 shows where the goods are transshipped or loaded/discharged, which may not be the same region of origin/final destination, while

- Table 2.4 shows the region of origin or final destination

- The primary difference the tables is that tonnages and revenue data for South East Asia tend to be higher for the region of loading / unloading, since goods transshipped in Singapore/Malaysia are on shipped to/from other regions such as Europe and East Asia. These differences although not large are growing when compared to difference in earlier tables reported in BTRE 2004 and 2001.

TABLE 2.3:   INTERNATIONAL FREIGHT BY REGION OF LOADING / UNLOADING, 2003–2004

Region of loading / unloading	Value ($'000s)		Tonnes	
	Imports	Exports	Imports	Exports
Africa	1 263 565	2 075 728	936 065	5 920 288
East Asia	16 230 647	14 988 901	7 050 614	124 337 914
Europe	20 559 517	8 496 300	3 980 599	57 024 876
Japan & North Asia	17 349 746	26 004 000	6 324 982	286 454 622
Middle East	2 251 331	4 108 845	6 435 402	13 092 027
New Zealand	4 211 464	5 796 886	2 609 700	5 167 571
North & Central America	12 084 129	9 159 493	6 497 212	12 451 381
Pacific Islands and PNG	718 803	1 730 929	3 115 682	2 085 103
Rest of world	13 431	364 585	86 713	1 449 546
South America	773 724	704 378	1 151 987	8 969 795
South East Asia	17 060 927	13 562 885	25 459 815	22 256 730
South Asia	949 956	2 310 515	533 225	19 085 953
Total	93 467 240	89 303 445	64 181 995	558 295 807

Source: ABS, International Cargo Statistics, unpublished.

FIGURE 2.1: INTERNATIONAL FREIGHT BY REGION OF LOADING / UNLOADING, 2003–2004, ($billion)

Europe 20.56 bn
Mid East 2.25 bn
Sth Asia 0.95 bn
East Asia 16.23 bn
Nth Asia & Japan 17.35 bn
North & Central America 12.08 bn
SE Asia 17.06 bn
Pacific & PNG 0.72 bn
Africa 1.26 bn
Rest of world 0.01 bn
South America 0.77 bn
New Zealand 4.21 bn

Imports

Europe 8.50 bn
Mid East 4.11 bn
Sth Asia 2.31 bn
East Asia 14.99 bn
Nth Asia & Japan 26.0 bn
North & Central America 9.16 bn
SE Asia 13.56 bn
Pacific & PNG 1.73 bn
Africa 2.08 bn
Rest of world 0.36 bn
South America 0.70 bn
New Zealand 5.80 bn

Exports

Source: ABS, International Cargo Statistics, unpublished

FIGURE 2.2: INTERNATIONAL FREIGHT BY REGION OF ORIGIN / FINAL DESTINATION, 2003–2004, ($billion)

Europe 21.06 bn
Mid East 2.17 bn
Sth Asia 1.00 bn
East Asia 16.25 bn
Nth Asia & Japan 17.63 bn
North & Central America 12.35 bn
Pacific & PNG 0.66 bn
SE Asia 15.68 bn
Africa 1.29 bn
Rest of world 0.53 bn
South America 0.89 bn
New Zealand 3.94 bn

Imports

Europe 9.01 bn
Mid East 5.03 bn
Sth Asia 2.71 bn
East Asia 15.56 bn
Nth Asia & Japan 26.20 bn
North & Central America 9.66 bn
Pacific & PNG 1.74 bn
SE Asia 9.41 bn
Africa 2.81 bn
Rest of world 0.71 bn
South America 0.78 bn
New Zealand 5.70 bn
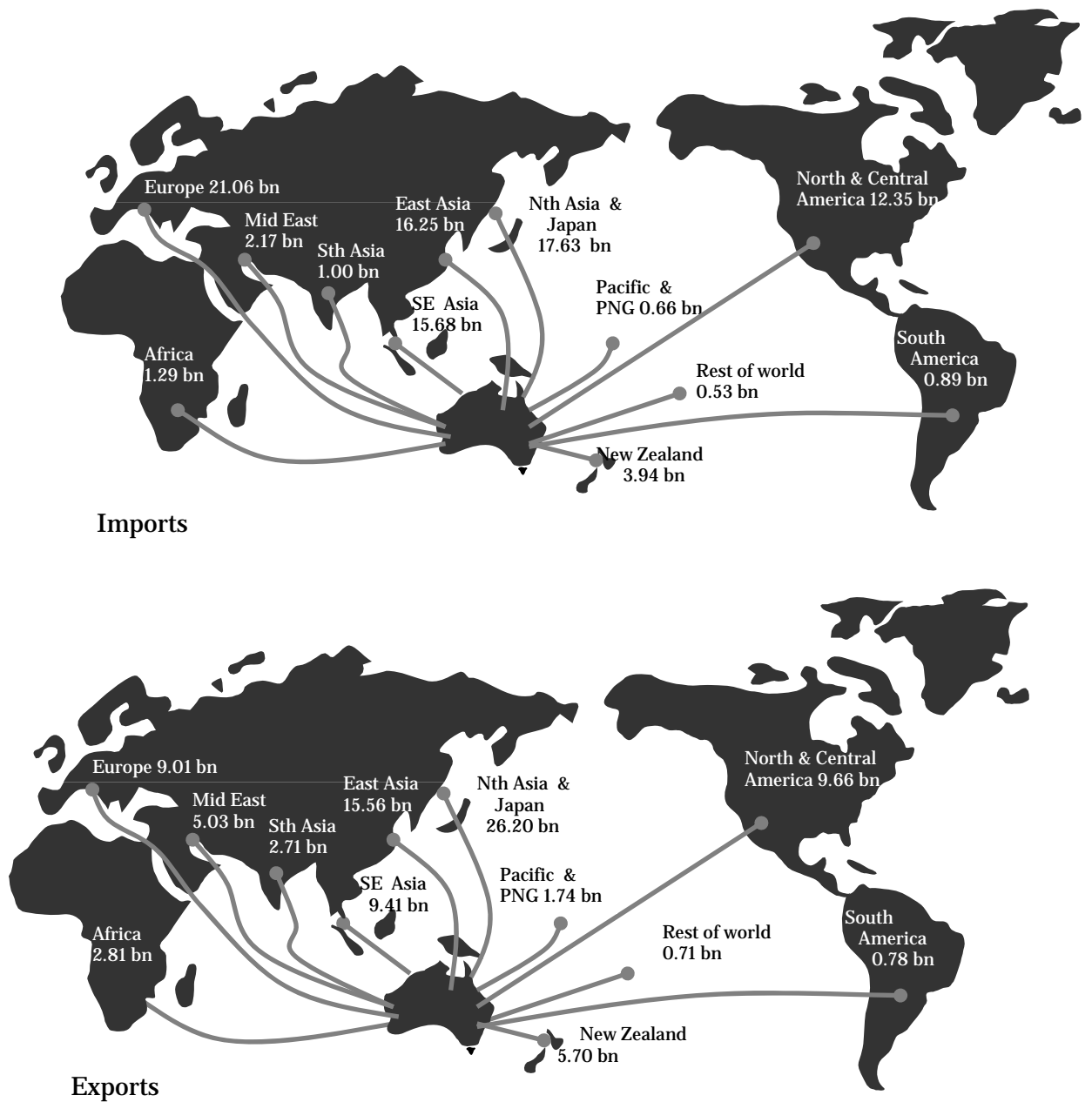
Exports

Source: ABS, International Cargo Statistics, unpublished

**TABLE 2.4:   INTERNATIONAL FREIGHT BY REGION OF ORIGIN /
FINAL DESTINATION, 2003–2004**

	Value ($'000s)		Tonnes	
Region of origin/ final destination	**Imports**	**Exports**	**Imports**	**Exports**
Africa	1 288 857	2 805 519	1 000 891	8 719 227
East Asia	16 254 418	15 555 823	7 023 226	124 661 005
Europe	21 058 397	9 008 567	4 025 400	57 344 432
Japan & North Asia	17 634 592	26 196 368	6 514 380	286 835 942
Middle East	2 173 454	5 030 280	6 404 619	10 625 599
New Zealand	3 940 880	5 695 779	2 565 809	5 141 065
North & Central America	12 354 665	9 657 687	6 505 516	12 210 622
Pacific Islands and PNG	660 626	1 736 485	3 098 401	2 097 758
Rest of world	528 285	711 831	259 917	1 630 592
South America	894 796	783 450	1 194 497	9 104 167
South East Asia	15 678 251	9 412 238	25 042 535	20 558 188
South Asia	1 000 020	2 709 418	546 804	19 367 208
Total	93 467 240	89 303 445	64 181 995	558 295 807

Source: ABS, International Cargo Statistics, unpublished

COMMODITIES

Australia's leading commodity export by value is coal, followed by confidential items, meat and meat preparations, transport equipment, iron ore and concentrates, cereals and petroleum products (Table 2.5). By weight, exports of coal and iron ore dominate. The major import commodity by value is machinery followed by road vehicles, and by weight, petroleum oils, petroleum products, iron ore and concentrates, and chemicals.

**TABLE 2.5:   INTERNATIONAL FREIGHT BY COMMODITY,
2003–2004**

	Value ($'000s)		Tonnes	
Commodity	**Imports**	**Exports**	**Imports**	**Exports**
Ale, beer and stout, cider (alcoholic)	92 086	60 177	109 949	65 816
Aluminium and aluminium alloys	498 387	3 802 647	138 767	1 658 875
Aluminium ores and concentrates; alumina	10 024	3 720 517	18 260	14 033 767
Apparel and clothing access	2 542 678	154 824	216 800	17 037
Cereals and cereal preparations	347 888	5 086 514	237 431	20 745 541
Chemicals	3 972 692	2 304 588	4 600 137	1 297 775
Coal, coke and briquettes	14 079	11 002 685	81 633	220 059 084

TABLE 2.5:   INTERNATIONAL FREIGHT BY COMMODITY, 2003–2004 (continued)

Commodity	Value ($'000s)		Tonnes	
	Imports	Exports	Imports	Exports
Coffee, tea, cocoa, spices etc	477 870	62 335	142 147	12 039
Confidential	1 182 578	6 149 020	359 865	15 547 888
Copper and copper alloys	215 344	1 278 408	53 423	399 059
Copper ores and concentrates	16 408	1 247 328	12 767	1 353 956
Cork and wood	596 386	985 228	574 459	11 590 724
Cork and wood manufactures (excludes furniture)	640 985	212 586	355 271	363 263
Cotton	555	984 772	157	465 129
Crude animal and vegetable materials nes	158 772	184 716	71 187	60 644
Crude minerals	144 457	421 372	1 585 347	15 254 191
Crude rubber (including synthetic)	126 700	15 758	76 908	9 474
Dairy products and birds eggs	291 851	2 105 554	88 007	870 246
Feeding stuff for animals	258 562	816 703	432 062	1 743 738
Fertilisers	789 076	144 670	3 693 522	426 071
Fish, crustaceans, molluscs etc	854 116	692 608	199 445	44 833
Footwear	778 661	26 217	67 661	2 324
Gases, natural and manufactured nes	426	267	167	78
Iron and steel	1 970 411	932 564	2 031 363	2 524 197
Iron ore and concentrates	139 801	5 267 323	4 918 036	207 903 131
Lead and lead alloys	3 807	340 876	2 433	346 816
Lead and zinc ores and concentrates	53 906	1 062 503	157 907	2 397 800
Leather, leather manufactures nes	115 152	555 101	6 944	158 170
Liquefied natural gas	6	2 174 269		
Liquefied petroleum gas (LPG)	166 152	648 033	399 650	1 572 907
Live animals	1 083	725 477	372	419 683
Machinery	22 212 249	3 375 858	1 949 822	300 432
Manufactures of metal nes	2 705 796	599 103	759 853	245 574
Meat and meat preparations	251 189	5 475 889	69 347	1 389 752
Mineral sands	16 361	183 732	33 008	1 005 494

TABLE 2.5: INTERNATIONAL FREIGHT BY COMMODITY, 2003–2004 (continued)

Commodity	Value ($'000s)		Tonnes	
	Imports	Exports	Imports	Exports
Miscellaneous	19 254	37 826	10 413	1 522
Miscellaneous manufactured articles	8 343 949	1 486 174	1 525 046	173 946
Nickel and nickel alloys	23 798	474 749	1 536	28 267
Non-alcoholic beverages nes	102 703	24 031	84 912	23 486
Non-metallic mineral manufactures nes	1 536 974	310 581	2 578 351	553 864
Oil seeds and oleaginous fruits	77 284	550 337	129 020	1 250 084
Oils and fats	360 985	354 777	297 423	501 725
Organic chemicals	1 511 609	91 372	869 204	71 907
Other metalliferous ores and metal scrap	44 815	2 536 760	57 379	9 338 353
Other non-ferrous metals nes	69 473	271 618	11 779	18 925
Other textile fibres	92 201	47 055	57 333	37 720
Paper, paperboard and articles	2 422 025	756 037	1 826 116	1 013 671
Petroleum oil	6 873 395	4 727 750	20 783 873	12 722 367
Petroleum oils and refined products	3 042 469	1 221 768	7 982 814	2 912 556
Plastics	1 916 064	362 107	895 390	177 583
Pulp and waste paper	241 564	53 959	388 055	364 583
Road vehicles and transport equipment	18 397 633	4 312 896	1 324 029	378 470
Rubber manufactures nes	1 585 728	118 509	379 052	26 563
Spirits (potable), alcoholic beverages nes	376 641	52 336	86 144	57 314
Sugars, sugar preparations and honey	169 742	177 704	81 514	508 975
Textile yarn, fabrics, and articles article	2 097 591	336 866	377 145	44 288
Tobacco and tobacco manufactures	170 631	514 948	21 035	309 282
Uranium and thorium ores and concentrates	0	364 455	0	9 689
Vegetables and fruit	937 927	1 125 621	667 736	1 356 643
Wine and vermouth	153 276	2 486 163	33 838	1 101 446
Wool, sheep and lambs	57 388	2 470 342	12 348	401 118
Zinc and zinc alloys	9 049	569 222	4 782	404 907
Total	93 467 240	89 303 445	64 181 995	558 295 807

nes   *not elsewhere specified.*
Notes: *1. Confidential items may only be confidential for weight or value or both, eg Liquefied natural gas is confidential by weight but not value.*
        2. Where cells are blank it means no data was recorded for this category, while cells that are listed as 0 means that data was recorded but rounded to zero.
Source: *ABS, International Cargo Statistics, unpublished.*

INTERNATIONAL TRADING PARTNERS BY COUNTRY

Japan is Australia's largest trading partner for sea freight imports and exports by value followed by China and the United States of America. Over the last few years, while maritime trade with China has been growing, trade with the USA has been decreasing[4]. Our near neighbours, New Zealand (5th imports and exports), Indonesia (12th imports and 7th exports) and Papua New Guinea (33rd on imports and 22nd on exports), which is included in the Rest of the World, remain important as trading partners for Australia.

TABLE 2.6: TOP TWENTY TRADING PARTNERS BY SEA, 2003–2004

Imports			Exports			Rank
Country of origin	Value ($'000s)	Tonnes	Country of final destination	Value ($'000s)	Tonnes	
Japan	14 241 323	4 218 680	Japan	18 987 289	219 037 990	1
China (including Hong Kong and Macau)	13 400 490	4 512 934	China (including Hong Kong and Macau)	11 410 669	93 773 928	2
USA	10 672 346	4 353 499	USA	7 550 217	6 078 941	3
Germany	5 975 558	814 831	Korea, Republic of	7 063 186	67 502 321	4
New Zealand	3 940 880	2 565 809	New Zealand	5 695 779	5 141 065	5
Singapore	3 706 241	6 371 976	Taiwan	3 330 327	29 508 772	6
Malaysia	3 547 151	4 816 202	Indonesia	2 904 196	7 434 235	7
Korea, Republic of	3 341 926	2 152 496	United Kingdom	2 289 077	12 533 741	8
Thailand	3 130 326	1 502 148	Singapore	2 128 011	3 752 222	9
Italy	3 005 747	713 525	Saudi Arabia	1 967 149	2 917 952	10
United Kingdom	2 957 766	393 307	Malaysia	1 963 234	6 119 042	11
Indonesia	2 790 719	5 892 128	Thailand	1 870 886	2 341 443	12
Taiwan	2 426 862	1 689 446	India	1 852 905	16 698 311	13
Vietnam	1 993 830	4 991 497	Canada	1 609 140	2 985 700	14
France	1 870 140	295 171	Italy	1 330 657	6 822 289	15
Canada	1 292 090	2 033 940	South Africa	1 278 121	3 558 505	16
South Africa	1 089 085	457 632	Netherlands	1 162 304	11 008 622	17
Sweden	988 092	179 729	United Arab Emirates	1 097 405	1 820 163	18
Belgium	926 679	247 573	Philippines	799 120	1 376 174	19
Spain	914 078	266 120	France	734 410	8 183 059	20
Rest of World	11 255 911	15 713 351	Rest of word	12 279 364	49 701 332	
Total	93 467 240	64 181 995	Total	89 303 445	558 295 807	

Source: ABS, International Cargo Statistics, unpublished.

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[4]   Compared to BTRE 2002, *Australian Sea Freight 1999-2000*, Information paper 47, Canberra

LINER TRADE

In 2003–2004, freight carried by the Australian liner trade[5] was valued at $119.4 billion (Table 2.7). Europe was the largest source of imports by value, while East Asia was the largest source of imports by weight. Japan/North Asia, East Asia, Europe, North and Central America, and South East Asia were our largest markets for liner exports, Figure 2.3.

TABLE 2.7: INTERNATIONAL LINER TRADE BY REGION, 2003–2004

Region of origin / final destination	Value ($'000s)		Tonnes	
	Imports	Exports	Imports	Exports
Africa	1 183 333	991 984	367 824	465 225
East Asia	15 255 748	7 528 050	3 911 084	4 082 235
Europe	20 155 439	5 270 281	3 704 626	1 713 786
Japan & North Asia	15 701 133	8 254 427	2 089 989	4 022 719
Middle East	449 458	2 703 701	277 570	638 413
New Zealand	3 388 278	4 441 799	1 528 435	1 852 258
North & Central America	9 974 270	6 529 609	1 879 574	1 702 808
Pacific Islands and PNG	238 273	1 296 268	123 736	652 814
Rest of world	273 171	80 823	52 000	10 959
South America	657 950	197 091	294 484	80 518
South East Asia	7 895 567	5 036 059	3 117 857	3 282 362
South Asia	959 502	980 072	419 923	838 906
Total	76 132 121	43 310 165	17 767 103	19 343 003

Source: ABS, International Cargo Statistic, unpublished.

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[5] A liner or a liner ship is defined as a cargo carrying ship that provides carriage for cargo, in regularly scheduled services between specified ports. It does not include bulk cargo, or general cargo carried on charter services such as car carriers, or tramp shipping. It includes most containerised, ro-ro and general cargo freight shipping services.

FIGURE 2.3: INTERNATIONAL LINER FREIGHT EXPORTS AND IMPORTS BY REGION OF FINAL DESTINATION, 2003–2004, ($billion)

Europe 20.16 bn
Mid East 0.45 bn
Sth Asia 0.96 bn
East Asia 15.26 bn
Nth Asia & Japan 15.70 bn
North & Central America 9.97 bn
SE Asia 7.90 bn
Pacific & PNG 0.24 bn
Africa 1.18 bn
Rest of world 0.27 bn
South America 0.66 bn
New Zealand 3.39 bn

Imports

Europe 5.27 bn
Mid East 2.70 bn
Sth Asia 0.98 bn
East Asia 7.53 bn
Nth Asia & Japan 8.25 bn
North & Central America 6.53 bn
SE Asia 5.04 bn
Pacific & PNG 1.30 bn
Africa 0.99 bn
Rest of world 0.08 bn
South America 0.20 bn
New Zealand 4.44 bn

Exports

Source: ABS, International Cargo Statistics, unpublished

17
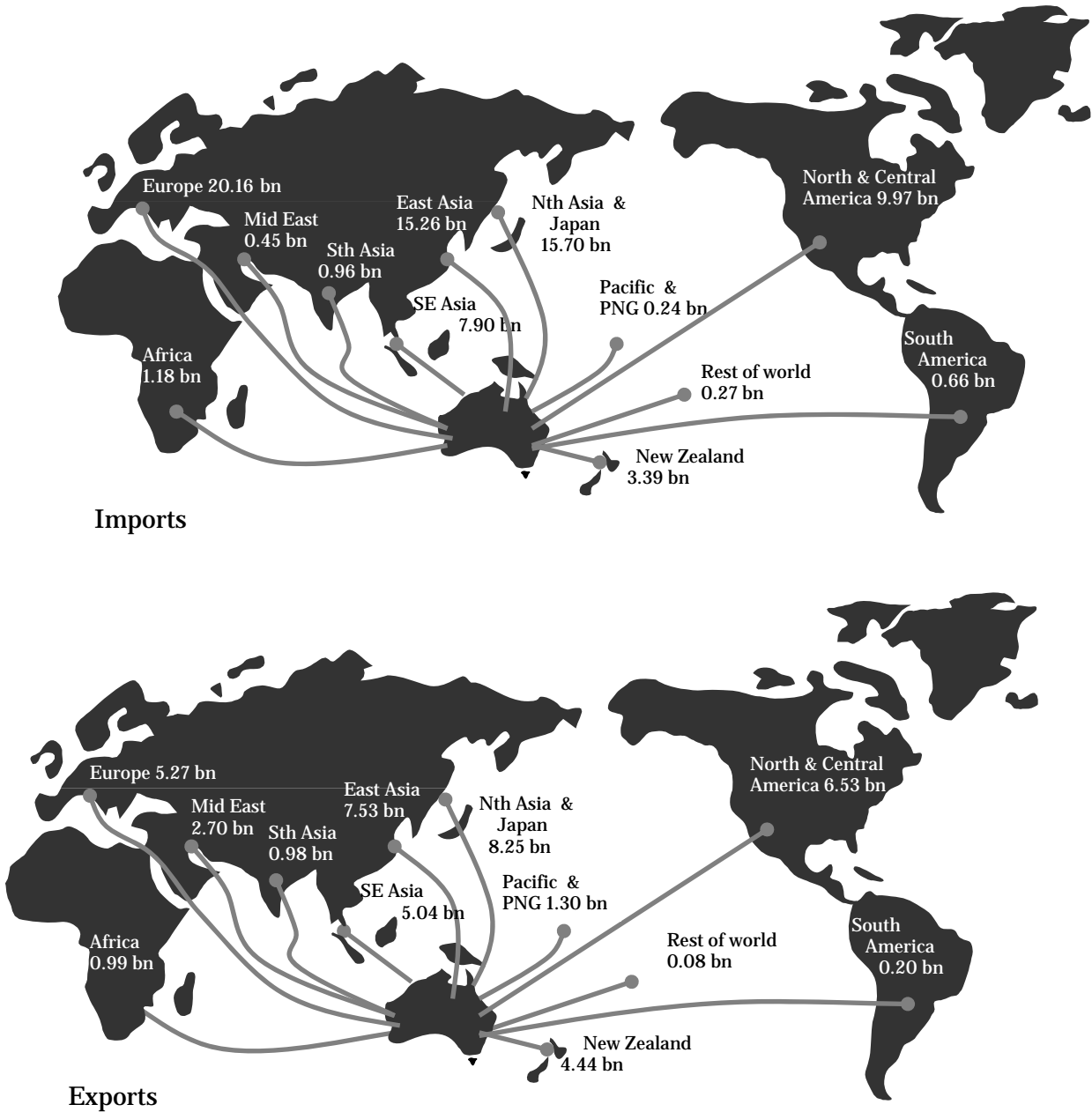
NON–LINER TRADE

Australian non–liner trade[6] in 2003–2004 was valued at $63.3 billion (Table 2.8). Value–wise, South East Asia was the largest source of imports ($7.8 billion). Figure 2,4 shows Japan / North Asia was our largest market for non–liner exports ($17.9 billion).

TABLE 2.8:   INTERNATIONAL NON–LINER TRADE BY REGION, 2003–2004

Region of origin / final destination	Value ($'000s)		Tonnes	
	Imports	Exports	Imports	Exports
Africa	105 525	1 813 534	633 067	8 254 002
East Asia	998 669	8 027 772	3 112 178	120 578 353
Europe	902 958	3 738 285	320 788	55 630 647
Japan & North Asia	1 933 458	17 941 941	4 424 349	282 813 223
Middle East	1 723 996	2 326 579	6 127 049	9 987 186
New Zealand	552 602	1 253 980	1 037 374	3 288 807
North & Central America	2 380 395	3 128 079	4 626 246	10 507 814
Pacific Islands and PNG	422 353	440 217	2 974 665	1 444 945
Rest of world	255 114	631 008	207 914	1 619 383
South America	236 846	586 359	899 968	9 023 649
South Asia	40 518	1 729 346	126 418	18 528 302
South East Asia	7 782 685	4 376 180	21 924 678	17 275 826
Total	17 335 119	45 993 280	46 414 693	538 952 138

Source: ABS, International Cargo Statistics, unpublished.

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[6]   Non–liner cargo consists of all dry and liquid bulk cargo, but also comprises cargo not shipped on regular liner services such as charters, dedicated car carriers and passenger ships.

**FIGURE 2.4:   INTERNATIONAL NON–LINER FREIGHT EXPORTS
AND IMPORTS BY REGION OF FINAL
DESTINATION, 2003–2004, (million tonnes)**

Europe 0.32

Mid East
6.13

Sth Asia
0.13

East Asia
3.11

Nth Asia &
Japan
4.42

North & Central
America 4.63

SE Asia
21.92

Pacific &
PNG 2.97

Africa
0.63

South
America
0.90

Rest of world
0.21

New Zealand
1.04

Imports

Europe 55.63

Mid East
9.99

Sth Asia
18.53

East Asia
120.58

Nth Asia &
Japan
282.81

North & Central
America 10.51

SE Asia
17.28

Pacific &
PNG 1.44

Africa
8.25

Rest of world
1.62

South
America
9.02

New Zealand
3.29

Exports
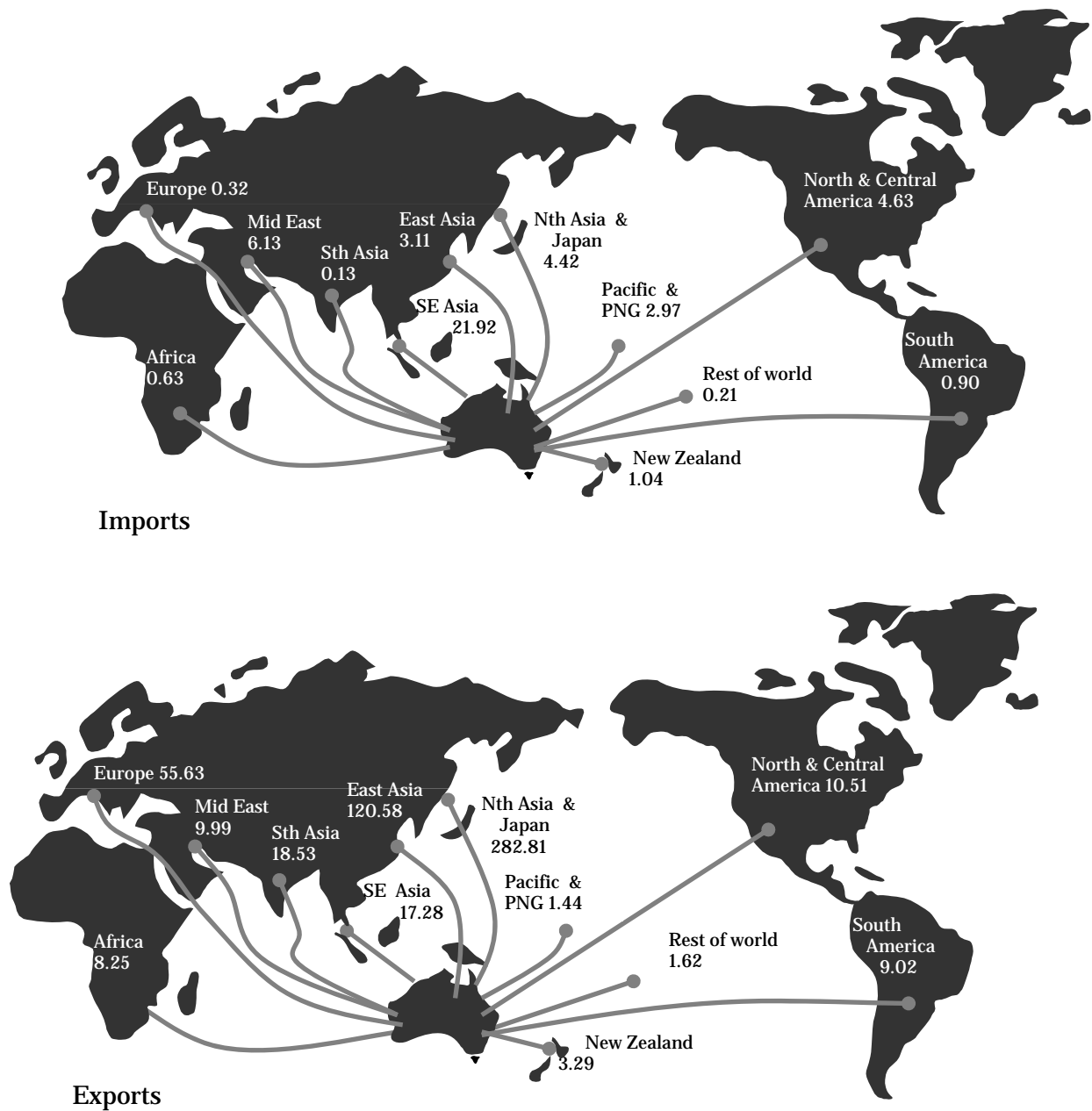
Source: ABS, International Cargo Statistics, unpublished

CHAPTER 3:   COASTAL FREIGHT

In 2003–2004, 108.3 million tonnes of coastal cargo was handled through Australian ports. Of this, 53.2 million tonnes of coastal cargo was loaded and 55.1 million tonnes was discharged.

In terms of task performed, based on cargo loaded, the Australian coastal fleet performed 117.5 billion tonne kilometres. This is up on the previous year, with a slight increase in *bauxite/alumina* and a major increase in *crude oil*.

MAJOR COMMODITIES

In 2003–2004, there were increases in tonnage loaded in *bauxite/alumina* and *crude oil*. The other categories experienced a decrease (Table 3.1).

TABLE 3.1:   COASTAL FREIGHT LOADED BY MAJOR COMMODITY, 1998–1999 TO 2003–2004

ATFCC code	Commodity	1998–1999	1999–2000	2000–2001	2001–2002	2002–2003	2003–2004
			Tonnes (millions)				
281	Iron ore	8.6[b]	6.8	6.7	6.5	6.6	6.5
282	Bauxite/alumina	9.9	12.1	11.6	11.6	11.7	12.2
331	Crude oil	6	6.6	7.5	7.0	7.3	8.1
33	Petroleum products [a]	6.9	6.5	5.8	6.5	6.8	6.4
	Other cargo	17.0	19.2	20.3	20.9	20.4	20.0
	Total	48.4	51.3	52.0	52.4	52.8	53.2
			Tonne-Kilometres (billions)				
281	Iron ore	40.3b	29.7	28.3	26.3	27.2	26.5
282	Bauxite/alumina	21.8	27.9	25.7	25.6	25.9	26.8
331	Crude oil	15.1	17.1	15.2	20.3	20.2	24.8
33	Petroleum products [a]	10.7	9.6	9.4	9.4	10.9	9.4
	Other cargo	20.9	24.6	25.9	28.8	30.5	30.1
	Total	108.8	108.9	104.5	110.4	114.8	117.5

a.   Excludes crude oil (ATFCC code 331) in row above
b.   Adjusted to more closely balance with discharged input/output tables for all the iron ore ports.
Source: BTRE, Domestic sea freight collection——survey of Australian port authorities, unpublished

CARGO FLOWS

Table 3.2 details coastal freight flows between the States by weight. Queensland and Western Australia are ranked first and second in terms of state of origin. Queensland

and New South Wales are ranked first and second in terms of state of destination. This is the same as the previous year. Queensland's top ranking as state of origin is due to the large tonnages of intrastate *bauxite* trade. Victoria's and Western Australia's overall ranking continued to strengthen, while New South Wales' position has again weakened. This continues the trends witnessed in 2002–2003,

TABLE 3.2:   TOTAL COASTAL FREIGHT FLOWS, 2003–2004

State of origin	State of destination (kilotonnes)							
	NSW	*Vic*	*Qld*	*SA*	*WA*	*Tas*	*NT*	*Total*
NSW	163	1 094	516	1 078	197	204	7	3 258
Vic	2 338	58	532	289	408	2 500	0	6 125
Qld	2 355	913	12 738	293	138	485	36	16 958
SA	2 035	1 424	483	1 931	164	271	0	6 307
WA	6 031	2 408	824	795	3 309	11	160	13 538
Tas	1 987	3 410	50	246	437	223	0	6 352
NT	101	0	12	0	125	409	8	656
Total	15 010	9 306	15 154	4 632	4 777	4 104	211	53 194

Source: BTRE, Domestic sea freight collection——survey of Australian port authorities, unpublished

Shipping freight activity over the last 9 years by state is shown in Figures 3.1 and 3.2. Changes since 2002–2003 include:

- continued increasing tonnages (loaded) in Western Australia and Queensland, with a corresponding continued decline in New South Wales;

- relative stability in the discharge of cargo for all States, with slight declines in New South Wales, Queensland, Tasmania and the Northern Territory balanced by increases in South Australia, Western Australia and a substantial increase in Victoria.

**FIGURE 3.1: COASTAL FREIGHT LOADED BY STATE,
1995–1996 TO 2003–2004**
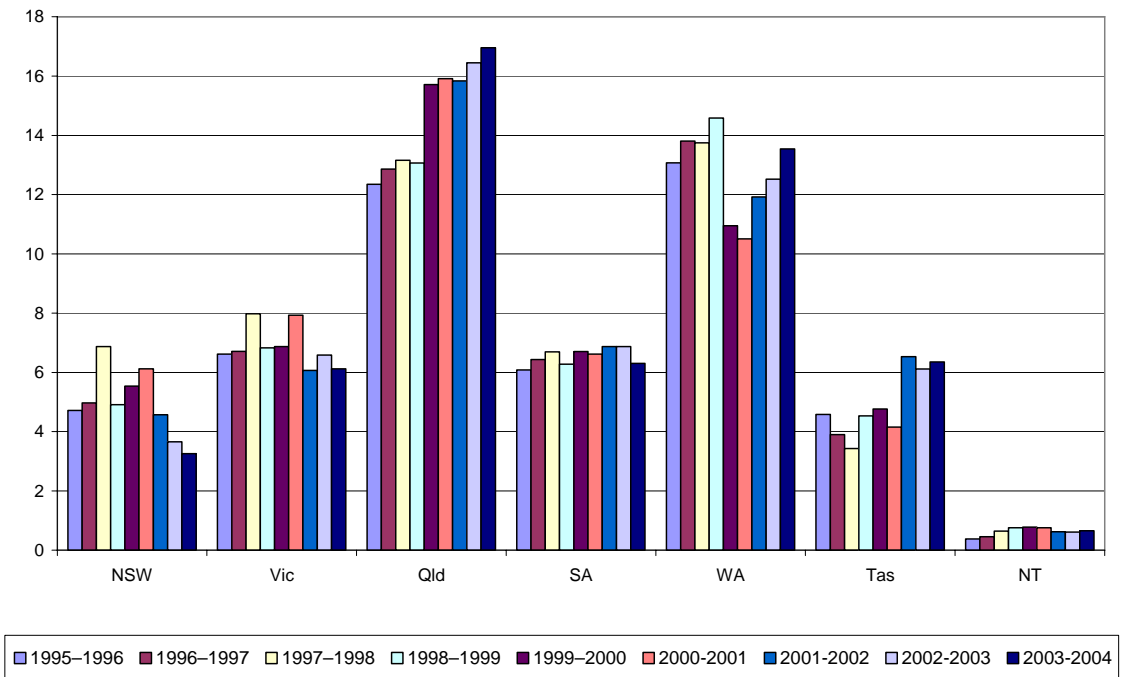
Source: BTRE, Domestic sea freight collection——survey of Australian port authorities, unpublished

**FIGURE 3.2: COASTAL FREIGHT DISCHARGED BY STATE,
1995–1996 TO 2003–2004**
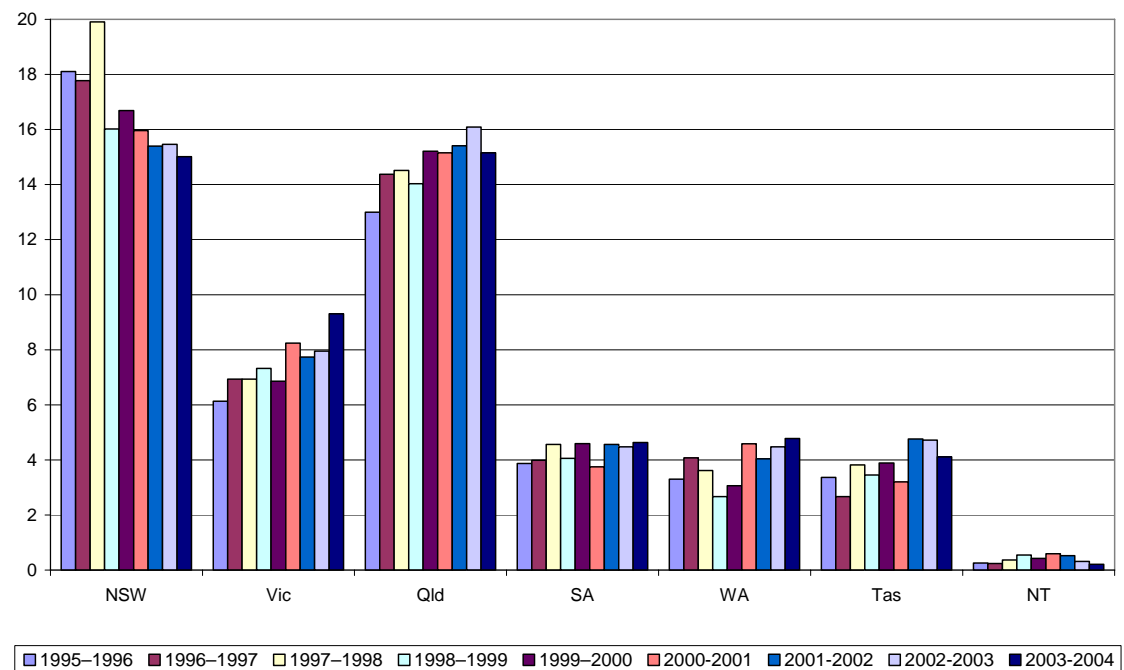
Source: BTRE, Domestic sea freight collection——survey of Australian port authorities, unpublished

TABLE 3.3:   COASTAL FREIGHT FLOWS BETWEEN AUSTRALIAN PORTS, 2003–2004

Port of origin	Port of destination (kilotonnes)
	Sydney	Rest of NSW	Melbourne	Rest of Vic	Brisbane	Rest of Qld	Adelaide	Rest of SA	Fremantle	Rest of WA	Hobart	Rest of Tas	Darwin	Rest of NT	Total
Sydney	54	0	28	85	233	41	3	0	180	0	2	33	3	0	662
Rest of NSW	16	93	64	918	61	180	0	1 074	0	16	63	107	4	0	2 596
Melbourne	79	0	0	19	238	0	245	0	340	1	5	1 682	0	0	2 610
Rest of Vic	2 253	6	17	22	179	114	39	4	3	64	620	169	0	0	3 491
Brisbane	536	75	7	44	0	1 575	9	0	48	16	17	0	25	0	2 352
Rest of Qld	184	1 560	633	229	876	10 287	40	244	36	38	156	336	11	0	14 629
Adelaide	52	0	0	556	13	279	4	0	0	15	0	16	0	0	935
Rest of SA	460	1 523	867	0	191	0	1 717	209	143	6	0	255	0	0	5 372
Fremantle	66	18	351	672	17	4	789	6	0	968	0	4	152	0	3 048
Rest of WA	1 541	4 406	309	1 076	765	38	0	0	2 337	4	0	7	8	0	10 490
Hobart	0	88	38	154	14	0	23	176	35	0	0	0	0	0	528
Rest of Tas	519	1 380	2 429	788	3	68	0	47	7	395	166	23	0	0	5 824
Darwin	0	0	0	0	0	12	0	0	8	2	0	0	1	114	138
Rest of NT	0	101	0	0	0	0	0	0	0	0	0	409	7	0	518
Total	5 761	9 250	4 742	4 564	2 590	12 599	2 881	1 761	3 139	1 525	1 029	3 040	211	114	53 194

Source: BTRE, Domestic sea freight collection——survey of Australian port authorities, unpublished

Table 3.3 shows the changes in trading patterns in more detail, providing information on cargo flows between the various state capitals and rest of state regions. In comparing, the tonnages moved 2002–2003 (BTRE, 2004):

- there has been a further increase in *Rest of WA* to *Rest of Vic,* which is due to an increase in crude oil moving from WA oil fields straight to the Victorian refineries; and

- there was a notable decline in *Brisbane* discharged cargo mainly due to a notable decrease from *Rest of VIC* which related to the continuing trend of reduced crude oil from Bass Strait and decreased tonnages of petroleum products from Geelong refinery.

PACK TYPE

Pack type is a description of the way cargo is packaged and moved. Pack type is primarily split between bulk[7] and non-bulk. Bulk cargo is further subdivided, between liquid and dry bulk, which is a characteristic of the cargo. Gas cargo is considered as liquid bulk for the purposes of this report since it is pumped on board like most liquid bulk cargoes. Non bulk cargo is similarly split between containerised, and other not classified and/or non-containerised cargo.

Non-bulk cargo has nearly doubled since 1993-1994: 3.7/3.8 million tonnes loaded/discharged in 1993–1994 to 7.3/7.1 million tonnes loaded/discharged in 2003–2004. Most of the growth has been in containerised cargo.

Bulk cargo (see Tables 3.4 and 3.5) makes up the majority of coastal cargo, representing 86.7 per cent by weight of all coastal cargo, down slightly from 87.6 per cent of in 2002–2003, and down from a high of 92 per cent in 1993–1994.

Liquid bulk cargo loaded/discharged in 2003–2004 increased slightly to 14.9/15.3 million tonnes compared to levels in 2002-2003 of 14.9/14.9 million. This however is well down on the peak of 16.0/15.7 million tonnes loaded/discharged in 2000–2001.

Table 3.6 shows the flow of cargo between the states by pack type. Of significance is the overall decrease in the 2003–2004 levels of non-bulk cargo, offset by increases in containerised cargo, particularly between Victoria and Tasmania. WA has also again raised its oil output.

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7   The best description of bulk cargo is cargo that can be poured or dropped, as a liquid or solid, into a ship's hold. Non-bulk is effectively those types of cargo that would be damaged if dropped or poured. For example:

- wheat as a bulk cargo is loaded as loose grain, via a conveyor belt to a spout, where it is poured into a hold;

- wheat as a non bulk cargo is bagged or in containers. In either of these forms, it has to be lifted into the ship's hold. If it was poured into the hold, as in the bulk case, the bags or containers would break.

**TABLE 3.4: COASTAL FREIGHT LOADED BY PORT AND PACK
TYPE, 2003–2004**

Port of origin	Bulk (kilotonnes)		Non-bulk (kilotonnes)		Total
	Dry bulk	Liquid bulk	Container	Other	(kilotonnes)
Sydney	0	355	295	11	662
Rest of NSW	1 334	121	1 030	111	2 596
Melbourne	14	289	1 660	648	2 610
Rest of Vic	73	3 382	1	35	3 491
Brisbane	133	2 121	71	26	2 352
Rest of Qld	14 326	172	52	80	14 629
Adelaide	878	34	17	6	935
Rest of SA	4 834	533	0	6	5 372
Fremantle	874	2 071	80	22	3 048
Rest of WA	4 959	5 498	8	25	10 490
Hobart	254	272	2	0	528
Rest of Tas	2 767	3	1 882	1 171	5 824
Darwin	0	34	23	80	138
Rest of NT	518	0	0	0	518
Total	30 964	14 886	5 122	2 222	53 194

Source: BTRE, Domestic sea freight collection——survey of Australian port authorities, unpublished

TABLE 3.5: COASTAL FREIGHT DISCHARGED BY PORT AND PACK TYPE, 2003–2004

Port of destination	Bulk (kilotonnes)		Non-bulk (kilotonnes)		Total (kilotonnes)
	Dry bulk	Liquid bulk	Container	Other	
Sydney	48	577	666	19	1 310
Rest of NSW	3 430	244	22	22	3 719
Melbourne	38	144	1 581	415	2 179
Rest of Vic	130	3 518	825	62	4 534
Brisbane	271	2 135	117	6	2 529
Rest of Qld	13 728	376	36	307	14 447
Adelaide	911	142	17	7	1 077
Rest of SA	4 784	503	30	0	5 317
Fremantle	886	1 461	609	7	2 963
Rest of WA	4 985	5 564	24	1	10 574
Hobart	62	265	1	4	332
Rest of Tas	2 991	34	1 460	730	5 215
Darwin	377	314	33	4	727
Rest of NT	123	0	5	41	169
Total	32 765	15 276	5 426	1 625	55 091

Source: BTRE, Domestic sea freight collection——survey of Australian port authorities, unpublished

TABLE 3.6: COASTAL FREIGHT LOADED BY PACK TYPE, 2003–2004

State of origin	State of destination (kilotonnes)							
	NSW	Vic	Qld	SA	WA	Tas	NT	Total
Dry Bulk								
NSW	0	64	33	1 074	2	162	0	1 334
Vic	0	20	3	16	26	22	0	87
Qld	1 817	787	11 036	292	55	467	5	14 459
SA	2 003	1 015	481	1 927	16	270	0	5 712
WA	4 415	1 053	95	0	263	7	0	5 833
Tas	1 953	644	33	225	0	166	0	3 022
NT	101	0	0	0	0	409	7	518
Sub Total	10 290	3 583	11 681	3 534	362	1 503	12	30 964
Liquid Bulk								
NSW	118	135	215	0	0	9	0	476
Vic	2 318	36	285	231	42	757	0	3 671
Qld	536	120	1 602	1	15	17	0	2 293
SA	29	406	0	4	127	0	0	567
WA	1 611	1 339	715	776	2 985	0	143	7 570
Tas	21	187	14	15	35	3	0	276
NT	0	0	0	0	34	0	0	34
Sub Total	4 634	2 224	2 831	1 028	3 240	786	143	14 886
Container								
NSW	33	895	168	4	191	30	5	1 325
Vic	12	1	225	37	284	1 126	0	1 685
Qld	2	4	16	0	47	0	31	100
SA	0	2	0	0	14	1	0	18
WA	4	15	1	6	44	5	14	88
Tas	3	1457	3	6	394	21	0	1 883
NT	0	0	8	0	15	0	1	23
Sub Total	53	2 373	420	53	989	1 183	51	5 122
Non-Bulk								
NSW	12	1	101	0	4	3	2	123
Vic	7	1	20	4	56	594	0	683
Qld	0	1	83	0	21	0	1	106
SA	2	1	2	0	6	0	0	11
WA	2	1	12	14	16	0	2	47
Tas	9	1 122	0	0	7	34	0	1 171
NT	0	0	4	0	76	0	0	80
Sub Total	33	1 127	221	17	187	631	5	2 222
Total	15 010	9 306	15 154	4 632	4 777	4 104	211	53 194

Source: BTRE, Domestic sea freight collection——survey of Australian port authorities, unpublished

COMMODITY GROUPS

Total tonnages for all commodity classifications, as a whole, changed only slightly over 2002–2003 figures (Table 3.7). One of the greatest changes between 2002–2003 and 2003–2004 was in the commodity grouping *Food and live animals*, which fell sharply due to a drop in loading from both South Australia and Western Australia. Total *Mineral fuels lubricants and related materials* loadings was stable, the most notable change being an increase between Western Australia loading to Victoria discharge. In general however, most categories showed very little change from 2002–2003.

TABLE 3.7: COASTAL FREIGHT LOADED BY MAJOR COMMODITY GROUPS, 2003–2004

State of origin	State of destination (kilotonnes)							
	NSW	Vic	Qld	SA	WA	Tas	NT	Total
Food and live animals								
NSW	0	1	9	0	36	10	1	58
Vic	5	0	42	6	66	291	0	410
Qld	219	375	24	0	62	0	0	681
SA	0	0	0	3	0	20	0	23
WA	2	8	13	0	9	7	4	43
Tas	0	359	3	0	67	2	0	431
NT	0	0	0	0	0	0	0	0
Sub total	227	743	91	9	240	331	5	1 645
Beverages and tobacco								
NSW	0	0	1	0	17	0	0	19
Vic	1	0	8	1	4	49	0	63
Qld	0	0	0	0	2	0	24	26
SA	0	0	0	0	0	0	0	0
WA	0	0	0	0	0	0	0	0
Tas	0	10	0	0	10	0	0	20
NT	0	0	0	0	0	0	0	0
Sub total	1	10	10	1	33	49	25	128
Crude materials inedible except fuels								
NSW	0	64	7	1	9	80	0	161
Vic	1	0	16	1	55	146	0	219
Qld	1 277	94	9 717	147	21	451	0	11 707
SA	1 949	491	204	1 924	0	222	0	4 790
WA	4 406	1 024	92	14	114	1	1	5 653
Tas	1 345	308	10	223	9	166	0	2 061
NT	101	0	4	0	6	409	7	527
Sub total	9 081	1 982	10 050	2 308	214	1 475	9	25 118

TABLE 3.7: COASTAL FREIGHT LOADED BY MAJOR COMMODITY GROUPS, 2003–2004 (continued)

State of origin	State of destination (kilotonnes)							
	NSW	Vic	Qld	SA	WA	Tas	NT	Total
Mineral fuels, lubricants and related materials								
NSW	121	135	277	1 074	2	95	0	1 705
Vic	2 315	36	292	231	45	796	0	3 716
Qld	602	63	1 748	0	17	17	0	2 448
SA	34	376	0	4	143	28	0	586
WA	1 602	1 339	715	776	3 140	0	143	7 715
Tas	0	0	0	0	0	3	0	3
NT	0	0	4	0	37	0	0	41
Sub total	4 675	1 950	3 037	2 085	3 384	940	143	16 214
Animal and vegetable oils, fats and waxes								
NSW	0	0	1	0	0	1	0	3
Vic	3	0	2	0	2	13	0	20
Qld	2	1	41	1	0	0	0	46
SA	0	0	0	0	0	0	0	0
WA	2	0	0	0	0	0	0	2
Tas	0	1	0	0	0	0	0	1
NT	0	0	0	0	0	0	0	0
Sub total	7	2	44	2	2	14	0	71
Chemicals and related materials nes								
NSW	9	2	71	0	29	5	0	116
Vic	7	20	29	19	40	141	0	255
Qld	96	366	64	145	7	4	1	682
SA	49	30	0	0	0	0	0	79
WA	16	5	0	0	2	0	2	25
Tas	86	199	14	23	36	16	0	374
NT	0	0	0	0	7	0	0	7
Sub total	262	622	177	187	121	165	4	1 538
Manufactured goods classified chiefly by material								
NSW	28	880	116	1	80	9	5	1 119
Vic	2	0	89	11	120	236	0	458
Qld	157	9	1 082	0	8	12	5	1 272
SA	0	524	278	0	6	0	0	807
WA	0	26	0	5	29	2	1	65
Tas	545	1 244	23	0	305	0	0	2 117
NT	0	0	0	0	70	0	0	70
Sub total	732	2 683	1 587	18	617	259	11	5 907

TABLE 3.7: COASTAL FREIGHT LOADED BY MAJOR COMMODITY GROUPS, 2003–2004 (continued)

State of origin	State of destination (kilotonnes)							
	NSW	Vic	Qld	SA	WA	Tas	NT	Total
Machinery and transport materials								
NSW	0	5	10	0	16	1	0	32
Vic	1	1	20	5	17	83	0	126
Qld	0	0	0	0	1	0	0	1
SA	2	1	2	0	1	0	0	6
WA	0	1	2	0	4	0	1	8
Tas	9	143	0	0	0	0	0	152
NT	0	0	0	0	2	0	0	2
Sub total	13	151	33	5	41	84	1	328
Miscellaneous manufactured articles								
NSW	1	6	14	0	6	1	0	29
Vic	1	0	20	4	47	598	0	670
Qld	0	0	0	0	16	0	4	20
SA	0	0	0	0	0	0	0	0
WA	0	0	0	0	1	0	0	1
Tas	0	6	0	0	0	0	0	6
NT	0	0	4	0	0	0	0	4
Sub total	2	13	37	5	70	599	5	731
Commodities and transactions nes								
NSW	3	0	10	0	2	1	0	17
Vic	1	1	14	10	14	150	0	189
Qld	2	4	63	0	4	0	1	75
SA	0	2	0	0	14	1	0	16
WA	3	4	1	1	9	1	7	25
Tas	1	1 140	0	0	10	36	0	1 188
NT	0	0	0	0	3	0	0	3
Sub total	10	1 151	88	11	56	188	9	1 513
Total	15 010	9 306	15 154	4 632	4 777	4 104	211	53 194

Source: BTRE, Domestic sea freight collection——survey of Australian port authorities, unpublished

TASMANIAN TRADE

The trade to and from Tasmania (Table 3.8) increased in 2003–2004 from 2002-03 (BTRE 2004):

- by 3.8 per cent from 6.1 million tonnes to 6.3 million tonnes from Tasmania to the mainland;

- by 13.2 per cent from 4.7 million tonnes to 5.3 million tonnes from the mainland to Tasmania, returning to its weight in 2001-02.

The rise in both *special transactions and commodities[8] (Tasmania Loaded)* and *other commodities and transactions[9]* between 2003-2003 and 2003-2004 is primarily because more cargo is being containerised. Containerised cargo commodity is classified as commercial consignments not classified, and similarly because more cargo is containerised there are now larger quantities of empty containers.

TABLE 3.8:   TASMANIAN FREIGHT LOADED AND DISCHARGED BY COMMODITY, 2003–2004

ATFCC code	Description	Loaded in Tasmania (kilotonnes)	Discharged in Tasmania (kilotonnes)
0	Food and live animals	40	20
1	Meat and meat preparations	14	0
2	Dairy products and birds eggs	31	1
3	Fish, crustaceans and molluscs	29	1
4	Cereals and cereal preparations	0	131
5	Vegetables and fruit	178	31
6	Sugars, sugar preparations and honey	10	17
7	Coffee, tea, cocoa, spices	0	0
8	Feeding stuff for animals	1	6
9	Miscellaneous edible products & preparations	128	60
11	Beverages	20	91
21	Hides, skins and fur skins, raw	10	0
22	Oil seeds and oleaginous fruits	10	0
24	Cork and wood	218	25
25	Pulp and waste paper	9	98
26	Textile fibres	13	5
27	Crude fertilizers and crude minerals	0	52
28	Metalliferous ores and metal scrap	1 800	1 288
32	Coal, coke and briquettes	0	110
33	Petroleum and petroleum products	3	757
34	Gases, natural and manufactured	0	29

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[8]   Includes commercial consignments not classified.

[9]   Includes empty used containers and packaging.

TABLE 3.8: TASMANIAN FREIGHT LOADED AND DISCHARGED BY COMMODITY, 2003–2004 (continued)

ATFCC code	Description	Loaded in Tasmania (kilotonnes)	Discharged in Tasmania (kilotonnes)
41	Animal oils and fats	1	0
42	Fixed vegetable oils and fats	0	3
51	Organic chemicals	0	0
52	Inorganic chemicals	274	10
56	Fertilizers, manufactured	87	57
57	Plastics in primary forms	0	0
58	Plastics in non-primary forms	0	2
59	Chemical materials & products, nes	12	92
62	Rubber manufactures, nes	0	0
63	Cork & wood manufactures (excludes furniture)	0	0
64	Paper, paperboard & articles of paper	694	63
65	Textile, yarn, fabrics, made-up articles	3	1
66	Non-metallic mineral manufactures, nes	1 190	256
67	Iron and steel	16	72
68	Non-ferrous metals	214	1
69	Manufactures of metal, nes	0	0
72	Machinery specialized particular by industry	3	8
74	General industrial machinery & equipment nes	0	0
77	Electrical machinery and appliances nes	0	3
78	Road vehicles	149	193
79	Other transport equipment	0	0
81	Prefab buildings; sanitary & heating fittings	0	6
82	Furniture and parts thereof	6	34
89	Miscellaneous manufactured articles nes	0	2
90	Commodities and transactions nes	0	0
93	Special transactions and commodities	813	934
99	Other commodities and transactions	374	887
All	Total	6 352	5 347

nes   Not elsewhere stated.
Source: BTRE, Domestic sea freight collection——survey of Australian port authorities, unpublished

CHAPTER 4: COASTAL VOYAGE PERMITS

Part VI of the *Navigation Act, 1912* requires vessels trading interstate on the Australian coast to be licensed or have a permit. Some trades have exemption under the *Navigation Act*, mostly concerning the external territories, but there is also an exemption for cruise liners to carry passengers, except between Victoria and Tasmania.

An unlicensed ship may be granted a permit to trade on the Australian coast in the carriage of either cargo or passengers, where:

- there is no suitable licensed ship available for the shipping task; or

- the service carried out by licensed ships is inadequate; and

- it is considered to be desirable in the public interest that an unlicensed ship be allowed to undertake that shipping task.

Two kinds of permits are issued:

- a single voyage permit (SVP) is issued for a single voyage between designated ports for the carriage of a specified cargo or passengers

- a continuing voyage permit (CVP) is issued for a period of up to three months (up to December 2002 a CVP could be issued up to 6 months) and enables a vessel to carry specified cargo between specified ports for that period

In 2003–2004, 1 031 voyages were undertaken by foreign flag ships using voyage permits[10] to move cargo around the Australian coast. Of these, 681 voyages used SVPs and 350 voyages used CVPs. Table 4.1 shows the split of cargo carried using permits between commodity groups.

The drop in the tonnes and tonnes kilometres this year may relate more to the improved quality of the data, particularly for January 2004 to July 2004, than with an actual reduction in permit tonnage. With the introduction of a new database in January 2004, which has been operated by the Office of Transport Security since July 2004, the data is now recorded in a more usable form and is easier to analyse.

Table 4.2 shows that the split between different pack types is not in the same proportions as in the total coastal freight market (Table 3.6). Dry bulk using coastal permits represents only 23.5 per cent of total coastal dry bulk cargo loaded, liquid bulk 23.4 per cent, containerised cargo 13.6 per cent and other non bulk 31.6 per cent.

Most of the growth in permit use was in liquid bulk and other non bulk.

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10   Note that information provided in this paper on voyage permits is different from that appearing in the BTRE's *Waterline* series (BTRE 2005b). Figures in *Waterline* report tonnes as specified on the permits when issued, while in this paper, the figures reported are the actual tonnes and TEUs carried, as notified by the permit holders after they have used the permit. In addition, *Waterline* reports on numbers of permits issued within a given period, whereas this paper reports on cargo carried subject to the actual CVP or SVP sail date where it falls within that period.

TABLE 4.1: VOYAGE PERMITS BY COMMODITY TYPE, 2003–2004

	Commodity group					
	Bauxite / alumina	Crude oil	Iron ore	Petroleum products	Other	Total
	(No of voyages)					
SVP	10	32	62	64	513	681
CVP	0	0	0	0	350	350
Total	10	32	62	64	863	1 031
	(Tonnes)					
SVP	397 631	1 739 199	3 672 797	1 445 881	3 174 682	10 430 190
CVP	0	0	0	0	1 755 127	1 755 127
Total	397 631	1 739 199	3 672 797	1 445 881	4 929 810	12 185 318
	(TEUs)					
SVP	0	0	0	0	7 908	7 908
CVP	0	0	0	0	38 810	38 810
Total	0	0	0	0	46 718	46 718

Source: Department of Transport and Regional Services, SVP and CVP Registers, unpublished

TABLE 4.2: TONNES CARRIED UNDER VOYAGE PERMITS BY PACK TYPE, 1999–2000 TO 2003–2004

Pack type	1999–2000	2000–2001	2001–2002	2002–2003	2003–2004
Dry bulk	1 864 074	4 049 276	5 924 212	7 876 261	7 291 310
Liquid bulk	1 431 537	2 380 265	3 013 168	3 421 382	3 495 361
Containerised	375 987	505 537	887 480	841 398	697 126
Other non bulk	43 666	61 531	513 172	163 207	701 520
Total	3 715 264	6 996 609	10 338 032	12 302 249	12 185 318

Source: Department of Transport and Regional Services; SVP and CVP Registers, unpublished

The proportion of total coastal freight moved using voyage permits in 2003–2004 was 22.9 per cent by weight or 31.0 per cent of tonne kilometres performed (Table 4.3). This is down from 2002–2003 when it was 23.3 per cent by weight and 33.0 per cent of tonne kilometres performed. In general, the use of voyage permits is irregular, with permits being used more on longer coastal routes than on the shorter routes where road and rail competition is fiercer.

The largest group of shippers using coastal permits in terms of tonne kilometres is the iron ore industry (53.1 per cent in terms of tonne kilometres performed and 56.5 per cent in terms of tonnes loaded). For the bauxite alumina industry, the use is only 2.0 per cent and 3.3 per cent respectively.

TABLE 4.3:   IMPACT OF VOYAGE PERMITS ON COASTAL TRADE, 2003−2004

	Tonnes (millions)			Tonne kilometres (billion)		
Cargo group	Coastal	SVP and CVP	Per cent coastal	Coastal	SVP and CVP (estimate)	Per cent coastal
Iron ore	6.5	3.7	56.5%	26.5	14.1	53.1%
Bauxite Alumina	12.2	0.4	3.3%	26.8	0.5	2.0%
Crude oil	8.1	1.7	21.5%	24.8	5.3	21.3%
Petroleum products	6.4	1.4	22.6%	9.4	3.5	37.0%
Other	20	4.9	24.6%	30.1	13.1	43.4%
Total	53.2	12.2	22.9%	117.5	36.4	31.0%

Source: Department of Transport and Regional Services; SVP and CVP Registers, unpublished

CHAPTER 5: AUSTRALIAN PORT ACTIVITY

In 2003–2004, there was a 3.6 per cent increase in the number of voyages into Australia from overseas ports while the total number of port calls fell by 0.1 per cent. The actual number of ships servicing our ports increased 7.4 per cent. Melbourne was the busiest port in terms of ship visits, while Brisbane was the busiest in terms of first port of call of international voyages.

TABLE 5.1: PORT CALLS AT AUSTRALIAN PORTS, 2003–2004

Port	Visits [a]		Voyages	
	Number	Ships [b]	Number	Ships [c]
Abbot Point	54	44	45	36
Adelaide	804	379	90	77
Albany	108	100	59	56
Ardrossan	23	19	5	5
Australia	47	43	30	30
Barrow Island Terminal	48	6	1	1
Bayu-Undan Field	4	4	3	3
Bell Bay	3	3	0	0
Bing Bong	11	10	6	6
Botany Bay	1 280	305	543	172
Bowen	1	1	1	1
Brisbane	2 059	708	1 035	429
Broome	20	16	10	9
Buffalo Terminal	2	2	0	0
Bunbury	303	231	214	180
Bundaberg	23	11	6	5
Burnie	319	55	25	21
Cairns	245	79	44	33
Cape Cuvier	12	10	11	9
Cape Flattery	26	14	25	14
Carnarvon	1	1	1	1
Challis Terminal	4	4	3	3
Cooktown	17	3	2	2

TABLE 5.1: PORT CALLS AT AUSTRALIAN PORTS, 2003–2004 (continued)

Port	Visits [a]		Voyages	
	Number	Ships [b]	Number	Ships [c]
Cossack Pioneer Terminal	32	21	5	5
Dampier	1 267	443	517	330
Darwin	704	134	254	73
Derby	9	9	9	9
Devonport	937	52	7	7
Eden	11	8	8	7
Elang-Kakatua Field	3	3	2	2
Esperance	150	139	91	86
Fremantle	1 626	749	875	504
Geelong	499	248	167	125
Geraldton	214	170	144	123
Gladstone	1 263	639	582	449
Gove	123	105	112	98
Grassy	1	1	0	0
Griffin Terminal	10	6	2	2
Hastings (Westernport)	211	58	33	19
Hay Point	936	645	787	580
Hayman Island	3	2	0	0
Hobart	283	127	58	52
Jabiru Terminal	6	5	2	2
Karumba	42	30	22	22
Kwinana	5	5	2	2
Laminaria-Corallina Terminal	11	9	2	2
Launceston	414	139	93	62
Legendre Terminal	6	6	1	1
Lord Howe Is	1	1	1	1
Lucinda	17	16	17	16
Mackay	149	97	44	39
Melbourne	3 232	612	518	198
Milner Bay	70	58	58	49
Mourilyan	15	14	11	10
Newcastle	1 390	680	793	503
Onslow	10	9	10	9
Port Alma	33	28	12	9

TABLE 5.1: PORT CALLS AT AUSTRALIAN PORTS, 2003–2004 (continued)

Port	Visits [a]		Voyages	
	Number	Ships [b]	Number	Ships [c]
Port Bonython	22	18	7	5
Port Douglas	1	1	0	0
Port Giles	36	32	17	16
Port Hedland	548	332	491	308
Port Kembla	616	311	169	155
Port Latta	42	29	9	8
Port Lincoln	121	108	28	27
Port Pirie	71	41	15	13
Port Stanvac	9	5	0	0
Port Walcott	304	187	291	183
Portland	284	143	94	66
Saladin Terminal	3	3	2	2
Shark Bay	2	2	2	2
Stag Terminal	16	7	2	2
Sydney	1 211	371	222	113
Thevenard	100	37	13	10
Thursday Island	35	5	24	22
Townsville	582	311	353	209
Useless Loop	14	10	12	9
Varanus Island Terminal	32	10	3	2
Wallaroo	39	32	16	16
Wandoo Terminal	10	4	1	1
Weipa	131	71	62	55
Whitsunday Island	2	2	0	0
Whyalla	82	44	19	18
Woollybutt Terminal	9	7	3	3
Wyndham	5	4	2	2
Yamba	10	2	4	1
Yampi Sound	2	2	2	2
Total	23 436	3 510	9 261	3 363

a. No of port calls made by ships involved in coastal and international voyages.
b. No of ships involved in coastal and international voyages.
c. No of ships involved in international shipping (based on arrivals from overseas).
Notes: 1. These figures will differ from port authority figures due to vessels not appearing in the source data.
Source: Lloyd's Marine Information Services, Lloyd's Voyage Record, unpublished.

In terms of tonnes of cargo handled in 2003–2004 the busiest ports in order, were Dampier, Port Hedland, Newcastle, Hay Point, Gladstone, Port Walcott, Melbourne, Fremantle, Sydney, Brisbane, and Port Kembla (Table 5.2).

TABLE 5.2: CARGO LOADED AND DISCHARGED BY AUSTRALIAN PORTS, 2003–2004 (tonnes)

State	Port	Coastal		International [a]			
		Loaded	Discharged	Exports	Imports	Total	Rank
NSW	Coffs Harbour	0	0	16	290	306	75
NSW	Lord Howe Island	985	5 448	0	0	6 433	72
NSW	Newcastle	303 739	1 750 185	79 340 601	973 443	82 367 968	3
NSW	Other Ports NSW	0	0	182	15	197	76
NSW	Port Kembla	2 288 222	7 488 973	10 366 888	2 204 234	22 348 317	11
NSW	Sydney	662 086	5 987 118	4 337 723	13 703 790	24 690 717	9
NSW	Twofold Bay	0	0	769 804	40	769 844	45
NSW	Yamba/Grafton	3 185	285	10 764	2	14 236	68
Vic	Geelong	1 387 263	1 573 040	2 650 883	5 375 861	10 987 047	14
Vic	Melbourne	2 610 214	5 544 145	8 776 828	9 825 768	26 756 955	7
Vic	Other Ports Vic	0	0	1	0	1	77
Vic	Port Welshpool	4 707	4 283	0	0	8 990	70
Vic	Portland	61 974	801 899	2 533 327	453 831	3 851 031	24
Vic	Westernport	2 037 538	1 959 348	1 548 808	323 227	5 868 921	21
Qld	Abbot Point	0	0	11 791 826	0	11 791 826	13
Qld	Brisbane	2 352 158	2 998 788	8 404 906	10 087 420	23 843 272	10
Qld	Bundaberg	282 213	16 579	154 139	5 061	457 991	52
Qld	Cairns	79 287	571 671	2 654 794	344 147	3 649 899	25
Qld	Cape Flattery	1 063	0	0	0	1 063	74
Qld	Gladstone	3 354 872	10 423 009	44 623 143	1 078 649	59 479 673	5
Qld	Hay Point	0	0	77 962 368	0	77 962 368	4
Qld	Innisfail	0	0	271 767	0	271 767	55
Qld	Karumba	264 979	0	843 236	298	1 108 514	40
Qld	Lucinda	0	0	428 553	0	428 553	53
Qld	Mackay	322 072	484 399	879 155	282 120	1 967 745	33
Qld	Mourilyan	13 155	0	0	0	13 155	69

TABLE 5.2: CARGO LOADED AND DISCHARGED BY AUSTRALIAN PORTS, 2003–2004 (continued)

State	Port	Coastal		International [a]		Total	Rank
		Loaded	Discharged	Exports	Imports		
Qld	Port Alma	0	1 201	0	0	1 201	73
Qld	Rockhampton	0	0	42 766	9	42 776	65
Qld	Thursday Island	6 540	0	36	106	6 682	71
Qld	Townsville	671 727	804 236	4 032 598	4 468 833	9 977 394	16
Qld	Weipa	9 633 217	0	3 746 709	60 281	13 440 207	12
SA	Adelaide	935 101	2 910 431	3 734 715	1 940 123	9 520 371	17
SA	Ardrossan	562 421	0	0	0	562 421	49
SA	Port Giles	0	0	644 119	0	644 119	46
SA	Klein Point	1 698 233	0	0	0	1 698 233	35
SA	Other Ports SA	0	0	87 103	356	87 459	62
SA	Port Bonython	503 463	0	463 095	0	966 557	43
SA	Port Lincoln	8 064	121 839	1 881 610	114 391	2 125 904	32
SA	Port Pirie	164 917	427 952	430 704	6 041	1 029 613	42
SA	Thevenard	1 288 573	0	502 735	0	1 791 308	34
SA	Wallaroo	0	37 200	508 443	16 002	561 645	50
SA	Whyalla	1 146 463	1 223 245	662 863	132 908	3 165 479	27
WA	Albany	0	24 427	2 697 009	159 638	2 881 074	28
WA	Barrow Island	420 018	0	0	0	420 018	54
WA	Broome	389 684	108 441	113 063	9 520	620 707	47
WA	Bunbury	375 958	69 907	9 260 343	953 935	10 660 142	15
WA	Cape Cuvier	170 064	0	2 269 806	0	2 439 870	29
WA	Carnarvon	0	0	179 405	0	179 405	59
WA	Challis Venture	67 977	0	0	0	67 977	63
WA	Cossack Pioneer	1 314 915	0	0	0	1 314 915	37
WA	Dampier	1 379 110	224 216	100 213 978	390 871	102 208 175	1
WA	Derby	0	0	94 586	0	94 586	61
WA	Esperance	6 576	82 543	6 801 116	300 245	7 190 480	18
WA	Fremantle	3 047 960	3 250 383	11 093 169	8 356 389	25 747 901	8
WA	Geraldton	11 000	186 179	3 957 609	184 539	4 339 327	22

TABLE 5.2: CARGO LOADED AND DISCHARGED BY AUSTRALIAN PORTS, 2003–2004 (continued)

| State | Port | Coastal | | International [a] | | Total | Rank |
		Loaded	Discharged	Exports	Imports		
WA	Griffin Venture	231 873	0	0	0	231 873	56
WA	Jabiru Venture	203 337	0	0	0	203 337	58
WA	Other Ports WA	13 965	0	631	0	14 596	67
WA	Port Hedland	4 413 675	371 537	85 034 467	226 285	90 045 963	2
WA	Port Walcott	0	0	43 872 829	24 567	43 897 396	6
WA	Thevenard Island	231 395	0	0	0	231 395	57
WA	Useless Loop	0	0	1 085 712	0	1 085 712	41
WA	Varanus Island	1 253 541	0	0	0	1 253 541	39
WA	Wyndham	6 970	15 544	1 532 651	34 722	1 589 886	36
WA	Yampi Sound	0	0	495 923	0	495 923	51
Tas	Burnie	1 350 358	890 692	1 668 921	198 149	4 108 120	23
Tas	Devonport	1 904 577	1 235 037	5 694	55 322	3 200 630	26
Tas	Flinders Island	0	39 011	0	0	39 011	66
Tas	Hobart	528 167	881 900	785 941	136 687	2 332 695	30
Tas	King Island	25 295	28 461	0	0	53 756	64
Tas	Launceston	1 188 375	2 271 753	3 358 351	237 859	7 056 339	19
Tas	Port Latta	1 355 185	0	906 721	0	2 261 906	31
Tas	Spring Bay	0	0	126 692	0	126 692	60
Tas	Stanley	0	0	573 125	0	573 125	48
NT	Confidential NT Ports	0	0	5 074 404	932 940	6 007 344	20
NT	Darwin	137 990	276 009	296 973	582 884	1 293 855	38
NT	Other Ports NT [b]	517 581	0	266 442	0	784 023	44
	Confidential Aust Ports	0	0	1 443 040	197	1 443 237	
	Total	53 193 977	55 091 313	558 295 807	64 181 995	730 763 092	

a. *ABS records offshore exports such as crude oil through the nearest mainland port, although the actual cargo does not pass through the actual port. For example: most of the 1.5 million tonnes of exports through Wyndham are actually exported from offshore crude oil terminals.*
b. *Other Ports NT consists of Bing Bong, remote communities, Gove, Groote Eylandt and rigs, which are not split up easily.*
Sources: *BTRE, Domestic sea freight collection——survey of Australian port authorities, unpublished; ABS, International Cargo Statistics, unpublished*

CHAPTER 6: AUSTRALIAN MERCHANT FLEET

The Australian merchant fleet increased in terms of deadweight and gross tonnage. The larger ships engaged primarily in the international trade. In 2003–2004, the major trading fleet decreased from 55 to 52 ships although overall the fleet increased in numbers from 74 in 2002 to 82 ships in 2004. Eleven vessels left the fleet, while nineteen newer ships joined the fleet (Table 6.1).

TABLE 6.1: SUMMARY OF THE AUSTRALIAN TRADING FLEET, AS AT 30 JUNE 2004

Trade	No. of vessels	Deadweight (tonnes)	Gross tonnage (tonnes)
Major Trading Fleet (>2000 dwt)			
Coastal			
Australian registered	35	863 132	695 649
Overseas registered	5	140 251	80 915
Total Coastal	40	1 003 383	776 564
Overseas			
Australian registered	9	749 182	685 649
Overseas registered	3	285 817	159 376
Total Overseas	12	1 034 999	845 292
Total major trading fleet	52	2 038 382	1 621 856
Other (minor) Trading ships (>150grt < 2000 dwt)			
Australian registered	28	12 979	20 399
Overseas registered	2	1 434	1 454
Total other trading ships	30	14 413	21 853
Total Australian registered	72	1 625 293	1 401 964
Total Overseas registered	10	427 502	241 745
Total Australian trading fleet	82	2 052 795	1 643 709

Sources: Department of Transport and Regional Services—personal communications; Lloyd's Maritime Information Unit, Lloyd's Voyage Record, unpublished; Lloyd's Register Fairplay, World Shipping Directory 2004–2005; AMSA, List of Ships Registered, 19/8/2004, http://www.amsa.gov.au/Shipping_Registration/List_of_Registered_Ships/; Shipping companies (various)—personal communications.

Number of ships by ship type is shown in Figure 6.1. Changes to note include:

- ro-ro landing barges increased by 62 per cent from 13 to 21 ships, and

- general cargo, multipurpose ships increased by 20 per cent from 15 to 18 ships.

FIGURE 6.1: NUMBER OF SHIPS BY SHIP TYPE, AS AT 30 JUNE 2004
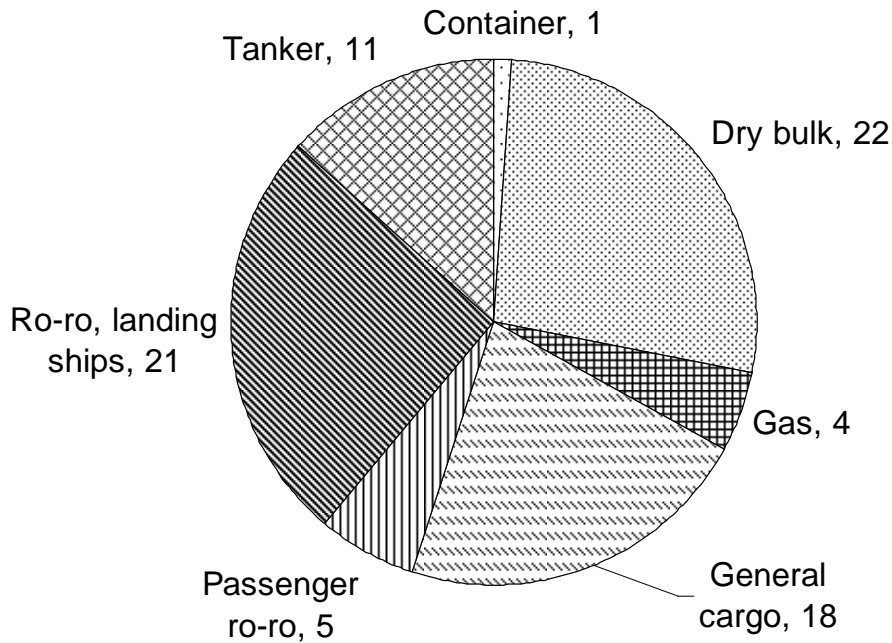
Tables 6.2 and 6.3 show the main trades and commodities in which the major trading vessels were engaged during 2003–2004.

TABLE 6.2:   SHIPS IN THE MAJOR TRADING FLEET — OVERSEAS TRADES, 2003–2004

Name	Trade	Products	Ports called at
Tankers			
Nivosa	o (c)	Crude oil	Singapore, Brunei, SE Asia, Malaysia, United Arab Emirates and Laminaria-Corallina Field to Sydney, Geelong and Botany Bay
Northwest Sanderling	o	LNG	Dampier, Japan
Northwest Sandpiper	o	LNG	Dampier, Japan
Northwest Snipe	o	LNG	Dampier, Japan
Northwest Stormpetrel	o	LNG	Dampier, Japan
Samar Spirit	o (c)	Crude oil	Pt Bonython, Hastings, Philippines, PNG, Singapore, and Indonesia to Botany Bay, Brisbane, Melbourne and Sydney
Bulk carriers			
Alltrans	o (c)	Alumina	Gladstone and Gove to Bluff (NZ), Launceston and Newcastle
Iron Kembla	o (c)	Iron ore and coal	Hay Pt and Newcastle to Sth Korea (coal); Pt Hedland to Pt Kembla (iron ore)
Iron Yandi	o (c)	Iron ore and coal	Newcastle to Taiwan (coal); Pt Hedland to Pt Kembla (iron ore)
Pacific Triangle	o (c)	Iron ore and coal	Pt Hedland to Pt Kembla (iron ore); Pt Kembla and Newcastle to Japan
General cargo			
Aurora Australis	o	General cargo	Hobart, Melbourne, Burnie and Launceston to Fremantle, Macquarie Island and Antarctica
Norfolk Guardian	o (c)	General cargo	Brisbane/Yamba- Norfolk Island - NZ

o   Overseas.
(c)   Also undertakes occasional coastal voyages.
Sources: Prepared by BTRE using Lloyd's Marine Information Unit, Lloyd's Voyage records, unpublished;
Shipping companies (various)—personal communications.

TABLE 6.3: SHIPS IN THE MAJOR TRADING FLEET — COASTAL TRADES, 2003–2004

Name	Trade	Products	Ports called at
Tankers			
Barrington	c (o)	Petroleum products	Melbourne, Geelong, Botany Bay, Brisbane Geelong to Hobart, Mackay, Cairns, Gladstone, Townsville and Singapore
Broadwater	c (o)	Crude oil	Hastings, Kumul Terminal, Dampier, Port Bonython, Indonesia, Thailand, Vietnam Taiwan, and Singapore to Botany Bay and Brisbane
Helix	c (o)	Petroleum products	Victoria, New South Wales, Queensland, Tasmanian and New Zealand ports
Japonica	c (o)	Petroleum products	Fremantle to Melbourne, Adelaide, NZ, Pt Hedland, Esperance and Geraldton
Palmerston	c (o)	Petroleum products	Botany Bay, Brisbane, Geelong, Hastings to Melbourne, Cairns, Townsville, Gladstone, Mackay and NZ
Scottish Bard	c (o)	Petroleum products	Melbourne, Geelong, Hastings, Adelaide, Pt Stanvac, Singapore, Launceston, Botany Bay and Sydney
Scottish Wizard	c (o)	Petroleum products	Melbourne, Geelong, Adelaide, Pt Stanvac, Botany Bay Albany, Fremantle, Singapore, Bangladesh and Japan
Seakap	c (o)	Bitumen & bituminous materials, chemicals	Newcastle ,Pt Kembla, Botany Bay, Portland, Whyalla, Gladstone, Taiwan and Singapore
Stolt Australia	c	Chemicals	Victoria, New South Wales ,South Australia, Queensland, Western Australia and Tasmanian ports
Bulk carriers			
Aburri	c	Metal concentrates	Bing Bong
Accolade II	c	Limestone	Klein Point to Adelaide
Cementco	c (o)	Cement	Gladstone and Launceston to, Townsville, Brisbane, Mackay, New Caledonia;
Dara	c	Dry bulk products	Brisbane
Endeavour River	c	Bauxite, alumina	Bauxite: Weipa to Gladstone; Alumina: Gladstone to Newcastle

TABLE 6.3: SHIPS IN THE MAJOR TRADING FLEET — COASTAL TRADES, 2003–2004 (continued)

Name	Trade	Products	Ports called at
Bulk carriers (continued)			
Enterprise	c	Various bulk products	New South Wales, South Australia, Tasmania and Victorian ports
Fitzroy River	c	Bauxite, and alumina	Bauxite: Weipa to Gladstone, Alumina: Gladstone to Newcastle
Goliath	c	Cement	Devonport, Sydney, Melbourne, Newcastle, Pt Kembla
Iron Chieftain	c	Iron ore, coal, steel products	Whyalla, Port Kembla, Newcastle and Sydney
Iron Sturt	c	Cement, metal concentrates, alumina, zinc and steel products	South Australia, Victoria and Tasmanian ports
Kowulka	c	Gypsum, salt, sugar and chemicals	Thevenard to Sydney; Bundaberg to Sydney, Melbourne and Adelaide and Malaysia
Lindesay Clark	c	Alumina, dolomite, fertilizer, and steel products	Geelong to Whyalla and Fremantle; Fremantle and Bunbury to Geelong, and Portland; Ardrossan to Whyalla and Pt Kembla
Ormiston	c	Gypsum, salt and Sugar	Thevenard to Sydney and Melbourne; Bundaberg to Sydney and Melbourne
Pioneer	c (o)	Sugar	Mackay to Sydney, Singapore and USA.
Portland	c	Alumina and other dry bulk	Fremantle and Bunbury to Portland, Geelong and Newcastle; Newcastle to Launceston to Fremantle
River Boyne	c	Bauxite	Weipa to Gladstone,
River Embley	c	Bauxite	Weipa to Gladstone
Wunma	c	Dry bulk	Intra Qld
General cargo			
ANL Bass Trader	c	General	Melbourne, Launceston, Burnie (occasional)
Claudia	c	Blue metal	Bass Point to Sydney
Frances Bay	c	General cargo	Nth Australia
Iron Monarch	c	Steel products	Pt Kembla to Westernport
Newcastle Bay	c	General cargo	Cairns, northern Queensland and Cape York.

TABLE 6.3:   SHIPS IN THE MAJOR TRADING FLEET — COASTAL TRADES, 2003–2004 (continued)

Name	Trade	Products	Ports called at
General cargo (continued)			
Searoad Mersey	c	General cargo	Melbourne, Devonport
Searoad Tamar	c	General cargo	Melbourne, Devonport, and Geelong
Spirit of Tasmania I	c	General cargo, passengers	Melbourne to Devonport
Spirit of Tasmania II	c	General cargo and passengers	Melbourne to Devonport
Spirit of Tasmania III	c	General cargo and passengers	Sydney/Melbourne to Devonport
Tasmanian Achiever	c	General cargo	Melbourne and Burnie
Trinity Bay	c	General Cargo and passengers	Cairns, Cape York, Gulf of Carpentaria ports
Victorian Reliance	c	General cargo	Melbourne and Burnie

c   *Coastal.*
(o)   *Also undertakes occasional overseas voyages.*
Sources: Prepared by BTRE using Lloyd's Marine Information Unit, Lloyd's Voyage records, unpublished;
            Shipping companies (various)—personal communications.

EXPLANATORY NOTES

SOURCES

Coastal tonnage figures and pack details have been derived from data supplied by port authorities.

To obtain tonne-kilometre figures, a port-to-port distance figure (including pilotage) was applied to individual port tonnages. Where optional routes within Australia could reasonably be used, the shorter distance has been used. The main reference for distances was The Ports of Australia, 13th edition, 1993, published by the Australian Chamber of Shipping.

The vessel movement details for the Australian trading fleet have been obtained from Lloyd's Marine Information Unit, Lloyd's Ship Movements, unpublished, and, from data supplied by shipping companies and from BTRE's knowledge of the shipping industry.

International sea cargo data was obtained from ABS, International Cargo Statistics, unpublished.

DEFINITIONS AND ABBREVIATIONS

ABS: Australian Bureau of Statistics

Australian trading fleet: Cargo vessels operated by Australian companies to and from Australia, with Australian crews and/or vessels licensed to operate on the Australian coast (meaning they can trade between States and the Northern Territory), and vessels operating intrastate. The fleet includes vessels that carry cargo and passengers, but does not include vessels that carry passengers only.

ATFCC: **(Australian Transport Freight Commodity Code Classification):** A systematic classification of commodities transported by sea, air, road, rail and pipeline, developed jointly by precursors of the Department of Transport and Regional Services and the Australian Bureau of Statistics. It has been designed to facilitate standardised classification of goods carried by these modes to, from and within Australia. The ATFCC is aligned with the Standard International Trade Classification (SITC) at divisional (2-digit)[11] level of classification.

BTRE: Bureau of Transport and Regional Economics

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[11]   The ATFCC is a four-tiered classification. At the most detailed level there are about 300 commodity categories each identified by a four-digit item code. At the next level there are about 160 categories each identified by a three-digit group code. The commodity groups are assembled into 67 commodity divisions at the two-digit level of the classification, which, in turn, are aggregated to 10 sections at the broadest level of the ATFCC. Sections of the ATFCC are identified by a one-digit code.

For example, iron and steel wire (6794) at 4-digit level is a member of the iron and steel basic products subdivision (679), which is a member of iron and steel division (67), which in turn is a member of the manufactured goods classified chiefly by materials (6).

CVP (Continuing Voyage Permit): Allows international foreign flag vessels to trade on the Australian coast, in the coasting trade over predetermined set route for a set period for a predetermined amount of cargo. This may include several coastal voyages. CVP's are used in the general cargo (container) and bulk trades.

DOTARS: Department of Transport and Regional Services

DWT (Deadweight tonnage): The measure of weight that a vessel can carry, including cargo, bunkers, water and stores. Expressed in tonnes, it is the difference between the displacement of the vessel loaded to its summer loadline and the light ship displacement, or the total weight of the vessel.

Freight: Includes all cargo lifted, including empty containers, but excludes ship stores and bunkers.

GRT (Gross tonnage): The measure of the internal capacity of a ship that is available within the hull and enclosed spaces above deck, for cargo, stores, passengers and crew (with certain exceptions). GRT is expressed as a volume, in cubic metres divided by 2.83.

Liner: A liner service is a fleet of ships, with a common ownership or management, which provide a fixed service, at regular intervals, between named ports, and offer transport to any goods in the catchment area served by those ports and ready for transit by their sailing dates. A fixed itinerary, inclusion of regular service, and obligation to accept cargo from all comes and to sail, whether filled or not, on the date fixed by a published schedule is what distinguishes the liner trade from the tramp trade. [12]

LMIU: Lloyd's Marine Information Unit

Major trading fleet: Vessels of 2 000 DWT or more

Minor trading fleet: Vessels of 150 GRT or more but less than 2 000 DWT

nes: not elsewhere stated.

NZ: New Zealand

PNG: Papua New Guinea

SE: South East

State: Australian states plus Northern Territory.

SVP (Single Voyage Permit): Allows international foreign flag vessels to trade on the Australian coast in the coasting trade over a set route (once only per permit) for a predetermined amount of cargo.

TEU (twenty foot equivalent unit): measure used to count containers. A 40 foot container counts as 2 TEUs.

tonne: All figures are measured in mass tonnes (1 000 kilograms) unless otherwise stated.

tonne-kilometres: The product of tonnes of freight carried between two ports and the sea route distance in kilometres, including pilotage, between the two ports.

Tramp: A ship, which will call at any port to carry whatever cargoes are available, normally based on a charter or part charter (P Brodie, 1997).

Transhipped cargo: Recorded for both inbound and outbound to the port of transhipment and assigned to Australian Transport Freight Commodity Code Classification (ATFCC), Division 93.

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[12]   Stopford M, 2003, Maritime Economics, 2nd edition, Routledge, London

STATISTICAL ISSUES

Coastal statistics provided by port authorities on tonnages loaded and discharged do not always balance. The most common reasons for this lack of consistency are:

- Port authorities record cargo as having been discharged during the month the vessel arrives in port, and, cargo loaded against the month of the vessel's departure. Consequently, variations in the loaded and discharged cargo totals will occur due to cargo being in transit during the financial year cut off period.

- A port authority's record of cargo loaded and discharged is based on information provided by the ship's agents. This information could be incorrect because the agent may provide only summary statistics for different types of cargo. The agent may also not know the true origin or destination of particular consignments, and may therefore record the last or next port of call respectively. This particularly applies to liquid and dry bulk commodities, where the cargo originates from or is destined for, several ports.

- The commodity recorded by the agent may not be classified in the same way at the ports of loading and discharge. For example, gypsum loaded in South Australia is classified as fertilizer at NSW ports, and petroleum products are classified as kerosene in Cairns.

The BTRE has endeavoured to reconcile some of the above data problems as far as possible. It takes no responsibility for correctness or accuracy. Reconciliation was not attempted for many of the smaller shipments.

Figures in tables may not add to totals due to rounding.

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