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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, port activity and fleet structure. This edition covers sea freight activity around Australia during 2005–06.

Quarterly updates of selected tables in the publication are available at <http://www.btre.gov.au>.

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Burnie Port Corporation	Ord River District Cooperative – Wyndham
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Central Queensland Ports Authority	Perkins Shipping Pty Ltd
Chevron Australia Pty Ltd	Port Hedland Port Authority
Christmas & Cocos (Keeling) Islands Port Authority	Port Kembla Port Corporation
Dampier Port Authority	Port of Brisbane Corporation
Darwin Port Corporation	Port of Devonport Corporation
Dampier Salt	Port of Launceston Pty Ltd
Department of Transport, Western Australia	Port of Portland Pty Ltd
Derby-West Kimberley Shire Administration	Ports Corporation of Queensland
Esperance Port Authority	Samancor Gemco
Flinders Ports Pty Ltd	Santos Limited
Flinders Island Ports Company Pty Ltd	Sea Swift
Fremantle Port Authority	Southern Shipping
Geraldton Port Authority	Sydney Ports Corporation
Gippsland Ports Committee of Management	TOLL Ports
Hobart Ports Corporation Pty Ltd	Townsville Port Authority
King Island Ports Corporation Pty Ltd	Waterways Authority (NSW)
Kangaroo Island Sealink	

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Scope and coverage

Australian Sea Freight, 2005–06 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 unloaded at Australian ports. It excludes some trade from small craft at isolated locations in northern and western regions of Australia. Cargo loaded or unloaded at Christmas Island, the Cocos (Keeling) Islands and Norfolk Island also is excluded.
- Chapter 4 covers single and continuing voyage permits.
- Chapter 5 provides information about ship and cargo movements through Australian ports.
- Chapter 6 contains details of the Australian trading fleet for the period 2005–06.

Chapter 1 Overview

In 2005–06, 806.3 million tonnes of cargo moved across Australian wharves, another record high. This represented a 2.4 per cent annual increase over 2004–05. This growth was less than the 7.8 per cent increase recorded in 2004–05. There was little change in the structure in these movements compared with 2004–05. Exports, imports and domestic loaded and unloaded cargoes accounted for 77.5 per cent, 8.9 per cent, 6.8 per cent and 6.8 per cent of cargo movements respectively.

International sea freight

In 2005–06, 696 million tonnes of international cargo moved across Australian wharves (Table 1.1). Compared with 2004–05, there was a 2.3 per cent increase in both exports and imports by weight. This was a smaller percentage increase, compared with 9.4 per cent in 2004–05. By value, there was a 20.9 per cent increase in exports, and a 10.7 per cent increase in imports, between 2004–05 and 2005–06.

Table 1.1 Summary of international sea freight, 10 years to 2005–06

Financial year	Value			Weight		
	Exports	Imports	Total	Exports	Imports	Total
	\$ Billion			Million tonnes		
1996–97	63.4	56.9	120.4	404.0	49.8	453.8
1997–98	69.6	64.1	133.7	427.1	51.9	479.0
1998–99	68.2	68.5	136.7	431.8	56.3	488.1
1999–00	78.2	76.5	154.6	462.0	56.7	518.7
2000–01	99.4	83.0	182.3	495.0	55.0	550.0
2001–02	99.5	85.2	184.7	501.0	57.8	558.7
2002–03	93.4	94.9	188.4	529.4	62.2	591.6
2003–04	89.3	93.5	182.8	558.3	64.2	622.5
2004–05	106.3	108.9	215.3	610.6	69.9	680.6
2005–06	128.5	120.5	249.0	624.5	71.5	696.0

Source: ABS 2007.

Coastal freight

In 2005–06, Australian ports handled 110.3 million tonnes of coastal cargo. This tonnage represented 13.7 per cent of all cargo moved across Australian wharves, a slight increase from 13.6 per cent in 2004–05. 55.2 million tonnes of coastal cargo was loaded and 55.1 million tonnes was unloaded (Table 1.2). The discrepancy between loaded and unloaded is due, primarily, to cargo on ships in transit at the start and end of the year, as explained in the section on statistical issues at the end of this paper.

Table 1.2: Summary of Australian coastal freight, 10 years to 2005–06

Financial year	Loaded			Unloaded		
	Interstate	Intrastate	Total	Interstate	Intrastate	Total
	<i>Million tonnes</i>					
1996–97	32.6	16.6	49.1	32.5	17.5	50.0
1997–98	34.3	18.2	52.5	34.7	19.0	53.7
1998–99	31.9	16.5	48.4	31.0	17.1	48.1
1999–00	32.7	18.6	51.3	32.4	18.4	50.7
2000–01	33.2	18.8	52.0	32.8	18.7	51.5
2001–02	32.5	19.9	52.4	33.2	19.7	52.8
2002–03	34.3	18.6	52.8	35.0	18.5	53.5
2003–04	34.8	18.4	53.2	35.5	19.6	55.1
2004–05	34.1	19.6	53.7	34.0	19.4	53.4
2005–06	34.8	20.4	55.2	34.1	21.0	55.1

Source: BTRE 2007b.

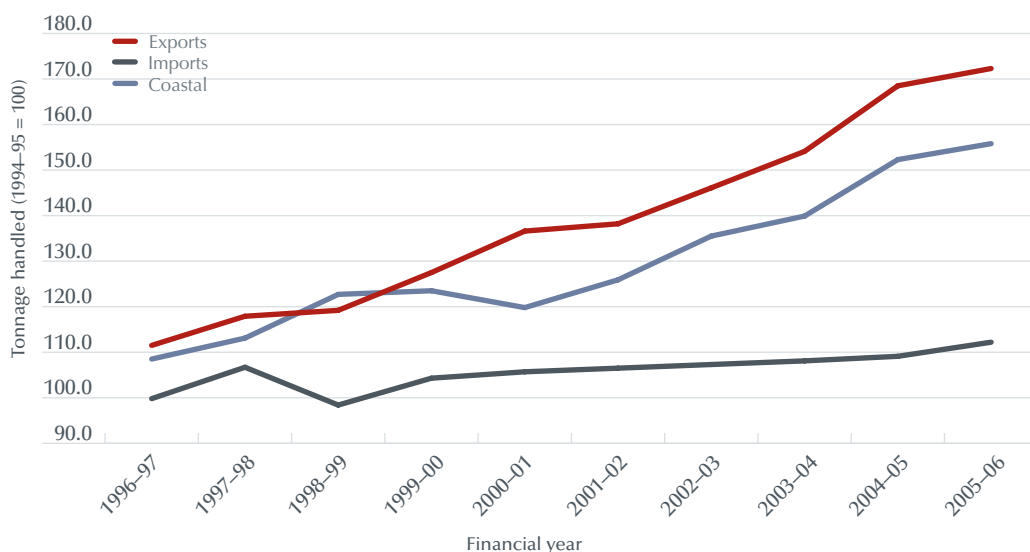
Summary of Australian port task

In 2005–06, the Australian port cargo-handling activity, as measured in tonnes, experienced slower growth compared with the previous year. Loaded exports increased by 2.3 per cent in 2005–06 compared with 9.4 per cent in previous year. Unloaded imports also increased by 2.3 per cent, compared with the 8.9 per cent increase in 2004–05.

Total coastal cargo tonnes increased by 3.0 per cent. Loaded cargo increased by 2.8 per cent and unloaded cargo increased by 3.2 per cent. Based on cargo loaded, the Australian coastal fleet performed 122 billion tonne-kilometres in 2005–06, which was 7 per cent more than the previous year.

Figure 1.1 summarises the changes in the Australian sea freight task using three indices, with 1994–95 as the base year.

Figure 1.1 Australia's maritime trading; index of exports, imports and coastal tonnage, 10 years to 2005–06



Source: ABS 2007, BTRE 2007b.

In 2005–06, ships using single voyage permits (SVPs) and continuous voyage permits (CVPs)¹ moved an estimated 13.7 million tonnes of freight around the Australian coast (Table 1.3). This was an increase from 13 million tonnes in 2004–05. Overall, the share of total loaded freight carried under permits increased slightly to 24.8 per cent in 2005–06 from 24.3 per cent in 2004–05.

The number of containers carried under voyage permits declined by 21.5 per cent, from 62 793 TEUs in 2004–05 to 49 259 in 2005–06. The largest drop was in the number of TEUs carried under the CVPs, from 56 938 in 2004–05 to 32 758 in 2005–06. Some of this reduction may be due to the operation of PAN Australia Shipping Pty Ltd for the last quarter of the period. During the same period, the number of TEUs carried under SVPs nearly tripled, from 5 855 in 2004–05 to 16 501 in 2005–06.

Table 1.3 Summary of voyage permits used, 2005–06

Permit type	Voyages	Freight carried	TEUs carried
	Number	Tonnes	Number
Single voyage permits	1 133	11 470 959	16 501
Continuing voyage permits	1 291	2 230 131	32 758
Total	2 424	13 701 090	49 259

Source: DOTARS 2007.

¹ Voyage permit information provided in this paper differs from that appearing in the BTRE's Waterline series. See explanatory notes for further information.

Australian port activity

The number of ships involved in international shipping entering Australia declined slightly, from 3 540 in 2004–05 to 3 517 in 2005–06. The number of voyages by all ships involved in international shipping increased slightly, while the number of port calls made by all ships involved in international shipping increased by 0.9 per cent (Table 1.4). This slight increase in ship activity resulted from an increase in the amount of cargo that moved across Australian ports and made 2005–06 the busiest period yet recorded.

Table 1.4: Summary of Australian port visits, 10 years to 2005–06

<i>Financial year</i>	<i>All ships involved in international shipping</i>	<i>Number</i>	
		<i>Voyages by all ships involved in international shipping</i>	<i>Port calls by all ships involved in coastal and international shipping</i>
1996–97	2 870	8 138	18 643
1997–98	3 239	9 706	20 322
1998–99	3 187	9 744	20 899
1999–00	3 165	9 893	21 683
2000–01	3 162	9 738	21 542
2001–02	3 103	8 779	21 358
2002–03	3 140	8 935	23 454
2003–04	3 363	9 261	23 436
2004–05	3 540	10 034	25 348
2005–06	3 528	10 172	25 615

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: LMIU 2007.

Australian fleet

The Australian merchant fleet increased in 2005–06, in both gross and deadweight tonnage (Table 1.5). The total number of ships also has increased by 9 to 88. In 2005–06, the number of small ships (mostly general cargo carriers), increased to 11 from 2 in the previous year. The number of large ships was 77 and remained unchanged from 2004–05. However, the fleet's carrying capacities increased in the category of bulk carriers following a further increase in demand for ships to carry exports of minerals and energy commodities in 2005–06.

Table 1.5 Summary of Australian trading fleet between 1994 and 2006

Year	Small ships (less than 2000 dwt)	Large ships (greater than 2000 dwt)	Total number of ships	Deadweight tonnage	Gross registered tonnage
1994	n/a	n/a	90	3 499 527	2 414 844
1995	n/a	n/a	85	3 203 623	2 298 894
1996	n/a	n/a	82	3 303 294	2 267 719
1997	n/a	n/a	76	3 164 568	2 238 141
1999	22	55	77	2 505 369	1 864 976
2000	23	54	77	2 283 336	1 729 770
2001	30	51	81	2 323 983	1 764 298
2002	23	54	77	2 028 637	1 587 743
2003	19	55	74	2 135 982	1 628 203
2004	30	52	82	2 052 795	1 643 709
2005	2	77	79	2 802 834	2 113 398
2006	11	77	88	3 003 805	2 386 976

Note: Data for 1998 was not available.

Sources: DOTARS—personal communications; LMIU 2007; Fairplay 2007; AMSA 2006, Shipping, companies (various)—personal communications.

Chapter 2 International sea freight

In 2005–06, Australia’s international maritime trade continued to grow, although at a slower rate than in 2004–05. In 2005–06, international sea freight to and from Australia increased by 15.7 per cent by value, and increased by 2.3 per cent by weight over 2004–05². The international sea freight task for exports increased in value and weight by 20.8 and 2.3 per cent respectively. The increase in international imports by sea was 10.6 per cent by value and 2.2 per cent by weight in 2005–06.

Handling of Australia’s international sea freight by Australian ports

In 2005–06, Western Australia continued to have the largest volume and value of exports (Table 2.1) while Queensland received the largest volume of imports by weight and New South Wales received the most imports in terms of value.

Table 2.1 International sea freight by Australian state and territory of origin and final destination, 2005–06

State/Territory	Value		Weight	
	Imports	Exports	Imports	Exports
	\$ Thousand	\$ Thousand	Tonnes	Tonnes
New South Wales	39 763 339	21 900 593	17 793 884	103 436 254
Victoria	38 086 155	15 783 475	16 675 816	12 339 893
Queensland	21 706 945	34 470 520	18 851 528	166 176 010
South Australia	5 456 260	8 256 996	3 214 462	10 004 835
Western Australia	13 373 873	38 767 893	11 301 155	316 561 950
Tasmania	527 168	2 648 791	635 243	6 820 212
Northern Territory	1 588 064	2 476 117	2 996 677	7 155 029
Australian Capital Territory	1 085		124	
State confidential ^a	0	709 577	1 158	1 571 084
Foreign origin ^b		3 481 114		415 657
Total	120 502 889	128 495 076	71 470 046	624 480 924

a State confidential refers to situations where ABS concludes that indicating state of origin or destination for cargo may lead to disclosure of commercially sensitive information.

b Foreign origin refers to commodities where no Australian origin is identified. Most of this category refers to transhipped cargo.

Note: Blank cells mean no data was recorded for this category, while cells with an entry of 0 mean that data was recorded but rounded to zero.

An update of this table is available on the BTRE website <<http://www.btre.gov.au>>.

Source: ABS 2007.

Analysis of Australian port of loading or unloading data (Table 2.2) leads to the conclusion that Sydney continued to be the port handling the largest volume of imports by weight and value, and that Melbourne handled the largest volume of exports by value. Dampier handled the largest volume of exports by weight in 2005–06 followed by Port Hedland, reversing the 2004–05 ranking.

Table 2.2 International sea freight by Australian ports, 2005–06

Australian port	Value		Weight	
	Imports \$ Thousand	Exports \$ Thousand	Imports Tonnes	Exports Tonnes
New South Wales				
Coffs Harbour	825	4 317	646	96
Newcastle	597 593	7 148 445	1 027 709	82 835 442
Port Kembla	284 831	3 785 370	1 909 559	13 954 890
Sydney	39 776 688	10 258 250	15 023 548	4 880 631
Twofold Bay	1 316	85 767	1 166	1 061 763
Other ports	1 329	13 640	1 012	8 858
Victoria				
Geelong	3 234 270	520 716	5 473 684	2 047 057
Melbourne	36 961 155	19 081 434	11 167 368	9 881 202
Portland	175 076	1 027 012	501 709	2 087 410
Westernport	254 170	456 284	76 290	411 571
Other ports	14 540	114 779	10 409	575 262
Queensland				
Abbot Point		938 471		11 962 085
Brisbane	18 178 150	9 252 742	10 875 231	10 057 695
Bundaberg	1 774	60 335	5 974	129 606
Cairns	456 761	521 770	380 523	352 275
Gladstone	741 996	7 440 590	2 101 525	48 527 781
Hay Point		11 333 765		80 344 974
Innisfail		255 234		770 244
Karumba		710 358		736 316
Lucinda		228 015		620 636
Mackay	354 062	518 657	496 567	2 324 423
Rockhampton	1 023	626	393	981
Thursday Island	7 163	571	3 756	48
Townsville	999 630	4 478 319	4 698 517	3 896 417
Weipa	52 759	101 841	56 424	5 048 489
Other ports	2 720	22 393	597	1 344 450
South Australia				
Adelaide	3 202 134	5 019 178	2 223 327	3 950 998
Edithburg	30	38 994	9	224 215
Port Bonython		382 366		549 766
Port Lincoln	74 679	383 472	110 905	1 563 614
Port Pirie	3 002	187 758	2 075	231 888
Thevenard		60 567		552 564

Table 2.2 International sea freight by Australian ports, 2005–06 (continued)

<i>Australian port</i>	<i>Value</i>		<i>Weight</i>	
	<i>Imports</i> \$ Thousand	<i>Exports</i> \$ Thousand	<i>Imports</i> Tonnes	<i>Exports</i> Tonnes
South Australia (continued)				
Walleroo	9 808	66 521	30 585	354 003
Whyalla	39 123	120 655	375 101	1 209 777
Other ports	161	57 639	73	327 285
Western Australia				
Albany	42 742	427 442	114 827	2 616 257
Broome	24 599	43 615	45 427	25 037
Bunbury	170 848	2 740 458	1 122 630	8 756 277
Cape Cuvier		51 189		2 689 345
Carnarvon		9		0
Dampier	1 315 323	13 194 072	521 030	1 100 037 81
Esperance	152 001	1 353 233	204 646	7 886 124
Fremantle	10 728 959	9 293 837	8 371 338	12 077 226
Geraldton	202 536	1 133 193	200 261	4 648 953
Port Hedland	402 457	5 832 761	566 693	105 936 670
Port Walcott	66 608	2 455 132	73 566	55 233 299
Useless Loop		16 376		854 930
Offshore terminals	940	1 686 594	0	2 562 999
Wyndham	52 849	285 411	69 352	325 933
Yampi Sound	780	62 027	714	1 109 412
Other ports	38 355	135 124	12 234	1 928 198
Tasmania				
Burnie	75 808	361 665	152 180	1 283 381
Devonport	14 980	10 120	38 662	10 200
Hobart	40 633	65 076	177 331	184 520
Launceston	194 568	1 140 155	221 897	3 093 987
Port Latta		82 568		1 000 920
Spring Bay		70 341		815 305
Other ports		4 516		6 019
Northern Territory				
Darwin	933 493	1 052 868	1 841 205	1 076 167
Confidential	607 678	897 600	1 168 298	4 965 707
Offshore terminals		440 159		614 422
Other ports	9 967	273 107	11 912	380 058
State/territory confidential				
Other confidential ports	0	709 577	1 161	1 571 084
Australia total	120 502 889	128 495 076	71 470 046	624 480 923

Note: Blank cells mean no data was recorded for this category, while cells with an entry of 0 mean that data was recorded but rounded to zero.

An update of this table is available on the BTRE website <<http://www.btre.gov.au>>.

Source: ABS 2007.

Australia's maritime trading regions

The regions³ of South East Asia and East Asia were Australia's largest suppliers by value, followed by Europe, Japan and North Asia. South East Asia continued also as Australia's largest source of imports by weight (Table 2.3). Figures 2.1 and 2.2 provide the information on value of international sea freight by region of origin and final destination respectively.

Japan and North Asia was Australia's largest export market both by weight (289.8 million tonnes, a slight decline from 295.8 million tonnes in 2004–05) and value (\$41.6 billion, a 24.6 per cent increase from \$33.4 billion in 2004–05). East Asia was Australia's second largest export market.

Table 2.3 International sea freight by region of origin and final destination, 2005–06

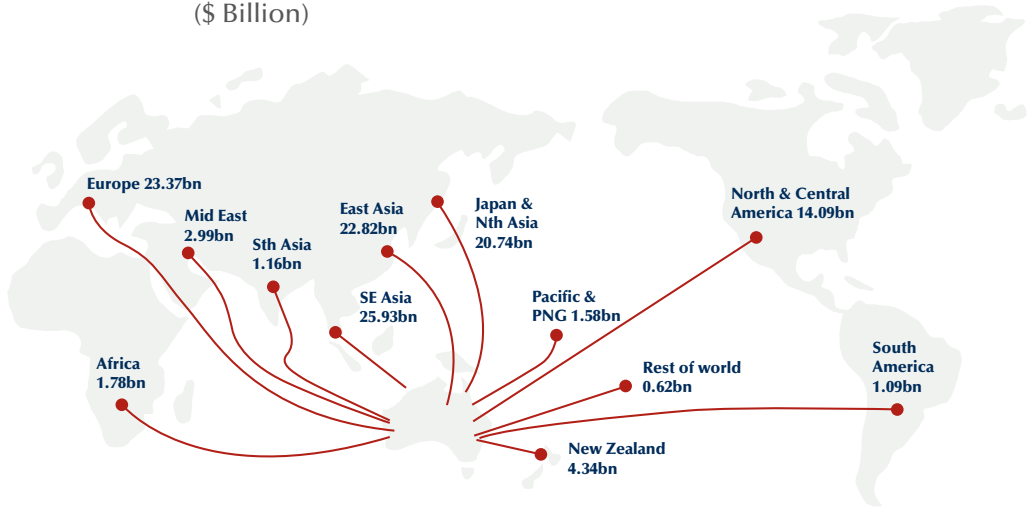
Region of origin/ final destination	Value		Weight		Commodity rank	
	Imports	Exports	Imports	Exports	By value	By weight
	\$ Thousand	\$ Thousand	Tonnes	Tonnes		
Africa	1 776 161	3 115 372	1 064 253	8 206 564	9	8
North and Central America	14 085 667	10 027 123	5 643 136	13 929 902	5	6
South America	1 092 454	1 404 287	1 250 201	7 950 313	11	9
East Asia	22 818 984	25 843 800	9 496 514	193 108 421	2	2
South East Asia	25 926 097	13 383 927	27 923 411	21 995 097	3	4
South Asia	1 159 880	4 997 346	496 271	21 476 782	8	5
Japan and North Asia	20 740 387	41 651 632	7 828 538	289 800 124	1	1
Europe	23 369 904	12 764 376	4 039 435	48 433 629	4	3
Middle East	2 993 313	5 726 549	5 905 955	10 442 011	7	7
New Zealand	4 339 223	6 307 109	2 520 970	5 121 435	6	10
Pacific Islands and Papua New Guinea	1 582 081	2 355 247	3 934 648	2 162 701	10	11
Rest of world	618 739	918 308	1 366 715	1 853 944	12	12
Total	120 502 889	128 495 076	71 470 046	624 480 924		

Note: An update of this table is available on the BTRE website <<http://www.btre.gov.au>>.

Source: ABS 2007.

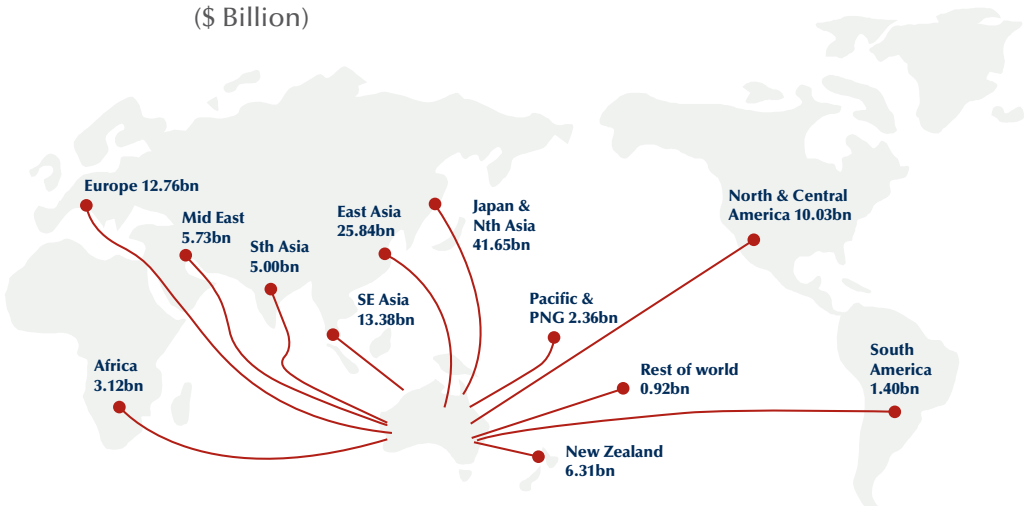
³ See explanatory notes for the countries included in each maritime region

Figure 2.1 International freight by region of origin, 2005–06
(\$ Billion)



Source: ABS 2007.

Figure 2.2 International freight by region of final destination, 2005–06
(\$ Billion)



Source: ABS 2007.

Table 2.4 Australia’s top 20 maritime trading partners, 2005–06

Country of origin	Imports		Country of final destination	Exports		Rank
	Value \$ Thousand	Weight Tonnes		Value \$ Thousand	Weight Tonnes	
China (including Hong Kong and Macau)	19 210 933	5 915 891	Japan	30 060 765	219 278 440	1
Japan	15 322 377	5 124 855	China (including Hong Kong and Macau)	19 550 839	155 247 349	2
United States of America	12 177 316	3 614 676	Republic of Korea	11 129 389	69 751 663	3
Singapore	7 673 827	8 796 324	United States of America	7 575 481	5 342 136	4
Germany	6 423 313	776 954	New Zealand	6 307 109	5 121 435	5
Republic of Korea	5 336 744	2 539 065	Taiwan	5 544 860	35 977 775	6
Malaysia	4 827 252	4 458 314	India	4 279 895	19 743 181	7
Thailand	4 486 548	1 378 276	Indonesia	3 953 825	7 783 891	8
New Zealand	4 339 223	2 520 970	Singapore	3 452 574	3 804 488	9
Vietnam	4 096 400	5 440 526	Thailand	2 989 569	3 575 617	10
Indonesia	3 817 193	5 910 260	United Kingdom	2 880 188	9 345 841	11
United Kingdom	3 201 838	384 566	Netherlands	2 417 278	9 374 259	12
Taiwan	2 991 759	2 115 471	Malaysia	2 292 342	5 707 737	13
Italy	2 910 271	587 157	Saudi Arabia	2 156 148	2 578 243	14
France	2 101 596	307 946	South Africa	1 730 958	4 061 241	15
South Africa	1 494 568	465 827	Italy	1 513 914	7 159 299	16
Papua New Guinea	1 357 294	2 015 210	Canada	1 458 276	1 976 454	17
Canada	1 233 346	1 877 463	United Arab Emirates	1 371 761	2 706 637	18
Saudi Arabia	1 225 879	2 630 169	Papua New Guinea	1 254 017	1 222 545	19
Sweden	1 223 506	213 909	France	1 003 228	7 178 387	20
Rest of world	15 051 709	14 396 217	Rest of world	15 572 662	47 544 310	
Total	120 502 889	71 470 046	Total	128 495 076	624 480 924	

Note: An update of this table is available on the BTRE website <<http://www.btre.gov.au>>.

Source: ABS 2007.

Trading partners by country

The trend of strong growth in maritime trade with China and Japan has continued. In 2005–06, Japan was Australia’s largest trading partner for sea freight exports by value, followed by China and the Republic of Korea. China was also Australia’s largest trading partner for sea freight imports, followed by Japan (Table 2.4). New Zealand was Australia’s ninth largest supplier of imports and fifth largest market for Australia’s exports, followed by Indonesia (eleventh supplier of imports and eighth market for Australia’s exports) and Papua New Guinea (nineteenth on exports).

Overseas ports of loading or unloading

Not all international sea freight travels directly from the country of origin to Australia or from Australia to its final destination. This section summarises information on the overseas ports of loading and unloading. These ports represent either the last port the cargo was loaded onto a ship prior to arriving in Australia, or the first port the cargo was unloaded from a ship after departing Australia.

The 2005–06 data on ports of loading or unloading indicated the following changes compared with previous years:

Loaded cargo

- the weight of total cargo loaded increased by 2.2 per cent, down from 9 per cent in 2004–05, with more than half of regions recording an increase;
- the total value of cargo loaded increased by 10.6 per cent. This was due to an increase in value from all regions, with the Rest of world noting a slight decline;
- South East Asia was the region with the largest value of cargo loaded followed by East Asia, Europe and then Japan and North Asia (Table 2.5 and Figures 2.3 and 2.4);

Unloaded cargo

- total tonnes of cargo unloaded increased by 2.3 per cent although only half the regions recorded increases with the remainder recording decreases;
- Japan and North Asia again dominated as the region with the highest volume weight and value of cargo unloaded; and
- the value of unloaded freight increased by 20.8 per cent. The value of unloaded freight in all regions increased, except in North and Central America and New Zealand which decreased.

Table 2.5 International freight by trading region of loading and unloading, 2005–06

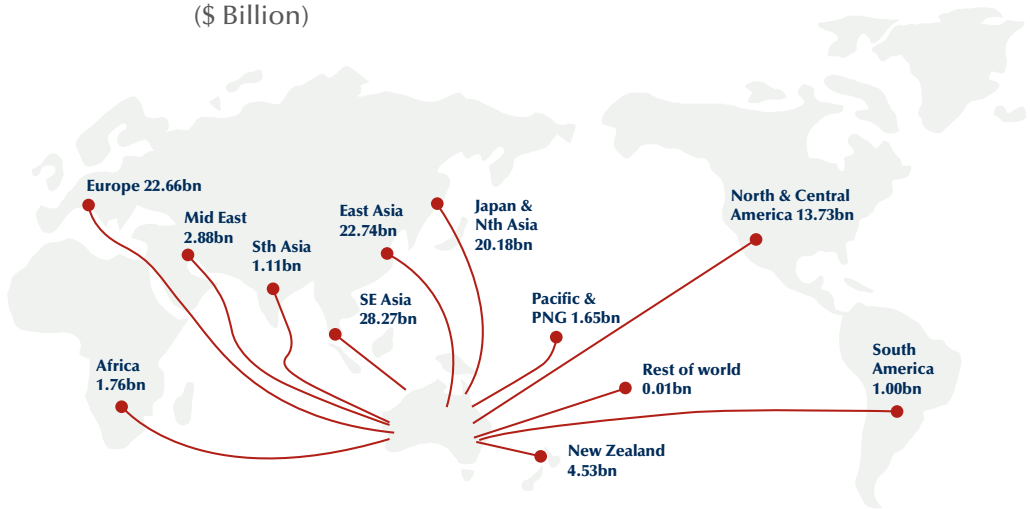
<i>Region of loading/unloading</i>	<i>Value</i>		<i>Weight</i>	
	<i>Loaded \$ Thousand</i>	<i>Unloaded \$ Thousand</i>	<i>Loaded Tonnes</i>	<i>Unloaded Tonnes</i>
Africa	1 755 532	2 153 949	1 062 757	5 718 353
North and Central America	13 725 124	8 903 877	5 569 247	14 986 672
South America	995 454	1 257 564	1 165 925	7 742 681
East Asia	22 741 107	24 379 312	9 520 445	192 747 246
South East Asia	28 267 470	21 174 915	29 709 034	24 634 012
South Asia	1 107 539	4 363 163	481 299	20 864 782
Japan and North Asia	20 184 179	40 765 683	7 763 801	289 244 303
Europe	22 655 869	11 673 620	3 911 868	47 452 336
Middle East	2 875 926	4 307 266	5 726 185	11 969 755
New Zealand	4 530 569	6 487 306	2 552 666	5 164 023
Pacific Islands and Papua New Guinea	1 651 419	2 289 999	3 896 772	2 153 738
Rest of world	12 701	738 422	110 046	1 803 022
Total	120 502 889	128 495 076	71 470 046	624 480 924

Note: Freight loaded in various regions was unloaded in Australian ports. Similarly, freight unloaded in various overseas regions was loaded in Australian ports.

An update of this table is available on the BTRE website <<http://www.btre.gov.au>>.

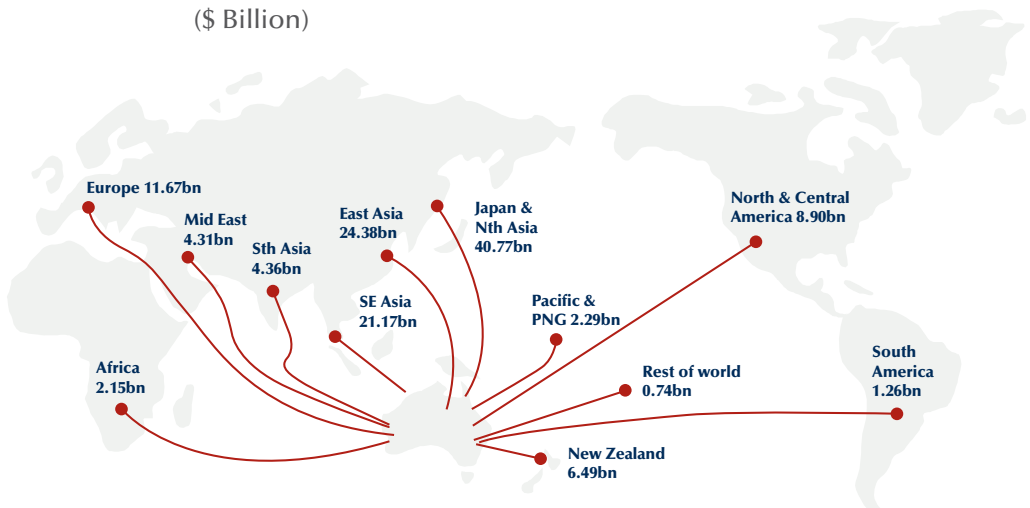
Source: ABS 2007.

Figure 2.3 International freight by region of loading, 2005–06
(\$ Billion)



Source: ABS 2007.

Figure 2.4 International freight by region of unloading, 2005–06
(\$ Billion)



Source: ABS 2007.

Australia's maritime trade carried by liner shipping

In 2005–06, freight carried by the liner trade⁴ decreased by 12 per cent in value to \$128.6 billion from \$133.9 billion in the previous year (Table 2.6 and Figure 2.5). There was a decline of 8.6 per cent in loaded liner freight by weight and 4.7 per cent decline in unloaded liner freight. East Asia was the largest source of loaded cargo by value and by weight. East Asia was also Australia's largest market for liner unloaded cargo by weight, while South East Asia was the largest destination for liner unloaded cargo by value.

Table 2.6 International liner trade by region of loading and unloading, 2005–06

Region of loading/unloading	Value		Weight	
	Loaded	Unloaded	Loaded	Unloaded
	\$ Thousand	\$ Thousand	Tonnes	Tonnes
Africa	1 288 435	476 325	339 598	230 469
North and Central America	9 900 897	5 535 890	1 860 558	1 707 195
South America	702 446	155 778	242 536	178 063
East Asia	19 764 197	8 230 320	4 900 186	7 089 623
South East Asia	10 189 774	13 664 743	3 546 381	6 271 874
South Asia	1 037 840	410 968	391 889	655 293
Japan and North Asia	14 054 045	8 024 162	1 928 384	6 732 941
Europe	19 393 598	4 208 217	3 365 681	1 595 059
Middle East	525 133	1 071 939	290 380	369 978
New Zealand	3 756 193	4 669 767	1 719 033	2 265 342
Pacific Islands and Papua New Guinea	235 081	1 254 558	119 212	655 832
Rest of world	3 245	38 569	1 233	61 718
Total	80 850 882	47 741 237	18 705 071	27 813 389

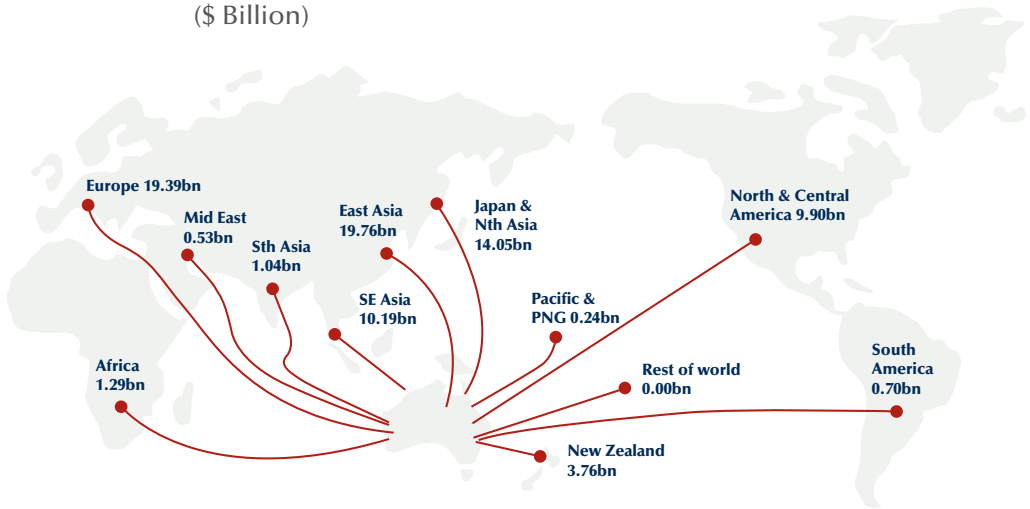
Note: Freight loaded in various regions was unloaded in Australian ports. Similarly, freight unloaded in various overseas regions was loaded in Australian ports.

An update of this table is available on the BTRE website <<http://www.btre.gov.au>>.

Source: ABS 2007.

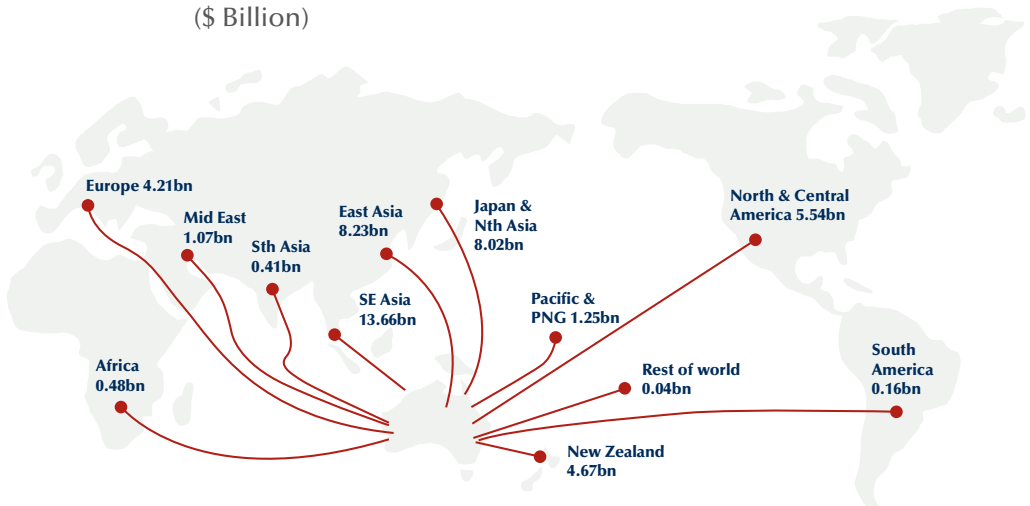
⁴ See explanatory notes for a definition of liner trade.

Figure 2.5 International liner freight by region of loading, 2005–06
(\$ Billion)



Source: ABS 2007.

Figure 2.6 International liner freight by region of unloading, 2005–06
(\$ Billion)



Source: ABS 2007.

Australia's maritime trade carried by non-liner shipping

Australian non-liner trade⁵ increased by 48 per cent in 2005–06 and was valued at \$120.4 billion (Table 2.7). South East Asia was the most important region for non-liner cargo loaded, both by value and weight, while the Japan and North Asia region was Australia's largest non-liner unloading region (Figures 2.7 and 2.8).

Table 2.7 International non-liner trade by region of loading and unloading, 2005–06

Region of loading/unloading	Value		Weight	
	Loaded	Unloaded	Loaded	Unloaded
	\$ Thousand	\$ Thousand	Tonnes	Tonnes
Africa	467 097	1 677 624	723 159	5 487 884
North and Central America	3 824 227	3 367 986	3 708 671	13 279 477
South America	293 008	1 101 786	923 389	7 564 618
East Asia	2 976 910	16 148 992	4 620 188	185 867 350
South East Asia	18 077 695	7 510 172	26 162 653	18 362 138
South Asia	69 700	3 952 195	89 410	20 209 489
Japan and North Asia	6 130 134	32 741 521	5 835 394	282 511 362
Europe	3 262 271	7 465 403	546 143	45 857 277
Middle East	2 350 793	3 235 327	5 435 806	11 599 777
New Zealand	774 376	1 817 538	832 627	2 898 232
Pacific Islands and Papua New Guinea	1 416 338	1 035 441	3 777 559	1 513 871
Rest of world	9 457	699 853	108 813	1 741 304
Total	39 652 008	80 753 839	52 763 813	596 892 778

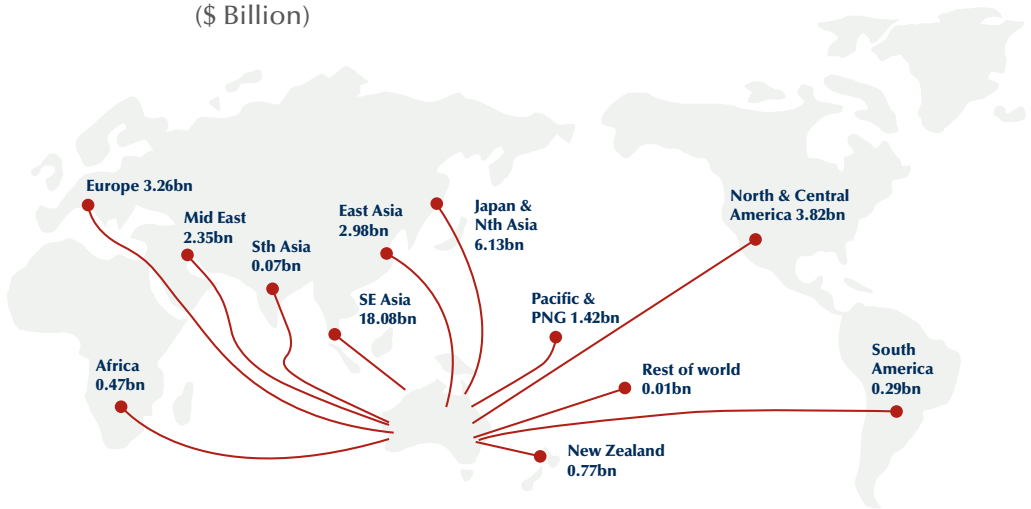
Note: Freight loaded in various regions was unloaded in Australian ports. Similarly, freight unloaded in various overseas regions was loaded in Australian ports.

An update of this table is available on the BTRE website <<http://www.btre.gov.au>>.

Source: ABS 2007.

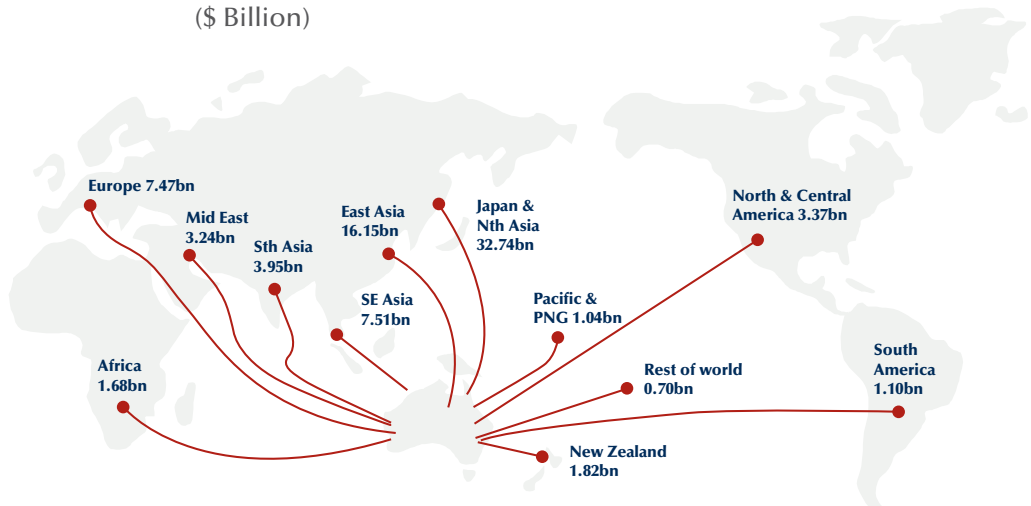
⁵ See explanatory notes for a definition of non-liner trade.

Figure 2.7 International non-liner freight by region of loading, 2005–06
(\$ Billion)



Source: ABS 2007.

Figure 2.8 International non-liner freight by region of unloading, 2005–06
(\$ Billion)



Source: ABS 2007.

Commodity structure of Australia's international sea freight

In 2005–06, the leading commodities by value moving across Australia's wharves were *machinery, road vehicles and transport equipment and coal, coke and briquettes*, while *iron ore and concentrates, coal, coke and briquettes and petroleum oil* were the leading commodities in terms of tonnes transported.⁶

Table 2.8 International freight by commodity, 2005–06

ATFCC codes and Commodity names	Value		Weight		Commodity rank	
	Imports	Exports	Imports	Exports	By value	By weight
	\$ Thousand	\$ Thousand	Tonnes	Tonnes		
0 – Food and live animals						
Cereals & cereal preparations	434 063	4 846 140	293 231	20 897 723	13	4
Coffee, tea, cocoa, spices etc.	531 519	57 848	146 624	12 618	47	52
Dairy products & birds' eggs	383 963	2 408 646	101 451	863 513	23	31
Feeding stuff for animals	297 730	767 224	439 760	1 697 422	38	19
Fish, crustaceans, molluscs etc.	971 276	625 822	210 668	38 577	34	49
Live animals	590	698 393	179	397 846	43	47
Meat & meat preparations	321 380	6 365 262	88 083	1 513 052	10	26
Miscellaneous edible products & preparations	1 396 448	590 769	305 320	208 517	30	40
Sugars, sugar preparations & honey	179 282	250 816	87 582	616 891	53	37
Vegetables & fruit	1 098 488	1 238 328	724 978	1 390 619	25	20
1 – Beverages and tobacco						
Ale, beer & stout, cider (alcoholic)	117 612	19 029	134 068	20 691	63	54
Non-alcoholic beverages nes	133 521	33 039	117 653	31 588	60	55
Spirits (potable), alcoholic beverages nes	414 366	69 491	96 841	29 246	51	56
Tobacco & tobacco manufactured	205 082	82 364	24 920	6 515	57	61
Wine & vermouth	242 957	2 756 150	52 269	1 704 835	21	24
2 – Crude materials, inedible, except fuels						
Aluminium ores & concentrates; alumina	12 405	5 307 592	19 053	20 548 545	12	5
Copper ores & concentrates;	16 517	3 403 942	5 774	1 717 375	17	25
Cork & wood	552 618	1 048 599	483 667	11 338 396	33	9
Cotton	83	1 137 442	42	656 729	36	39
Crude animal & vegetable materials nes	166 129	210 578	92 023	62 845	54	53
Crude minerals	120 544	510 350	1 505 924	15 276 037	44	7
Crude rubber (including synthetic)	168 255	5 262	77 775	3 354	59	58
Fertilisers, crude	47 966	3 092	656 849	3 872	64	38
Hides, skins & fur skins raw	1 644	492 621	729	450 796	50	42

⁶ This ranking is based on the sum of both imports and exports, to gauge the total commodities handled.

Table 2.8 International freight by commodity, 2005–06 (continued)

ATFCC codes and Commodity names	Value		Weight		Commodity rank	
	Imports	Exports	Imports	Exports	By value	By weight
	\$ Thousand	\$ Thousand	Tonnes	Tonnes		
2 – Crude materials, inedible, except fuels (continued)						
Iron ore & concentrates;	218 515	12 831 373	4 895 668	255 910 284	5	1
Lead & zinc ores & concentrates;	70 492	2 230 225	112 011	2 474 605	27	17
Mineral sands	10 217	226 968	22 229	933 154	58	32
Oil seeds & oleaginous fruits	46 185	413 859	92 549	1 124 460	52	28
Other metallic ores & metal scrap	52 786	3 310 099	131 575	6 986 334	18	10
Other textile fibres	102 570	42 232	58 335	43 186	62	57
Pulp & waste paper	228 667	145 729	354 745	940 805	55	27
Uranium & thorium ores & concentrates		545 846		10 908	49	64
Wool, sheep & lambs	38 700	2 246 415	8 679	440 897	28	43
3 – Mineral fuels, lubricants & related materials						
Coal, coke & briquettes	23 321	24 353 384	206 872	232 921 795	3	2
Gases, natural & manufactured nes	151 992	79	952 630	8	61	33
Liquefied natural gas	100	4 415 783	1 766	0	14	65
Liquefied petroleum gas (LPG)	198 271	1 002 648	319 035	1 519 672	35	23
Petroleum oil	13 292 483	6 098 607	21 654 158	9 179 114	4	3
Petroleum oils & refined prods	7 921 509	1 698 830	10 192 082	2 592 970	7	8
4 – Animal & vegetable oils, fats & waxes						
Oils & fats	407 545	316 033	291 605	485 774	42	35
5 – Chemical & related products nes						
Chemicals	4 876 848	2 755 485	5 782 385	1 218 184	9	11
Fertilisers, manufactured	892 776	174 960	2 775 734	513 809	37	14
Organic chemicals	1 703 350	88 865	865 614	56 660	32	34
Plastics	2 226 426	458 477	897 147	230 272	24	30
6 – Manufactured goods classified chiefly by material						
Aluminium & aluminium alloys	636 873	5 233 964	157 099	1 734 854	11	22
Copper & copper alloys	315 914	2 601 056	44 322	385 259	22	44
Cork & wood manufactures (excludes furniture)	591 281	217 961	344 671	377 349	41	36
Iron & steel	3 161 396	899 607	2 528 060	1 189 401	16	12
Lead & lead alloys	22 389	591 678	14 208	389 687	46	46
Leather, leather manufactures nes	106 962	463 609	6 786	191 811	48	51
Manufactures of metal nes	3 503 587	738 017	909 716	239 272	15	29
Nickel & nickel alloys	40 611	575 456	2 176	28 543	45	62
Non-metallic mineral manufacture nes	1 529 174	342 414	2 944 792	443 934	31	13
Other non-ferrous metals nes	85 953	269 844	15 032	22 255	56	60
Paper, paperboard & articles	2 557 570	700 280	1 889 241	873 007	20	15
Rubber manufactures nes	1 920 688	138 620	433 463	45 271	29	41

Table 2.8 International freight by commodity, 2005–06 (continued)

ATFCC codes and Commodity names	Value		Weight		Commodity rank	
	Imports	Exports	Imports	Exports	By value	By weight
	\$ Thousand	\$ Thousand	Tonnes	Tonnes		
6 – Manufactured goods classified chiefly by material (continued)						
Textile yarn, fabrics, & articles	2 020 276	3 14 250	365 828	41 560	26	45
Zinc & zinc alloys	14 231	1 005 595	4 540	390 843	39	48
7 – Machinery & transport equipment						
Machinery	26 938 380	4 308 777	2 285 472	381 779	1	16
Road vehicles & transport equipment	21 731 644	4 542 229	1 736 398	432 113	2	18
8 – Miscellaneous manufactured articles						
Apparel & clothing access	3 193 059	103 526	237 467	8 110	19	50
Footwear	966 520	26 103	74 645	1 418	40	59
Miscellaneous manufactured articles	9 502 475	1 556 294	1 882 838	215 560	6	21
9 – Commodities & transactions nes						
Confidential	1 371 531	7 559 838	301 082	20 010 020	8	6
Miscellaneous	15 183	21 265	11 931	8 387	65	63
Total	120 502 889	128 495 076	71 470 046	624 480 924		

Note: An update of this table is available on the BTRE website <<http://www.btre.gov.au>>.

Source: ABS 2007.

Chapter 3 Coastal freight

In 2005–06, 110.3 million tonnes of coastal cargo was handled through Australian ports. Of this, 55.2 million tonnes of coastal cargo was loaded and 55.1 million tonnes was unloaded.

Based on cargo loaded, the Australian coastal fleet task was 122 billion tonne–kilometres, up from 114 billion tonne–kilometres, which was an increase of 7 per cent on the previous year. This increase was primarily in *crude materials, mineral fuels* and *manufactured goods*, with a slight offset due to decreases in *foods and live animals* and *animal and vegetable oils, fats and waxes*.

Commodity structure of Australia’s coastal freight

In 2005–06, there were increases in tonnage loaded in *crude materials* and *mineral fuels*, but decreases were noted in *food and live animals, beverages and tobacco, manufactured goods and machinery and transport materials* (Table 3.1). The overall increase in tonnage loaded was 2.8 per cent, whilst the tonne-kilometres increased by about 7 per cent. This indicated that in 2005–06, on average, the coastal freight travelled longer distances than in the previous year (Table 3.2).

Table 3.1 Coastal freight loaded by commodity group, 10 years to 2005–06

Commodity group	Financial year									
	1996–97	1997–98	1998–99	1999–00	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06
	Million tonnes									
0 – Food and live animals	1.2	1.5	1.5	1.9	1.6	1.7	2.1	1.6	1.7	1.5
1 – Beverages and tobacco	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.1
2 – Crude materials, inedible, except fuels	23.8	24.0	23.7	24.7	23.7	25.5	24.7	24.9	27.7	28.6
3 – Mineral fuels, lubricants and related materials	18.2	20.8	15.8	16.2	18.0	15.9	15.9	16.2	13.8	14.9
4 – Animal and vegetable oils, fats and waxes	0.0	0.0	0.1	0.2	0.1	0.1	0.0	0.1	0.0	0.0
5 – Chemicals and related materials, nes	0.5	0.7	0.8	1.1	1.0	1.6	1.9	1.5	1.5	1.5
6 – Manufactured goods classified chiefly by material	4.0	4.2	4.8	5.6	6.0	5.6	5.8	5.9	6.1	6.0
7 – Machinery and transport materials	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.2
8 – Miscellaneous manufactured articles	0.4	0.6	0.5	0.6	0.6	0.7	0.7	0.7	0.7	0.7
9 – Commodities and transactions nes	0.8	0.6	1.0	0.7	0.7	0.9	1.4	1.5	1.6	1.6
Total	49.1	52.5	48.4	51.3	52.0	52.4	52.8	53.0	53.7	55.2

Source: BTRE 2007b.

Table 3.2 Coastal freight task performed, by commodity group, 10 years to 2005–06

Commodity group	Financial year									
	1996–97	1997–98	1998–99	1999–00	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06
	Billion tonne-kilometres									
0 – Food and live animals	2.1	2.2	2.2	2.8	2.4	2.7	4.1	2.8	2.4	2.1
1 – Beverages and tobacco	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.2	0.3
2 – Crude materials, inedible, except fuels	68.2	71.5	70.5	65.9	61.8	62.1	63.4	64.8	69.7	72.6
3 – Mineral fuels, lubricants and related materials	35.9	36.1	28.6	30.2	30.0	33.6	34.5	37.4	30.5	35.5
4 – Animal and vegetable oils, fats and waxes	0.1	0.1	0.1	0.4	0.1	0.1	0.0	0.1	0.1	0.0
5 – Chemicals and related materials, nes	0.7	1.1	1.0	1.7	2.0	3.1	4.0	3.1	3.1	3.1
6 – Manufactured goods classified chiefly by material	4.8	4.9	5.1	6.7	6.8	6.4	6.6	6.6	6.1	6.4
7 – Machinery and transport materials	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.4
8 – Miscellaneous manufactured articles	0.2	0.3	0.3	0.4	0.5	0.5	0.5	0.6	0.5	0.5
9 – Commodities and transactions nes	0.5	0.5	0.7	0.5	0.6	1.5	1.0	0.9	0.9	1.0
Total	112.6	116.9	108.8	108.9	104.5	110.4	114.8	117.0	114.0	122.0

Source: BTRE 2007b.

In 2005–06, total tonnages for all commodity classifications, as a whole, changed only slightly from 2004–05 figures (Table 3.3). As in 2004–05, the commodity group *crude materials inedible except fuels*, continued to increase due to the Queensland intrastate bauxite movements. At the same time, total *mineral fuels, lubricants and related materials* reversed their previous fall due to the increased levels of crude oil movements. Most other categories were stable or showed a slight increase over their 2004–05 levels.

Table 3.3 Coastal freight by Australian state and territory of loading or unloading and commodity groups, 2005–06

State/territory of origin	State/territory of destination							Total
	NSW	VIC	QLD	SA	WA	TAS	NT	
<i>Thousand tonnes</i>								
0 – Food and live animals								
NSW	0.0	8.9	39.5	30.0	38.3	8.3		125.0
VIC	2.3	0.0	23.5	6.8	33.8	434.1		500.5
QLD	186.2	288.0	59.4	0.0	35.0	0.1		568.6
SA				25.5				25.5
WA	0.4	0.3	0.4	0.0	5.3	1.7	2.6	10.8
TAS	4.5	228.1	2.9	0.1	22.8	4.3		262.8
NT							2.5	2.5
Sub total	193.4	525.3	125.7	62.5	135.2	448.4	5.1	1 495.7
1 – Beverages and tobacco								
NSW	0.3	1.4	3.9	1.3	19.4	0.2		26.5
VIC	0.3		3.3	1.1	7.1	69.1		80.8
QLD					1.1		23.9	25.0
SA								
WA	0.0				0.0		0.1	0.2
TAS		6.4			7.0			13.5
NT							0.1	0.1
Sub total	0.6	7.9	7.2	2.3	34.6	69.3	24.1	146.0
2 – Crude materials inedible except fuels								
NSW	0.3	159.1	12.3	38.4	17.1	27.7		255.0
VIC	24.6		19.5	52.5	20.4	157.4		274.5
QLD	1 268.9	234.4	12 890.4	192.8	5.7	553.4	0.0	15 145.7
SA	1 893.5	449.3	344.7	2 081.0	1.6	157.8		4 928.0
WA	4 294.9	1 091.5	44.4	3.0	204.5	2.3	1.4	5 642.1
TAS	1 291.9	194.4	19.4	172.1	16.9	165.9		1 860.7
NT	26.4				0.2	432.7	2.1	461.4
Sub total	8 800.6	2 128.7	13 330.8	2 539.9	266.6	1 497.3	3.5	28 567.3
3 – Mineral fuels, lubricants and related materials								
NSW	101.0	132.4	284.8	1 050.0	7.1	89.7		1 665.1
VIC	1 945.1	70.0	1 617.1	225.3	100.3	928.2		4 886.0
QLD	391.8	81.4	1 119.8	57.7	129.2		0.1	1 780.0
SA	203.5	296.4			24.2	47.9		572.0
WA	1 799.9	720.7	873.5	582.1	1 901.0		42.7	5 919.9
TAS		1.7	0.0					1.7
NT					43.2		31.7	75.0
Sub total	4 441.4	1 302.5	3 895.3	1 915.1	2 205.0	1 065.8	74.5	14 899.7

Table 3.3 Coastal freight by Australian state and territory of loading or unloading and commodity groups, 2005–06 (continued)

State/territory of origin	State/territory of destination							Total
	NSW	VIC	QLD	SA	WA	TAS	NT	
<i>Thousand tonnes</i>								
4 – Animal and vegetable oils, fats and waxes								
NSW		0.2	3.9			0.8		5.0
VIC			1.2	0.2	2.7	5.8		9.9
QLD		0.0	17.4		0.0			17.5
SA								
WA		0.0	1.6					1.6
TAS								
NT								
Sub total		0.3	24.1	0.2	2.7	6.6		33.9
5 – Chemicals and related materials nes								
NSW		2.1	26.4	0.4	32.0	8.6		69.5
VIC	1.3	9.7	38.4	23.3	46.4	238.8		357.9
QLD	81.5	158.5	91.2	261.1	11.1	20.2	0.1	623.7
SA		9.3	5.1	2.0	0.0	9.2		25.5
WA	1.6	1.1	0.3	0.2	54.9		1.0	59.2
TAS	81.0	225.3	25.4	16.8	15.5	13.1		377.1
NT					0.4		14.9	15.3
Sub total	165.4	406.1	186.7	303.8	160.3	289.9	16.1	528.2
6 – Manufactured goods classified chiefly by material								
NSW	2.9	893.3	73.7	8.0	107.5	30.7	1.5	117.6
VIC	24.5	0.6	71.3	15.6	123.4	277.0		512.4
QLD	20.8	0.7	444.5	0.0	19.8	0.0	0.7	486.4
SA	28.3	567.3	365.4		27.1			988.2
WA	1.0	2.7	0.1	0.1	4.5	0.2	0.7	9.1
TAS	559.8	172.7	53.5	14.1	86.9			887.0
NT					6.2		23.5	29.7
Sub total	637.3	2637.2	2008.5	37.7	375.4	307.9	26.3	6030.4
7 – Machinery and transport materials								
NSW	0.2	6.3	16.7	1.5	19.9	3.6	1.4	49.7
VIC	1.2	10.1	12.1	14.2	29.5	67.9		135.0
QLD	0.1	0.1	0.2	0.0	24.2	0.0	0.5	25.1
SA		0.5	0.5		0.1			1.0
WA	1.0	0.6	1.0		1.2	0.0	1.5	5.4
TAS	1.0	16.7			0.1			17.9
NT					0.4		8.3	8.7
Sub total	3.5	34.3	30.5	15.7	75.4	71.5	11.7	242.8

Table 3.3 Coastal freight by Australian state and territory of loading or unloading and commodity groups, 2005–06 (continued)

State/territory of origin	State/territory of destination							Total
	NSW	VIC	QLD	SA	WA	TAS	NT	
<i>Thousand tonnes</i>								
8 – Miscellaneous manufactured articles								
NSW	1.0	7.3	16.7	0.2	13.8	1.7	1.2	42.0
VIC	1.8	0.0	11.7	9.2	32.6	628.6		683.9
QLD	0.0	0.0		0.0	2.0	0.0	0.4	2.5
SA								
WA	0.4	0.4		0.0	0.4	0.1	0.1	1.5
TAS		9.8	0.0		0.0			9.9
NT					0.0		1.1	1.1
Sub total	3.3	17.6	28.4	9.5	49.0	630.4	2.7	740.9
9 – Commodities and transactions nes								
NSW	0.1	3.4	6.6	0.4	10.3	2.1		22.8
VIC	6.7		20.4	28.7	11.7	140.6		208.1
QLD	0.5	0.1	37.9	6.6	4.6		1.9	51.7
SA	0.0		0.2	0.6	48.9	0.8		50.6
WA	2.3	3.7	0.1	8.4	15.8	2.2	0.2	32.7
TAS	31.5	148.8	0.0	1.8	1.3	8.4		191.8
NT					0.4		6.3	6.7
Sub total	41.1	156.0	65.3	46.5	93.1	153.9	8.5	564.4
Total	14 286.6	8 216.0	19 702.4	4 933.2	3 397.4	4 541.1	172.6	55 249.3

Note: Blank cells mean no data was recorded for this category, while cells with an entry of 0 mean that data was recorded but rounded to zero.

Source: BTRE 2007b.

Cargo flows

Table 3.4 details coastal freight flows between the States by weight. Queensland and Western Australia continued to be ranked first and second respectively as states of origin, while Queensland and New South Wales were ranked first and second respectively as states of destination. This is a similar ranking to the previous three years. Queensland's top ranking as state of origin is due to the large tonnages of intrastate bauxite trade, which continued to increase.

Table 3.4 Total coastal freight flows, 2005–06

State/territory of origin	State/territory of destination							Total	Per cent of total
	NSW	VIC	QLD	SA	WA	TAS	NT		
<i>Thousand tonnes</i>									
NSW	105.9	1 214.5	484.5	1 130.2	265.5	173.5	4.2	3 378.3	6
VIC	2 007.9	90.4	1 818.5	376.9	407.9	2 947.2		7 648.9	14
QLD	1 949.8	763.3	15 660.8	518.3	232.7	573.8	27.6	19 726.3	36
SA	2 125.3	1 322.8	715.8	2 109.1	102.1	215.7		6 590.7	12
WA	6 101.6	1 821.1	921.5	593.8	2 187.7	6.5	50.3	11 682.5	21
TAS	1 969.7	3 004.0	101.3	204.9	150.7	191.7		5 622.3	10
NT	26.4				50.9	432.7	90.4	600.4	1
Total	14 286.6	8 216.0	19 702.4	4 933.2	3 397.4	4 541.1	172.6	55 249.3	100
Per cent of total	26	15	36	9	6	8	0	100	

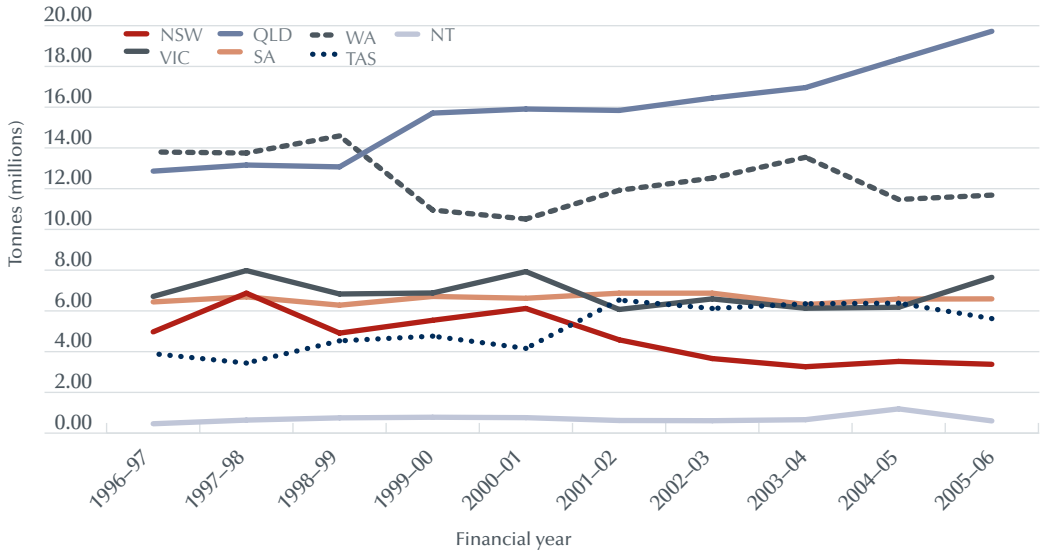
Note: Blank cells mean no data was recorded for this category, while cells with an entry of 0 mean that data was recorded but rounded to zero.

Source: BTRE 2007b.

Shipping freight activity over the last 10 years by state and territory is shown in Figures 3.1 and 3.2. Changes since 2004–05 include:

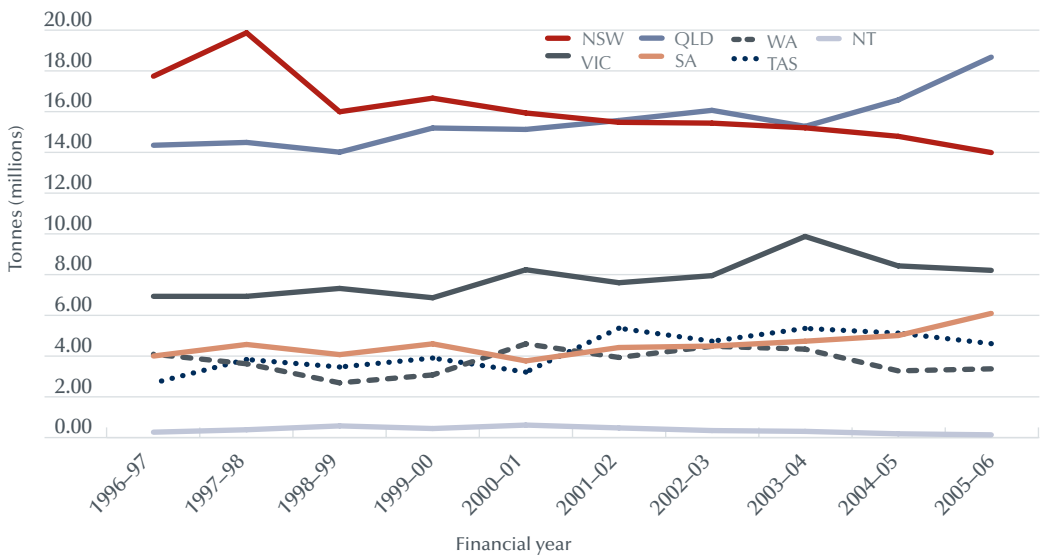
- increased loaded tonnages in Queensland, Western Australia and Victoria, while New South Wales and Tasmania declined slightly; and
- increased unloaded tonnages in Queensland, South Australia and Tasmania, accompanied by declines in New South Wales, Victoria, Western Australia and the Northern Territory.

Figure 3.1 Coastal freight loaded by Australian state and territory, 10 years to 2005–06



Source: BTRE 2007b.

Figure 3.2 Coastal freight unloaded by Australian state and territory, 10 years to 2005–06



Source: BTRE 2007b.

Table 3.5 Coastal freight flows between Australian ports, 2005–06

Port of origin	Port of destination											Total			
	Sydney	Rest of NSW	Melbourne	VIC	Brisbane	QLD	Adelaide	SA	Fremantle	WA	Hobart		TAS	Darwin	Rest of NT
	Thousand tonnes														
Sydney	34.6	0.1	43.0	79.9	281.5	38.6	6.7	259.5	0.0	17.6	58.6				819.9
Rest of NSW	7.1	64.2	164.6	927.1	41.7	122.7	45.2	1 078.4	6.0	25.4	71.9	2.8		1.4	2 558.4
Melbourne	23.8	1.5		10.9	179.4	1.6	81.9	308.3		2.7	1 911.7				2 521.9
Rest of VIC	1 893.9	88.7	70.0	9.6	1 520.7	116.8	243.7	51.2	3.2	485.9	546.9				5 127.0
Brisbane	366.7	41.9	31.6	35.5	1 147.5		40.0	136.6	20.1		0.2	24.3	2.4		1 846.8
Rest of QLD	185.7	1 355.4	471.4	224.8	1 083.6	13 429.6	108.7	369.7	4.7	203.1	370.5	0.0	0.9		17 879.5
Adelaide		28.3	545.8	31.3	370.9	0.2	0.5	2.1	33.4	4.7	4.5				1 066.2
Rest of SA	598.8	1 498.2	542.5	203.2	299.1	45.6	1 873.9	232.5	24.2	102.5	104.0				5 524.5
Fremantle	84.0		254.6	629.0	17.8	8.0	570.1	16.8	5.9	0.0	6.5	49.9	0.3		2 030.1
Rest of WA	1 770.5	4 247.1	1 668	770.7	769.4	19.2	6.9	1 775.8	126.0			0.1			9 652.4
Hobart		81.0	36.5	184.6	9.2	16.2	14.0	136.1	9.1	6.1	2.3				495.2
Rest of TAS	446.3	1 442.4	2 781.5	1.3	3.6	72.3	54.8	135.5		165.9	23.4				5 127.1
Darwin								0.5	7.7			6.5	84.0		98.7
Rest of NT		26.4						42.7			432.7				501.7
Total	5 411.4	8 875.2	5 108.1	3 107.9	4 576.9	15 018.3	2 991.7	1 941.6	2 805.9	1 007.8	3 533.3	83.6	89.0	55 249.3	

Note: Blank cells mean no data was recorded for this category, while cells with an entry of 0 mean that data was recorded but rounded to zero.
 Source: BTRE 2007b.

Table 3.5 shows the changes in cargo flows between the various state capitals and rest of state regions. In comparing the tonnages moved in 2005–06 with 2004–05:

- Darwin and the rest of Northern Territory recorded a sharp decline, both as origin and destination of freight;
- past increases in tonnage movement from the rest of Western Australia to the rest of Victoria had slowed further and declined from 997 to 771 (29 per cent in 2005–06 and 7.3 per cent decline in 2004–05), due to the continuing general downturn in crude oil movements in that area;
- a strong increase in shipments between the rest of Tasmania and Melbourne (882 000 tonnes, or 36.3 per cent growth in 2004–05), was followed by a decline in this trade by 16 per cent or about 530 000 tonnes in 2005–06; and
- there was a reversal in the previously noted marked general decline in the trade from and to Fremantle (17.1 and 16.2 per cent respectively in 2004–05); in 2005–06, freight originating in Fremantle increased by 495 000 tonnes, or 24 per cent, whilst coastal freight destined for Fremantle increased by 175 000 tonnes, or around 7 per cent.

Pack type

An analysis of pack type⁷ shows that bulk cargo⁸ (see Tables 3.6 and 3.7) continues to be the majority of coastal cargo, representing nearly 88 per cent by weight of total coastal cargo loaded, up 2 percentage points from 2004–05. Liquid bulk loaded in 2005–06 increased to 13.9 million tonnes or 11.2 per cent, compared with levels in the previous year. Container non-bulk cargo declined from 4.6 million to 4.4 million tonnes in 2005–06, or 3.8 per cent. Similarly, loaded other non-bulk freight declined from 3.2 million to 2.3 million tonnes in 2005–06, or 27.2 per cent.

Data in Table 3.8 illustrates the flow of cargo between the states by pack type. There is a strong growth in dry bulk cargo from Queensland and liquid bulk shipments from New South Wales, Queensland and Western Australia. This growth was partially offset by overall decreases in the 2005–06 levels of container cargo shipments from New South Wales and Queensland. Similarly, further declines in non-bulk cargo were recorded, especially from all States and Territories, except Western Australia, which recorded a slight increase in this category in 2005–06.

7 See explanatory notes for a definition of pack type.

8 See explanatory notes for a definition of bulk cargo.

Table 3.6 Coastal freight loaded by port and pack type, 2005–06

Port of loading	Pack type				Total	Per cent of total
	Dry bulk	Liquid bulk	Container non-bulk	Other non-bulk		
	Thousand tonnes					Per cent
Sydney	0.0	375.9	430.4	13.6	819.9	1.5
Rest of NSW	1 398.9	154.9	34.2	970.3	2 558.4	4.6
Melbourne	9.0	7.5	1 822.4	682.9	2 521.9	4.6
Rest of VIC	198.7	4 916.0		12.2	5 127.0	9.3
Brisbane	140.7	1 587.6	79.0	39.5	1 846.8	3.3
Rest of QLD	17 657.5	156.0	23.9	42.1	17 879.5	32.4
Adelaide	1 048.5	9.4	7.3	1.1	1 066.2	1.9
Rest of SA	5 023.8	499.9		0.8	5 524.5	10
Fremantle	650.8	1 322.2	49.1	8.1	2 030.1	3.7
Rest of WA	5 014.6	4 605.0	4.1	28.7	9 652.4	17.5
Hobart	231.1	263.2	0.9		495.2	0.9
Rest of TAS	2 768.0	1.3	1 944.7	413.0	5 127.1	9.3
Darwin	12.6	33.2	13.8	39.1	98.7	0.2
Rest of NT	459.1	42.7			501.7	0.9
Total	34 613.2	13 974.9	4 409.8	2 251.4	55 249.3	100.0
Per cent of total	62.6	25.3	8.0	4.1	100.0	

Note: Blank cells mean no data was recorded for this category, while cells with an entry of 0 mean that data was recorded but rounded to zero.

Source: BTRE 2007b.

Table 3.7 Coastal freight unloaded by port and pack type, 2005-06

Port of unloading	Pack type				Total	Per cent of total
	Dry bulk	Liquid bulk	Container non-bulk	Other non-bulk		
	Thousand tonnes					Per cent
Sydney	1 290.8	3 760.4	49.6	3.4	5 104.2	9.3
Rest of NSW	8 684.5	186.1	1.6	33.2	8 905.4	16.2
Melbourne	2 190.8	613.7	1 494.2	694.0	4 992.7	9.1
Rest of VIC	2 072.6	768.9	0.9	374.9	3 217.3	5.8
Brisbane	1 626.6	1 899.3	115.8	5.1	3 646.7	6.6
Rest of QLD	13 492.6	1 529.7	24.3	19.2	15 065.8	27.4
Adelaide	2 079.8	1 978.0	88.0	15.7	4 161.6	7.6
Rest of SA	1 895.6	28.8			1 924.4	3.5
Fremantle	358.5	1 689.3	639.3	31.6	2 718.7	4.9
Rest of WA	53.3	546.4	16.0	23.2	638.9	1.2
Hobart	493.3	414.6	0.8		908.7	1.6
Rest of TAS	1 028.0	571.9	1 707.0	381.3	3 688.2	6.7
Darwin		41.6	43.7	24.8	110.1	0.2
Rest of NT						0.0
Total	35 266.6	14 028.7	4 181.1	1 606.4	55 082.7	100.0
Per cent of total	64.0	25.5	7.6	2.9	100.0	

Note: Blank cells mean no data was recorded for this category, while cells with an entry of 0 mean that data was recorded but rounded to zero.

Source: BTRE 2007b.

Table 3.8 Coastal freight by Australian state and territory of loading or unloading and pack type, 2005–06

State/territory of loading	State/territory of unloading							Total
	NSW	VIC	QLD	SA	WA	TAS	NT	
<i>Thousand tonnes</i>								
Dry Bulk								
NSW		156.5	33.1	1 116.3		93.1		1 398.9
VIC	41.5	9.6	21.0	70.0		65.7		207.7
QLD	1 584.9	636.3	14 410.9	481.4	1 111.0	573.6	0.0	17 798.2
SA	1 921.8	1 021.3	715.2	2 108.3	95.6	210.2		6 072.3
WA	4 292.9	1 086.1	44.3	3.0	239.1			5 665.3
TAS	1 907.3	641.4	88.5	186.1		175.9		2 999.1
NT	26.4					432.7	12.6	471.6
Sub Total	9 774.8	3 551.0	15 312.9	3 965.1	445.7	1 551.0	12.6	34 613.2
Liquid Bulk								
NSW	93.3	131.5	283.8		3.0	19.2		530.9
VIC	1 945.1	70.0	1 616.5	225.4	101.7	964.9		4 923.6
QLD	363.3	122.6	1 187.3	30.2	40.2			1 743.6
SA	203.5	301.1				4.7		509.2
WA	1 799.9	720.2	875.1	582.1	1 907.3		42.7	5 927.3
TAS	24.3	197.2	9.2	18.6	15.2			264.6
NT					42.7		33.2	75.8
Sub Total	4 429.4	1 542.5	3 972.0	856.3	2 110.0	988.8	75.8	13 974.9
Container								
NSW	2.1	35.1	104.9	5.7	257.9	57.7	1.2	464.6
VIC	19.3	0.1	179.2	69.2	260.8	1 293.9		1 822.4
QLD	1.2	1.4	17.3	6.7	49.2	0.2	26.9	103.0
SA			0.2	0.7	6.3			7.3
WA	7.9	14.3	1.1	1.8	16.1	6.5	5.4	53.1
TAS	14.0	1 778.7	3.6	0.1	135.5	13.7		1 945.7
NT					1.7		12.1	13.8
Sub Total	44.5	1 829.6	306.3	84.3	727.4	1 372.0	45.6	4 409.8
Non-Bulk								
NSW	10.5	891.5	62.6	8.3	4.6	3.5	3.0	983.9
VIC	2.0	10.7	1.9	12.3	45.5	622.7		695.2
QLD	0.4	3.0	45.3	0.0	32.2		0.7	81.6
SA	0.0	0.5	0.5		0.1	0.8		1.9
WA	0.9	0.5	1.0	6.9	25.3		2.3	36.8
TAS	24.2	386.7				2.1		413.0
NT					6.5		32.6	39.1
Sub Total	37.9	1 292.9	111.2	27.5	114.2	629.2	38.5	2 251.4
Total	14 286.6	8 216.0	19 702.4	4 933.2	3 397.4	4 541.1	172.6	55 249.3

Note: Blank cells mean no data was recorded for this category, while cells with an entry of 0 mean that data was recorded but rounded to zero.

Source: BTRE 2007b.

Tasmanian trade

The freight shipments to and from Tasmania changed in 2005–06 from 2004–05 in the following way (Table 3.9):

- freight destined for the mainland loaded in Tasmania declined by 11.9 per cent from 6.38 to 5.62 million tonnes;
- freight arriving from the mainland unloaded in Tasmania decrease of 10.2 per cent from 5.1 to 4.6 million tonnes.

There was a 38.2 per cent decline in the weight of *food and live animals* loaded in Tasmania but a slight increase in unloaded weight in this group.

In the category of unloaded freight, all commodity groups noted a decline in 2005–06, except for *food and live animals, mineral fuels, lubricants and related materials* and *chemicals and related materials*, which increased slightly in 2005–06, compared with their 2004–05 levels.

Table 3.9 Tasmanian coastal freight by commodity group, 2004–05 and 2005–06

Commodity group	Loaded		Unloaded	
	2004–05	2005–06	2004–05	2005–06
<i>Thousand tonnes</i>				
0 – Food and live animals	425.1	262.8	240.6	248.1
1 – Beverages and tobacco	26.2	13.5	93.9	90.9
2 – Crude materials, inedible, except fuels	2 143.5	1 860.7	1 687.4	1 445.7
3 – Mineral fuels, lubricants and related materials	0.9	1.7	975.3	1 059.2
4 – Animal and vegetable oils, fats and waxes	0.7			0.3
5 – Chemicals and related materials, nes	374.3	377.1	143.8	154.9
6 – Manufactured goods classified chiefly by material	2 082.5	1 887.0	432.3	246.2
7 – Machinery and transport materials	143.5	17.9	206.4	60.4
8 – Miscellaneous manufactured articles	5.2	9.9	65.4	50.3
9 – Commodities and transactions nes	1 182.7	1 191.8	1 274.0	1 241.0
Total	6 384.6	5 622.3	5 119.1	4 596.9

Note: Blank cells mean no data was recorded for this category, while cells with an entry of 0 mean that data was recorded but rounded to zero.

Source: BTRE 2007b.

Chapter 4 Coastal voyage permits

In 2005–06, 2 424 voyages were undertaken by foreign-flagged ships using voyage permits⁹ to move cargo around the Australian coast. Of these, 1 133 voyages used single voyage permits (SVPs) and 1 291 voyages used continuing voyage permits (CVPs) (Table 4.1). Total tonnes carried using SVPs and CVPs increased by 5 per cent from the previous year. The number of TEUs transported using SVPs and CVPs fell substantially, by 21.6 per cent in 2005–06. While the number of TEUs carried by SVPs grew by 182 per cent, TEUs carried by CVPs decreased by 42.5 per cent (Table 4.1). Some of this reduction and restructuring may be due to the operation of PAN Australia Shipping Pty Ltd for the last quarter of the period.

Table 4.1 Number of voyages, tonnes and TEUs carried under coastal voyage permits, 2005–06

Permit type	No of voyages	Freight carried	TEUs carried
	Number	Tonnes	Number
Single voyage permit	1 133	11 470 959	16 501
Continuing voyage permit	1 291	2 230 131	32 758
Total	2 424	13 701 090	49 259

Source: DOTARS 2007.

Compared with 2004–05, the use of SVPs to transport bauxite and alumina continued to increase with a 33 per cent increase in total tonnes carried. There was an increase of 0.6 million tonnes of iron ore from 2.2 to 2.8 million tonnes in 2005–06. Coastal shipments of crude oil using SVPs and CVPs declined from 1.9 to 1.2 million tonnes, however, shipments of petroleum products increased from 1.2 in 2004–05 to 1.8 million tonnes in 2005–06.

There also was a significant decline in tonnage in the *Other* category, from 9.1 in 2004–05 to 5.2 million tonnes in 2005–06. This category includes containers, general cargo and break bulk.

The proportion by weight of total coastal freight moved using voyage permits declined from 24.3 per cent in 2004–05 to 22.1 per cent in 2005–06. The tonne-kilometres produced under coastal permits, as a per cent of total coastal tonne-kilometres, decreased from 26.8 per cent in 2004–05 to 23.1 per cent in 2005–06 (Table 4.2).

⁹ Voyage permit information provided in this paper differs from that appearing in the BTRE's Waterline series. See explanatory notes for further information.

The use of voyage permits by the iron ore industry increased from 31.5 per cent in 2004–05 to 41.1 per cent of total coastal iron ore shipments in 2005–06. In tonne-kilometres, coastal iron ore shipments under the SVPs and CVPs represented 41.8 per cent of total coastal shipments. This was still down significantly from levels noted in 2003–04, when voyage permits were used to carry 56.5 per cent of tonnes loaded and 53.1 per cent of tonne-kilometres. In 2005–06, voyage permits used by the bauxite and alumina industry accounted for 7.9 per cent of total tonnes and 7.8 per cent of total tonne-kilometres produced in Australia's coastal shipping.

While previous editions of *Australian Sea Freight* contained information regarding voyage permits by pack type, this information is no longer available and the relevant table has been discontinued.

Table 4.2 Impact of voyage permits on coastal trade, 2005–06

Cargo group	Total coastal	SVP and CVP	SVP and CVP as per cent of coastal tonnes	Total coastal	SVP and CVP (estimate)	SVP and CVP as per cent of coastal tonne- kilometres
	Million tonnes	Million tonnes	Per cent	Billion tonne- kilometres	Billion tonne- kilometres	Per cent
Iron ore	6.7	2.8	41.1	27.4	11.5	41.8
Bauxite & alumina	15.4	1.2	7.9	34.0	2.6	7.8
Crude oil	6.9	1.2	17.8	22.9	4.0	17.4
Petroleum products	6.5	1.8	27.3	9.5	2.6	27.7
Other	19.8	5.2	26.5	28.2	7.4	26.3
Total	55.2	12.2	22.1	122.0	28.1	23.1

Source: DOTARS 2007, BTRE 2007b.

Chapter 5 Australian port activity

In 2005–06, there was a 1.4 per cent increase in the number of voyages into Australia from overseas ports, down from an 8.2 per cent increase in 2004–05, while the total number of port calls increased by 0.3 per cent. The number of ships visiting Australian ports remained relatively stable. Melbourne was the busiest port in terms of the number of ship visits (3 426 visits), while Brisbane was the busiest as first port of call of international voyages (1 146 visits, up from 1 050 in 2004–05).

Table 5.1 Ship activity at Australian ports, 2005–06

<i>Australian port</i>	<i>All ships involved in international shipping</i>	<i>All ships involved in coastal and international shipping</i>	<i>Voyages by all ships involved in international shipping</i>	<i>Port calls by all ships involved in coastal and international shipping</i>
	<i>Number</i>			
New South Wales				
Eden	19	26	20	29
Newcastle	447	668	810	1 453
Port Kembla	173	306	193	628
Sydney	247	649	807	2 613
Yamba	2	2	9	9
Unidentified New South Wales ports		1		1
Victoria				
Geelong	104	239	134	457
Hastings	23	62	35	190
Melbourne	245	627	702	3 429
Port Phillip Bay		1		1
Port Welshpool		1		1
Portland	64	133	76	250
Queensland				
Abbot Point	49	56	55	66
Brisbane	479	804	1 163	2 508
Bundaberg	8	12	8	24
Cairns	30	78	44	224
Cape Flattery	7	8	21	24
Gladstone	470	685	643	1 432
Hay Point	560	635	765	973
Karumba	12	23	13	45
Lucinda	10	12	10	12
Mackay	53	102	64	168
Mourilyan	19	25	19	30
Port Alma	25	40	31	55

Table 5.1 Ship activity at Australian ports, 2005–06 (continued)

<i>Australian port</i>	<i>All ships involved in international shipping</i>	<i>All ships involved in coastal and international shipping</i>	<i>Voyages by all ships involved in international shipping</i>	<i>Port calls by all ships involved in coastal and international shipping</i>
	<i>Number</i>			
<i>Queensland (continued)</i>				
Thursday Island	5	6	5	6
Townsville	218	286	344	601
Weipa	133	152	145	283
<i>South Australia</i>				
Adelaide	70	395	81	834
Ardrossan	2	14	2	29
Klein Point		1		106
Port Bonython	8	26	8	27
Port Giles	7	26	7	27
Port Lincoln	18	94	18	125
Port Pirie	6	33	6	65
Thevenard	16	41	16	111
Wallaroo	9	28	9	29
Whyalla	18	54	21	101
Unidentified South Australian ports	1	1	1	2
<i>Western Australia</i>				
Albany	25	45	30	52
Barrow Island Terminal		7		19
Broome	3	15	3	29
Bunbury	196	251	227	318
Cape Cuvier	7	8	7	8
Challis Terminal		2		2
Cossack Pioneer Terminal	2	21	2	24
Dampier	422	528	747	1 424
Esperance	85	141	91	159
Fremantle	503	739	849	1 622
Geraldton	120	182	140	290
Griffin Terminal		5		5
Jabiru Terminal	2	3	2	4
Kwinana		1		1
Legendre Terminal	1	1	1	1
Onslow	1	1	1	1
Port Hedland	472	524	807	1 215
Port Walcott	198	207	311	361
Saladin Terminal		1		1
Stag Terminal	2	6	2	6
Useless Loop	4	4	4	4

Table 5.1 Ship activity at Australian ports, 2005–06 (continued)

<i>Australian port</i>	<i>All ships involved in international shipping</i>	<i>All ships involved in coastal and international shipping</i>	<i>Voyages by all ships involved in international shipping</i>	<i>Port calls by all ships involved in coastal and international shipping</i>
	<i>Number</i>			
Western Australia (continued)				
Varanus Island Terminal	2	11	2	14
Wandoo Terminal	2	3	2	3
Woollybutt Terminal		4		4
Wyndham	1	3	1	6
Unidentified Western Australian ports	2	4	2	6
Tasmania				
Bell Bay	1	3	1	4
Burnie	20	63	25	494
Devonport	1	36	1	961
Hobart	42	91	51	196
King Island		1		1
Launceston	56	127	77	378
Port Latta	14	41	15	48
Stanley		1		1
Northern Territory				
Bayu-Undan Field	17	18	31	32
Bing Bong	9	14	10	15
Darwin	89	146	219	653
Elang-Kakatua Field		1		1
Gove	98	117	116	145
Laminaria-Corallina Terminal	3	10	3	10
Milner Bay	57	66	64	73
Other ports – not clearly specified				
Unidentified Australian ports	37	42	43	56
Total	3 528	3 668	10 172	25 615

Note: Blank cells mean no data was recorded for this category, while cells with an entry of 0 mean that data was recorded but rounded to zero.

Source: LMIU 2007.

In 2005–06, the busiest ports in terms of tonnes of cargo handled and their primary export commodities in order, were Dampier (iron ore), Port Hedland (iron ore), Newcastle (coal), Hay Point (coal), Gladstone (coal), Port Walcott (iron ore), Melbourne (miscellaneous manufactures), Brisbane (refined oil and gas), Sydney (miscellaneous manufactures), Port Kembla (coal) and Fremantle (wheat)(Table 5.2).

Table 5.2 Cargo loaded and unloaded by Australian ports, 2005–06

Australian port	Coastal		International		Total	Rank
	Loaded	Unloaded	Exports	Imports		
	Tonnes					
New South Wales						
Coffs Harbour			96	646	742	78
Eden	158	870			1 028	77
Newcastle	285 572	1 713 346	82 835 442	1 027 709	85 862 069	3
Port Kembla	2 269 372	7 190 711	13 954 890	1 909 559	25 324 532	10
Sydney	819 891	5 104 198	4 880 631	15 023 548	25 828 268	9
Twofold Bay			1 061 763	1 166	1 062 929	44
Yamba	3 267	515			3 782	75
Other ports			8 858	1 012	9 870	72
Victoria						
Geelong	1 884 346	1 498 222	2 047 057	5 473 684	10 903 309	15
Melbourne	2 521 888	4 992 733	9 881 202	11 167 368	28 563 191	7
Portland	160 536	813 616	2 087 410	501 709	3 563 271	24
Westernport	3 082 101	905 435	411 571	76 290	4 475 397	21
Other ports			575 262	10 409	585 671	52
Queensland						
Abbot Point			11 962 085		11 962 085	13
Brisbane	1 846 840	3 646 736	10 057 695	10 875 231	26 426 502	8
Bundaberg	227 831	29 528	129 606	5 974	392 939	59
Cairns	66 607	542 629	352 275	380 523	1 342 034	40
Gladstone	3 430 348	13 219 711	48 527 781	2 101 525	67 279 365	5
Hay Point		12 469	80 344 974		80 357 443	4
Innisfail			770 244		770 244	49
Karumba	407 859		736 316		1 144 175	41
Lucinda			620 636		620 636	50
Mackay	253 908	369 268	2 324 423	496 567	3 444 166	25
Mourilyan	36 003				36 003	68
Port Alma		16 155			16 155	69
Rockhampton			981	393	1 374	76
Thursday Island	9 253		48	3 756	13 057	70
Townsville	711 068	876 001	3 896 417	4 698 517	10 182 003	17
Weipa	12 736 583		5 048 489	56 424	17 841 496	12
Other ports			1 344 450	597	1 345 047	39

**Table 5.2 Cargo loaded and unloaded by Australian ports, 2005–06
(continued)**

<i>Australian port</i>	<i>Coastal</i>		<i>International</i>		<i>Total</i>	<i>Rank</i>
	<i>Loaded</i>	<i>Unloaded</i>	<i>Exports</i>	<i>Imports</i>		
<i>Tonnes</i>						
<i>South Australia</i>						
Adelaide	1 066 200	4 161 584	3 950 998	2 223 327	11 402 109	14
Ardrossan	582 058				582 058	53
Klein Point	1 866 091				1 866 091	34
Port Bonython	499 893		549 766		1 049 659	45
Port Giles	7 815	7 815	224 215	9	239 854	64
Port Lincoln		133 735	1 563 614	110 905	1 808 254	37
Port Pirie	124 854	487 115	231 888	2 075	845 932	47
Thevenard	1 313 394		552 564		1 865 958	35
Wallaroo		45 715	354 003	30 585	430 303	57
Whyalla	1 130 400	1 250 012	1 209 777	375 101	3 965 290	23
Other ports			327 285	73	327 358	61
<i>Western Australia</i>						
Albany		28 456	2 616 257	114 827	2 759 540	30
Barrow Island	315 582				315 582	62
Broome	407 070		25 037	45 427	477 534	55
Bunbury	448 974	7 116	8 756 277	1 122 630	10 334 997	16
Cape Cuvier	175 313		2 689 345		2 864 658	29
Carnarvon			0		0	79
Christmas Island	1 567	5 865			7 432	73
Cossack Pioneer	1 085 881				1 085 881	43
Dampier	1 848 125		110 003 781	521 030	112 372 936	1
Esperance		196 185	7 886 124	204 646	8 286 955	18
Fremantle	2 030 122	2 718 734	12 077 226	8 371 338	25 197 420	11
Geraldton	10 009	205 462	4 648 953	200 261	5 064 684	20
Griffin Venture	102 532				102 532	66
Jabiru Venture	81 589				81 589	67
Modec Venture	283 953				283 953	63
Port Hedland	4 273 023	189 943	105 936 670	566 693	110 966 329	2
Port Walcott			55 233 299	73 566	55 306 865	6
Thevenard Island	181 706				181 706	65
Useless Loop			854 930		854 930	46
Varanus Island	433 287				433 287	56
Offshore terminals			2 562 999	0	2 562 999	31
Wyndham	3 776	5 853	325 933	69 352	404 914	58
Yampi Sound			1 109 412	714	1 110 126	42
Other ports			1 928 198	12 234	1 940 432	33

**Table 5.2 Cargo loaded and unloaded by Australian ports, 2005–06
(continued)**

Australian port	Coastal		International		Total	Rank
	Loaded	Unloaded	Exports	Imports		
Tonnes						
Tasmania						
Bell Bay	496 774	1 347 253			1 844 027	36
Burnie	1 535 970	1 057 910	1 283 381	152 180	4 029 441	22
Devonport	1 833 539	1 273 105	10 200	38 662	3 155 506	27
Hobart	495 200	908 708	184 520	177 331	1 765 759	38
King Island					9 939	71
Launceston		9 939	3 093 987	221 897	3 315 884	26
Port Latta	1 260 782		1 000 920		2 261 702	32
Spring Bay			815 305		815 305	48
Other Ports			6 019		6 019	74
Northern Territory						
Confidential ports			4 965 707	1 168 298	6 134 005	19
Darwin	98 668	110 062	1 076 167	1 841 205	3 126 102	28
Groote Eylandt	501 740				501 740	54
Offshore terminals			614 422		614 422	51
Other ports ^a			380 058	11 912	391 970	60
Other ports			1 571 084	1 161	1 572 245	n/a
Total	55 249 318	55 082 707	624 480 924	71 470 046	806 282 995	

a Other ports in NT consists of Bing Bong, remote communities and rigs, which are not split up easily.

Note: Blank cells mean no data was recorded for this category, while cells with an entry of 0 mean that data was recorded but rounded to zero.

Sources: BTRE 2007b, ABS 2007

Chapter 6 Australian merchant fleet

In 2005–06, the Australian merchant fleet increased both in deadweight and gross registered tonnage, with the larger ships engaged primarily in the international trade. Overall, the fleet increased from 79 in 2004–05 to 88 ships in 2005–06 (Table 6.1).

The number of small ships (mostly general cargo carriers) increased from 2 in 2004–05 to 11 in 2005–06. The number of larger ships remained unchanged from 2004–05 at 77 vessels. Bulk carrier tonnage increased in 2005–06, following the increased export demand for minerals and energy commodities. This flowed through to an increase in the total deadweight and gross registered tonnage of the Australian trading fleet in 2005–06.

Table 6.1 Summary of the Australian trading fleet, 2005-06

<i>Trade</i>		<i>Vessels</i>	<i>Deadweight tonnage</i>	<i>Gross registered tonnage</i>
		<i>Number</i>	<i>Tonnes</i>	<i>Tonnes</i>
Major Trading Fleet (>2000 dwt)				
Coastal				
	Australian registered	33	982 503	742 491
	Overseas registered	11	363 275	237 098
	Total coastal	44	1 345 778	979 589
Overseas				
	Australian registered	7	575 298	599 036
	Overseas registered	26	1 072 068	796 610
	Total overseas	33	1 696 674	1 436 111
	Total major trading fleet	77	2 993 144	2 375 235
Other trading ships (>150 Gross registered tonnage but less than 2000 dwt)				
	Australian registered	6	4 911	6 468
	Overseas registered	5	5 750	5 273
	Total other trading ships	11	10 661	11 741
	Total Australian registered	46	1 562 712	1 347 995
	Total overseas registered	42	1 441 093	1 038 981
	Total Australian trading fleet	88	3 003 805	2 386 976

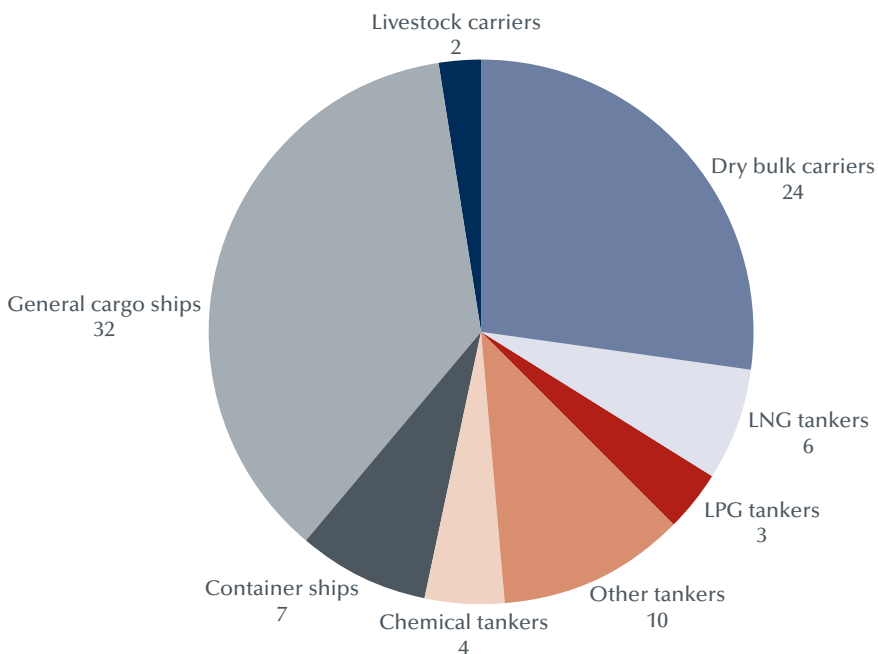
Note: During the period 2005-06, a number of ships left the Australian fleet. At the same time, new ships were acquired but these new “additions” can only be accounted for when registered and reported by the end of June 2007.

Sources: DOTARS—personal communications; LMIU 2007; Fairplay 2006; AMSA 2006, Shipping, companies (various)—personal communications.

The composition of the fleet, by ship type, is illustrated in Figure 6.1. Compared with 2004–05, in 2005–06 there was:

- an increase in the number of LPG and LNG tankers, from 8 to 9;
- a decrease in the number of dry bulk carriers, from 30 to 24;
- a decline in the number of other tankers from 12 to 10; and
- an increase in the number of general cargo ships, from 16 to 32.

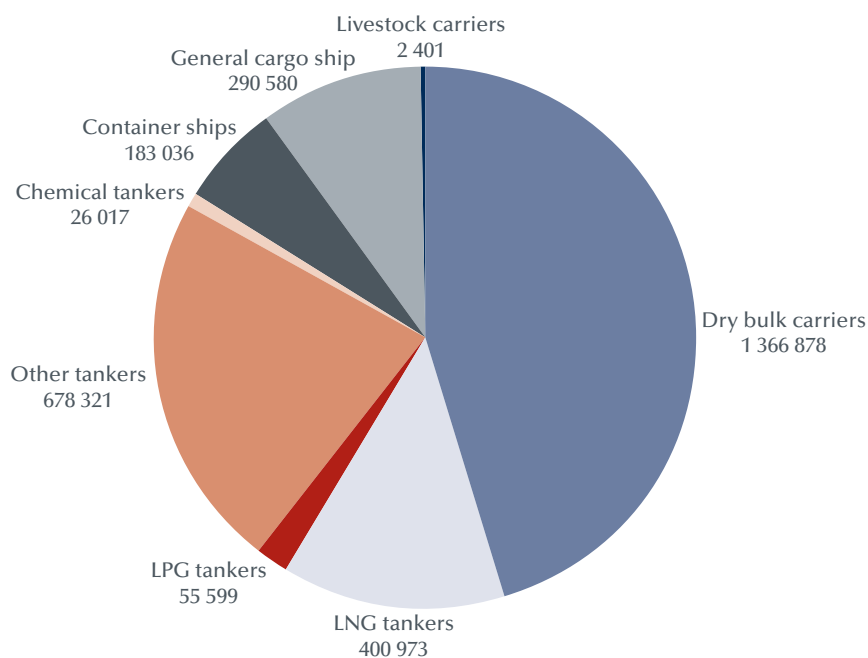
Figure 6.1 Australian fleet: number of ships by ship type, 2005–06



Sources: DOTARS—personal communications; LMIU 2007; Fairplay 2006; AMSA 2006, Shipping, companies (various)—personal communications.

The figure below illustrates the deadweight tonnage shares of the various ship types.

Figure 6.2 Australian fleet: deadweight tonnage by ship type, 2005–06



Sources: DOTARS—personal communications; LMIU 2007; Fairplay 2006; AMSA 2006, Shipping, companies (various)—personal communications.

Tables 6.2 and 6.3 show the main commodities carried and trades in which the major trading vessels were engaged during 2005–06.

Table 6.2 Ships in the major overseas trading fleet, 2005–06

<i>Name of vessel</i>	<i>Trade</i>	<i>Products</i>	<i>Ports called at in Australia</i>	<i>Overseas countries visited</i>
Bulk carriers				
Alltrans	(c)	Alumina	Gladstone, Launceston, Newcastle	New Zealand
Iron Kembla	(c)	Iron ore, coal	Port Kembla, Hay Point, Port Hedland	Republic of Korea, Singapore
Pacific Triangle	(c)	Iron ore, coal	Hay Point, Newcastle, Gladstone, Port Hedland	Japan, Singapore, People's Republic of China, Republic of Korea
Saraji Trader		Coal, dry bulk	Hay Point	Japan, Egypt, Brazil, Gibraltar, Denmark, Philippines, Spain, United Kingdom
Chemical tankers				
Botany Tradition		Chemicals	Bunbury, Gladstone, Brisbane	Argentina, Brazil, Malaysia, Singapore, New Zealand,
Petro Navigator		Chemicals	Cairns	Papua New Guinea, Solomon Islands
Container carriers				
ANL Explorer	(c)	General	Botany Bay, Melbourne, Sydney	China, Republic of Korea, Taiwan, Vietnam
ANL Esprit	(c)	General	Adelaide, Fremantle, Botany Bay	Hong Kong, Japan, Malaysia, People's Republic of China, Republic of Korea
General cargo ships				
Cape Conway	(c)	General	Brisbane, Hastings, Hobart	Japan, Hong Kong, Taiwan, Republic of Korea, People's Republic of China
Norfolk Guardian	(c)	General	Brisbane, Yamba, Sydney	New Zealand, Norfolk Island
NT Express		General	Darwin, Karumba	Indonesia, Papua New Guinea, Philippines, Brunei
Cape Darnley	(c)	General	Adelaide, Botany Bay, Melbourne, Newcastle	Papua New Guinea, Philippines,
Aurora Australis		General	Hobart, Fremantle, Maquarie Island	Antarctica
Livestock carriers				
Norvantes		Livestock	Cairns, Darwin, Mourilyan	Indonesia, Malaysia, Brunei
Molunat		Livestock	Darwin, Karumba	Indonesia, Papua New Guinea, Philippines, Brunei
LNG Tankers				
Northwest Sanderling		LNG	Dampier	Japan
Northwest Sandpiper		LNG	Dampier	Japan, Singapore
Northwest Snipe		LNG	Dampier	Japan
Northwest Stormpetrel		LNG	Dampier	Japan, Singapore

Table 6.2 Ships in the major overseas trading fleet, 2005–06 (continued)

<i>Name of vessel</i>	<i>Trade</i>	<i>Products</i>	<i>Ports called at in Australia</i>	<i>Overseas countries visited</i>
LPG Tankers				
Boral Gas	(c)	LPG	Hastings, Brisbane, Devonport	New Zealand, Papua New Guinea, Tonga, Vanuatu, Western Samoa
Lycaste Peace		LPG	Dampier	Egypt, Japan, Malta, Algeria
Pacific Gas		LPG	Cairns	New Zealand, Papua New Guinea, Tonga, Solomon Islands, Vanuatu, Western Samoa, Chile
Tankers				
Nivosa	(c)	Crude oil	Sydney, Geelong	Singapore, Malaysia, Vietnam, Saudi Arabia, Mozambique
Pacific Venture		Crude oil	Melbourne	Japan, Peoples' Republic of China, Singapore, Sudan, Thailand, Vietnam
Samar Spirit	(c)	Crude oil	Botany Bay, Hastings, Brisbane	Papua New Guinea, Philippines

Note: (c) denotes that the vessel occasionally transports coastal freight.

Source: LMIU 2007; Shipping companies (various)—personal communications

Table 6.3 Ships in the major coastal trading fleet, 2005-06

<i>Name of vessel</i>	<i>Trade</i>	<i>Products</i>	<i>Ports called at in Australia</i>	<i>Overseas countries visited</i>
Bulk carriers				
Aburri		Metal concentrates	Bing Bong	
Accolade II		Limestone	Adelaide, Brisbane, Klein Port	
Cementco	(o)	Cement, lead concentrates	Gladstone, Brisbane	
Endeavour River	(o)	Bauxite, alumina	Gladstone, Weipa, Thursday Island	Singapore
Enterprise		Dry bulk	Hobart, Geelong, Melbourne, Portland, Launceston, Port Pirie, Brisbane	
Fitzroy River	(o)	Bauxite, alumina	Gladstone, Thursday Island, Weipa	Singapore
Goliath		Cement	Devonport, Geelong, Melbourne, Sydney, Newcastle	
Ikuna	(o)	Coal, dry bulk	Adelaide, Brisbane, Bunbury, Fremantle, Launceston	New Zealand
Iron Sturt		Cement, metal concentrates, alumina, zinc	Burnie, Hobart, Geelong, Port Pirie, Portland, Adelaide, Melbourne	
Iron Yandi	(o)	Iron ore, coal	Gladstone, Hay Point, Port Hedland, Port Kembla, Newcastle	Republic of Korea, Taiwan
Kowulka		Gypsum, salt, sugar, alumina, chemicals	Sydney, Thevenard, Melbourne, Brisbane, Bundaberg	
Lindesay Clark	(o)	Alumina, dolomite, fertilizers, steel products	Geelong, Fremantle, Bunbury, Ardrossan, Whyalla	Singapore
Ormiston		Gypsum, salt, sugar	Melbourne, Thevenard, Ardrossan, Bundaberg, Mackay, Whyalla	
Pioneer	(o)	Sugar	Mackay, Sydney	Singapore
Portland		Alumina, steel products	Portland, Fremantle, Bunbury, Geelong	
River Boyne		Bauxite	Gladstone, Weipa, Thursday Island	
River Embley		Bauxite	Gladstone, Weipa, Thursday Island	
Wunma		Dry bulk	Karumba	
Chemical tankers				
Seakap	(o)	Bitumen and bituminous materials, chemicals	Sydney, Gladstone, Launceston, Newcastle, Port Kembla, Portland, Whyalla	Taiwan, Singapore
Container carriers				
ANL Australia	(o)	General	Botany Bay, Brisbane, Melbourne, Sydney,	Japan, Peoples' Republic of China, Republic of Korea, Taiwan
ANL Bass Trader		General	Melbourne, Launceston, Burnie, Hobart	
ANL Emblem	(o)	General	Botany Bay, Brisbane, Melbourne, Fremantle	Singapore

<i>Name of vessel</i>	<i>Trade</i>	<i>Products</i>	<i>Ports called at in Australia</i>	<i>Overseas countries visited</i>
General cargo ships				
Claudia I		Blue metal	Sydney, Newcastle	
Iron Monarch	(o)	Steel products	Hastings, Port Kembla, Newcastle	New Zealand
Newcastle Bay		General cargo	Cairns, Weipa, Cape Flattery	
Searoad Mersey		General cargo	Devonport, Melbourne, Geelong	
Searoad Tamar		General cargo	Devonport, Launceston, Melbourne	
Spirit of Tasmania I		General cargo, passengers	Devonport, Melbourne, Sydney, Hastings	
Spirit of Tasmania II		General cargo, passengers	Devonport, Melbourne, Sydney, Hastings	
Spirit of Tasmania III		General cargo, passengers	Devonport, Melbourne, Sydney, Hastings	
Tasmanian Achiever		General cargo	Burnie, Melbourne, Launceston	
Trinity Bay		General cargo, passengers	Cairns	
Victorian Reliance		General cargo	Melbourne, Burnie, Launceston	
Tankers				
Barrington		Petroleum products	Botany Bay, Cairns, Gladstone, Mackay, Brisbane, Townsville	
Helix		Petroleum products	Geelong, Devonport, Hobart, Sydney, Launceston	
Seabridge	(o)	Crude oil	Botany Bay, Brisbane, Dampier, Hastings, Sydney	Japan, Republic of Korea, Singapore, Brunei, Taiwan, Thailand, Vietnam
Palmerston	(o)	Petroleum products	Mackay, Gladstone, Townsville, Brisbane,	Singapore
Scottish Bard		Petroleum products	Adelaide, Brisbane, Fremantle, Melbourne	Fiji, American Samoa, Hong Kong, Solomon Islands

Note: (o) denotes that the vessel occasionally enters the overseas trade market.

Sources: LMIU 2007; Shipping companies (various)—personal communications.

Explanatory notes

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 an 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; and
- 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 nominated ports for that period

The information provided in this paper on voyage permits differs 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.

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 loaded or unloaded. 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* (Australian Chamber of Shipping 1993).

The vessel movement details for the Australian trading fleet have been obtained from Lloyd's Marine Information Unit, Lloyd's Ship Movements (unpublished), 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.

Glossary

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:	See Australian Transport Freight Commodity Code Classification
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) level of classification.
BTRE:	Bureau of Transport and Regional Economics.
Bulk cargo:	<p>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:</p> <ul style="list-style-type: none"> • 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.
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 (containerised or not) and bulk trades.

CVP:	See continuing voyage permit.
DOTARS:	Department of Transport and Regional Services.
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.
DWT:	See deadweight tonnage.
Freight:	Includes all cargo lifted, including empty containers, but excludes ship stores and bunkers.
Gross registered 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.
GRT:	See gross registered tonnage.
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 comers 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. It includes most containerised, roll on-roll off and general cargo freight shipping services.
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.
Non-liner:	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.
NZ:	New Zealand.

Pack type:	Pack type is a description of the way cargo is packaged and moved. Pack type is primarily split between bulk and non-bulk. Bulk cargo is further subdivided, between liquid and dry bulk, which is a characteristic of the cargo. Gas is considered as liquid bulk cargo 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.
PNG:	Papua New Guinea.
SE:	South East.
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.
SVP:	See single voyage permit.
TEU:	See twenty foot equivalent unit.
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.
Twenty foot equivalent:	A measure used to count containers. A 40 foot container unit counts as 2 TEUs.

Statistical issues

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

- Port authorities record cargo as having been unloaded 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 unloaded 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 unloaded 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 unloading. For example, gypsum loaded in South Australia is classified as fertiliser 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.

Countries included in maritime regions

<i>Markets/regions</i>	<i>Countries</i>			
Africa	Algeria	Ghana	Rwanda	
	Angola	Guinea	Sao Tome and Principe	
	Benin	Guinea-Bissau	Senegal	
	Botswana	Kenya	Seychelles	
	British Indian Ocean Territory	Lesotho	Sierra Leone	
	Burkina Faso (Upper Volta)	Liberia	Somalia	
	Burundi	Libya	South Africa	
	Cameroon	Madagascar	St. Helena	
	Cape Verde	Malawi	Swaziland	
	Central African Republic	Mali	Tanzania	
	Chad	Mauritania	Togo	
	Comoros, Republic of	Mauritius	Tunisia	
	Congo	Morocco	Uganda	
	Ivory Coast	Mozambique	Western Sahara	
	Egypt (Mediterranean ports)	Namibia	Zaire, Democratic	
	Equatorial Guinea	Niger	Republic of Congo	
	Gabon	Nigeria	Zambia	
	Gambia	Reunion	Zimbabwe	
	Europe	Albania	Germany	Portugal
		Austria	Gibraltar	Romania
		Belarus	Greece	Russian Federation (excluding Pacific coast)
		Belgium-Luxembourg	Hungary	Slovak Republic
		Bosnia and Herzegovina	Iceland	Slovenia
		Bulgaria	Ireland	Sweden
Spain		Italy	Latvia	
Czech Republic		Croatia	Turkey	
Switzerland		Lithuania	Ukraine	
Cyprus		Malta	United Kingdom	
Denmark		Moldova	Yugoslavia	
Estonia		Netherlands		
Finland		Norway		
Former Yugoslavia		Poland		
Macedonia, Republic of		France		
East Asia		China	Macau	Philippines
		Hong Kong	Mongolia	Taiwan
South Asia	Afghanistan	Kyrgyzstan	Pakistan	
	Bangladesh	Maldives	Sri Lanka	
	Bhutan	Myanmar	Tajikistan	
	India	Nepal		

<i>Markets/regions</i>	<i>Countries</i>		
Japan and North Asia	Japan	Korea, Republic of	Russian Federation (Pacific coast)
		Korea, Democratic Peoples Republic	
South East Asia	Brunei	Laos	Thailand
	Cambodia	Malaysia	Viet Nam
	Indonesia	Singapore	Zone of Cooperation—Timor Gap
Middle East	Armenia	Iran	Saudi Arabia
	Azerbaijan	Iraq	Sudan
	Bahrain	Israel	Syria
	Country not avail Persian Gulf	Jordan	Turkmenistan
	Country not avail Red Sea	Kazakhstan	United Arab Emirates
	Djibouti	Kuwait	Uzbekistan
	Egypt (Red Sea ports)	Lebanon	Yemen
	Eritrea	Oman	
	Ethiopia	Palestine, Territory administered	
	Georgia	Qatar	
New Zealand	New Zealand		
North and Central America	Anguilla	Grenada	St. Chris Nevi Anguilla
	Antigua and Barbuda	Guatemala	St. Christopher and Nevis
	Bahamas	Guyana	St. Lucia
	Barbados	Haiti	St. Pierre and Miquelon
	Belize	Honduras	St. Vincent and Grenadines
	Bermuda	Jamaica	Suriname
	Canada	Johnston and Sand Island	Trinidad and Tobago
	Cayman Islands	Mexico	Turks and Caicos Islands
	Costa Rica	Midway Islands	United States of America
	Cuba	Montserrat	United States Virgin Islands
	Dominica	Netherlands Antilles	Venezuela
	Dominican Republic	Nicaragua	Virgin Islands (British)
	El Salvador	Panama	
	French Antilles	Panama Canal Zone	
	French Guiana	Puerto Rico	
Pacific Islands and Papua New Guinea	Australian Antarctic Territory	Nauru	Solomon Islands
	Cook Islands	New Caledonia	Tokelau
	Fiji	Niue	Tonga
	French Polynesia	Norfolk Island	Trust Territory
	Pacific Island	Palau	Tuvalu
	French South Antarctic Territory	Papua New Guinea	U.S. Misc Pacific Islands
	Guam	Pitcairn Island	Vanuatu
	Kiribati	Ross Dependency	Wake Island

<i>Markets/regions</i>	<i>Countries</i>		
Pacific Islands and Papua New Guinea (continued)	Marianas Northern	Samoa	Wallis and Futuna Islands
	Marshall Islands		
	Micronesia, Fed States of		
	Samoa (American)		
Rest of world	Australian fishing zone	Christmas Island	Cocos (Keeling) Islands
	Country not available	International waters	Ships and aircraft stores
South America	Argentina	Colombia	Peru
	Bolivia	Ecuador	Uruguay
	Brazil	Falkland Islands	
	Chile	Paraguay	

Source: ABS 2007.

References

AMSA — See Australian Maritime Safety Authority

ABS — See Australian Bureau of Statistics

DOTARS — See Department of Transport and Regional Services

BTRE — See Bureau of Transport and Regional Economics

LMIU — See Lloyd's Marine Information Unit

Australian Bureau of Statistics 2007, *International Cargo Statistics*, unpublished, Canberra.

Australian Maritime Safety Authority 2007, *List of registered ships* <http://www.amsa.gov.au/Shipping_Registration/List_of_Registered_Ships/>, (viewed on 17 January 2007), Canberra.

Australian Chamber of Shipping 1993, *The Ports of Australia*, thirteenth edition, Sydney.

Brodie P. 1997, *Definition of shipping terms*, LLP Limited, third edition, London.

Bureau of Transport and Regional Economics 2007a, *Australian Sea Freight 2004–05*, Information paper 58, Canberra

Bureau of Transport and Regional Economics 2007b, *Domestic sea freight database* — survey of Australian port authorities, unpublished, Canberra.

Department of Transport and Regional Services 2007, *SVP and CVP Registers*, unpublished, Canberra.

Lloyd's List DCN 2006, *Directory of Australian Shipping, Air, Road and Rail Services, 2006*, Sydney.

Lloyd's Marine Information Unit 2007, *Lloyd's Voyage Record*, unpublished, London, United Kingdom.

Lloyd's Register – Fairplay Limited 2006, *World Shipping Directory 2005–2006*, Surrey, United Kingdom.