Australian Government

Department of Infrastructure, Transport, Regional Development and Local Government

Bureau of Infrastructure, Transport and Regional Economics

Australian sea freight 2007–08

Information paper 64

Bureau of Infrastructure, Transport and Regional Economics

Australian sea freight 2007–08

Information paper 64

Department of Infrastructure, Transport,
Regional Development and Local Government
Canberra, Australia

An appropriate citation for this report is:

Indemnity statement

Published by

Foreword

This is the latest in a series of Bureau of Infrastructure, Transport and Regional Economics (BITRE) papers that provide information on Australian sea freight movements, port activity and fleet structure. This edition covers sea freight activity around Australia during 2007–08.

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

The publication was prepared in the Maritime and Rail Statistics Section by Rob Bolin, Mark Cregan, and Anatoli Lightfoot.

To know more about these statistics, or related publications, please phone (02) 6274 7312 or email data.team@infrastructure.gov.au.

Gary Dolman
General Manager
Regional Research and Transport Statistics
Bureau of Infrastructure, Transport and Regional Economics
Canberra
June 2009

Acknowledgements

Contents

Table

Figures

At a glance

In 2007–08, 908.9 million tonnes of cargo moved across Australian wharves. This represented a 6.8 per cent increase on 2006–07. Some 77.7 per cent of this cargo was exports, 9.2 per cent was imports, 6.5 per cent was domestic loaded cargo, and 6.6 per cent was domestic unloaded cargo.

In 2007–08, 789.6 million tonnes of international cargo moved across Australian wharves. Compared with 2006–07, there was a 7.6 per cent increase in exports and an 8.1 per cent increase in imports by weight. By value, there was a 7.1 per cent increase in exports and a 13.4 per cent increase in imports between 2006–07 and 2007–08.

Australian ports handled 119.3 million tonnes of coastal cargo during 2007–08, an increase of 2.4 per cent on 2006–07. This tonnage represented 13.1 per cent of all cargo moved across Australian wharves.

In 2007–08, ships using single voyage permits (SVPs) and continuous voyage permits (CVPs) moved an estimated 14.9 million tonnes of freight around the Australian coast, a 10.6 per cent decrease on 2006–07.

In 2007–08, the number of ships involved in international shipping entering Australia rose to 3807, compared to 3723 in 2006–07.

The Australian trading fleet decreased in both gross and deadweight tonnage as at July 2008 compared to the previous year. The total number of ships in the fleet also decreased by 2 to 94.

Chapter 1   Overview

In 2007–08, 908.9 million tonnes of cargo moved across Australian wharves. This represented a 6.8 per cent increase on 2006–07 and another record high. Exports, imports, loaded domestic cargo, and unloaded domestic cargo accounted for 77.7 per cent, 9.2 per cent, 6.5 per cent, and 6.6 per cent respectively of total cargo movements.

International sea freight

In 2007–08, 789.6 million tonnes of international cargo moved across Australian wharves (Table 1.1). Compared with 2006–07, there was a 7.6 per cent increase in exports and an 8.1 per cent increase in imports by weight. By value, there was a 7.1 per cent increase in exports and a 13.4 per cent increase in imports between 2006–07 and 2007–08.

Table 1.1   Summary of international sea freight, 10 years to 2007

Financial year	Value			Weight		
	Exports	Imports	Total	Exports	Imports	Total
	($ billions)			(million tonnes)		
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
2006–07	142.4	133.0	275.4	656.2	77.5	733.7
2007–08	152.5	150.8	303.4	705.8	83.8	789.6

Source: ABS 2009.

Coastal freight

In 2007–08, Australian ports handled 119.3 million tonnes of coastal cargo. This tonnage represented 13.1 per cent of all cargo moved across Australian wharves, a slightly smaller proportion than in 2006–07. Of this, 59.5 million tonnes was cargo loaded onto ships and 59.8 million was unloaded cargo (Table 1.2). The discrepancy between loaded and unloaded figures 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 in the explanatory notes.

Table 1.2   Summary of Australian coastal freight, 10 years to 2007–08

Financial year	Loaded			Unloaded		
	Interstate	*Intrastate*	*Total*	*Interstate*	*Intrastate*	*Total*
			(million tonnes)			
1998–99	31.9	16.5	48.4	31.0	17.1	48.1
1999–00	21.7	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
2006–07	35.7	20.7	56.4	34.6	25.5	60.1
2007–08	37.2	22.3	59.5	37.3	22.5	59.8

Source: BITRE 2009.

Summary of Australian port task

In 2007–08, cargo-handling activity at Australian ports, measured in tonnes, increased faster than in the previous year. Loaded export tonnes increased by 7.6 per cent in 2007–08 compared with an increase of 5.1 per cent in the previous year. Unloaded import tonnes increased by 8.1 per cent, compared with an 8.6 per cent increase in 2006–07.

Total coastal cargo tonnes increased by 1.3 per cent. Loaded cargo increased by 4.6 per cent and unloaded cargo decreased by 1.8 per cent. Based on cargo loaded, the Australian coastal fleet performed 123 billion tonne kilometres in 2007–08, which was 2.5 per cent less 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 2007–08
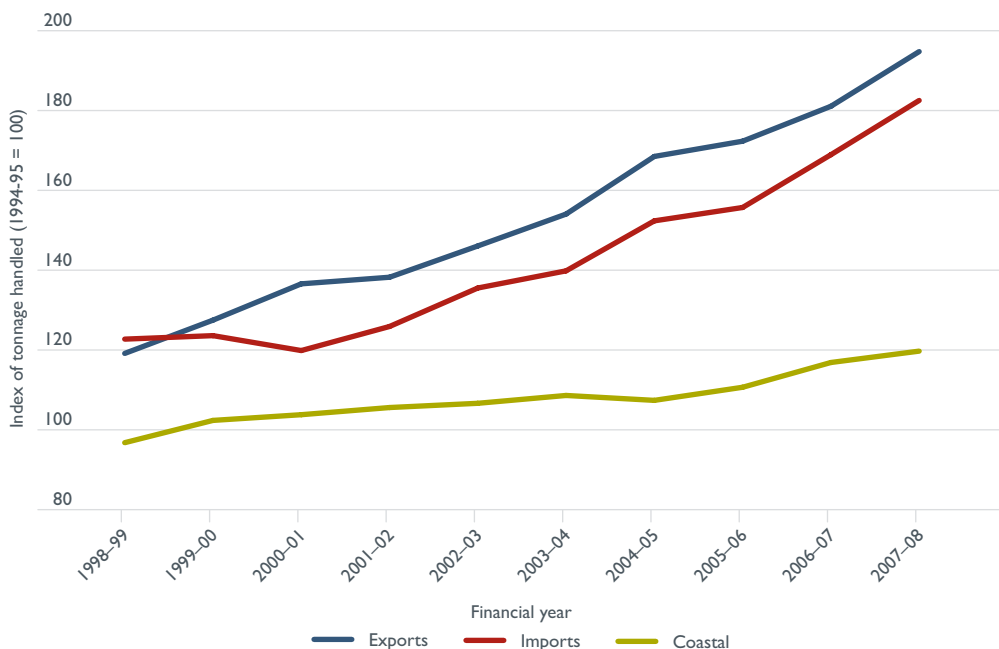
Source: ABS 2009, BITRE 2009.

In 2007–08, ships using single voyage permits (SVPs) and continuous voyage permits (CVPs)[1] moved an estimated 14.9 million tonnes of freight around the Australian coast (Table 1.3). This was a decrease of 1.8 million tonnes from 2006–07. The number of containers carried under voyage permits fell by 39.3 per cent from 73 929 twenty-foot equivalent units (TEU) in 2006–07 to 44 470 TEU in 2007–08. Overall, the share of total loaded tonnage carried under permits decreased to 25.3 per cent in 2007–08, from 29.6 per cent in 2006–07 (Table 4.2).

As shown in Table 1.3, there have been significant fluctuations in quantities of freight carried on permits in recent years, both in term of tonnage and TEU. Historically, annual tonnage moved on permits has been closely related to total annual coastal tonnage figures, while this is not the case for TEU. This suggests that the size of the coastal bulk freight market (which represents the majority of coastal tonnage shipped) may be the dominant factor in determining tonnage carried on permits, while other factors influence the use of permits to carry containerised freight.

---

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

Table 1.3   Summary of voyage permits used, 6 years to 2007–08

Financial year	Voyages (number)			Freight carried (tonnes)			Containers carried (TEU)		
	SVPs	CVPs	Total	SVPs	CVPs	Total	SVPs	CVPs	Total
2002–03	798	454	1 252	10 573 004	1 729 244	12 302 248	12 161	37 619	49 780
2003–04	681	350	1 031	10 430 190	1 755 127	12 185 317	7 908	38 810	46 718
2004–05	892	977	1 869	11 030 905	2 015 719	13 046 624	5 855	56 938	62 793
2005–06	1 133	1 291	2 424	11 470 959	2 230 131	13 701 090	16 501	32 758	49 259
2006–07	1 876	1 915	3 791	14 836 938	1 836 476	16 673 414	20 455	53 474	73 929
2007–08	1 814	1 372	3 186	13 691 895	1 211 434	14 903 329	6 694	37 776	44 470

Source: Infrastructure 2009.

Australian port activity

The number of vessels involved in international shipping entering Australia rose from 3723 in 2006–07 to 3807 in 2007–08, a 2.3 per cent increase. Over the same period the number of voyages by all ships involved in international shipping increased by 6.9 per cent, while the number of port calls made by all ships increased by 4.3 per cent (Table 1.4).

Table 1.4   Summary of Australian port visits, 10 years to 2007–08

Financial year	All ships involved in international shipping	Voyages by all ships involved international shipping	Port calls by all ships involved in coastal and international shipping
		(number)	
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
2006–07	3 723	10 405	26 307
2007–08	3 807	11 119	27 442

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 port calls or visits.
Source: LMIU 2009.

Australian fleet

The Australian trading fleet decreased in 2007–08, in terms of both gross and deadweight tonnage (Table 1.5). The total number of ships also declined, by 2 to 94. The number of small ships (mostly general cargo carriers) fell by 1 from the previous year to 21, and the number of large ships also decreased by 1 from 74 to 73. In contrast to changes in fleet composition between 2006–07 and 2005–06, the reduction in bulk carrier tonnage in 2007–08 was partially offset by increases in general cargo and tanker tonnage.

Table 1.5   Summary of Australian trading fleet between 1996 and 2008

Year	Small ships (less than 2000 dwt)	Large ships (greater than 2000 dwt)	Total number of ships	Deadweight tonnage	Gross registered tonnage
	(number)			(tonnes)	
1996	18	75	93	3 208 208	2 420 591
1997	20	81	101	3 441 291	2 543 128
1998	19	86	105	3 409 236	2 502 846
1999	17	87	104	3 350 389	2 460 600
2000	15	89	104	3 377 573	2 560 051
2001	20	93	113	3 504 348	2 629 282
2002	23	94	117	3 486 534	2 534 625
2003	25	93	118	3 472 108	2 467 299
2004	26	89	115	3 746 739	2 740 545
2005	21	86	107	3 315 275	2 471 658
2006	23	82	105	3 040 657	2 369 057
2007	22	74	96	3 032 047	2 310 649
2008	21	73	94	2 680 561	2 141 845

Note: Table shows the fleet as at the end of June of the specified year.
Sources: LMIU 2009; Shipping companies (various)—personal communications.

Chapter 2   International sea freight

The expansion of Australia's international maritime trade continued in 2007–08. Total international sea freight to and from Australia increased 10.1 per cent by value and 7.6 per cent by weight compared with 2006–07.[2] International exports increased in value and weight by 7.1 and 7.6 per cent respectively. The increases in international imports by sea were 13.4 per cent by value and 8.1 per cent by weight.

Handling of Australia's international sea freight by Australian ports

In 2007–08, 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. This was unchanged from 2006–07.

Table 2.1   Australia's international sea freight by Australian state and territory of origin and final destination

State/territory	Value		Weight	
	Imports	*Exports*	*Imports*	*Exports*
	($ thousands)		(tonnes)	
New South Wales	48 339 634	24 286 328	20 191 922	111 235 261
Victoria	45 877 173	17 110 216	18 735 882	10 882 194
Queensland	27 801 319	34 327 842	20 455 325	178 475 672
South Australia	6 521 783	9 555 591	3 457 386	10 120 755
Western Australia	18 937 991	55 222 748	13 753 173	374 292 222
Tasmania	683 945	3 378 420	785 362	7 663 202
Northern Territory	2 648 624	4 419 386	6 400 305	10 436 569
Australian Capital Territory	1 434	579	247	2
State Confidential[a]	0	894 777	944	2 272 781
Foreign Origin[b]		3 344 571		465 664
Total	150 811 903	152 540 458	83 780 548	705 844 322

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.

         This table is updated between publications and is available on the BITRE website http://www.bitre.gov.au.

Source: ABS 2009.

---

2.   BITRE 2007

Analysis of Australian port of loading and unloading data (Table 2.2) shows that Sydney continued to handle the largest volume of imports by weight and value, while Melbourne handled the largest volume of exports by value. Dampier handled the largest volume of exports by weight in 2007–08, followed by Port Hedland.

Table 2.2   Australia's international sea freight by Australian ports, 2007–08

State/territory	Australian port	Value		Weight	
		Imports	Exports	Imports	Exports
		($ thousands)		(tonnes)	
New South Wales	Coffs Harbour	340	365	16	22
	Newcastle	696 901	8 443 132	1 120 790	89 920 736
	Port Kembla	2 702 862	3 998 641	2 377 851	14 327 314
	Sydney	46 512 437	11 150 031	17 158 853	5 025 878
	Twofold Bay	812	94 542	810	1 197 036
	Other Ports	3 358	12 564	4 557	29 045
Victoria	Geelong	4 018 399	529 278	5 377 484	2 030 717
	Melbourne	43 884 073	21 019 682	13 433 130	8 444 403
	Portland	261 372	1 187 850	474 173	1 973 832
	Westernport	349 646	262 705	101 016	340 535
	Other Ports	18 324	102 546	12 511	141 636
Queensland	Abbot Point		1 218 410		12 367 852
	Brisbane	23 155 464	10 208 128	12 485 892	10 954 728
	Bundaberg	1 834	21 037	416	72 263
	Cairns	415 823	449 068	350 950	366 442
	Gladstone	755 914	7 131 069	2 132 228	56 797 667
	Hay Point		9 388 478		80 325 694
	Innisfail		135 305		502 612
	Karumba		696 579		675 855
	Lucinda		184 885		570 784
	Mackay	413 180	331 610	577 186	1 197 733
	Thursday Island	971	107	137	34
	Townsville	1 677 343	5 604 978	4 377 312	3 755 477
	Weipa	47 357	206 258	57 060	9 067 917
	Other Ports	2 175	34 447	39	1 812 049
South Australia	Adelaide	4 118 476	6 204 836	2 418 518	3 032 753
	Port Bonython		321 922		351 899
	Port Lincoln	126 762	430 809	135 329	1 090 120
	Port Pirie	8 369	167 445	2 301	272 667
	Thevenard		43 276		525 327
	Wallaroo	9 851	66 932	17 105	184 230
	Whyalla	30 067	388 330	352 682	3 924 244
	Other Ports	374	113 747	479	344 226
Western Australia	Albany	65 502	769 748	101 157	3 314 529
	Broome	426 020	94 478	194 475	30 284
	Bunbury	183 164	3 005 893	1 254 285	9 530 966
	Cape Cuvier		51 762		2 634 152
	Cape Lambert	16 977	6 712	13 989	86 221
	Dampier	1 102 903	18 426 115	576 539	136 847 792
	Derby		48 493		37 300
	Esperance	385 016	1 803 071	599 932	8 943 107

(continued)

Table 2.2 **Australia's international sea freight by Australian ports, 2007–08 (continued)**

State/territory	Australian port	Value		Weight	
		Imports	Exports	Imports	Exports
		($ thousands)		(tonnes)	
	Fremantle/Perth	14 711 081	11 218 939	9 869 717	10 058 055
	Geraldton	148 815	1 480 749	146 130	6 460 659
	Port Hedland	820 874	8 659 659	792 175	125 541 976
	Port Walcott	19 935	2 992 849	5 211	56 350 237
	Useless Loop		20 031		1 096 074
	Offshore Terminals		5 444 755		7 018 411
	Wyndham	64 278	228 509	76 099	155 711
	Yampi Sound	3	308 119	2	4 209 952
	Other Ports	573 939	37 460	40 004	1 753 765
Tasmania	Burnie	109 315	389 433	169 654	1 376 226
	Devonport	21 424	4 582	44 820	4 519
	Hobart	47 341	265 065	197 325	489 306
	Launceston	283 308	1 521 117	329 885	3 351 733
	Port Latta	215	72 342	345	1 092 187
	Spring Bay		86 261		929 151
Northern Territory	Darwin	2 219 299	2 163 184	5 186 064	4 485 626
	Confidential	353 843	1 659 718	1 168 567	5 282 204
	Offshore Terminals		439 702		496 964
	Other Ports	46 073	297 945	44 402	370 708
State/territory confidential	Other confidential ports	0	894 777	944	2 272 781
Australia total		150 811 903	152 540 460	83 780 549	705 844 323

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.

Some crude oil or gas exports from offshore terminals are reported as being exported from the nearest mainland port, although the actual cargo may not pass through that port.

This table is updated between publications and is available on the BITRE website http://www.bitre.gov.au.

Source: ABS 2009.

Australia's maritime trading regions

As in 2006–07, the region of South East Asia was Australia's largest supplier by value, followed by Europe and East Asia. Japan and North Asia and North and Central America comprised the majority of the remainder of imports by value in 2007–08. South East Asia continued to be Australia's largest source of imports by weight (Table 2.3). Total imports in 2007–08 rose by 7.1 per cent by weight and 13.4 per cent by value compared with 2006–07.

Japan and North Asia was Australia's largest export market both by weight (318 million tonnes, a 6.2 per cent increase from 299 million tonnes in 2006–07) and value ($47.9 billion, an 8.1 per cent increase from $44.3 billion in 2006–07). East Asia was Australia's second largest export market.

Figure 2.1 shows the value of international imports by region of origin, and Figure 2.2 shows the value of exports by final destination.

Table 2.3   Australia's international sea freight by region of origin and final destination, 2007–08

Region of origin/ final destination	Value		Weight		Commodity rank	
	Imports	Exports	Imports	Exports	By value	By weight
	($ thousands)		(tonnes)			
Africa	1 792 126	2 984 703	1 056 414	6 030 812	9	10
North and Central America	15 934 443	10 345 586	6 223 859	8 294 819	5	7
South America	1 746 231	1 365 730	1 697 809	8 588 326	11	8
East Asia	28 671 395	34 364 014	10 536 934	249 723 231	2	2
South East Asia	36 042 643	17 352 813	31 511 864	24 402 366	3	3
South Asia	1 526 852	6 008 442	622 769	28 935 905	8	5
Japan and North Asia	22 644 509	47 943 201	8 636 937	317 903 221	1	1
Europe	28 377 557	14 640 124	4 786 479	43 219 971	4	4
Middle East	5 075 850	6 813 404	7 402 555	9 313 879	7	6
New Zealand	5 802 067	7 077 805	3 672 532	5 149 194	6	9
Pacific Islands and Papua New Guinea	1 800 011	2 541 548	3 276 749	1 940 763	10	12
Rest of world	1 398 219	1 103 086	4 355 646	2 341 834	12	11
Total	150 811 903	152 540 458	83 780 548	705 844 322		

Note: This table is updated between publications and is available on the BITRE website.
Source: ABS 2009.

Figure 2.1   Australia's international imports by region of origin, 2007–08 ($ billions)

Europe 28.38

Mid East 5.06

Sth Asia 1.53

East Asia 28.67

Nth Asia & Japan 22.64

North & Central America 15.93

SE Asia 36.04

Pacific & PNG 1.80

Africa 1.57

Rest of world 1.40

South America 1.75

New Zealand 5.80
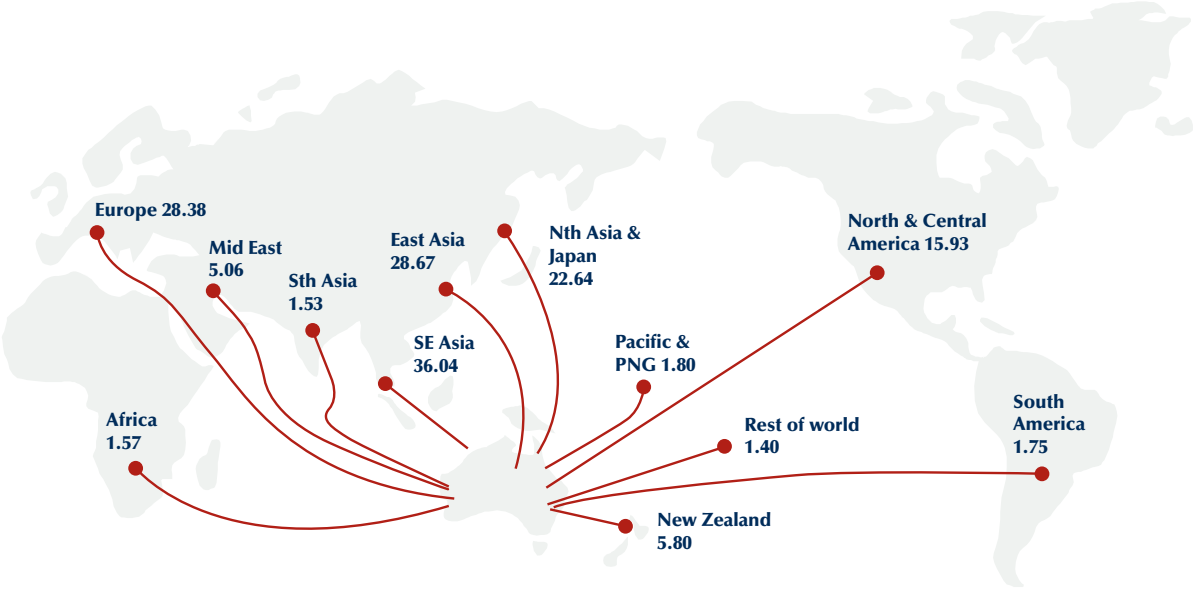
Figure 2.2   Australia's international exports by region of final destination, 2007–08 ($ billions)

Europe 14.64

Mid East 6.81

Sth Asia 6.01

East Asia 34.36

Nth Asia & Japan 47.94

North & Central America 10.35

SE Asia 17.35

Pacific & PNG 2.54

Africa 2.64

Rest of world 1.10

South America 1.37

New Zealand 7.08
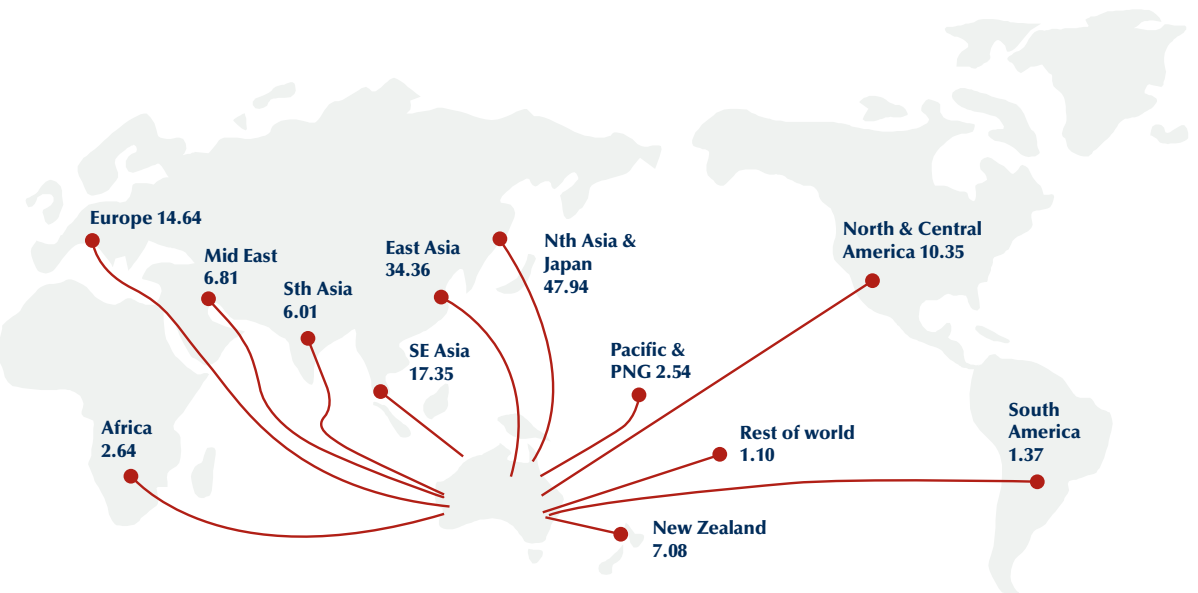
Table 2.4   Australia's top 20 maritime trading partners, 2007–08

Country of origin	Imports		Country of final destination	Exports		Rank
	Value	Weight		Value	Weight	
	($ thousand)	(tonnes)		($ thousands)	(tonnes)	
China (including Hong Kong and Macau)	25 226 456	7 883 996	Japan	34 357 160	239 015 222	1
Japan	17 832 144	6 352 417	China (including Hong Kong and Macau)	28 203 741	207 185 564	2
United States of America	13 506 205	3 673 209	Republic of Korea	13 586 041	78 887 998	3
Singapore	11 623 566	10 463 082	United States of America	8 284 446	4 915 507	4
Germany	7 957 098	835 899	New Zealand	7 077 805	5 149 194	5
Thailand	7 167 298	2 060 806	Taiwan	6 152 584	42 536 535	6
Malaysia	6 432 033	4 939 882	India	5 118 599	27 336 654	7
New Zealand	5 802 067	3 672 532	Singapore	4 079 472	3 739 137	8
Vietnam	4 851 679	5 676 053	Indonesia	3 911 310	6 574 732	9
Republic of Korea	4 805 911	2 282 116	Thailand	3 816 154	4 965 251	10
Indonesia	4 185 424	5 356 469	Malaysia	3 116 871	5 750 519	11
Italy	3 523 508	672 598	United Kingdom	2 980 368	5 716 792	12
United Kingdom	3 485 918	480 131	Netherlands	2 584 062	9 043 568	13
Taiwan	3 444 799	2 652 902	Saudi Arabia	2 209 480	2 317 918	14
United Arab Emirates	2 512 642	3 209 675	United Arab Emirates	1 921 071	2 379 691	15
France	2 479 115	323 854	South Africa	1 492 476	3 302 070	16
Spain	1 656 850	238 464	Papua New Guinea	1 471 670	989 485	17
Canada	1 553 694	2 339 742	Canada	1 393 415	1 262 572	18
Papua New Guinea	1 526 275	1 763 603	Italy	1 373 435	6 123 113	19
Sweden	1 510 182	227 455	Belgium	1 243 697	3 453 860	20
Rest of world	19 729 039	18 675 663	Rest of world	18 166 600	45 198 939	
Total	150 811 903	83 780 548	Total	152 540 458	705 844 322	

Note: This table is updated between publications and is available on the BITRE website http://www.bitre.gov.au.
Source: ABS 2009.

Trading partners by country

The trend of strong growth in maritime trade with China and Japan has continued. In 2007–08, Japan was Australia's largest trading partner for sea freight exports by value followed by China and the Republic of Korea. China was Australia's largest trading partner for sea freight imports, followed by Japan and the United States of America (Table 2.4). Since 2006–07 there has been a 46.5 per cent increase by weight (19.9 per cent by value) in imports from Singapore, Australia's fourth largest source of imports, while imports from the United States of America remained constant. New Zealand was Australia's eighth largest supplier of imports and fifth largest market for exports, and Indonesia was Australia's eleventh largest supplier of imports and ninth largest market for 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 2007–08 data on ports of loading or unloading indicated the following changes compared with previous years:

Loaded cargo

- The majority of regions recorded increases in the weight of total cargo loaded in comparison to 2006–07, with New Zealand and South Asia recording the largest growth (37.3 per cent and 29.9 per cent respectively).

- The majority of regions also recorded increases in the value of loaded goods. South America continues to show strong growth in percentage terms with 2007–08 figures representing a 34.4 per cent increase on 2006–07, and a total growth of 61 per cent since 2005–06.

- 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). This is consistent with 2005–06 and 2006–07.

Unloaded cargo

- The majority of regions saw unloaded cargo by value remained relatively constant in comparison to 2006–07, with the exceptions being the Middle East, East Asia, and Japan and North Asia which all recorded substantial growth (20.5 per cent, 17.7 per cent, and 9.3 per cent respectively).

- Japan and North Asia again dominated as the region with the highest weight and value of cargo unloaded.

Table 2.5   Australia's international freight by trading region of loading and unloading, 2007–08

Region of loading or unloading	Value		Weight	
	Loaded	Unloaded	Loaded	Unloaded
	($ thousands)		(tonnes)	
Africa	1 790 359	2 271 678	1 021 660	5 906 712
North and Central America	15 681 560	8 912 404	6 066 190	8 054 996
South America	1 611 408	1 258 181	1 601 627	8 597 065
East Asia	28 562 825	32 328 051	10 543 176	248 868 906
South East Asia	38 544 010	26 558 061	32 096 663	27 325 965
South Asia	1 476 156	5 196 681	642 930	28 309 345
Japan and North Asia	21 868 956	47 692 332	8 799 357	317 729 325
Europe	27 145 756	12 855 713	4 408 047	43 174 649
Middle East	4 882 940	4 116 995	7 306 316	8 290 984
New Zealand	6 038 414	7 760 878	3 638 986	5 329 307
Pacific Islands and Papua New Guinea	1 925 057	2 502 055	3 330 011	1 919 969
Rest of world	1 284 461	1 087 430	4 325 585	2 337 100
Total	150 811 903	152 540 458	83 780 548	705 844 322

Note: Freight loaded in various regions are imports to Australian ports. Similarly, freight unloaded in various overseas regions are exports from Australian ports.

This table is updated between publications and is available on the BITRE website http://www.bitre.gov.au.

Source: ABS 2009.

Figure 2.3   Australia's international imports by region of loading, 2007–08 ($ billions)

Europe 27.15

Mid East 4.88

Sth Asia 1.48

East Asia 28.56

Nth Asia & Japan 21.87

North & Central America 15.68

SE Asia 38.54

Pacific & PNG 1.93

Africa 1.79

Rest of world 1.28

South America 1.61

New Zealand 6.04
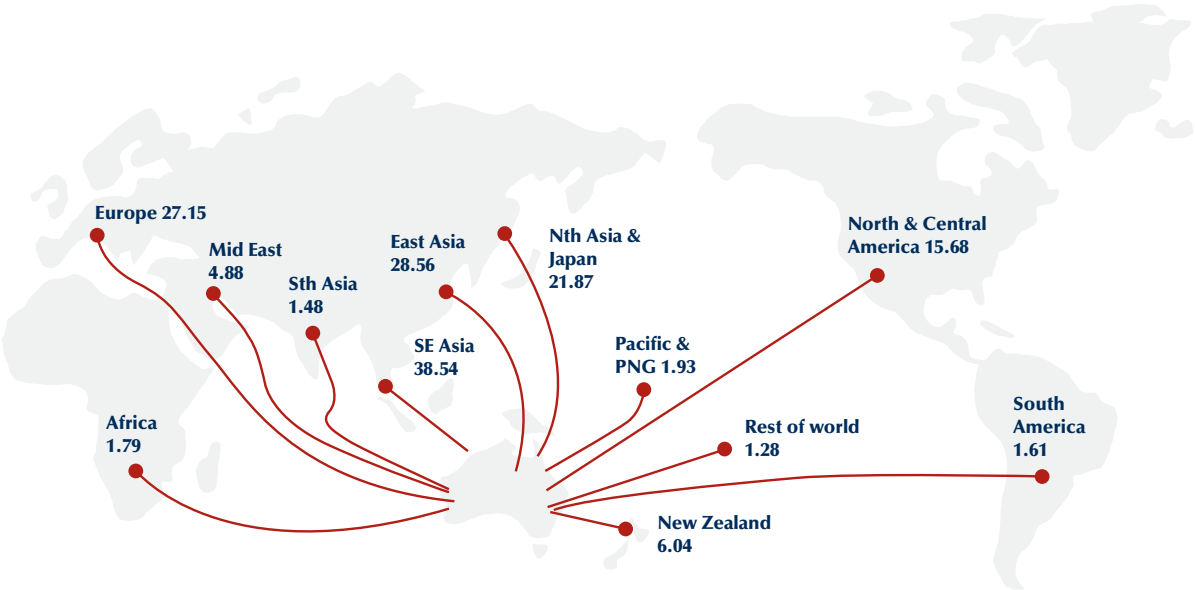
Figure 2.4   Australia's international exports by region of unloading, 2007–08 ($ billions)

Europe 12.86

Mid East 4.17

Sth Asia 5.20

East Asia 32.33

Nth Asia & Japan 47.70

North & Central America 8.91

SE Asia 26.56

Pacific & PNG 2.50

Africa 2.27

Rest of world 1.09

South America 1.26

New Zealand 7.76

Australia's maritime trade carried by liner shipping

In 2007–08, total freight carried by the liner trade[3] increased by 11.6 per cent in value to \$113.6 billion from \$101.5 billion in the previous year (Table 2.6 and Figure 2.5). This represents a reversal of the 2006–07 result which saw a 21 per cent drop in liner-carried freight by value from 2005–06. By weight, there was a 17.0 per cent increase in loaded liner freight and a 16.5 per cent increase in unloaded liner freight. As in 2006–07, East Asia was Australia's largest source of loaded liner cargo by value and by weight, and South East Asia was the destination for the most unloaded liner cargo in 2007–08 both by value and by weight.

Table 2.6   **Australia's international liner trade by region of loading and unloading, 2007–08**

Region of loading or unloading	Value		Weight	
	Loaded	Unloaded	Loaded	Unloaded
	($ thousands)		(tonnes)	
Africa	629 147	449 560	255 390	164 617
North and Central America	9 544 248	4 924 405	2 005 688	1 259 581
South America	665 391	273 911	262 021	104 786
East Asia	20 105 199	7 040 552	5 302 515	3 546 047
South East Asia	9 806 952	13 465 526	3 303 969	7 042 736
South Asia	1 048 420	542 743	395 716	414 770
Japan and North Asia	5 982 817	5 677 174	1 136 665	2 428 238
Europe	16 934 752	4 827 341	3 129 839	1 233 781
Middle East	747 726	670 178	374 093	298 126
New Zealand	3 795 363	4 578 963	1 623 024	1 719 665
Pacific Islands and Papua New Guinea	278 442	1 278 972	138 909	696 927
Rest of world	.	111	.	14
Total	69 538 458	43 729 436	17 927 828	18 909 288

Note: Freight loaded in various regions are imports to Australian ports. Similarly, freight unloaded in various overseas regions are exports from Australian ports.

This table is updated between publications and is available on the BITRE website http://www.bitre.gov.au.

Source: ABS 2009.

---

3.   See glossary in explanatory notes for a definition of liner trade.

Figure 2.5   Australia's international liner imports by region of loading, 2007–08 ($ billions)

Europe 16.93
Mid East 0.75
Sth Asia 1.05
East Asia 20.11
Nth Asia & Japan 5.98
SE Asia 9.81
Pacific & PNG 0.28
North & Central America 9.54
Africa 0.63
Rest of world 0.00
South America 0.67
New Zealand 3.80
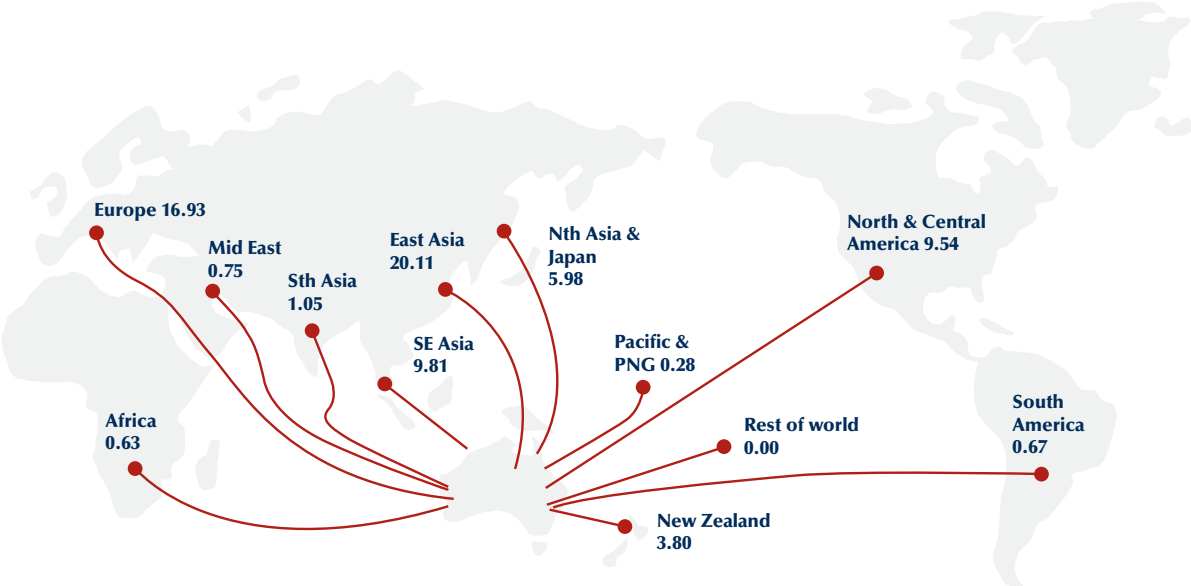
Figure 2.6:   Australia's international liner exports by region of unloading, 2007–08 ($ billions)

Europe 4.83
Mid East 0.67
Sth Asia 0.54
East Asia 7.04
Nth Asia & Japan 5.68
SE Asia 13.47
Pacific & PNG 1.28
North & Central America 4.92
Africa 0.45
Rest of world 0.00
South America 0.27
New Zealand 4.58
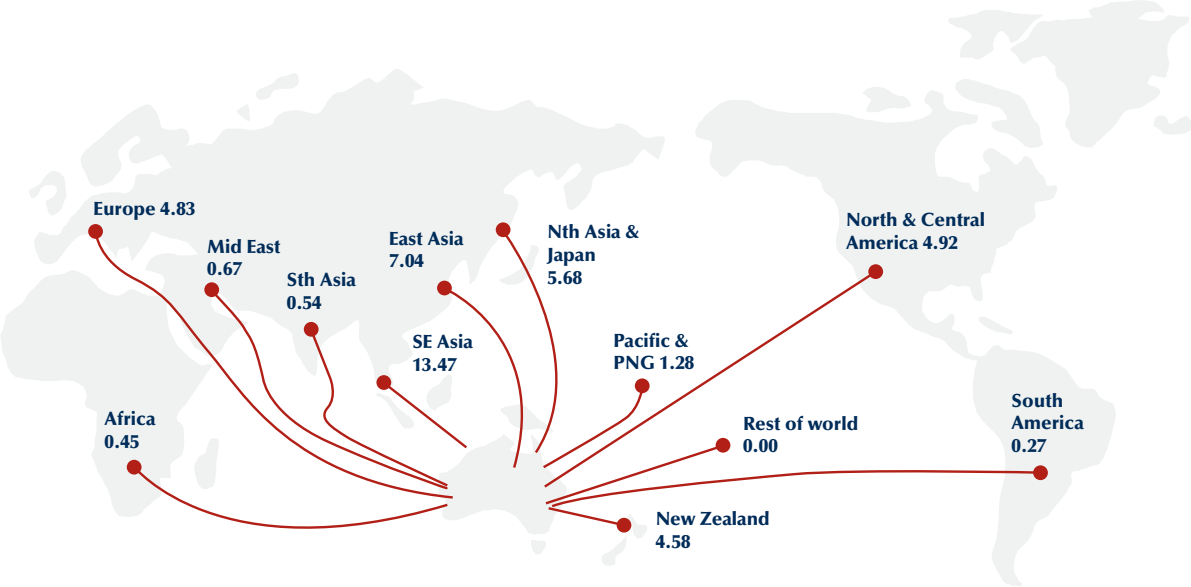
Australia's maritime trade carried by nonliner shipping

Australian nonliner trade[4] increased by 9.3 per cent in 2007–08 and was valued at $190 billion (Table 2.7). South East Asia was again the most important region for nonliner cargo loaded, both by value and weight, while Japan and North Asia remained Australia's largest nonliner unloading region (Figures 2.7 and 2.8). Loaded non-liner cargo figures for East Asia experienced significant decline since 2006–07, falling by 19.2 per cent by value and 7.0 per cent by weight, although unloaded non-liner cargo for East Asia increased by 20.3 per cent by value and 18.6 per cent by weight in the same period. Loaded and unloaded non-liner cargo for Africa also experienced declines of 13.4 per cent by value and 10.2 per cent by weight since 2006–07.

Table 2.7   Australia's international non–liner trade by region of loading and unloading, 2007–08

Region of loading or unloading	Value		Weight	
	Loaded	Unloaded	Loaded	Unloaded
	($ thousands)		(tonnes)	
Africa	1 161 212	1 822 118	766 270	5 742 095
North and Central America	6 137 312	3 987 999	4 060 502	6 795 415
South America	946 017	984 270	1 339 606	8 492 279
East Asia	8 457 626	25 287 499	5 240 661	245 322 859
South East Asia	28 737 058	13 092 535	28 792 694	20 283 229
South Asia	427 736	4 653 938	247 214	27 894 574
Japan and North Asia	15 886 140	42 015 158	7 662 692	315 301 087
Europe	10 211 004	8 028 372	1 278 208	41 940 868
Middle East	4 135 215	3 446 817	6 932 223	7 992 858
New Zealand	2 243 051	3 181 915	2 015 962	3 609 641
Pacific Islands and Papua New Guinea	1 646 615	1 223 083	3 191 102	1 223 042
Rest of world	1 284 461	1 087 319	4 325 585	2 337 085
Total	81 273 445	108 811 022	65 852 720	686 935 034

Note: Freight loaded in various regions are imports to Australian ports. Similarly, freight unloaded in various overseas regions are exports from Australian ports.
This table is updated between publications and is available on the BITRE website http://www.bitre.gov.au.

Source: ABS 2009.

---

4.   See glossary in explanatory notes for a definition of non-liner trade.

Figure 2.7   Australia's international non-liner imports by region of loading, 2007–08 ($ billions)

Europe 10.21

Mid East 4.14

Sth Asia 0.43

East Asia 8.46

Nth Asia & Japan 15.89

North & Central America 6.14

SE Asia 28.74

Pacific & PNG 1.65

Africa 1.16

Rest of world 1.28

South America 0.95

New Zealand 2.24
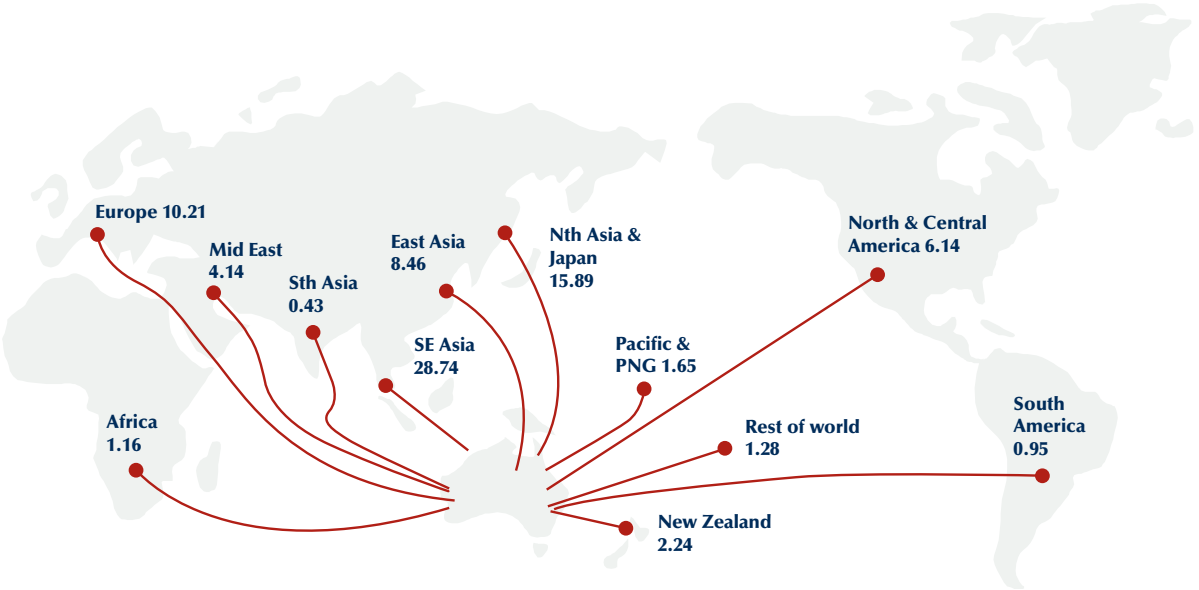
Figure 2.8   Australia's international non-liner exports by region of unloading, 2007–08 ($ billions)

Europe 8.96

Mid East 2.90

Sth Asia 4.73

East Asia 21.01

Nth Asia & Japan 36.90

North & Central America 3.67

SE Asia 13.62

Pacific & PNG 1.14

Africa 1.82

Rest of world 1.02

South America 0.98

New Zealand 3.21
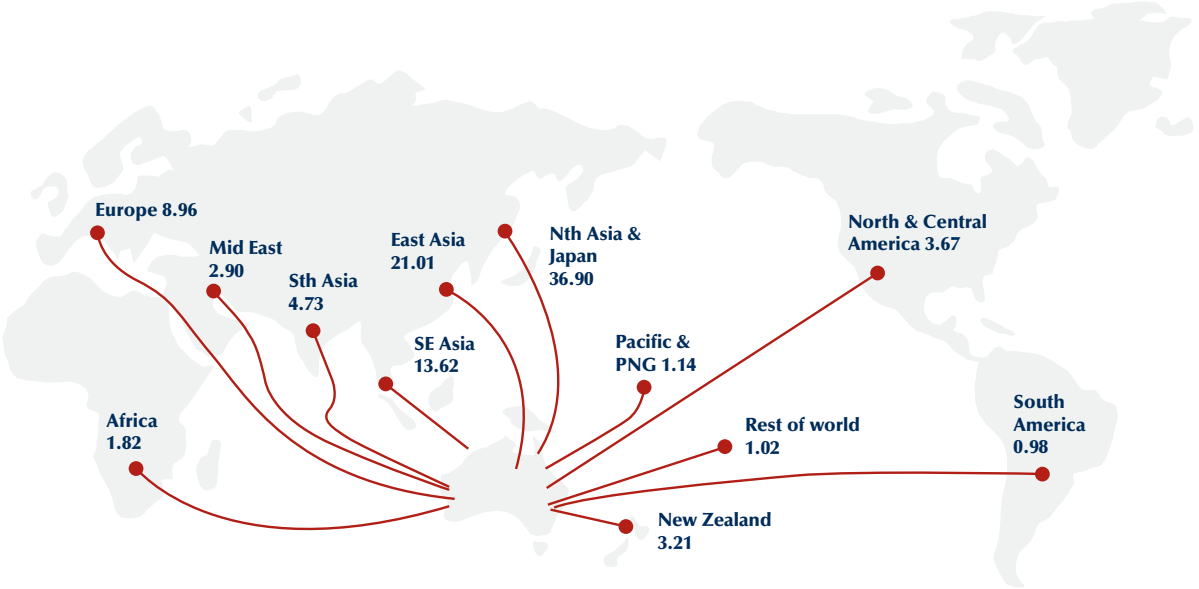
Commodity structure of Australia's international sea freight

In 2007–08, the leading commodities by value moving across Australia's wharves were *machinery*; *road vehicles and transport equipment*; and *petroleum oil* while *iron ore and concentrates; coal, coke and briquettes;* and *petroleum oil* were the leading commodities in terms of tonnes transported.[5] The most significant change from 2006–07 rankings is that *petroleum oil* became the third most moved commodity by value, replacing *coal, coke and briquettes* which dropped to fourth.

Table 2.8   Australia's international freight by commodity, 2007–08

ATFCC codes and Commodity names	Value		Weight		Commodity rank	
	Imports	*Exports*	*Imports*	*Exports*	*By value*	*By weight*
	($ thousands)		*(tonnes)*			
0. Food and live animals						
Cereals and cereal preparations	641 866	4 964 711	427 797	11 791 978	15	9
Coffee, tea, cocoa, spices etc.	655 870	68 092	158 651	11 260	47	53
Dairy products and birds' eggs	567 625	2 549 160	132 238	682 743	24	33
Feeding stuff for animals	498 054	776 433	943 526	1 496 591	39	20
Fish, crustaceans, molluscs etc.	1 050 013	504 523	224 003	31 003	36	50
Live animals	757	824 792	195	458 840	44	41
Meat and meat preparations	418 382	6 174 318	125 731	1 586 676	10	27
Misc edible products and preparations	1 643 622	662 878	376 751	221 222	30	38
Sugars, sugar preparations and honey	224 210	222 764	119 238	548 011	55	36
Vegetables and fruit	1 485 029	1 192 462	1 003 399	1 081 465	26	22
1. Beverages and tobacco						
Ale, beer and stout, cider (alcoholic)	168 834	19 521	213 781	19 399	61	51
Non-alcoholic beverages NES	214 471	31 083	173 104	29 888	59	52
Spirits (potable), alcoholic beverages NES	480 646	76 568	114 946	31 166	52	55
Tobacco and tobacco manufactures	181 209	120 316	24 258	8 083	58	61
Wine and vermouth	446 023	2 685 640	99 940	1 148 195	23	30
2. Crude materials, inedible, except fuels						
Aluminium ores and concentrates; alumina	13 563	5 902 572	18 127	24 377 928	13	5
Copper ores and concentrates	23 906	4 116 080	4 146	1 787 134	18	25
Cork and wood	660 665	1 300 389	575 930	13 154 304	33	7
Cotton	52	465 731	275	268 510	54	49
Crude animal and vegetable materials NES	182 888	149 371	101 695	49 306	57	54
Crude minerals	186 743	460 500	2 038 738	11 420 940	48	8
Crude rubber (including synthetic)	188 929	7 875	80 493	17 475	60	58
Fertilisers, crude	87 212	4 352	718 258	5 623	64	34
Hides, skins and fur skins, raw	2 474	565 042	1 010	305 565	50	47
Iron ore and concentrates	310 501	20 522 122	4 407 764	314 738 744	5	1

(continued)

---

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

Table 2.8 Australia's international freight by commodity, 2007–08 (continued)

ATFCC codes and Commodity names	Value		Weight		Commodity rank	
	Imports	Exports	Imports	Exports	By value	By weight
	($ thousands)		(tonnes)			
2. Crude materials, inedible, except fuels (continued)						
Lead and zinc ores and concentrates	111 022	2 802 727	100 662	2 825 517	25	17
Mineral sands	2 653	168 707	9 960	435 347	62	43
Oil seeds and oleaginous fruits	50 703	348 387	48 100	555 715	56	37
Other metallic ores and metal scrap	79 780	5 951 041	112 110	10 040 760	12	10
Other textile fibres	108 785	49 778	66 018	51 602	63	57
Pulp and waste paper	294 060	266 390	406 558	1 351 580	51	26
Uranium and thorium ores and concentrates	0	886 613	0	10 689	42	64
Wool, sheep and lambs	29 898	2 475 422	7 713	389 249	28	45
3. Mineral fuels, lubricants and related materials						
Coal, coke and briquettes	16 062	24 588 086	124 197	252 920 470	4	2
Gases, natural and manufactured NES	724 386	418	4 031 842	42	46	14
Liquefied natural gas (LNG)	1	5 854 240	0	0	14	65
Liquefied petroleum gas (LPG)	435 953	1 182 134	494 545	1 408 455	35	24
Petroleum oil	17 708 338	9 864 951	23 077 861	12 162 333	3	3
Petroleum oils and refined products	11 651 207	1 890 347	12 365 079	2 250 762	6	6
4. Animal and vegetable oils, fats and waxes						
Oils and fats	529 205	559 410	333 884	524 671	40	32
5. Chemical and related materials NES						
Chemicals	5 696 666	3 310 367	6 214 422	2 052 142	9	11
Fertilisers, manufactured	1 557 905	296 092	2 863 134	672 494	34	15
Organic chemicals	2 004 730	93 758	938 021	40 209	31	31
Plastics	2 720 283	526 074	1 166 439	293 291	22	28
6. Manufactured goods classified chiefly by material						
Aluminium and aluminium alloys	786 312	5 457 381	181 811	1 772 807	11	23
Copper and copper alloys	847 791	3 253 469	92 814	373 659	19	40
Cork and wood manufactures (excludes furniture)	655 412	154 213	409 561	258 299	45	35
Iron and steel	3 615 222	1 405 516	2 563 853	1 633 538	17	12
Lead and lead alloys	32 600	1 270 725	9 802	364 115	38	46
Leather, leather manufactures NES	131 734	459 355	8 004	111 634	49	5
Manufactures of metal NES	4 217 703	867 280	1 171 816	273 770	16	29
Nickel and nickel alloys	88 106	781 873	3 294	24 730	43	62
Non-metallic mineral manufactures NES	1 757 986	278 820	3 869 784	325 541	32	13
Other non-ferrous metals NES	138 201	416 968	13 133	32 321	53	60
Paper, paperboard and articles	2 715 669	714 253	2 017 173	841 588	21	18
Rubber manufactures NES	2 370 051	230 874	516 986	59 554	27	39
Textile yarn, fabrics, and articles	2 177 557	307 998	414 430	44 288	29	42
Zinc and zinc alloys	12 673	1 329 046	2 999	414 126	37	44
7. Machinery and transport materials						
Machinery	31 843 639	4 763 162	2 708 050	462 040	1	16
Road vehicles and transport equipment	26 949 411	4 912 047	2 120 396	449 678	2	19

(continued)

Table 2.8   Australia's international freight by commodity, 2007–08 (continued)

ATFCC codes and Commodity names	Value		Weight		Commodity rank	
	Imports	Exports	Imports	Exports	By value	By weight
	($ thousands)		(tonnes)			
8. Miscellaneous manufactured articles						
Apparel and clothing accessories	3 551 390	86 642	274 149	6 334 20	48	
Apparel and clothing accessories	3 551 390	86 642	274 149	6 334	20	48
Footwear	1 046 029	27 474	87 224	1 580	41	59
Miscellaneous manufactured articles	11 075 380	1 773 742	2 270 239	165 729	7	21
9. Commodities and transactions NES						
Confidential	2 725 488	8 549 320	589 515	24 966 000	8	4
Miscellaneous	18 365	18 059	10 977	5 614	65	63
Total	150 811 900	152 540 454	83 780 549	705 844 322		

Note: This table is updated between publications and is available on the BITRE website http://www.bitre.gov.au.
NES = 'Not Elsewhere Specified', see glossary in explanatory notes for further details.

Source: ABS 2009.

Chapter 3   Coastal freight

In 2007–08, 119.3 million tonnes of coastal cargo was handled through Australian ports. Of this, 59.5 million tonnes was loaded cargo and 59.8 million tonnes due to the unloading of vessels.

Based on cargo loaded, the Australian coastal fleet task was 124.1 billion tonne kilometres, down from 126.2 billion tonne kilometres the previous year. This decrease was primarily in *mineral fuels, lubricants and related materials* with increases observed in c*rude materials, inedible, except fuels*.

Commodity structure of Australia's coastal freight

In 2007–08, there were increases in tonnage loaded for the following commodity groups: *food and live animals; crude materials, inedible, except fuels; mineral fuels, lubricants and related materials; machinery and transport materials;* and *commodities and transactions not elsewhere specified.* Commodity groups in which a decrease was observed were: *chemicals and related materials not elsewhere specified;* and *manufactured goods classified chiefly by material* (Table 3.1). The overall increase in tonnage loaded was 5.5 per cent, while total tonne kilometres decreased by 1.7 per cent (Table 3.2). This indicates that in 2007–08, the average distance travelled by each tonne of coastal freight was shorter than in the previous year.

Table 3.1   Coastal freight loaded by commodity group, 10 years to 2007–08

Commodity group	Financial year									
	1998–99	1999–00	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06	2006–07	2007–08
	(million tonnes)									
0. Food and live animals	1.5	1.8	1.6	1.7	2.1	1.6	1.7	1.5	2.3	2.5
1. Beverages and tobacco	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.2
2. Crude materials, inedible, except fuels	23.7	24.8	23.7	25.5	24.7	25.1	27.7	28.6	27.1	29.2
3. Mineral fuels, lubricants and related materials	15.8	16.2	18.0	15.9	15.9	16.2	13.8	14.9	16.4	16.7
4. Animal and vegetable oils, fats and waxes	0.1	0.2	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0
5. Chemicals and related materials NES	0.8	1.1	1.0	1.6	1.9	1.5	1.5	1.5	1.9	1.8
6. Manufactured goods classified chiefly by material	4.8	5.6	6.0	5.6	5.8	5.9	6.1	6.0	6.4	5.9
7. Machinery and transport materials	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.2	0.4	0.5
8. Miscellaneous manufactured articles	0.5	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.8	0.8
9. Commodities and transactions NES	1.0	0.7	0.7	0.9	1.4	1.5	1.6	1.6	0.9	1.8
Total	48.4	51.3	52.0	52.4	52.8	53.2	53.7	55.2	56.4	59.5

Note: This table is updated between publications and is available on the BITRE website http://www.bitre.gov.au.
         NES = 'Not Elsewhere Specified', see glossary in explanatory notes for further details.
Source: ABS 2009.

Table 3.2 Coastal freight task by commodity group, 10 years to 2007–08

Commodity group	Financial year									
	1998–99	1999–00	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06	2006–07	2007–08
	(billion tonne kilometres)									
0. Food and live animals	2.2	2.6	2.4	2.7	4.1	2.8	2.4	2.1	3.3	3.6
1. Beverages and tobacco	0.1	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.3	0.3
2. Crude materials, inedible, except fuels	70.5	66.1	61.8	62.1	63.4	64.8	69.7	72.6	71.9	73.2
3. Mineral fuels, lubricants and related materials	28.6	30.2	30.0	33.6	34.5	37.4	30.5	35.5	36.1	33.7
4. Animal and vegetable oils, fats and waxes	0.1	0.4	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0
5. Chemicals and related materials NES	1.0	1.7	2.0	3.1	4.0	3.1	3.1	3.1	4.8	3.8
6. Manufactured goods classified chiefly by material	5.1	6.7	6.8	6.4	6.6	6.6	6.1	6.4	6.9	6.4
7. Machinery and transport materials	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.4	0.7	0.6
8. Miscellaneous manufactured articles	0.3	0.4	0.5	0.5	0.5	0.6	0.5	0.5	0.6	0.6
9. Commodities and transactions NES	0.7	0.5	0.6	1.5	1.0	0.9	0.9	1.0	1.8	1.9
Total	108.8	108.9	104.5	110.4	114.8	117.0	114.0	122.0	126.2	124.1

Note: This table is updated between publications and is available on the BITRE website http://www.bitre.gov.au.
NES = 'Not Elsewhere Specified', see glossary in explanatory notes for further details.

Source: ABS 2009.

As is shown in Table 3.1, there were marked changes in tonnage of coastal cargo shipped in some commodity groups in 2007–08 compared to 2006–07. There was a 32.2 per cent increase in tonnes of *machinery and transport materials* shipped. Increases of 7.9 per cent in tonnes of *crude materials, inedible, except fuels* and 10.7 per cent in tonnes of *food and live animals* shipped were also observed. In contrast, *chemicals and related materials not elsewhere specified* and *manufactured goods classified chiefly by material* both recorded declines in tonnage shipped, of 3.7 per cent and 6.8 per cent respectively.

Commodities and transactions not elsewhere specified nearly doubled in quantity shipped (rising 95.6 per cent) compared with the previous year. However, this is likely to be due to a decline in the quality of data supplied to BITRE rather than an actual increase in commodities of this type being shipped. This increase may also account for some of the decrease in other commodity groups observed.

Freight task as shown in Table 3.2 is driven by both the level of demand for a commodity and the locations at which that demand exists (i.e. the distance the commodity must be shipped), among other factors. In comparison, tonnage figures in Table 3.1 are not affected directly by the location of demand. This can cause freight task figures for a commodity to vary more than tonnage figures from year to year, since patterns of demand can change even if overall demand for a commodity remains relatively fixed.

Table 3.3 shows how the 2007–08 totals in Table 3.1 break down by state/territory of origin and destination.

Table 3.3   Coastal freight by Australian state and territory of loading or unloading and commodity groups, 2007–08

State/territory of origin	State/territory of destination							
	NSW	VIC	QLD	SA	WA	TAS	NT	Total
				(thousand tonnes)				
0. Food and live animals								
NSW	0.0	4.5	51.1	0.5	55.1	2.2		113.4
VIC	5.0	0.0	18.0	28.6	58.3	535.5	0.0	645.3
QLD	285.6	375.9	40.3	0.1	38.7	4.6		745.2
SA	46.5	14.3	13.5		0.1	38.6		113.1
WA	105.3	84.5	6.8		5.5	13.4	3.6	219.2
TAS		699.4	0.2	0.0	0.0	3.0		702.7
NT								
Subtotal	442.5	1178.6	129.9	29.2	157.7	597.4	3.6	2538.9
1. Beverages and tobacco								
NSW	0.3	0.3	22.9	0.1	8.7			32.2
VIC	0.6		3.5	9.7	18.6	66.5		98.8
QLD	0.0				2.8		18.1	20.9
SA								
WA	0.0	0.0					0.1	0.2
TAS		79.9						79.9
NT								
Subtotal	1.0	80.2	26.4	9.7	30.0	66.5	18.2	232.0
2. Crude materials inedible except fuels								
NSW	0.7	4.0	70.5	0.4	18.5	45.5		139.6
VIC	1.9		23.1	6.3	24.2	150.1		205.6
QLD	1 336.7	116.6	13 185.9	169.8	5.1	715.8	12.7	15 542.6
SA	1 815.6	483.9	438.9	2 109.5	66.0	73.0		4 986.9
WA	4 362.9	1 278.1	68.0		678.8	15.0	4.8	6 407.6
TAS	1 513.2	169.6	74.8	50.6		147.0		1 955.1
NT					10.3			10.3
Subtotal	9 030.9	2 052.2	13 861.2	2 336.6	802.9	1 146.5	17.5	29 247.9
3. Mineral fuels, lubricants and related materials								
NSW	87.2	257.4	255.9	1 117.0	16.3	141.1	1.0	1 876.1
VIC	2 525.8	491.6	918.0	106.6	38.0	430.7		4 510.7
QLD	278.6	154.5	1 496.3	70.1	221.9		1.9	2 223.4
SA	480.6		1.3		175.5	27.3		684.8
WA	738.1	666.9	343.9	3 284.0	2 207.1	134.2	43.3	7 417.6
TAS	17.6	0.1			1.0	2.8		21.6
NT								
Subtotal	4 128.1	1 570.5	3 015.5	4 577.8	2 659.8	736.1	46.2	16 734.0
4. Animal and vegetable oils, fats and waxes								
NSW	2.4	5.2	3.9		0.0			11.5
VIC	0.3		3.7	0.3	0.8	6.4		11.5
QLD					0.0			0.0
SA					2.7			2.7
WA			0.2	3.4				3.6
TAS		3.2						3.2
NT								
Subtotal	2.7	8.3	7.7	3.8	3.6	6.4		32.4

(continued)

Table 3.3 Coastal freight by Australian state and territory of loading or unloading and commodity groups, 2007–08 (continued)

State/territory of origin	State/territory of destination							
	NSW	VIC	QLD	SA	WA	TAS	NT	Total
				(thousand tonnes)				
5. Chemicals and related materials NES								
NSW	7.8	5.7	92.4	1.1	44.9	16.6		168.4
VIC	2.0	0.6	55.8	19.9	54.3	172.1		304.7
QLD	91.7	314.4	97.6	110.7	79.8	34.4	10.1	738.7
SA	38.1	3.3		0.4	0.2			41.9
WA	0.8	1.5	67.5		67.6		1.0	138.4
TAS	32.2	323.6	7.5	25.3	8.0	9.3		405.9
NT					0.1			0.1
Subtotal	172.5	649.0	320.8	157.2	254.8	232.4	11.1	1 797.9
6. Manufactured goods classified chiefly by material								
NSW	22.6	968.5	95.7	8.4	146.1	25.1	5.7	1 272.1
VIC	59.0	3.5	74.3	42.5	167.4	285.3		632.0
QLD	18.2	0.4	1 275.0	0.0	26.0	1.4	0.2	1 321.4
SA	0.0	576.1	428.0	0.3	0.6			1 005.1
WA	1.4	0.3	0.2		10.1	1.0	2.0	15.0
TAS	436.3	1 227.7	32.7					1 696.7
NT					4.7			4.7
Subtotal	537.6	2 776.6	1 905.9	51.3	354.9	312.8	7.9	5 946.9
7. Machinery and transport materials								
NSW	0.2	21.4	53.1	3.1	25.0	1.7		104.5
VIC	1.8	3.6	7.6	30.4	41.6	89.5		174.5
QLD	2.3	1.8	1.4	0.2	20.1	0.5	0.5	26.7
SA					2.5			2.5
WA	1.3	2.0	1.7	0.0	0.8	0.0	0.6	6.4
TAS		146.4			0.0	1.2		147.6
NT					0.8			0.8
Subtotal	5.6	175.2	63.7	33.6	90.9	92.9	1.0	463.0
8. Miscellaneous manufactured articles								
NSW	1.0	5.6	37.7	2.3	16.8	2.1	0.0	65.6
VIC	1.8	0.0	13.0	18.4	25.6	649.2	0.0	708.1
QLD	4.1	1.0	0.3	0.0	2.9	0.0	0.2	8.5
SA								
WA	0.5	0.3	0.0		0.2	0.1	0.3	1.2
TAS		0.6						0.6
NT					0.0			0.0
Subtotal	7.4	7.5	50.9	20.8	45.5	651.4	0.5	784.1
9. Commodities and transactions NES								
NSW	0.1	0.9	17.8	0.4	8.1	0.1		27.4
VIC	2.6	5.4	13.3	52.8	26.4	172.8		273.2
QLD	0.4	0.3	168.3	4.3	20.3	0.1	1.3	195.0
SA	1.8	0.0		1.0	255.9			258.7
WA	0.4	5.4	1.0	0.9	147.5	0.1	4.9	160.3
TAS	0.1	690.3	0.9	2.5	142.4	5.0		841.2
NT			0.6		0.9			1.5
Subtotal	5.3	702.3	201.9	62.0	601.5	178.1	6.2	1 757.4
Total	14 333.6	9 200.5	19 584.0	7 281.9	5 001.7	4 020.4	112.3	59 534.4

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.

NES = 'Not Elsewhere Specified', see glossary in explanatory notes for further details.

Source: ABS 2009.

Cargo flows

Table 3.4 details coastal freight flows between the States and the Northern Territory 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 five years.

Table 3.4   Total coastal freight flows, 2007–08

State/territory of origin	State/territory of destination								
	NSW	VIC	QLD	SA	WA	TAS	NT	Total	Per cent of total
				(thousand tonnes)					
NSW	122.3	1 273.4	701.0	1 133.3	339.4	234.5	6.7	3 810.7	6
VIC	2 601.0	504.7	1 130.3	315.4	455.2	2 558.1	0.0	7 564.7	13
QLD	2 017.7	964.9	16 265.0	355.1	417.6	756.9	45.0	20 822.3	35
SA	2 382.6	1 077.6	881.7	2 111.3	503.5	138.9		7 095.6	12
WA	5 210.7	2 039.1	489.3	3 288.4	3 117.5	163.8	60.6	14 369.3	24
TAS	1 999.3	3 340.8	116.2	78.4	151.5	168.3		5 854.4	10
NT			0.6		16.9			17.5	0
Total	14 333.6	9 200.5	19 584.0	7 281.9	5 001.7	4 020.4	112.3	59 534.4	100
Per cent of total	24	16	33	12	8	7	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: BITRE 2009.

Shipping freight activity over the last 10 years by state and territory is shown in Figures 3.1 and 3.2. Changes since 2006–07 include:

- increases in loaded tonnages in Queensland, Western Australia, South Australia and Tasmania

- decreases in loaded tonnages in Victoria, New South Wales, and the Northern Territory

- increases in unloaded tonnages in South Australia, Western Australia, and Tasmania

- decreases in unloaded tonnages in New South Wales, Victoria, and Queensland.

Figure 3.1   Coastal freight loaded by Australian state and territory, 10 years to 2007–08

Source: BITRE 2009.

Figure 3.2   Coastal freight unloaded by Australian state and territory, 10 years to 2007–08
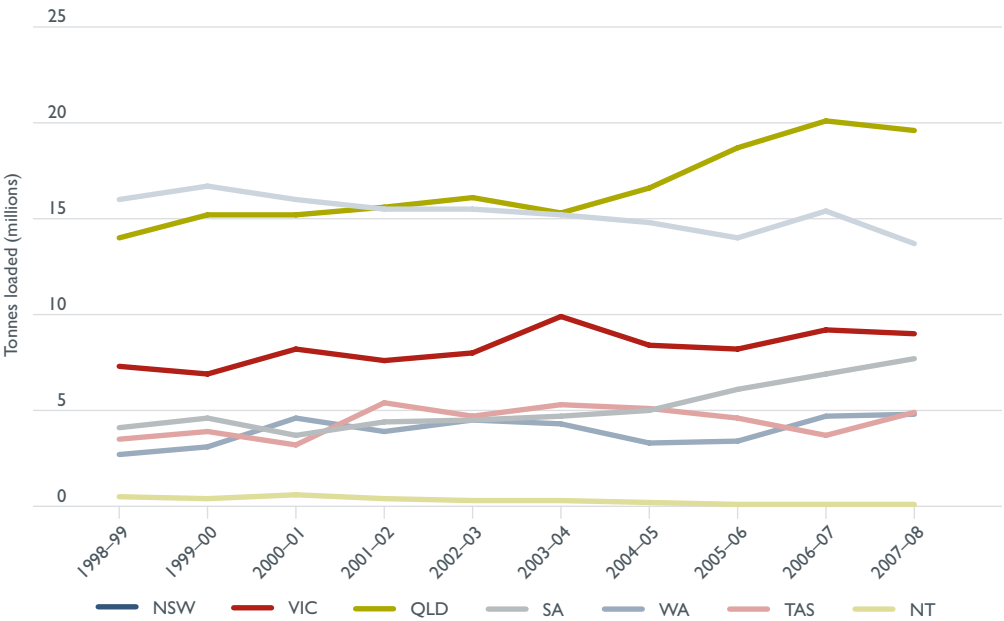
Source: BITRE 2009.

Table 3.5 Coastal freight flows between Australian ports, 2007–08

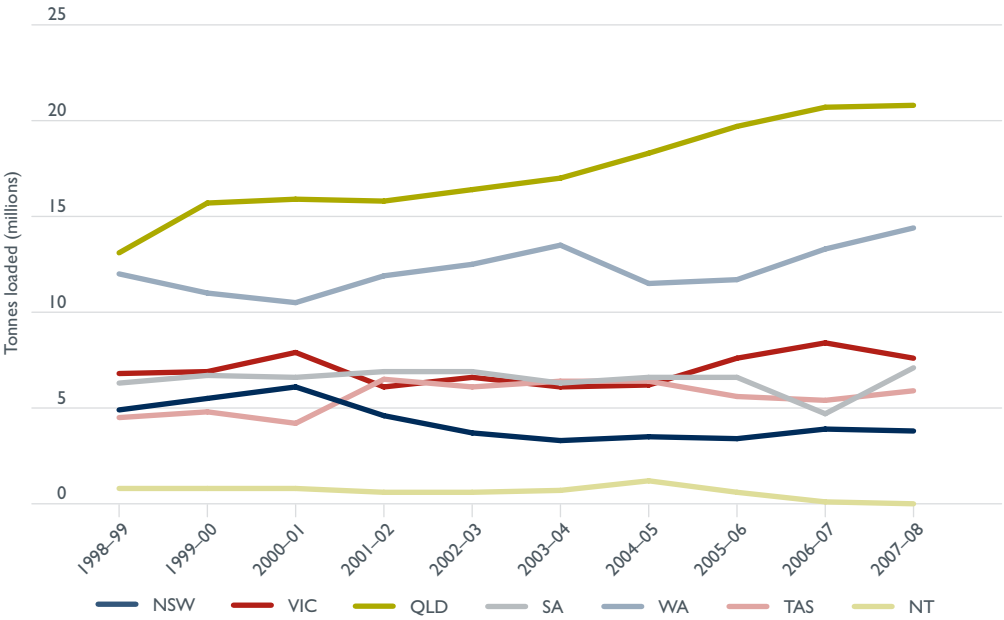| Port of origin	Port of destination (thousand tonnes)														
	Sydney	Rest of NSW	Melbourne	Rest of VIC	Brisbane	Rest of QLD	Adelaide	Rest of SA	Fremantle	Rest of WA	Hobart	Rest of TAS	Darwin	Rest of NT	Total
Sydney	12.8		64.9	191.6	499.7	39.5	15.9	0.4	317.1	0.0	30.0	59.8	1.1		1 232.9
Rest of NSW	21.7	87.8	10.8	1 006.2	22.2	139.6		1 117.0	11.5	10.8	38.3	106.4	5.6		2 577.8
Melbourne	26.4	0.5		5.1	168.1	20.4	196.9	4.7	419.7		4.8	2 122.8	0.0		2 969.5
Rest of VIC	2 518.2	55.9	288.1	211.5	930.8	11.0	113.7		35.6		390.8	39.7			4 595.2
Brisbane	231.2	51.8	80.7	178.8		1 564.0	12.3		92.8	17.2	0.1	10.6	24.0	7.8	2 271.4
Rest of QLD	187.0	1 547.6	416.0	289.4	993.4	13 707.6	53.4	289.4	255.4	52.2	348.8	397.4	11.9	1.3	18 550.8
Adelaide	3.8	49.1	576.1	3.3	428.0		1.8		16.8	245.2					1 324.0
Rest of SA	860.9	1 468.8	498.2		406.7	47.1	1 910.1	199.5	241.5			138.9			5 771.6
Fremantle	126.6	6.1	221.3	637.9	26.4	129.8	3 288.3			304.4	0.4	141.8	50.4	5.5	4 938.8
Rest of WA	626.1	4 451.8	88.5	1 091.4	197.1	136.0	0.0		2 559.1	254.0	14.6	7.0	4.7		9 430.5
Hobart	0.0	32.2	36.2	237.8	7.5		19.9	10.7		8.0		0.4			352.7
Rest of TAS	348.4	1 618.7	3 017.0	49.8	0.2	108.4		47.8	142.5	1.0		167.9			5 501.7
Darwin						0.6			4.1	12.8					17.5
Rest of NT															0.0
Total	4 963.2	9 370.4	5 297.8	3 902.7	3 680.1	15 903.9	5 612.5	1 669.5	4 095.9	905.7	827.9	3 192.6	97.7	14.6	59 534.4

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: BITRE 2009.

Table 3.5 shows the cargo flows between the various state capitals and rest of state regions. In comparing the tonnages moved in 2007–08 with 2006–07:

• The amount of freight shipped from Melbourne grew by 13.9 per cent, while there was a 20.4 per cent decline in freight shipped from other Victorian ports.

• The amount of freight shipped from Adelaide remained relatively stable, while freight originating at other South Australian ports grew by 70.0 per cent.

• Freight shipped from Fremantle increased by well over 100 per cent from 2.2 million tonnes in 2006–07 to 4.9 million in 2007–08, while other Western Australian ports experienced a decline of 18.2 per cent in outbound freight from 11.0 million tonnes to 9.0 million tonnes.

• Freight bound for Sydney and Brisbane decreased by 19.7 per cent and 19.8 per cent respectively, while freight bound for Melbourne decreased by 10.2 per cent.

• Freight bound for Adelaide leapt from 0.93 million to 5.8 million, a sixfold increase comprising 3.2 million tonnes of Fremantle–Adelaide freight (chiefly petroleum products from Kwinana) and 1.9 million tonnes of limestone shipped from Klein Point to Adelaide.

Pack type

An analysis of pack type[6] shows that bulk cargo[7] continues to form the majority of coastal cargo, representing 86.0 per cent by weight of total coastal cargo loaded (see Tables 3.6 and 3.7). Liquid bulk loaded in 2007–08 increased slightly to 15.6 million tonnes, a 0.1 per cent rise on the previous year. Loaded quantities of all other pack types increased more substantially: dry bulk rose 5.7 per cent, container cargo rose 20.1 per cent, and other non-bulk freight rose 11.5 per cent.

Data in Table 3.8 illustrates the flow of cargo between the states by pack type. Some of the major differences from the 2006–07 figures are:

• South Australian intrastate dry bulk cargo increased by a factor of ten from 204 200 tonnes to 2.1 million tonnes, due to 1.9 million tonnes of limestone shipped from Klein Point to Adelaide during 2007–08.

• Total liquid bulk loaded in Victoria fell 20.6 per cent to 4.5 million tonnes, and the majority of this decrease was in cargo unloaded in New South Wales.

• Total liquid bulk (primarily petroleum products) loaded in Western Australia rose by 17.5 per cent despite substantial falls in amounts from WA unloaded in New South Wales, Victoria, and Queensland. Liquid bulk from WA unloaded in South Australia jumped by 8 times from 403 200 tonnes to 3.3 million tonnes.

• Tonnes of container cargo loaded in Tasmania and unloaded in Victoria rose 22.3 per cent.

6.　　　See glossary in explanatory notes for a definition of pack type.
7.　　　See glossary in explanatory notes for a definition of bulk cargo.

- Queensland intrastate other non-bulk cargo increased by nearly 7 times from 16 500 tonnes to 111 000 tonnes and Western Australian intrastate other non-bulk cargo increased by more than 3 times from 42 800 tonnes to 156 200 tonnes;

- Other non-bulk cargo loaded in South Australia bound for Western Australia increased substantially, from 17 500 tonnes to 247 700 tonnes.

Table 3.6   Coastal freight loaded by port and pack type, 2007–08

Port of loading	Pack type				Total	Per cent of total
	Dry bulk	Liquid bulk	Container	Other non-bulk		
	(thousand tonnes)					*(per cent)*
Sydney	0.0	452.1	769.0	11.8	1 232.9	2.1
Rest of NSW	1 299.5	168.7	72.9	1 036.8	2 577.8	4.3
Melbourne	10.0	31.9	2 174.6	753.0	2 969.5	5.0
Rest of VIC	101.4	4 481.4		12.3	4 595.2	7.7
Brisbane	234.4	1 895.3	115.6	26.2	2 271.4	3.8
Rest of QLD	18 138.3	128.1	166.0	118.4	18 550.8	31.2
Adelaide	1 053.2	6.0	17.2	247.7	1 324.0	2.2
Rest of SA	5 139.4	632.2			5 771.6	9.7
Fremantle	652.0	4 211.3	59.8	15.8	4 938.8	8.3
Rest of WA	5 903.7	3 313.1	54.9	158.9	9 430.5	15.8
Hobart	110.8	240.1	1.9		352.7	0.6
Rest of TAS	2 999.8	1.0	1 908.7	592.2	5 501.7	9.2
Darwin			1.4	16.1	17.5	0.0
Rest of NT						0.0
Total	35 642.3	15 561.2	5 342.0	2 989.0	59 534.4	100
Per cent of total	59.9	26.1	9.0	5.0	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: BITRE 2009.

Table 3.7   Coastal freight unloaded by port and pack type, 2007–08

Port of loading	Pack type				Total	Per cent of total
	Dry bulk	Liquid bulk	Container	Other non-bulk		
	(thousand tonnes)					*(per cent)*
Sydney	1 225.0	2 905.1	102.0	4.2	4 236.3	7.1
Rest of NSW	9 205.3	209.2	57.0	27.6	9 499.1	15.9
Melbourne	2 259.5	532.2	1 818.9	697.6	5 308.2	8.9
Rest of VIC	2 537.2	1 113.9	2.9	10.1	3 664.1	6.1
Brisbane	1 825.5	1 728.3	285.4	21.4	3 860.5	6.5
Rest of QLD	13 794.9	1 787.0	101.8	98.4	15 782.1	26.4
Adelaide	2 071.4	3 621.3	267.9	46.6	6 007.2	10.0
Rest of SA	1 705.3				1 705.3	2.9
Fremantle	988.8	1 796.6	843.4	35.2	3 664.1	6.1
Rest of WA	275.2	707.1	26.2	121.1	1 129.6	1.9
Hobart	537.6	426.4	4.0		968.1	1.6
Rest of TAS	1 162.2	394.7	1 654.4	689.7	3 901.0	6.5
Darwin	2.7	43.5	36.6	15.4	98.2	0.2
Rest of NT						0.0
Total	37 590.6	15 265.3	5 200.7	1 767.3	59 823.9	100
Per cent of total	62.8	25.5	8.7	3.0	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: BITRE 2009.

Table 3.8 Coastal freight by Australian state and territory of loading or unloading and pack type, 2007–08

State/ territory of loading	State/territory of unloading							
	NSW	VIC	QLD	SA	WA	TAS	NT	Total
	(thousand tonnes)							
Dry bulk								
NSW	17.1	14.3	28.0	1 095.8		144.4		1 299.5
VIC	55.9		24.9	18.0	1.2	11.4		111.4
QLD	1 770.2	724.3	14 532.7	317.2	276.7	739.0	12.7	18 372.6
SA	1 898.2	1 074.3	880.4	2 109.5	91.2	138.9		6 192.5
WA	4 463.5	1 347.5	38.6		680.9	21.6	3.5	6 555.6
TAS	1 987.2	816.0	107.5	53.1		146.9		3 110.6
NT								
Subtotal	10 192.0	3 976.4	15 612.1	3 593.5	1 050.0	1 202.2	16.2	35 642.3
Liquid bulk								
NSW	68.7	241.6	249.3	21.3		38.9	1.0	620.7
VIC	2 526.0	492.1	939.1	105.7	34.8	415.6		4 513.4
QLD	244.1	228.9	1 526.5	12.0	1.9		10.0	2 023.4
SA	480.6	3.3	1.3		152.9			638.2
WA	738.1	666.9	411.1	3 287.4	2 243.3	134.2	43.3	7 524.4
TAS	12.1	187.2	7.5	25.3	9.0			241.1
NT								
Subtotal	4 069.7	1 820.0	3 134.9	3 451.7	2 441.9	588.7	54.3	15 561.2
Container								
NSW	11.6	50.2	388.8	14.4	326.0	50.9	0.1	841.9
VIC	17.0		143.6	172.7	360.3	1 481.0	0.0	2 174.6
QLD	0.8	9.8	94.8	21.6	116.1	18.0	20.5	281.6
SA	3.8	0.0		1.8	11.7			17.2
WA	7.8	16.5	37.7	0.9	37.1	8.0	6.7	114.7
TAS	0.1	1 749.5	1.1	0.1	142.5	17.3		1 910.5
NT			0.6		0.8			1.4
Subtotal	41.0	1 825.9	666.7	211.4	994.5	1 575.2	27.3	5 342.0
Other non-bulk								
NSW	25.1	967.4	34.9	1.9	13.5	0.2	5.6	1 048.6
VIC	2.1	12.5	22.7	19.0	58.9	650.1		765.2
QLD	2.6	1.9	111.0	4.4	22.9		1.7	144.6
SA	0.0				247.7			247.7
WA	1.2	8.3	1.9		156.2		7.1	174.6
TAS		588.1				4.1		592.2
NT					16.1			16.1
Subtotal	31.0	1 578.2	170.4	25.3	515.3	654.4	14.4	2 989.0
Total	14 333.6	9 200.5	19 584.0	7 281.9	5 001.7	4 020.4	112.3	59 534.4

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: BITRE 2009.

Tasmanian trade

The freight shipments to and from Tasmania changed in 2007–08 from 2006–07 in the following ways (Table 3.9):

- Freight destined for mainland Australia loaded in Tasmania increased by 7.9 per cent from 5.4 to 5.9 million tonnes.

- Freight arriving from mainland Australia unloaded in Tasmania increased by 31.5 per cent from 3.7 to 4.9 million tonnes.

The category *commodities and transactions not elsewhere specified* appears to have experienced dramatic growth since 2006–07. However, it is most likely that the quality of data provided was higher in 2006–07, and that the reported growth in this category is due to more of the data from other categories being inaccurately classified in 2007–08. It is therefore possible that decreases in some of the other commodity groups do not represent true reductions in commodities shipped, but are artefacts caused by the change in data quality.

Table 3.9   Tasmanian coastal freight by commodity group, 2006–07 and 2007–08

Commodity group	Loaded		Unloaded	
	2006–07	*2007–08*	*2006–07*	*2007–08*
	(thousand tonnes)			
0. Food and live animals	536.1	366.0	704.5	702.7
1. Beverages and tobacco	61.1	64.0	98.2	79.9
2. Crude materials, inedible, except fuels	1 113.5	1 698.3	1 881.8	1 955.1
3. Mineral fuels, lubricants and related materials	677.2	956.4	12.9	21.6
4. Animal and vegetable oils, fats and waxes	5.6	4.8	6.0	3.2
5. Chemicals and related materials, NES	164.4	233.6	369.6	405.9
6. Manufactured goods classified chiefly by material	304.6	93.6	1 967.3	1 696.7
7. Machinery and transport materials	77.9	188.1	38.9	147.6
8. Miscellaneous manufactured articles	602.6	5.2	124.2	0.6
9. Commodities and transactions NES	160.4	1 259.2	223.2	841.2
Total	3 703.5	4 869.1	5 426.7	5 854.4

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.

NES = 'Not Elsewhere Specified', see glossary in explanatory notes for further details.

Source: ABS 2009.

Chapter 4 Coastal voyage permits

In 2007–08, 3186 voyages were undertaken by foreign-flagged ships using voyage permits[8] to move cargo around the Australian coast. This represented a drop of 16.0 per cent compared to the previous year. Of these, 1814 voyages used single voyage permits (SVPs) and 1372 voyages used continuing voyage permits (CVPs) (Table 4.1). Total tonnes carried using SVPs and CVPs decreased by 10.6 per cent from the previous year. The number of TEU transported using SVPs and CVPs fell substantially, by 30.8 per cent in 2007–08 (Table 4.1).

Table 4.1   Number of voyages, tonnes, and TEU carried under coastal voyage permits, 2007–08

Permit type	No of voyages (Number)	Freight carried (Tonnes)	Containers carried (TEU)
Single voyage permit	1 814	13 691 895	6 694
Continuing voyage permit	1 372	1 211 434	37 776
Total	3 186	14 903 329	44 470

Source: Infrastructure 2009.

The proportion by weight of total coastal freight moved using voyage permits decreased from 29.6 per cent in 2006–07 to 25.3 per cent in 2007–08 (Table 4.2).

Compared with 2006–07, there was a 31.8 per cent drop in the tonnage of petroleum products shipped on permits, and a corresponding drop in the CVP and SVP share in total coastal petroleum products shipped. There was also a 19.0 per cent drop in tonnage of crude oil shipped on permits from 2006–07, although due to a similar drop in total tonnage of crude oil shipped coastally, the proportion of crude oil carried under permits remained relatively stable.

There was little change in the tonnage of coastal iron ore or bauxite/alumina carried under permits from 2006–07, although a slight increase in total iron ore shipped caused the proportion carried under permits to drop from 9.5 per cent to 8.8 There has been a 6.3 per cent decrease in tonnage of other freight (other dry bulk, other liquid bulk, and general cargo) carried under coastal permits since 2006–07, despite a 14.7 per cent increase in total coastal freight in these categories in the same period.

---

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

Table 4.2   Impact of voyage permits on coastal trade, 2007–08

Cargo group	Total coastal	SVP and CVP	SVP and CVP as per cent of coastal	Total coastal	SVP and CVP (estimate)
	(million tonnes)		(per cent)	(billion tonne kilometres)	
Bauxite and alumina	15.9	1.4	8.8	35.4	3.1
Iron Ore	7.2	4.0	54.6	28.6	15.6
Other Dry Bulk	12.5	4.9	39.1	20.2	7.9
Crude Oil	6.4	1.7	26.7	13.7	3.7
Petroleum products	7.6	1.9	25.1	14.0	3.5
Other Liquid Bulk	1.1	0.3	27.1	2.1	0.6
General Cargo (containerised)	5.3	0.6	11.7	6.3	0.7
General Cargo (non-containerised)	2.9	0.1	4.7	2.8	0.1
Total	59.0	14.9	25.3	123.1	31.1

Source: Infrastructure 2009, BITRE 2009.

Chapter 5 Australian port activity

In 2007–08, there was a 6.8 per cent increase in the number of voyages into Australia from overseas ports and a 4.2 per cent increase in the total number of port calls compared with 2006–07. Melbourne continued to be the busiest port in terms of the number of ship visits (3531 total port calls, up from 3478 in 2006–07), while Brisbane remained the most common first port of call for international voyages (1239 voyages, up from 1192 in 2006–07).

Table 5.1   Ship activity at Australian ports, 2007–08

State/territory	Australian port	All ships involved in international shipping	All ships involved in coastal and international shipping	Voyages by all ships involved in international shipping	Port calls by all ships involved in coastal and international shipping
		(number)			
New South Wales	Eden	12	19	12	21
	Newcastle	507	726	984	1 921
	Port Kembla	189	400	218	787
	Sydney	294	685	828	2 726
	Yamba	1	1	1	1
Victoria	Geelong	105	252	139	581
	Hastings	20	70	34	212
	Melbourne	233	666	748	3 531
	Portland	66	140	81	248
Queensland	Abbot Point	105	138	126	180
	Brisbane	451	809	1 239	2 645
	Bundaberg	4	8	5	17
	Cairns	32	99	74	375
	Cape Flattery	7	7	34	39
	Cooktown	0	1	0	1
	Gladstone	518	794	747	1 668
	Hay Point	598	673	811	1 062
	Hayman Island	0	1	0	1
	Horn Island	0	1	0	5
	Karumba	19	26	20	42
	Lucinda	12	13	13	15
	Mackay	92	155	114	261
	Mourilyan	16	21	17	29
	Port Alma	14	32	25	60
	Thursday Island	0	3	0	5
	Townsville	222	311	419	789
	Weipa	178	204	236	593
	Whitsunday Island	0	1	0	1
South Australia	Adelaide	56	350	66	849
	Ardrossan	3	12	4	43
	Port Bonython	7	23	9	26
	Port Giles	6	14	6	17
	Port Lincoln	12	56	12	78
	Port Pirie	4	43	4	63
	Thevenard	8	35	9	89
	Wallaroo	8	21	9	25
	Whyalla	24	51	25	112

(continued)

Table 5.1   Ship activity at Australian ports, 2007–08 (continued)

State/territory	Australian port	All ships involved in international shipping	All ships involved in coastal and international shipping	Voyages by all ships involved in international shipping	Port calls by all ships involved in coastal and international shipping
		(number)			
Western Australia	Albany	64	101	83	128
	Barrow Island Terminal	3	6	3	8
	Broome	4	10	4	12
	Bunbury	167	231	208	406
	Cape Cuvier	16	21	21	28
	Dampier	455	536	758	1 008
	Derby	0	1	0	1
	Esperance	98	153	114	216
	Exmouth	0	1	0	2
	Fremantle	518	752	944	1 729
	Geraldton	114	174	144	257
	Kwinana	1	3	1	3
	Onslow	1	1	1	1
	Port Hedland	367	411	663	904
	Port Walcott	194	214	334	376
	Thevenard Island	0	1	0	1
	Useless Loop	3	3	3	3
	Varanus Island Terminal	1	4	1	5
	Wyndham	0	1	0	1
	Yampi Sound	11	11	12	12
	Various offshore facilities	12	36	17	57
Tasmania	Burnie	31	100	51	547
	Devonport	3	42	3	853
	Hobart	34	100	44	206
	Launceston	61	123	86	392
	Port Latta	5	32	5	54
Northern Territory	Bing Bong	1	8	1	8
	Darwin	146	211	321	827
	Gove	78	92	106	124
	Milner Bay	61	70	87	100
	Various offshore facilities	15	22	19	33
Other Australian ports	Ports not clearly specified	14	18	16	21
Total		3 807	3 947	11 119	27 442

Source: LMIU 2009.

In 2007–08, the busiest ports in terms of tonnes of cargo handled and their primary export commodities were, in decreasing order: Dampier (iron ore); Port Hedland (iron ore); Newcastle (coal); Hay Point (coal); Gladstone (coal); Port Walcott (iron ore); Melbourne (miscellaneous manufactures); Brisbane (coal, coke and briquettes); Fremantle (wheat); and Sydney (miscellaneous manufactures). Compared to 2006–07, Fremantle rose two spots to become Australia's ninth busiest port by weight of cargo handled, pushing Sydney to tenth and Port Kembla (coal) to eleventh.

Table 5.2   Cargo loaded and unloaded by Australian ports, 2007–08

State/territory	Australian port	Coastal		International		Total
		Loaded	Unloaded	Exports	Imports	
		(tonnes)				
New South Wales	Coffs Harbour			22	16	38
	Eden	11 122	585			11 707
	Newcastle	339 402	2 052 512	89 920 736	1 120 790	93 433 440
	Port Kembla	2 223 558	7 445 734	14 327 314	2 377 851	26 374 457
	Sydney	1 232 893	4 236 346	5 025 878	17 158 853	27 653 970
	Twofold Bay			1 197 036	810	1 197 846
	Yamba	3 708	290			3 998
	Other ports			29 045	4 557	33 602
Victoria	Geelong	1 420 904	1 756 516	2 030 717	5 377 484	10 585 621
	Melbourne	2 969 505	5 308 249	8 444 403	13 433 130	30 155 286
	Port Welshpool	3 401	1 464			4 865
	Portland		761 373	1 973 832	474 173	3 209 378
	Westernport	3 079 607	1 144 746	340 535	101 016	4 665 904
	Other ports	91 249		141 636	12 511	245 396
Queensland	Abbot Point			12 367 852		12 367 852
	Brisbane	2 271 444	3 860 544	10 954 728	12 485 892	29 572 608
	Bundaberg	167 403	34 705	72 263	416	274 787
	Cairns	159 083	592 115	366 442	350 950	1 468 590
	Cape Flattery		5 074			5 074
	Gladstone	3 565 197	13 800 219	56 797 667	2 132 228	76 295 311
	Hay Point			80 325 694		80 325 694
	Innisfail			502 612		502 612
	Karumba	449 241		675 855		1 125 096
	Lucinda			570 784		570 784
	Mackay	429 276	337 239	1 197 733	577 186	2 541 434
	Mourilyan	26 202				26 202
	Thursday Island	17 238	52 274	34	137	69 683
	Townsville	705 774	938 556	3 755 477	4 377 312	9 777 119
	Weipa	13 031 426	21 895	9 067 917	57 060	22 178 299
	Other ports			1 812 049	39	1 812 088
South Australia	Adelaide	1 324 008	6 007 184	3 032 753	2 418 518	12 782 463
	Ardrossan	579 191				579 191
	Klein Point	1 910 079				1 910 079
	Port Bonython	604 490		351 899		956 389
	Port Giles	5 350				5 350
	Port Lincoln	94 594	60 512	1 090 120	135 329	1 380 556
	Port Pirie		310 950	272 667	2 301	585 918
	Thevenard	1 499 296		525 327		2 024 623
	Wallaroo		33 808	184 230	17 105	235 142
	Whyalla	1 078 588	1 300 047	3 924 244	352 682	6 655 561
	Other ports			344 226	479	344 704

(continued)

Table 5.2 Cargo loaded and unloaded by Australian ports, 2007–08 (continued)

State/ territory	Australian port	Coastal		International		Total
		Loaded	Unloaded	Exports	Imports	
		(tonnes)				
Western Australia	Albany	59 440	27 358	3 314 529	101 157	3 502 484
	Barrow Island	525 507				525 507
	Broome	594	191 581	30 284	194 475	416 934
	Bunbury	628 251	230 341	9 530 966	1 254 285	11 643 843
	Cape Cuvier	129 200		2 634 152		2 763 352
	Cape Lambert			86 221	13 989	100 210
	Challis Venture	38 306				38 306
	Christmas Island	53 357	15 181			68 538
	Cossack Pioneer	1 075 665				1 075 665
	Dampier	1 157 506	339 361	136 847 792	576 539	138 921 198
	Derby			37 300		37 300
	Esperance	156 761	116 131	8 943 107	599 932	9 815 931
	Fremantle	4 938 840	3 664 101	10 058 055	9 869 717	28 530 713
	Geraldton	32 256	130 517	6 460 659	146 130	6 769 562
	Griffin Venture	56 691				56 691
	Modec Venture	247 938				247 938
	Port Hedland	4 399 939	61 856	125 541 976	792 175	130 795 946
	Port Walcott			56 350 237	5 211	56 355 449
	Thevenard Island	104 035				104 035
	Useless Loop			1 096 074		1 096 074
	Varanus Island	479 985				479 985
	Wyndham	4 817	17 232	155 711	76 099	253 859
	Yampi Sound			4 209 952	2	4 209 953
	Unspecified offshore terminals			7 018 411		7 018 411
	Other ports	280 259		1 753 765	40 004	2 074 028
Tasmania	Bell Bay	544 933	1 353 024			1 897 957
	Burnie	1 627 888	1 175 416	1 376 226	169 654	4 349 183
	Devonport	1 884 231	1 336 466	4 519	44 820	3 270 035
	Hobart	352 750	968 084	489 306	197 325	2 007 464
	King Island	26 469	36 102			62 571
	Launceston			3 351 733	329 885	3 681 618
	Port Latta	1 418 154		1 092 187	345	2 510 686
	Spring Bay			929 151		929 151
Northern Territory	Darwin	17 457	98 221	4 485 626	5 186 064	9 787 368
	Unspecified offshore terminals			496 964		496 964
	Confidential ports			5 282 204	1 168 567	6 450 771
	Other ports			370 708	44 402	415 110
Other (incl. state confidential)				2 272 781	947	2 273 729
Total		59 534 457	59 823 909	705 844 322	83 780 548	908 983 236

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.

Sources: BITRE 2009, ABS 2009.

Chapter 6   Australian trading fleet

In 2007–08, the size of the Australian trading fleet declined both in terms of total deadweight tonnage and total gross registered tonnage compared to 2006–07. Overall, the fleet reduced slightly in number from 96 ships in 2006–07 to 94 in 2007–08 (Table 6.1). The number of vessels in the major trading fleet[9] fell by one from 74 in 2006–07 to 73 vessels, and the number of other trading ships[10] also decreased by one from 2006–07 to 21 vessels.

Some vessel types recorded dramatic falls in percentage terms in numbers or tonnage since 2006–07. However, these were only observed in categories with few vessels or small total tonnage so the impact on the size of the fleet overall was minimal. These falls was also partially offset by increases in some of the larger categories. Figure 6.1 shows numbers and Figure 6.2 shows total tonnage of each vessel type in the fleet in 2007–08.

Table 6.1   Summary of the Australian trading fleet, 2007–08

Trade	Vessels	Deadweight tonnage	Gross registered tonnage
	(number)	(tonnes)	(tonnes)
Major trading fleet			
Coastal			
Australian registered	28	644 807	524 883
Overseas registered	7	337 767	208 947
Total coastal	35	982 574	733 830
Overseas			
Australian registered	10	543 808	581 789
Overseas registered	28	1 140 286	806 199
Total overseas	38	1 684 094	1 387 988
Total major trading fleet	73	2 666 668	2 121 818
Other trading ships			
Australian registered	17	9 968	15 834
Overseas registered	4	3 925	4 193
Total other trading ships	21	13 893	20 027
Total Australian registered	55	1 198 583	1 122 506
Total overseas registered	39	1 481 978	1 019 339
Total Australian trading fleet	94	2 680 561	2 141 845

Note: The Australian trading fleet consists of cargo vessels operated or owned by Australian companies to and from Australia. This includes vessels that carry both cargo and passengers, but excludes vessels that carry passengers only. This table shows the number of ships operated by Australian companies as at July 2008 which traded in Australian waters in the 2007–08 financial year. This excludes vessels which operated internationally without calling to Australian ports in 2007–08, and also excludes non-Australian owned and operated vessels trading in Australian waters.

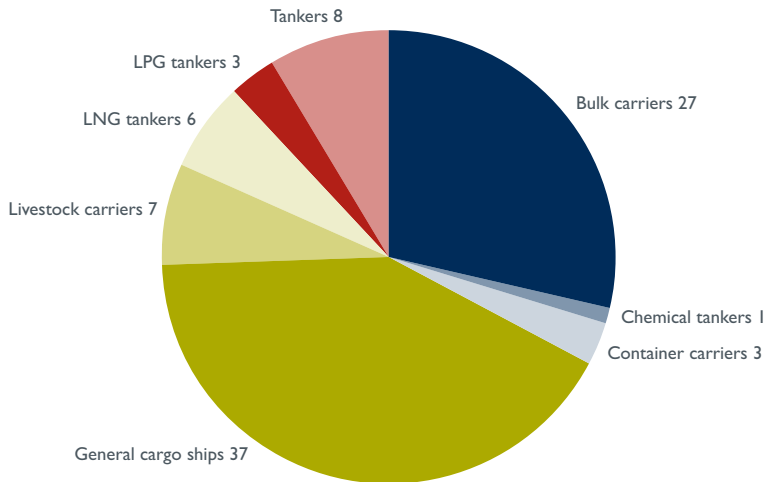Sources: LMIU 2009; Shipping companies (various)—personal communications.

---

9. The major trading fleet is defined as all vessels with deadweight tonnage greater than 2000.
10. Other trading ships are those with gross registered tonnage greater than 150 which are not in the major trading fleet.

The composition of the fleet, by ship type, is illustrated in Figure 6.1. Compared with 2006–07, in 2007–08 there was:

- a 20 per cent increase in LNG tankers, from 5 to 6

- a 14 per cent increase in the number of other tankers, from 7 to 8

- no net change in LPG tanker or general cargo vessel numbers

- a 4 per cent decrease in the number of bulk carriers, from 28 to 27

- a 13 per cent decrease in the number of livestock carriers, from 8 to 7

- a 25 per cent decrease in the number of container carriers, from 4 to 3

- a 75 per cent decrease in the number of chemical tankers, from 4 to 1.

Figure 6.1   Number of ships in the Australian fleet by ship type, 2007–08

Tankers 8
LPG tankers 3
LNG tankers 6
Livestock carriers 7
Bulk carriers 27
Chemical tankers 1
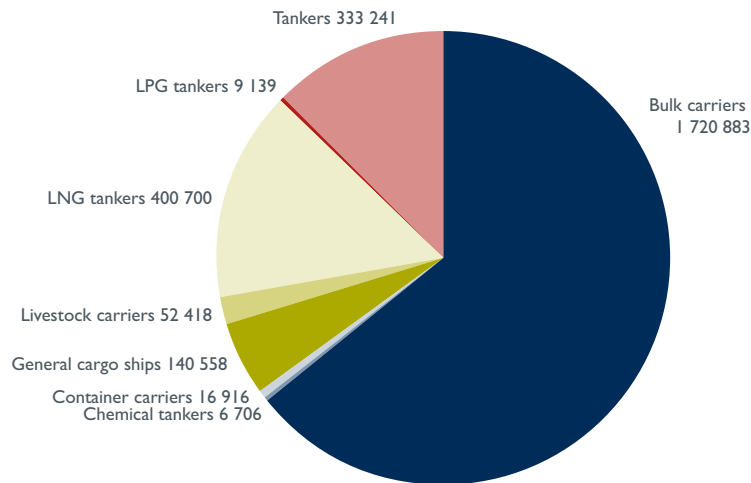Container carriers 3
General cargo ships 37

Sources: LMIU 2009; Shipping companies (various)—personal communications.

The composition of the fleet, by the deadweight tonnage shares of ship types is illustrated in Figure 6.2. Compared with 2006–07, in 2007–08 there was:

- a 27 per cent increase in total general cargo ship tonnage, from 110 272 to 140 558

- a 20 per cent increase in total LNG tanker tonnage, from 333 898 to 400 700

- no net change in total LPG tanker tonnage

- a 6 per cent decrease in total bulk carrier tonnage, from 1 837 568 to 1 720 883

- a 24 per cent decrease in total other tanker tonnage, from 438 389 to 333 241

- a 37 per cent decrease in total livestock carrier tonnage, from 83 624 to 52 418

- an 84 per cent decrease in total container carrier tonnage, from 104 897 to 16 916

- a 94 per cent decrease in total chemical tanker tonnage, from 114 260 to 6706.

Figure 6.2   Deadweight tonnage of the Australian fleet by ship type, 2007–08

Tankers 333 241
LPG tankers 9 139
LNG tankers 400 700
Livestock carriers 52 418
General cargo ships 140 558
Container carriers 16 916
Chemical tankers 6 706
Bulk carriers 1 720 883

Sources: LMIU 2009; 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 2007–08.

Table 6.2   Ships in the major overseas trading fleet, 2007–08

Name of vessel	Flag	Trade	Products	Ports called at in Australia	Overseas countries visited
Bulk carriers					
Alltrans	AUS	(c)	Alumina	Gladstone, Launceston	New Zealand
Goonyella Trader	LBR		Alumina	Gladstone, Hay Point	Arab Republic of Egypt, Canary Islands, Denmark, Finland, Gibraltar, Japan, Netherlands, Philippines, Republic of Singapore, United Kingdom
Iron Yandi	AUS	(c)	Iron ore, coal	Hay Point, Newcastle, Port Hedland, Port Kembla	Philippines, Republic of Korea
Orana	BHS	(c)	Forest products	Burnie, Launceston, Newcastle	People's Republic of China, Republic of Korea
Ormiston	PAN		Dry bulk	Geelong, Sydney	People's Republic of China
Pacific Dolphin	LBR	(c)	Iron ore, alumina	Gladstone, Launceston, Port Kembla, Port Latta	People's Republic of China, Philippines, Republic of Singapore
Pacific Triangle	LBR	(c)	Iron ore, coal	Hay Point, Newcastle, Port Hedland, Port Kembla	Japan, Republic of Singapore
Pioneer	AUS	(c)	Sugar	Dampier, Mackay, Sydney	Republic of Singapore, South Africa
Pos Ambition	PAN		Iron ore, coal	Hay Point, Newcastle	Arab Republic of Egypt, Brazil, Gibraltar, Netherlands, Republic of Korea, Republic of Singapore, United Kingdom
Saraji Trader	LBR		Coal, dry bulk	Hay Point	Arab Republic of Egypt, Denmark, Finland, Gibraltar, Italy, Japan, Malta, Republic of Singapore
Container carriers					
Capitaine Wallis	SGP		General	Sydney	Fiji, New Zealand
General cargo ships					
Achilles	SGP		General	Brisbane, Dampier, Darwin, Gladstone, Townsville	Indonesia, New Caledonia, People's Republic of China, Philippines, Republic of Singapore, Sri Lanka, Taiwan
Aurora Australis	AUS		General	Hobart, Newcastle	
Capitaine Cook	DMA		General	Adelaide, Albany, Brisbane, Melbourne, Port Giles, Sydney, Thevenard, Wallaroo	Fiji, New Zealand
Capitaine Tasman	TON		General	Botany Bay, Brisbane, Melbourne, Sydney	American Samoa, Fiji, New Caledonia, New Zealand, Tonga, Western Samoa
Kathryn Bay	SGP		General	Darwin	Canada, Japan, Mexico, People's Republic of China, Republic of Singapore
Norfolk Guardian	TON		General	Yamba	New Zealand, Norfolk Island
Priam	SGP	(c)	General	Brisbane, Gladstone, Newcastle, Port Alma	Indonesia
Rosslyn Bay	AUS		General	Brisbane, Cairns, Gladstone	Indonesia, Malaysia, Republic of Singapore
Telemachus	SGP	(c)	General	Adelaide, Dampier, Fremantle, Melbourne, Newcastle	India, Indonesia, Republic of Singapore

(continued)

Table 6.2   Ships in the major overseas trading fleet, 2007–08 (continued)

Name of vessel	Flag	Trade	Products	Ports called at in Australia	Overseas countries visited
Livestock carriers					
Hereford Express	PHL		Livestock	Darwin, Geraldton, Port Hedland	Indonesia, Malaysia, Philippines, Republic of Singapore
Kerry Express	PHL		Livestock	Brisbane, Darwin, Fremantle, Geraldton, Mourilyan	Indonesia, Japan, Malaysia, New Zealand, Republic of Singapore
Limousin Express	PHL		Livestock	Darwin, Fremantle, Geraldton	Indonesia, Malaysia, Republic of Singapore
Maysora	BHS		Livestock	Fremantle, Portland	Arab Republic of Egypt, Israel, Jordan, Kuwait, Saudi Arabia, Socialist People's Libyan, State of Bahrain, United Arab Emirates, Uruguay, Yemeni Republic
Norvantes	SGP		Livestock	Cairns, Darwin, Karumba, Mourilyan	Indonesia, Malaysia, Sultanate of Brunei
Torrens	TON		Livestock	Fremantle, Hastings, Port Kembla, Portland	Brazil, Denmark, Gibraltar, Mexico, Netherlands Antilles, New Zealand, Panama, Russian Federation
LNG Tankers					
Northwest Sanderling	AUS		LNG	Dampier	Japan, Republic of Singapore
Northwest Sandpiper	AUS		LNG	Dampier	Japan, Republic of Singapore
Northwest Seaeagle	BMU		LNG	Dampier	Japan, Republic of Singapore
Northwest Shearwater	BMU		LNG	Dampier	Japan, Republic of Singapore
Northwest Snipe	AUS		LNG	Dampier	Japan
Northwest Stormpetrel	AUS		LNG	Dampier	Japan, Republic of Singapore
LPG Tankers					
Boral Gas	VUT	(c)	LPG	Botany Bay, Brisbane, Cairns, Darwin, Gladstone, Hastings	Fiji, New Zealand, Norfolk Island, Papua New Guinea, Solomon Islands, Tonga, Vanuatu, Western Samoa
Bougainville	TON	(c)	LPG	Botany Bay, Brisbane, Devonport, Gladstone, Hastings, Hobart	Fiji, India, Malaysia, New Caledonia, New Zealand, Philippines, Republic of Singapore, Sultanate of Oman, Taiwan, United Arab Emirates
Pacific Gas	VUT	(c)	LPG	Botany Bay, Brisbane, Cairns, Darwin, Gladstone, Hastings, Townsville	Fiji, Malaysia, New Zealand, Norfolk Island, Papua New Guinea, Solomon Islands, Tonga, Vanuatu, Western Samoa
Tankers					
Botany Tribute	PAN		Liquid bulk	Brisbane, Fremantle, Melbourne, Newcastle, Sydney	Argentina, Brazil, Indonesia, Ivory Coast, Madagascar, New Zealand, Republic of Singapore, South Africa
Palmerston	AUS	(c)	Crude oil	Botany Bay, Brisbane, Cairns, Gladstone, Mackay	New Zealand, Papua New Guinea, Republic of Singapore
Samar Spirit	BHS	(c)	Crude oil	Barrow Island Terminal, Botany Bay, Brisbane, Fremantle, Hastings	People's Republic of China, Republic of Singapore, Saudi Arabia, South Africa, Thailand, United States of America

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

Flag abbreviations: AUS—Australia, BHS—Bahamas, BMU—Bermuda, DMA—Dominica, ITA—Italy, LBR—Liberia, PAN—Panama, PHL—Philippines, SGP—Singapore, TON—Tonga, VUT—Vanuatu.

Sources: LMIU 2009; Shipping companies (various)—personal communications.

Table 6.3 Ships in the major coastal trading fleet, 2007–08

Name of vessel	Flag	Trade	Products	Ports called at in Australia	Overseas countries visited
Bulk carriers					
Aburri	AUS		Metal concentrates	Bing Bong	
Accolade II	AUS		Limestone		
Cementco	BRB		Cement	Adelaide, Brisbane, Geelong, Gladstone, Melbourne, Port Kembla, Portland, Thevenard, Townsville	
Endeavour River	AUS	(o)	Bauxite	Gladstone, Weipa	Republic of Singapore
Fitzroy River	AUS		Bauxite	Gladstone, Weipa	
Goliath	AUS		Cement	Adelaide, Devonport, Gladstone, Melbourne, Newcastle, Sydney	
Ikuna	TON	(o)	Coal, dry bulk	Adelaide, Ardrossan, Devonport, Geelong, Gladstone, Hobart, Launceston, Mackay, Melbourne, Newcastle, Port Giles, Port Kembla, Port Lincoln, Port Pirie, Portland, Whyalla	New Zealand
Iron Chieftain	AUS		Iron ore, coal	Port Kembla, Port Latta, Whyalla	
Lindesay Clark	AUS		Alumina, fertiliser	Bunbury, Fremantle, Geelong, Portland, Thevenard	
Portland	AUS		Alumina	Adelaide, Bunbury, Fremantle, Geelong, Portland	
RTM Piiramu	GBR		Bauxite	Weipa	
RTM Wakmatha	GBR		Bauxite	Gladstone, Weipa	
River Boyne	AUS		Bauxite	Gladstone, Weipa	
River Embley	AUS		Bauxite	Gladstone, Weipa	
Stadacona	BHS	(o)	Cement, gypsum, dry bulk	Adelaide, Brisbane, Gladstone, Melbourne, Thevenard, Townsville	New Caledonia
Vigsnes	AUS		Metal concentrates, chemicals	Adelaide, Burnie, Geelong, Gladstone, Hobart, Karumba, Melbourne, Newcastle, Port Kembla, Port Pirie, Portland	
Wunma	AUS		Metal concentrates	Karumba	
Chemical tankers					
Seakap	AUS	(o)	Bitumen, bituminous materials	Botany Bay, Gladstone, Newcastle, Port Kembla, Portland, Whyalla	Republic of Singapore, Taiwan
Container carriers					
ANL Bass Trader	AUS		General	Burnie, Devonport, Hastings, Hobart, Launceston, Melbourne	

(continued)

Table 6.3   Ships in the major coastal trading fleet, 2007–08 (continued)

Name of vessel	Flag	Trade	Products	Ports called at in Australia	Overseas countries visited
General cargo ships					
Claudia I	AUS		Blue metal	Newcastle, Sydney	
Frances Bay	AUS		General		
Hakula	TON	(o)	General, metal concentrates	Adelaide, Ardrossan, Brisbane, Gladstone, Hobart, Launceston, Mackay, Newcastle, Port Giles, Port Kembla, Port Pirie, Portland, Thevenard, Wallaroo, Whyalla	New Zealand
Halifax Bay	AUS	(o)	General	Cairns, Darwin, Townsville, Weipa	Republic of Singapore
Iron Monarch	AUS		Steel products	Hastings, Port Kembla	
Newcastle Bay	AUS		General	Cairns, Horn Island, Thursday Island, Weipa	
Searoad Mersey	AUS		General	Devonport, Melbourne, Newcastle	
Searoad Tamar	AUS		General	Devonport, Hastings, Launceston, Melbourne	
Spirit of Tasmania I	AUS		General, passengers	Devonport, Launceston, Melbourne, Sydney	
Spirit of Tasmania II	AUS		General, passengers	Devonport, Hastings, Melbourne	
Tasmanian Achiever	AUS		General	Burnie, Hastings, Launceston, Melbourne	
Trinity Bay	AUS		General, passengers	Cairns	
Victorian Reliance	AUS		General	Burnie, Melbourne	
Tankers					
Barrington	AUS		Petroleum products	Botany Bay, Brisbane, Cairns, Gladstone, Hastings, Mackay, Townsville	
Basker Spirit	BHS		Crude oil	Eden, Geelong, Hastings, Melbourne	
Helix	AUS		Petroleum Products	Adelaide, Botany Bay, Brisbane, Burnie, Cairns, Devonport, Geelong, Hobart, Melbourne, Sydney, Townsville	

Note: (o) denotes that the vessel occasionally enters the overseas trade market.
           Flag abbreviations: AUS—Australia, BHS—Bahamas, BRB—Barbados, GBR—United Kingdom, TON—Tonga.
Sources: LMIU 2009; 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 in either case

• 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 BITRE'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 TEU, 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, port-to-port distances (including pilotage) were 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 Intelligence Unit, *Lloyd's Ship Movements*, unpublished, and, from data supplied by shipping companies and from BITRE'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 owned and/or operated by Australian companies to and from Australia. 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 Infrastructure, Transport, Regional Development and Local Government 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.
BITRE:	Bureau of Infrastructure, Transport and Regional Economics.
BTRE:	Bureau of Transport and Regional Economics (now BITRE).
Bulk cargo:	The best description of bulk cargo is cargo that can be poured or dropped, as a liquid or solid, into a ship's hold. Non-bulk is effectively those types of cargo that would be damaged if dropped or poured. For example:

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

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

Continuing voyage permit:	Allows international, unlicensed, 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 (now Infrastructure).

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.

Infrastructure: Department of Infrastructure, Transport, Regional Development and Local Government

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

LMIU: Lloyd's Marine Intelligence Unit.

Major trading fleet: Vessels of 2000 DWT or more.

Minor trading fleet: Vessels of 150 GRT or more but less than 2000 DWT.

NES: Not elsewhere specified. An abbreviation used in commodity classifications (and elsewhere) to indicate a group which includes all the elements in a higher-level group which are not specifically included in other groups at the same level. For example, Table 2.8 contains the commodity *Gases, natural and manufactured NES*, which excludes LPG and LNG which are separately specified but includes all other natural and manufactured gases that fall under *Mineral fuels, lubricants, and related materials*.

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, unlicensed, 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 (1000 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 unit:	A measure used to express amounts containerised freight consistently, regardless of the size of the containers. One 40 foot container is 2 twenty foot equivalent units.

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 BITRE 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.

The definitions of maritime trading regions used in this publication are according to Australian Bureau of Statistics publication 1269.0 – Standard Australian Classification of Countries (SACC), 1998, and match those used in Australian Sea Freight 2006–07. Prior to this however, different definitions were used. For a complete account of changes please refer to Australian Sea Freight 2006–07, p.54.

Countries included in maritime regions

Markets/regions	Countries		
Africa	Algeria	Gabon	Reunion
	Angola	Gambia	Rwanda
	Benin	Ghana	Sao Tome and Principe
	Botswana	Guinea	Senegal
	British Indian Ocean Territory	Guinea-Bissau	Seychelles
	Burkina Faso (Upper Volta)	Kenya	Sierra Leone
	Burundi	Lesotho	Somalia
	Cameroon	Liberia	South Africa
	Cape Verde	Libya	St. Helena
	Central African Republic	Madagascar	Sudan
	Chad	Malawi	Swaziland
	Republic of Comoros	Mali	Tanzania
	Congo	Mauritania	Togo
	Cote D'Ivoire	Mauritius	Tunisia
	Djibouti	Morocco	Uganda
	Egypt	Mozambique	Western Sahara
	Equatorial Guinea	Namibia	Zaire, Democratic Republic of Congo
	Eritrea	Niger	Zambia
	Ethiopia	Nigeria	Zimbabwe
Europe	Albania	German Dem Republic	Portugal
	Austria	Germany	Romania
	Belarus	Gibraltar	Russian Federation
	Belgium-Luxembourg	Greece	Slovak Republic
	Bosnia and Herzegovina	Hungary	Slovenia
	Bulgaria	Iceland	Spain
	Croatia	Ireland	Sweden
	Cyprus	Italy	Switzerland
	Czech and Slovak Federal Republic	Latvia	U.S.S.R.
	Czech Republic	Lithuania	Ukraine
	Denmark	Malta	United Kingdom
	Estonia	Moldova	West Germany (Fr)
	Finland	Netherlands	Yugoslavia
	Former Yugoslav Republic of Macedonia	Norway	
	France	Poland	
East Asia	People's Republic of China	Macau	Taiwan
	Hong Kong	Mongolia	
South Asia	Afghanistan	India	Sri Lanka
	Armenia	Kazakhstan	Tajikistan
	Azerbaijan	Kyrgyzstan	Turkmenistan
	Bangladesh	Maldives	Uzbekistan
	Bhutan	Nepal	
	Georgia	Pakistan	
Japan and North Asia	Japan	Democratic Peoples' Republic of Korea	Republic of Korea

Markets/regions	Countries		
South East Asia	Brunei	Laos	Singapore
	Cambodia	Malaysia	Thailand
	Democratic Republic of East Timor	Myanmar	Vietnam
	Indonesia	Philippines	Zone of Coop A-Timor Gap
Middle East	Bahrain	Kuwait	Turkey
	Ctry not avail Persian Gulf	Lebanon	United Arab Emirates
	Ctry not avail Red Sea	Oman	Yemen
	Iran	Palestine, Terr administ by	Yemen Arab Republic
	Iraq	Qatar	Peoples' Democratic Republic of Yemen
	Israel	Saudi Arabia	
	Jordan	Syria	
New Zealand	New Zealand		
North and Central America	Anguilla	French Antilles	Panama Canal Zone
	Antigua and Barbuda	Grenada	Puerto Rico
	Bahamas	Guatemala	St. Chris Nevi Anguilla
	Barbados	Haiti	St. Christopher and Nevis
	Belize	Honduras	St. Lucia
	Bermuda	Jamaica	St. Pierre and Miquelon
	Canada	Johnston and Sand Island	St. Vincent and Grenadines
	Cayman Islands	Mexico	Trinidad and Tobago
	Costa Rica	Midway Islands	Turks and Caicos Islands
	Cuba	Montserrat	United States Virgin Islands
	Dominica	Netherlands Antilles	United States of America
	Dominican Republic	Nicaragua	Virgin Islands (British)
	El Salvador	Panama	
South America	Argentina	Ecuador	Peru
	Bolivia	Falkland Islands	Suriname
	Brazil	French Guiana	Uruguay
	Chile	Guyana	Venezuela
	Colombia	Paraguay	
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 Territories Pacific Island
	French South Antarctic Territory	Palau	Tuvalu
	Guam	Papua New Guinea	U.S. Miscellaneous Pacific Islands
	Kiribati	Pitcairn Island	Vanuatu
	Marianas Northern	Ross Dependency	Wake Island
	Marshall Islands	Samoa	Wallis and Futuna Islands
	Federated States of Micronesia	Samoa (American)	
Rest of world	Australian fishing zone	Christmas Island	Cocos (Keeling) Islands
	Country not available	International waters	Ships and aircraft stores

Source: BITRE 2008.

References

ABS—See Australian Bureau of Statistics

Infrastructure—See Department of Infrastructure, Transport, Regional Development and Local Government

BITRE—See Bureau of Infrastructure, Transport and Regional Economics

LMIU—See Lloyd's Marine Intelligence Unit

Australian Bureau of Statistics 2009, International Cargo Statistics, unpublished, 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 Infrastructure, Transport and Regional Economics 2008, *Australian Sea Freight 2006–07*, Information paper 61, Canberra

Bureau of Infrastructure, Transport and Regional Economics 2009, Domestic sea freight database—survey of Australian port authorities, unpublished, Canberra.

Department of Infrastructure, Transport, Regional Development and Local Government 2009, SVP and CVP Registers, unpublished, Canberra.

Lloyd's Marine Intelligence Unit 2009 Lloyd's Voyage Record, unpublished, London, United Kingdom