



Bureau of Transport and Regional Economics

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## INFORMATION PAPER 47

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AUSTRALIAN SEA FREIGHT, 1999–2000

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Bureau of Transport and Regional Economics

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INFORMATION PAPER 47

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AUSTRALIAN SEA FREIGHT, 1999–2000

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## FOREWORD

This is the latest in a series of papers that provide information on Australian sea freight movements between, to and from Australian ports. This year the paper has been enlarged to cover all sea freight activity around Australia during 1999–2000. It now includes information about international cargo movements between Australian and overseas ports. The previous papers in this series are available at <http://www.dotars.gov.au/btre/publist4.htm>, listed under Maritime Information Papers.

The data and tables in this publication were compiled by Lara Smigielski and Stephen Wheatstone under the direction Patrick McNamara and Roy McAndrew.

As the BTRE intends to continue to produce annual updates of this publication to meet the needs of users, comments would be greatly appreciated. A feedback form is enclosed for your comments.

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Bunbury Port Authority	Northern Forest Products
Bundaberg Port Authority	Perkins Shipping Pty Ltd
Burnie Port Corporation	Port Hedland Port Authority
Cairns Port Authority	Port Kembla Port Corporation
Carpentaria Management Services	Port of Brisbane Corporation
Chevron Australia Pty Ltd	Port of Broome
Coal Operations Australia Ltd	Port of Devonport Corporation
CRDC Wyndham Port	Port of Launceston Pty Ltd
Dampier Port Authority	Port of Portland Pty Ltd
Darwin Port Corporation	Ports Corporation of Stanley
Department of Transport, Western Australia	Ports Corporation of Queensland
Shire of Derby-West Kimberley	South Australia Ports Corporation
Esperance Port Authority	Ports Corporation Western Australia
	Robe River Associates

Flinders Island Ports Company	Rockhampton Port Authority
Fremantle Port Authority	Samancor Gemco
Geraldton Port Authority	Sealink
Gippsland Ports Committee of Management	Southern Shipping
Gladstone Port Authority	Sydney Ports Corporation
Hobart Ports Corporation Pty Ltd	TOLL Westernport
King Island Ports Corporation Pty Ltd	Townsville Port Authority
LD Shipping	Toll Geelong Port Pty Ltd
Lord Howe Island Maritime	Waterways Authority (NSW)
Mackay Port Authority	West Australian Petroleum Pty Ltd

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## SCOPE AND COVERAGE

This edition of *Australian Sea Freight, 1999–2000* is an expansion of the previous *Coastal Freight in Australia* series. It has been expanded to cover information on, Australia's International Trade, coastal voyage permits and information on Australian port activity. The paper is now set out in six chapters.

Chapter 1 is a summary chapter.

Chapter 2 contains details of interstate and intrastate cargo loaded and discharged at Australian ports for the financial year 1999–2000. It excludes some trade from small craft at isolated locations in northern and western regions of Australia. Cargo loaded or discharged at Christmas Island, the Cocos (Keeling) Islands and Norfolk Island is also excluded.

Chapter 3 covers single and continuous voyage permits.

Chapter 4 covers international sea freight into and out of Australia.

Chapter 5 covers details of the Australian trading fleet as at 30 June 2000.

Chapter 6 covers information about ship and cargo movement through Australian ports.



## CHAPTER 1 OVERVIEW

In 1999–2000 620.8 million tonnes of cargo moved across Australian wharves. This represented a six per cent increase over 1998–99. Seventy four percent of this cargo was international exports, nine per cent international imports, eight per cent coastal cargo loaded and eight per cent coastal cargo discharged.

### INTERNATIONAL FREIGHT

In 1999–2000 518.8 million tonnes of international cargo moved across Australian wharves, Table 1.1. This represented a seven per cent increase in exports and 0.5 per cent increase in imports. However, in terms of value the increases were considerably larger representing a 15 per cent increase in export and 12 per cent increase in imports.

TABLE 1.1 INTERNATIONAL SEA FREIGHT, 1994–1995 TO 1999–2000

<i>Year</i>	<i>Weight (m tonnes)</i>			<i>Value (\$b)</i>		
	<i>Exports</i>	<i>Imports</i>	<i>Total</i>	<i>Exports</i>	<i>Imports</i>	<i>Total</i>
1994–1995	362.4	45.9	408.3	53.0	54.5	107.6
1995–1996	372.9	47.1	420.0	60.0	55.8	115.8
1996–1997	404.0	49.8	453.8	63.4	56.9	120.4
1997–1998	427.1	51.7	478.8	69.6	64.1	133.7
1998–1999	432.1	56.3	488.4	68.2	68.5	136.7
1999–2000	462.2	56.6	518.8	78.2	76.5	154.6

Source: ABS, International Cargo Statistics, unpublished

### COASTAL FREIGHT

In 1999–2000, 102.1 million tonnes of coastal cargo were handled through Australian ports. This made up 16.4 per cent of all cargo moved across Australian wharves. Of this 51.3 million tonnes of coastal cargo was loaded and 50.7 million tonnes was discharged, Table 1.2.

Coastal cargo tonnages are up by 5.8 per cent overall, or 6.1 per cent for loaded cargo and 5.5 percent for discharged cargo. In terms of task performed, based on cargo loaded, the Australian coastal fleet performed 108.9 billion tonne kilometres which is up 0.1 per cent on the previous year.

TABLE 1.2 AUSTRALIAN COASTAL FREIGHT SUMMARY, 1994–95 TO 1999–2000

<i>Year</i>	<i>Loaded (kilotonnes)</i>			<i>Discharged (kilotonnes)</i>		
	<i>Interstate</i>	<i>Intrastate</i>	<i>Total</i>	<i>Interstate</i>	<i>Intrastate</i>	<i>Total</i>
1994–1995	33 692	15 498	49 190	34 180	16 286	50 466
1995–1996	31 982	15 815	47 798	31 808	16 229	48 037
1996–1997	32 581	16 562	49 144	32 505	17 530	50 035
1997–1998	34 322	18 200	52 522	34 741	18 968	53 710
1998–1999	31 934	16 454	48 388	31 047	17 053	48 100
1999–2000	32 743	18 582	51 325	32 359	18 369	50 729

*Note:* Reasons for discrepancies between loaded and discharged tonnages in this and other tables are listed in the section ‘Statistical Issues’ on page 2.

*Source:* Australian port authorities—personal communications.

In 1999–2000, 895 single voyage permits (SVPs) and continuous single voyage permits (CVPs) were issued to move 3.7 million tonnes around the Australian Coast, Table 1.3. This represents 7.2 per cent of the loaded coastal task.

TABLE 1.3 SUMMARY OF SVPS AND CVPS ISSUED 1999–2000

<i>Permit type</i>	<i>No of Permits</i>	<i>Tonnes carried</i>	<i>TEU's Carried</i>
SVP	622	3 581 651	13 514
CVP	273	133 613	7 535
Total	895	3 715 264	21 049

*Source:* DOTARS, SVP and CVP Registers, unpublished

## AUSTRALIAN FLEET

The Australian merchant fleet continued to diminish in deadweight and gross tonnage terms with some larger ships, particularly those engaged primarily in the international trade, leaving the Australian fleet, Table 1.4. In terms of ships numbers, the number of ships in the Australian trading fleet was constant, this was due to a growth in smaller intrastate trading ships serving niche markets.

TABLE 1.4 AUSTRALIAN TRADING SUMMARY 1994 TO 2000

Year as at 30 June	Number of ships	Deadweight (tonnes)	Gross Tonnage (tons)
1994	90	3 499 527	2 414 844
1995	85	3 203 623	2 298 894
1996	82	3 303 294	2 267 719
1997	76	3 164 568	2 238 141
1999	77	2 505 369	1 864 976
2000	77	2 283 336	1 729 770

Note: Data for 1998 was not collected.

Sources: Department of Transport and Regional Services—personal communications; Lloyd's Maritime Information Services, unpublished; Fairplay, World Shipping Directory 2000-2001, 2000; Baird Publications, Australasian Shipping Directory 2000, 2000; Lloyd's List, Lloyd's Maritime Directory 2000, 2000; Shipping companies (various)—personal communications; Department of Workplace Relations and Small Business; Australian Shipping, 1994, 1995, 1996 and 1997.

## AUSTRALIAN PORT ACTIVITY

Despite a slight decrease in the number of international trading ships entering Australia, in 1999-2000, there was an increase in the number of international voyages trading ships made to Australia and the number of ports they visited, Table 1.5.

TABLE 1.5 SUMMARY OF AUSTRALIAN PORT VISITS<sup>a</sup> 1996-1997 TO 1999-2000

<i>Year</i>	<i>Number of ships entering Australia from overseas<sup>b</sup></i>	<i>Number of voyages into Australia from overseas<sup>b</sup></i>	<i>Number of ship calls at Australian ports (includes coastal)<sup>c</sup></i>
1996-1997	2 870	8 138	18 643
1997-1998	3 239	9 706	20 322
1998-1999	3 187	9 744	20 899
1999-2000	3 165	9 893	21 683

a. Standard visits, as defined by Lloyd's Maritime Information.

b. Excludes ships that do not leave the Australian coast.

c. Ship calls includes ships coasting around Australia.

Note: A ship which sails to Australia 3 times and makes a total of 15 port calls in Australia in a year, counts as 1 ship, 3 voyages and 15 ship calls or visits.

Source: Lloyd's Maritime Information Services, Lloyd's Voyage Record, unpublished.

In 1999-2000 the number of international voyages increased by 1.5 per cent, while ship calls increased by 3.8 per cent. Also the amount of cargo that moved across Australia's wharves increased by six per cent making 1999-2000 the busiest period yet recorded.





## CHAPTER 2 COASTAL FREIGHT

In 1999–2000, 102.1 million tonnes of coastal cargo were handled through Australian ports. Of this, 51.3 million tonnes of coastal cargo, was loaded and 50.7 million tonnes was discharged.

In terms of task performed, based on cargo loaded, the Australian coastal fleet performed 108.9 billion tonne kilometres. This is marginally up on the previous year, with a decrease in tonne kilometres from iron ore shipped around the coast, roughly balancing an increase in bauxite shipped.

### MAJOR COMMODITIES.

In 1999–2000, *bauxite alumina shipments* increased in tonnage loaded along with general cargo, Table 2.1. The increase in general cargo, is due the increasing use of cargo voyage permits by international liner companies to move cargo between Australian capital cities.

TABLE 2.1 COASTAL FREIGHT LOADED BY MAJOR COMMODITY,  
1995–96 TO 1999–2000

ATFCC code	Commodity	1995–96	1996–97	1997–98	1998–99	1999–2000
<i>Tonnes (millions)</i>						
281	Iron ore	9	8.3	8.2	8.6 <sup>b</sup>	6.8
282	Bauxite/alumina	9.6	10.1	10.3	9.9	12.1
331	Crude oil	7.6	8.3	8.9	6.0	6.6
33	Petroleum products <sup>a</sup>	6.5	6.9	7.2	6.9	6.5
	Other cargo	15.1	15.6	18.0	17.0	19.2
	Total	47.8	49.1	52.5	48.4	51.3
<i>tonne-kilometres (billions)</i>						
281	Iron ore	40.4	38.1	40.9	40.3 <sup>b</sup>	29.7
282	Bauxite/alumina	21.1	22.2	22.4	21.8	27.9
331	Crude oil	16.3	18.8	21.7	15.1	17.1
33	Petroleum products <sup>a</sup>	9.7	12.9	10.7	10.7	9.6
	Other cargo	18.6	20.7	21.2	20.9	24.6
	Total	106.1	112.7	116.6	108.8	108.9

a. Excludes crude oil (ATFCC code 331) in row above.

b. Adjusted to more closely balance with discharged input/output tables for all the iron ore ports.

Source: Australian port authorities—personal communications.

Iron ore tonnages loaded, reduced in both actual tonnes and tonne kilometres performed. The reduction in iron ore shipments was the result of the closure of Newcastle steel works.

## CARGO FLOWS.

Coastal freight flows between the States is detailed in Table 2.2. Of interest is that Queensland and Western Australia are the largest state of loading, while the largest states of unloading were New South Wales and Queensland. Queensland position as number one loading state firmed in 1999–2000 due to the increased tonnages of bauxite in its intrastate bauxite trade, while New South Wales and Western Australia positions have declined due to the cessation of steel production at Newcastle.

TABLE 2.2 TOTAL COASTAL FREIGHT FLOWS, 1999–2000

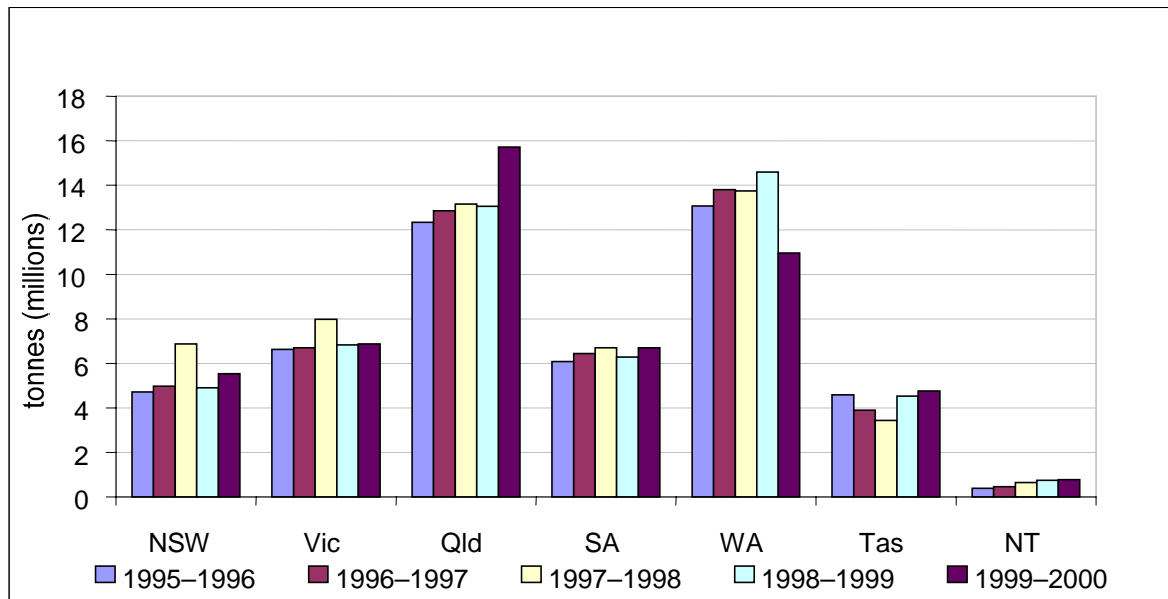
<i>State of origin</i>	<i>State of destination (kilotonnes)</i>							
	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas</i>	<i>NT</i>	<i>TOTAL</i>
NSW	1 623	1 512	800	1 130	281	169	21	5 537
Vic	2 871	123	904	237	909	1 831	0	6 875
Qld	2 009	639	12 384	181	84	334	77	15 708
SA	2 246	1 268	751	1 936	219	285	0	6 705
WA	5 265	1 481	713	882	2 091	228	293	10 954
Tas	1 800	2 196	160	189	106	306	6	4 764
NT	141	0	4	165	3	350	118	782
Total	15 955	7 220	15 716	4 721	3 693	3 504	516	51 325

Source: Australian port authorities—personal communications.

The changes in state shipping activity are more clearly seen in Figures 2.1 and 2.2, which show the freight flows over the last 5 years. Points worth observing are:

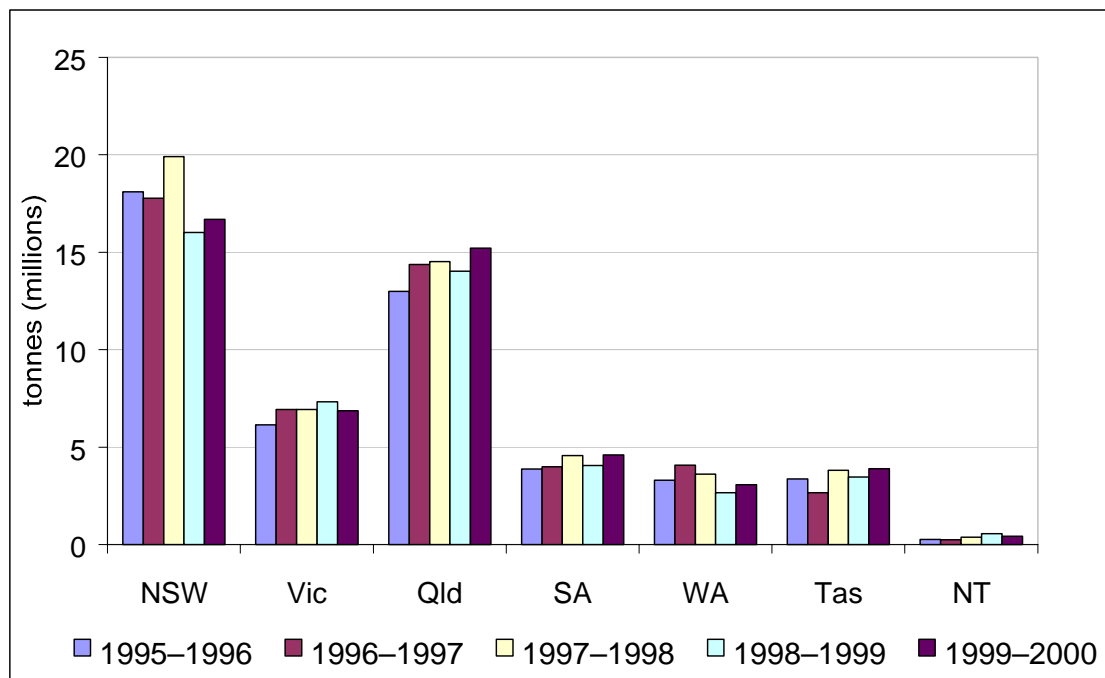
- The increasing tonnages discharged in Northern Territory, although actual tonnages are still small they are growing.
- Despite the closure of the steel works in Newcastle, coastal tonnages discharged in New South Wales have not dropped near as dramatically as loaded cargo in Western Australia.

FIGURE 2.1 COASTAL FREIGHT LOADED BY STATE, 1995–96 TO 1999–2000



Source: BTRE Coastal Freight Database, unpublished.

FIGURE 2.2 COASTAL FREIGHT DISCHARGED BY STATE, 1995–96 TO 1999–2000



Source: BTRE Coastal Freight Database, unpublished.

The changes in trading patterns can be seen in more detail in Table 2.3 which shows cargo flows between state capitals and their respective *rest of state*. In comparing the tonnages moved over last year (Table 4, BTE, Coastal Freight in Australia, 1998-99, IP45, BTE 2000) it can be seen:

- The increase in *rest of WA* to *Sydney, Brisbane and Melbourne* (drop) is due to increase in crude oil moving from WA oil fields to eastern state refineries;
- Despite the drop in iron ore from *rest of WA* to *rest of NSW* there was no similar drop in iron ore shipments from *rest of Tasmania* (*rest of Tas* to *rest of NSW*); and
- There was a 15 per cent increase in cargo from *Melbourne to rest of Tasmania* 1267 to 1456 kilo tonnes.

TABLE 2.3 COASTAL FREIGHT FLOWS BETWEEN AUSTRALIAN PORTS, 1999–2000

<i>Port of origin</i>	<i>Port of destination (kilotonnes)</i>						
	<i>Sydney</i>	<i>Rest of NSW</i>	<i>Melbourne</i>	<i>Rest of Vic</i>	<i>Brisbane</i>	<i>Rest of Qld</i>	<i>Adelaide</i>
Sydney	0	1	64	54	221	70	62
Rest of NSW	15	1 607	121	1 274	59	450	13
Melbourne	285	65	0	117	131	45	98
Rest of Vic	2 492	29	0	6	514	213	82
Brisbane	228	109	53	92	29	1 734	7
Rest of Qld	251	1 421	397	97	958	9 664	27
Adelaide	176	22	512	77	486	0	38
Rest of SA	506	1 542	680	0	228	37	1 727
Fremantle	10	0	6	685	43	8	228
Rest of WA	536	4 719	201	590	554	108	654
Hobart	46	86	29	104	57	18	22
Rest of Tas	451	1 218	2 053	10	0	84	1
Darwin	0	0	0	0	3	1	165
Rest of NT	0	141	0	0	0	0	0
Total	4 994	10 961	4 114	3 106	3 283	12 433	3 123

TABLE 2.3 COASTAL FREIGHT FLOWS BETWEEN AUSTRALIAN PORTS, 1999–2000  
(Continued)

<i>Port of origin</i>	<i>Port of destination (kilotonnes)</i>							<i>Total</i>
	<i>Rest of SA</i>	<i>Fremantle</i>	<i>Rest of WA</i>	<i>Hobart</i>	<i>Rest of Tas</i>	<i>Darwin</i>	<i>Rest of NT</i>	
Sydney	0	163	0	15	42	1	0	694
Rest of NSW	1 055	38	81	22	89	21	0	4 843
Melbourne	58	227	9	21	1 456	0	0	2 512
Rest of Vic	0	593	79	11	343	0	0	4 363
Brisbane	0	43	0	2	8	27	0	2 332
Rest of Qld	147	22	20	45	279	49	0	13 376
Adelaide	18	193	0	0	11	0	0	1 533
Rest of SA	153	26	0	186	88	0	0	5 172
Fremantle	0	0	718	1	45	197	0	1 941
Rest of WA	0	1 365	8	182	0	97	0	9 013
Hobart	139	46	0	0	0	0	0	547
Rest of Tas	27	61	0	279	27	2	4	4 218
Darwin	0	2	1	0	0	0	86	258
Rest of NT	0	0	0	0	350	32	0	524
Total	1 597	2 777	916	765	2 739	425	91	51 325

Source: Australian port authorities—personal communications.

## PACK TYPE

Pack type is a description of the way the cargo is package and moved. It is primarily split between bulk and non bulk. The best description of a bulk cargo is a cargo that can be poured or dropped, as a liquid or solid, into a ship's hold, and non bulk would be those cargoes that would be damaged if dropped or poured. Therefore wheat as:

- bulk is loaded as loose grain, via a conveyor belt to a spout, where it is poured into a hold, but in a
- non bulk form, wheat is bagged. In this form, it has to be lifted into the ship's hold either on pallets, containerised or in nets and stacked into the hold. If it was poured into the hold, as in the bulk case, the bags will break.

Bulk cargo is then further subdivided between liquid and dry bulk, which is a quality of the cargo. Gas cargo is considered as liquid bulk for the purposes of this report since it is pumped on board like most liquid bulk cargoes.

Non bulk cargo is similarly split between containerised, and cargo not classified and or non-containerised.

Bulk cargo, see Tables 2.4 and Table 2.5, makes up the majority of coastal cargo, representing 88 per cent of all coastal cargo. This is down from a high of 92 per cent in 1993–94.

Note the gradual increase in non bulk cargo, from 1993–94 to 1990–2000, it has increased from 3.7/3.8 million tonnes loaded/discharge to 6.4/5.8 million tonnes loaded /discharged respectively. All of this increase has been in containerised cargo. Non-containerised non-bulk cargo has declined over the same period, particularly over the last 2 years as more and more non bulk cargo is containerised.

The slump in liquid bulk cargo market, recorded last year, did not continue in 1999–2000, but recovered to be at the same level as it was in 1994–95. This was mainly due to increase tonnages of liquid bulk into Sydney (Table 2.6) which is primarily from Victoria.

Table 2.6 shows the flow of cargo between the states by pack type. Of significance is the increase in mainland interstate movements of containerised cargo.

TABLE 2.4 COASTAL FREIGHT LOADED BY PORT AND PACK TYPE, 1999–2000

<i>Port of Origin</i>	<i>Bulk (kilotonnes)</i>		<i>Non bulk (kilotonnes)</i>		<i>Total (kilotonnes)</i>
	<i>Dry bulk</i>	<i>Liquid bulk</i>	<i>Container</i>	<i>Other</i>	
Sydney	6	423	230	35	694
Rest of NSW	3 139	169	75	1 460	4 843
Melbourne	3	911	1 497	102	2 512
Rest of Vic	166	4 135	26	36	4 363
Brisbane	135	2 135	8	54	2 332
Rest of Qld	12 764	157	415	40	13 376
Adelaide	734	789	5	6	1 533
Rest of SA	4 621	437	91	24	5 172
Fremantle	977	621	322	20	1 941
Rest of WA	5 391	3 578	44	1	9 013
Hobart	190	354	2	0	547
Rest of Tas	2 395	26	1 378	418	4 218
Darwin	8	165	3	82	258
Rest of NT	496	0	0	28	524
Total	31 024	13 900	4 096	2 305	51 325

Source: Australian port authorities—personal communications.

TABLE 2.5 COASTAL FREIGHT DISCHARGED BY PORT AND PACK TYPE, 1999–2000

<i>Port of Destination</i>	<i>Bulk (kilotonnes)</i>		<i>Non bulk (kilotonnes)</i>		<i>Total (kilotonnes)</i>
	<i>Dry bulk</i>	<i>Liquid bulk</i>	<i>Container</i>	<i>Other</i>	
Sydney	1 254	4 373	188	21	5 836
Rest of NSW	10 570	207	7	66	10 850
Melbourne	1 400	1 250	1 438	125	4 213
Rest of Vic	1 037	634	896	81	2 647
Brisbane	1 317	1 444	20	356	3 136
Rest of Qld	9 549	2 305	222	3	12 079
Adelaide	1 626	1 379	21	12	3 038
Rest of SA	1 439	107	0	8	1 554
Fremantle	154	1 544	515	49	2 261
Rest of WA	34	720	28	17	800
Hobart	497	288	6	0	791
Rest of Tas	1 268	404	1 205	221	3 098
Darwin	42	205	37	88	372
Rest of NT	5	0	32	15	52
Total	30 192	14 859	4 616	1 061	50 729

Source: Australian port authorities—personal communications.

TABLE 2.6 COASTAL FREIGHT LOADED BY PACK TYPE, 1999–2000

<i>State of origin</i>	<i>State of destination (kilotonnes)</i>							
	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas</i>	<i>NT</i>	<i>Total</i>
Dry bulk								
NSW	1 398	143	371	1 020	115	98	0	3 145
Vic	0	0	0	75	0	93	0	168
Qld	1 733	459	10 159	161	25	321	41	12 899
SA	1 978	465	735	1 712	185	278	0	5 354
WA	4 686	962	149	147	111	215	97	6 368
Tas	1 493	549	100	160	0	279	4	2 585
NT	141	0	3	0	0	350	9	504
Sub total	11 428	2 579	11 517	3 276	437	1 636	151	31 024
Liquid bulk								
NSW	56	149	290	60	15	22	0	592
Vic	2 817	123	822	154	687	443	0	5 046
Qld	243	158	1 837	18	18	12	6	2 291
SA	240	803	15	142	20	6	0	1 226
WA	536	513	554	708	1 888	0	0	4 200
Tas	96	150	60	27	44	2	0	380
NT	0	0	0	165	0	0	0	165
Sub total	3 989	1 896	3 578	1 273	2 673	486	6	13 900
Container								
NSW	5	22	96	2	126	33	21	305
Vic	36	0	77	8	198	1 205	0	1 523
Qld	14	14	365	2	25	0	4	423
WA	26	0	0	59	10	0	0	96
SA	42	6	1	27	81	13	196	366
Tas	165	1 129	0	2	60	23	2	1 380
NT	0	0	1	0	2	0	0	3
Sub total	288	1 171	539	99	501	1 274	223	4 096
Non bulk								
NSW	164	1 198	44	47	25	16	0	1 495
Vic	18	0	5	1	24	90	0	137
Qld	20	8	24	0	17	0	26	94
SA	2	0	0	23	3	0	0	29
WA	0	0	8	1	11	0	1	21
Tas	46	386	0	0	2	2	0	418
NT	0	0	0	0	1	0	109	110
Sub total	250	1 574	82	72	82	108	136	2 305
Total	15 955	7 220	15 716	4 7213	3 6934	3 504	516	51 325

Source: Australian port authorities—personal communications.





## COMMODITY GROUPS

In terms of commodity groups moved (see Table 2.7), total tonnages for all commodity classifications except for *commodities and transactions not elsewhere specified* increased over 1998-1999 figures. The commodities with the largest fluctuations over the last year were in *Crude materials inedible except fuels* and *mineral fuels lubricants and related material*. In most other cases however, the changes are not large except for the iron ore and bauxite.

TABLE 2.7 COASTAL FREIGHT LOADED BY MAJOR COMMODITY GROUPS, 1999–2000

<i>State of origin</i>	<i>State of destination (kilotonnes)</i>							
	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas</i>	<i>NT</i>	<i>Total</i>
Food and live animals								
NSW	47	56	28	40	54	33	0	258
Vic	6	0	27	0	44	302	0	379
Qld	217	292	10	0	49	10	2	581
SA	0	0	10	47	0	0	0	57
WA	0	0	0	18	2	6	5	32
Tas	0	490	0	0	14	1	0	505
NT	51	0	0	0	0	0	0	52
Sub total	322	839	75	106	162	353	8	1 864
Beverages and tobacco								
NSW	0	0	2	0	2	0	0	5
Vic	1	0	1	0	2	29	0	34
Qld	3	14	0	0	1	0	23	42
SA	0	0	0	0	0	0	0	0
WA	0	0	0	0	0	0	1	1
Tas	1	37	0	0	2	0	0	40
NT	0	0	0	0	0	0	0	0
Sub total	6	51	4	1	7	29	25	122
Crude materials inedible except fuels								
NSW	1	150	11	0	90	38	0	290
Vic	3	0	20	28	25	175	0	251
Qld	1 398	168	9 250	66	5	267	1	11 155
SA	1 885	465	299	1 699	3	255	0	4 606
WA	4 687	962	42	147	119	217	1	6 175
Tas	1 059	204	100	160	6	289	4	1 822
NT	90	0	3	0	0	350	4	448
Sub total	9 123	1 950	9 725	2 101	248	1 591	10	24 747

TABLE 2.7 COASTAL FREIGHT LOADED BY MAJOR COMMODITY GROUPS, 1999–2000

(Continued)

<i>State of origin</i>	<i>State of destination (kilotonnes)</i>							
	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas</i>	<i>NT</i>	<i>Total</i>
Mineral fuels lubricants and related materials								
NSW	1 409	136	599	1 041	0	53	0	3 238
Vic	2 814	122	822	154	687	456	0	5 055
Qld	342	110	1 736	76	18	4	6	2 291
SA	239	741	11	142	40	26	0	1 199
WA	569	514	554	703	1 772	0	186	4 297
Tas	0	0	0	0	0	3	0	3
NT	0	0	0	165	0	0	0	165
Sub total	5 373	1 622	3 723	2 281	2 518	542	191	16 248
Animal and vegetable oils fats and waxes								
NSW	0	3	2	0	0	0	0	5
Vic	3	0	1	0	0	1	0	6
Qld	13	6	65	5	0	5	0	95
SA	0	0	0	0	0	0	0	0
WA	0	0	7	0	129	0	0	137
Tas	0	0	0	1	0	0	0	1
NT	0	0	0	0	0	0	0	0
Sub total	16	9	75	6	130	7	0	243
Chemicals and related materials nes								
NSW	0	13	20	0	35	22	0	91
Vic	1	1	4	47	32	146	0	230
Qld	25	50	36	33	8	2	1	155
SA	70	62	7	0	0	3	0	143
WA	1	0	0	1	48	0	0	50
Tas	105	154	60	26	44	0	0	390
NT	0	0	0	0	0	0	0	0
Sub total	203	280	128	108	167	173	1	1 060
Manufactured goods classified chiefly by material								
NSW	164	1 142	98	47	79	18	13	1 562
Vic	30	0	11	1	63	137	0	242
Qld	5	0	1 174	0	2	45	41	1 267
SA	50	0	423	0	173	1	0	646
WA	7	2	108	7	10	4	98	237
Tas	633	972	0	1	38	0	1	1 646
NT	0	0	0	0	0	0	41	42
Sub total	889	2 117	1 814	575	365	204	196	5 642

TABLE 2.7 COASTAL FREIGHT LOADED BY MAJOR COMMODITY GROUPS, 1999–2000  
(Continued)

State of origin	State of destination (kilotonnes)							
	NSW	Vic	Qld	SA	WA	Tas	NT	Total
Machinery and transport materials								
NSW	0	3	4	0	6	1	0	15
Vic	1	0	1	1	6	50	0	59
Qld	1	0	0	0	0	0	0	2
SA	0	0	0	0	0	0	0	0
WA	1	1	1	0	9	0	1	12
Tas	0	21	0	0	0	1	0	22
NT	0	0	0	0	0	0	0	0
Sub total	3	25	6	2	21	52	1	110
Miscellaneous manufactured articles								
NSW	2	2	3	0	6	1	0	14
Vic	2	0	7	1	44	479	0	533
Qld	0	0	1	0	1	0	0	2
SA	0	0	0	0	0	0	0	0
WA	0	0	0	0	0	0	0	1
Tas	0	7	0	0	1	0	0	8
NT	0	0	0	0	0	0	0	0
Sub total	4	9	11	1	53	480	0	558
Commodities and transactions nes								
NSW	0	7	32	0	9	4	8	60
Vic	10	0	9	4	6	56	0	86
Qld	3	0	112	0	1	0	2	118
SA	1	0	0	49	2	0	0	52
WA	0	2	0	5	3	1	1	12
Tas	1	311	0	1	2	13	0	327
NT	0	0	0	0	1	0	73	74
Sub total	16	320	154	59	23	73	84	729
Total	15 955	7 220	15 716	4 721	3 693	3 504	516	51 325

Source: Australian port authorities—personal communications.

## TASMANIAN TRADE

The trade to and from Tasmania (Table 2.8) increased in 1999–2000:

- 4.5 million tonnes to 4.8 million tonne for Tasmania to the Australian mainland;
- 3.5 million tonnes to 3.9 million tonnes for the Australian mainland to Tasmania.

This increased this was primarily driven by increases in tonnages *metalliferous ores and metal scrap* which increased by 19 and 25 per cent respectively.

TABLE 2.8 TASMANIAN FREIGHT LOADED AND DISCHARGED BY COMMODITY,  
1999–2000

<i>ATFCC code</i>	<i>Description</i>	<i>Loaded in Tasmania (kilotonnes)</i>	<i>Discharged in Tasmania (kilotonnes)</i>
00	Food and live animals	34	34
01	Meat and meat preparations	25	1
02	Dairy products and birds eggs	38	0
03	Fish, crustaceans and molluscs	5	7
04	Cereals and cereal preparations	0	64
05	Vegetables and fruit	337	25
06	Sugars, sugar preparations and honey	31	5
07	Coffee, tea, cocoa, spices	0	0
08	Feeding stuff for animals	0	1
09	Miscellaneous edible products and preps	46	37
10	Beverages and tobacco	1	0
11	Beverages	39	32
20	Crude materials, inedible, except fuels	0	0
21	Hides, skins and fur skins, raw	7	0
24	Cork and wood	137	10
25	Pulp and waste paper	22	161
26	Textile fibres	21	0
27	Crude fertilisers and crude minerals	23	131
28	Metalliferous ores and metal scrap	1 601	1 439
29	Crude animal and vegetable materials, nes	11	0
32	Coal, coke and briquettes	0	174
33	Petroleum and petroleum products	2	631
34	Gases, natural and manufactured	0	31
41	Animal oils and fats	1	0
50	Chemicals and related materials, nes	1	10
51	Organic chemicals	3	0
52	Inorganic chemicals	354	12
56	Fertilisers, manufactured	23	15
59	Chemical materials and products, n.e.s.	0	16
60	Manufactured goods classified chiefly by material	0	0
63	Cork and wood manufactures (excluding furniture)	18	8
64	Paper, paperboard and articles of paper	461	35
65	Textile yarn, fabrics, made-up articles	3	0
66	Non-metallic mineral manufactures, n.e.s.	1 077	55
67	Iron and steel	8	39
68	Non-ferrous metals	79	0
69	Manufactures of metal, n.e.s.	0	0
70	Machinery and transport materials	0	0
71	Power generating machinery and equipment	0	0
72	Machinery specialised for particular industries.	3	2
74	General industrial machinery and equipment nes	6	0
78	Road vehicles	13	35
79	Other transport equipment	0	0
82	Furniture and parts thereof	8	11

TABLE 2.8 TASMANIAN FREIGHT LOADED AND DISCHARGED BY COMMODITY,  
1999–2000

(continued)

<i>ATFCC code</i>	<i>Description</i>	<i>Loaded in Tasmania (kilotonnes)</i>	<i>Discharged in Tasmania (kilotonnes)</i>
89	Miscellaneous manufactured articles nes	0	0
93	Special transactions and commodities	237	807
99	Other commodities and transactions	90	60
All	Total	4 764	3 890

nes Not elsewhere stated.

Source: Australian port authorities—personal communications.



## CHAPTER 3 COASTAL VOYAGE PERMITS

In 1999–2000 there were 895 voyage permits issued to foreign flag shipping to move cargo around the Australian coast. The split between single voyage permits (SVPs) and continuous voyage permits (CVPs), was 622 to 273 permits respectively. The split between commodity groups is shown in Table 3.1. Voyage permits are at present not often used in the bauxite alumina industries, however other industries such as iron ore and oil petroleum industries are using voyage permits much more extensively.

TABLE 3.1 CVPs AND SVPs BY COMMODITY TYPE, 1999–2000

<i>Cargo group</i>	<i>Permit type</i>	<i>No of Permits</i>	<i>Tonnes carried</i>	<i>TEU's Carried</i>
Bauxite Alumina	SVP	5	26 304	0
Crude oil	SVP	31	481 008	0
Iron ore	SVP	24	795 842	0
Petroleum products	SVP	100	773 298	0
Other	SVP	462	1 505 199	13 514
Other	CVP	273	133 613	7 535
Total		895	3 715 264	21 049

Source: DOTARS, SVP and CVP Registers, unpublished

In terms of pack type (Table 3.2) it can be seen that the split between different pack types is not in same proportions as in the total coastal freight market (Table 2.6). That is dry bulk is 6.0 per cent of total coastal dry bulk is shipped under coastal voyage permits, liquid bulk 10.3 per cent, containerised cargo 9.2 per cent and other non bulk 1.9 per cent.

TABLE 3.2 SVP'S AND CVPS BY PACK TYPE, 1999–2000

<i>Pack type</i>	<i>Tonnes carried</i>
Dry bulk	1 864 074
Liquid bulk	1 431 537
Containerised	375 987
Other non bulk	43 666
Total	3 715 264

Source: DOTARS, SVP and CVP Registers, unpublished



The proportion of total coastal freight moved using voyage permit shippers in 1999–2000 was 7.2 per cent or 9.1 per cent of Tonne kilometres performed, (Table 3.3).

In general the use of voyage permits though is patchy, with permits being used more on longer coastal routes than on the shorter routes except in the petroleum products distribution area.

The largest group of shippers using coastal permits in terms of tonnes kilometres is the petroleum refining industry in moving crude oil, 13.1 per cent in terms of tonne kilometres performed but only 7.3 per cent in terms of tonnes loaded. But for petroleum product distribution the level of permit use is reverse, here only taking only 7.2 percent of the market in terms of tonne kilometres but 11.8 per cent in terms of tonnes moved.

Similarly the use of permits in the dry bulk market is very lumpy, iron ore shipments by voyage permits was 11.8 per cent in terms of tonne kilometres, 11.6 in tonnes loaded. While for bauxite alumina industry the use is only 0.1 per cent and 0.2 per cent respectively.

TABLE 3.3 IMPACT OF CVP'S AND SVP'S ON COASTAL TRADE

<i>Cargo group</i>	<i>Tonnes (millions)</i>			<i>Tonne kilometres (billion)</i>		
	Coastal	SVP and CVP	Per cent coastal	Coastal	SVP and CVP (estimate)	Per cent coastal
Iron ore	6.8	0.8	11.6%	29.7	3.5	11.8%
Bauxite Alumina	12.1	0.0	0.2%	27.9	0.1	0.3%
Crude oil	6.6	0.5	7.3%	17.1	2.2	13.1%
Petroleum products	6.5	0.8	11.8%	9.6	0.7	7.2%
Other	19.2	1.6	8.5%	24.6	3.3	13.6%
Total	51.3	3.7	7.2%	108.9	9.9	9.1%

Source: DOTARS, SVP and CVP Registers, unpublished

## CHAPTER 4 INTERNATIONAL SEA FREIGHT

In 1999–2000 international sea freight to and from Australia increased by 13.1 per cent, by value, and 6.2 per cent by weight. The largest exporting state was Western Australia (Table 4.1) while the largest importing states were New South Wales by value and Queensland by weight.

TABLE 4.1 INTERNATIONAL SEA FREIGHT BY AUSTRALIAN STATE OF ORIGIN / FINAL DESTINATION, 1999–2000.

<i>State</i>	<i>Value (\$'000s)</i>		<i>Tonnes</i>	
	<i>Imports</i>	<i>Exports</i>	<i>Imports</i>	<i>Exports</i>
New South Wales	27 102 362	15 242 092	13 927 768	86 574 938
Victoria	25 322 004	13 767 485	13 243 382	13 833 641
Queensland	10 940 433	15 903 687	14 681 869	125 211 110
South Australia	3 757 370	5 492 394	3 550 237	7 745 590
Western Australia	7 526 606	20 408 032	8 861 456	211 379 066
Tasmania	434 108	1 817 478	665 865	6 795 219
Northern Territory	1 380 891	2 373 227	1 634 098	8 760 504
Australian Capital Territory	703	306	72	250
State confidential		440 427		1 604 739
Foreign Origin		2 717 606		324 101
Total	76 464 477	78 162 734	56 564 747	462 229 158

Source: ABS, International Cargo Statistics, unpublished

### AUSTRALIAN PORTS

In terms of Australian port of loading/unloading (Table 4.2) Sydney was the largest importer by weight and value, while Melbourne was the largest exporter by value and Dampier was the largest exporter by weight.

TABLE 4.2 INTERNATIONAL SEA FREIGHT LOADED AND DISCHARGED BY AUSTRALIAN PORTS, 1999–2000.

<i>Australian port</i>	<i>Value (\$'000s)</i>		<i>Tonnes</i>	
	<i>Imports</i>	<i>Exports</i>	<i>Imports</i>	<i>Exports</i>
Abbot Point	0	324 642	0	8 255 188
Albany	18 195	485 765	108 126	2 357 245
Ardrossan	0	16 536	0	297 484
Ballina	0	2	0	1
Bowen	0	6 036	0	168 401
Brisbane	9 164 442	5 988 890	9 140 051	8 420 047
Broome	139 272	71 658	115 931	402 432
Bunbury	82 075	2 173 384	822 151	8 423 172
Bundaberg	100	192 630	10	715 325
Burnie	106 766	452 859	124 683	1 513 056
Cairns	60 439	386 218	105 622	2 404 582
Cape Cuvier	0	55 305	0	2 464 414
Cape Lambert	5 520	0	14 867	0
Carnarvon	0	371	0	19 000
Coffs Harbour	797	2	110	2
Conf Aust Ports	0	440 427	0	1 604 739
Conf NT Ports	141 659	623 649	1 027 066	4 784 965
Dampier	1 302 959	8 044 747	391 959	92 124 993
Darwin	1 234 874	609 087	606 344	352 890
Derby	0	71 189	0	156 790
Devonport	22 256	5 781	68 189	8 299
Edithburg	0	64 460	0	319 613
Esperance	57 378	543 911	204 779	3 084 705
Exmouth	0	60	0	5
Fremantle	5 783 924	6 291 069	6 816 395	11 111 987
Geelong	1 505 511	878 793	4 900 747	3 855 600
Geraldton	31 936	854 467	165 934	3 504 323
Gladstone	290 402	2 987 801	1 269 772	32 117 402
Grafton	603	22 869	308	6 275
Hay Point	0	3 401 204	0	63 893 490
Hobart	61 830	355 254	154 356	374 705
Innisfail	0	68 322	0	245 829
Karumba	0	135 900	0	223 191
Launceston	110 919	683 062	289 438	2 911 200
Lord Howe Island	0	1	0	2
Lucinda	0	114 273	0	427 480
Mackay	22 505	210 515	130 894	978 775
Melbourne	25 141 748	14 847 407	8 251 594	7 958 600
Newcastle	240 640	4 166 202	956 241	68 208 886
Other ports	0	21	0	1
Other Ports NT	0	124 479	0	318 439
Port Adelaide	2 157 077	3 065 673	2 276 384	2 901 719
Port Augusta	0	11 718	0	56 640
Port Bonython	0	232 205	0	631 305

TABLE 4.2 INTERNATIONAL SEA FREIGHT LOADED AND DISCHARGED BY AUSTRALIAN PORTS, 1999–2000, (continued).

<i>Australian port</i>	<i>Value (\$'000s)</i>		<i>Tonnes</i>	
	<i>Imports</i>	<i>Exports</i>	<i>Imports</i>	<i>Exports</i>
Port Botany	1 029	2 318 902	1 724	1 079 628
Port Hedland	43 410	1 644 509	159 685	60 303 700
Port Kembla	211 289	1 587 936	1 774 600	11 678 198
Port Latta	0	52 225	0	1 226 886
Port Lincoln	16 343	302 508	67 159	1 171 504
Port Pirie	4 497	270 406	8 685	548 441
Port Stanvac	177 004	39 581	592 842	147 810
Port Walcott	0	414 997	0	26 437 341
Portland	64 036	1 036 293	316 154	2 590 613
Rockhampton	28 374	73 731	6 306	66 629
Spring Bay	0	52 449	0	694 042
Sydney	27 723 052	6 879 447	11 486 724	3 415 695
Thevenard	0	18 445	0	343 848
Thursday Island	737	1 689	21	12 618
Townsville	449 073	2 332 947	3 797 411	3 576 638
Twofold Bay	0	62 763	0	802 048
Useless Loop	0	13 801	0	675 208
Wallaroo	8 276	180 396	41 745	822 568
Weipa	0	84 022	0	3 956 442
Welshpool	81	0	379	0
Westernport	43 497	445 634	111 381	1 197 453
Whyalla	2 325	66 161	226 500	232 018
Wyndham	7 622	1 272 010	31 482	3 516 632
Yampi Sound	0	3 036	0	130 000
Total	76 464 477	78 162 734	56 564 747	462 229 158

Source: ABS, International Cargo Statistics, unpublished.

## INTERNATIONAL TRADING PARTNERS

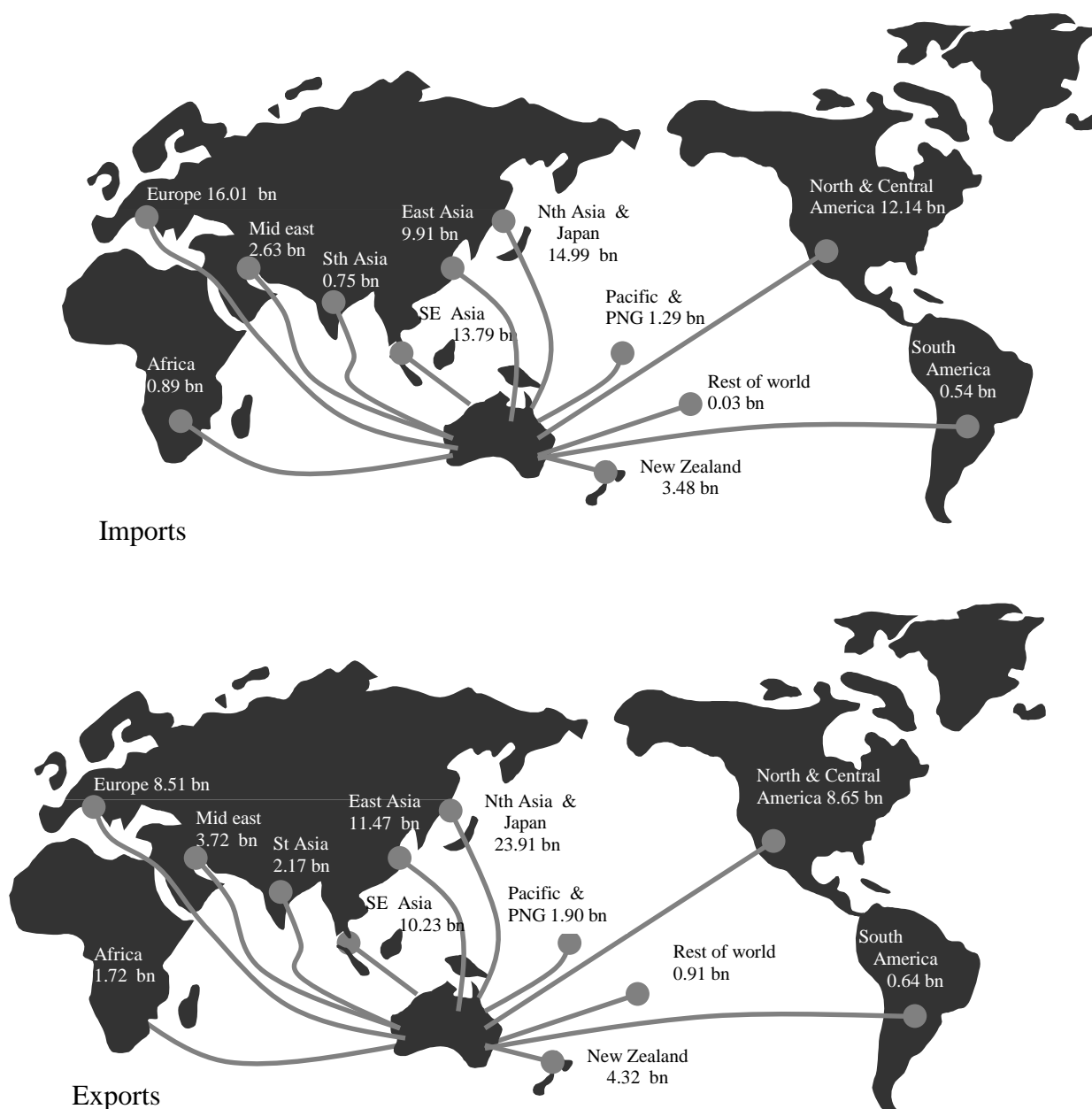
In terms of regions of origin of Australian imports, Europe was our largest supplier by value, but South East Asia dominated our imports in terms of weight (Table 4.3). In terms of exports, Japan/North Asia was Australia's preferred region of unloading by both weight and value. Figures 4.1 shows the same information for value by region of loading unloading, but it also reflects Australia's trading patterns which are dominated by Asia Pacific nations.

TABLE 4.3 INTERNATIONAL FREIGHT BY REGION OF LOADING / UNLOADING,  
1999–2000.

<i>Region of loading / unloading</i>	<i>Value (\$'000s)</i>		<i>Tonnes</i>	
	<i>Imports</i>	<i>Exports</i>	<i>Imports</i>	<i>Exports</i>
Africa	890 571	1 722 681	1 401 398	4 820 039
East Asia	9 914 467	11 473 951	3 016 722	75 825 112
Europe	16 008 042	8 510 647	3 439 445	59 653 271
Japan and North Asia	14 985 028	23 907 379	5 208 028	243 526 454
Middle East	2 632 426	3 720 912	8 580 020	12 186 784
New Zealand	3 483 502	4 320 181	2 899 602	4 346 138
North & Central America	12 143 800	8 646 510	7 108 358	14 875 422
Pacific Islands and Papua New Guinea	1 294 687	1 903 128	5 004 941	2 860 278
Rest of World	25 920	914 135	155 472	1 628 454
South America	544 330	644 588	400 715	7 791 074
South East Asia	13 787 801	10 229 868	18 763 029	18 069 059
South Asia	753 901	2 168 752	587 017	16 647 073
Total	76 464 477	78 162 734	56 564 747	462 229 158

Source: ABS, International Cargo Statistics, unpublished.

FIGURE 4.1 INTERNATIONAL FREIGHT BY REGION OF LOADING / UNLOADING, 1999–2000, (\$bn).



Source: ABS, International Cargo Statistics, unpublished

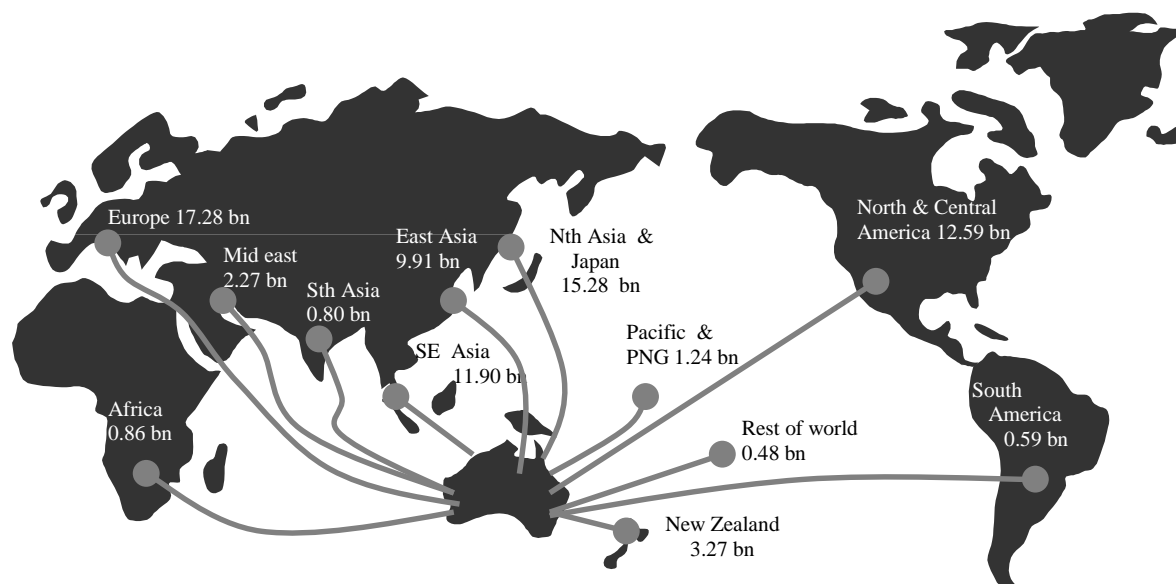
Not surprisingly the situation does not change when we study Australian sea trade in terms of region of origin/final destination, by weight and value. The same patterns are present, with dominance by Europe of Australian imports by value, South East Asia by weight (Table 4.4 and Figure 4.2), and for exports by weight and value being dominated by Japan North Asia.

TABLE 4.4 INTERNATIONAL FREIGHT BY REGION OF ORIGIN / FINAL DESTINATION, 1999–2000.

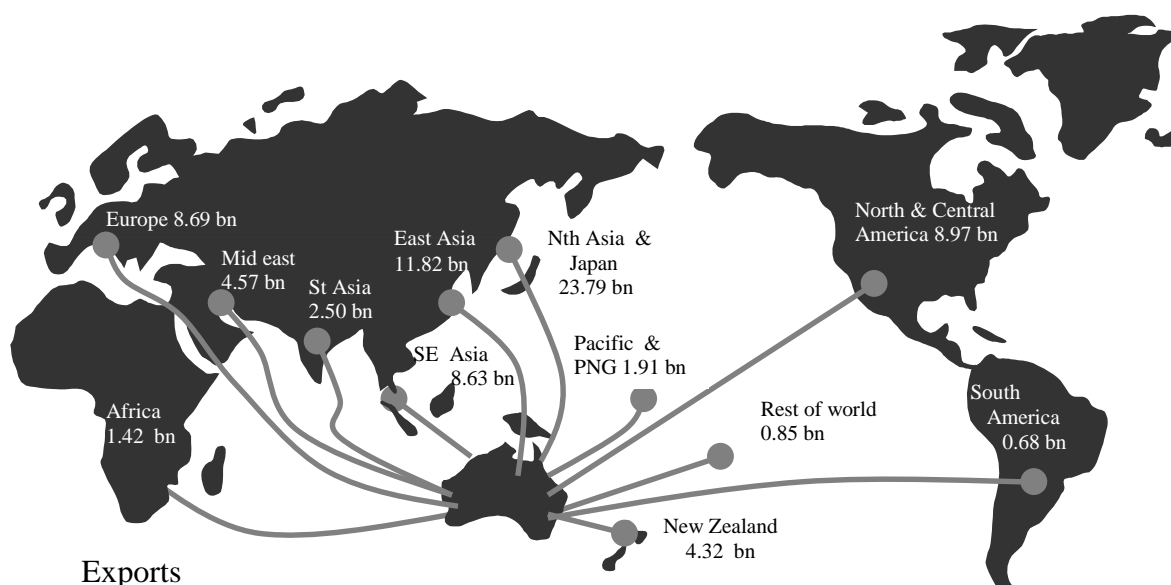
<i>Region of origin/ final destination</i>	<i>Value (\$'000s)</i>		<i>Tonnes</i>	
	<i>Imports</i>	<i>Exports</i>	<i>Imports</i>	<i>Exports</i>
Africa	861 288	1 418 639	1 299 612	3 721 227
East Asia	9 906 939	11 823 059	3 412 978	76 618 681
Europe	17 276 896	8 688 585	3 650 760	60 266 336
Japan and North Asia	15 278 338	23 791 861	5 253 649	242 938 585
Middle East	2 273 856	4 566 395	8 623 415	13 374 017
New Zealand	3 272 245	4 320 938	2 854 113	4 399 205
North and Central America	12 589 434	8 974 419	6 842 540	15 683 749
Pacific Islands and Papua New Guinea	1 241 617	1 905 884	4 991 623	2 859 966
Rest of World	475 573	852 287	220 336	334 795
South America	590 165	684 392	426 491	8 001 965
South East Asia	11 901 388	8 634 599	18 387 310	17 365 438
South Asia	796 740	2 501 676	601 920	16 665 192
Total	76 464 479	78 162 734	56 564 747	462 229 156

Source: ABS, International Cargo Statistics, unpublished

FIGURE 4.2 INTERNATIONAL FREIGHT BY REGION OF ORIGIN / FINAL DESTINATION, 1999-2000, (\$bn)



Imports



Exports

Source: ABS, International Cargo Statistics, unpublished



## COMMODITIES

In terms of commodity exports, Australia's leading export by value is *coal* followed by *petroleum products*, *cereals* and *meat* (Table 4.5). By weight of exports *coal* followed by *iron ore* dominate. For imports, the story is much different, with our major import commodity by value being *machinery* followed by *road vehicles*, and by weight *petroleum products* and *chemicals*.

TABLE 4.5 INTERNATIONAL FREIGHT BY COMMODITY, 1999–2000.

Commodity	Value (\$'000s)		Tonnes	
	Imports	Exports	Imports	Exports
Coal, coke and briquettes	21 395	8 338 152	219 433	176 546 001
Petroleum oil	6 525 326	5 303 166	23 388 286	16 277 008
Cereals and cereal preparations	262 784	4 950 821	155 752	22 224 730
Meat and meat preparations	151 695	4 168 077	48 472	1 335 448
Confidential	1 700 052	4 033 677	367 276	16 370 971
Iron ore and concentrates	107 069	3 817 263	4 328 567	156 296 530
Aluminium and aluminium alloys	401 079	3 794 957	103 682	1 509 473
Aluminium ores and concentrates; alumina	13 498	3 395 761	19 029	11 284 712
Machinery	17 546 207	3 177 655	1 347 181	319 283
Road vehicles and transport equipment	14 108 313	3 006 772	1 292 871	259 744
Wool, sheep and lambs	58 656	2 802 966	17 015	625 681
Dairy products and birds eggs	248 588	2 321 099	76 212	1 006 339
Chemicals	5 214 413	2 052 906	5 141 489	1 117 398
Other metallif ores and metal scrap	38 682	2 029 708	111 633	9 649 124
Liquefied natural gas	0	1 949 440	0	0
Beverages	535 926	1 497 208	219 565	566 652
Cotton	1 443	1 406 876	657	712 814
Iron and steel	1 450 770	1 399 373	1 426 693	3 077 784
Miscellaneous manufactures articles	6 750 618	1 364 630	1 021 780	197 718
Nickel and nickel alloys	17 320	1 246 947	1 521	97 561
Petroleum oils and refined prods refined	959 664	1 173 066	2 971 634	3 436 922
Copper and copper alloys	192 567	1 157 261	50 717	430 116
Vegetables and fruit	723 630	1 125 238	440 121	1 494 391
Lead and zinc ores and concentrates	31 370	944 842	67 581	2 049 332
Fish, crustaceans and molluscs	736 860	826 064	162 448	43 981
Oil seeds and oleaginous fruits	80 218	806 609	218 943	2 549 760
Cork and wood	617 014	775 492	644 582	7 657 118
Copper ores and concentrates	9 719	770 991	6 292	974 131
Liquefied petroleum gas (LPG)	116 859	647 707	283 892	1 576 314
Live animals	3 519	625 283	493	567 559
Feeding stuff for animals	149 409	617 854	153 044	1 600 614
Zinc and zinc alloys	11 174	557 583	5 435	322 054
Paper, paperboard and articles	2 288 175	538 779	1 685 901	544 519
Miscellaneous edible products and preparations	861 277	529 068	223 717	202 080
Manufactures of metal nes	2 078 232	504 476	539 985	198 968

TABLE 4.5 INTERNATIONAL FREIGHT BY COMMODITY, 1999–2000 (continued).

<i>Commodity</i>	<i>Value (\$'000s)</i>		<i>Tonnes</i>	
	<i>Imports</i>	<i>Exports</i>	<i>Imports</i>	<i>Exports</i>
Crude minerals	102 877	436 195	1 325 388	13 905 183
Textile yarn, fabrics, and articles	2 167 308	420 111	343 194	66 534
Hides, skins and furskins, raw	2 497	407 432	486	253 655
Mineral sands	1 377	349 776	565	1 363 119
Lead and lead alloys	8 750	345 713	8 183	393 758
Non-metallic mineral manufactures nes	1 347 472	338 767	1 541 549	700 486
Leather, leather manufactures nes	101 964	307 704	5 539	75 866
Plastics	1 802 458	304 181	766 067	182 012
Oils and fats	270 348	299 741	224 728	455 067
Crude animal and vegetable materials nes	191 096	185 808	115 862	55 517
Other non-ferrous metals nes	55 927	185 598	9 501	28 922
Sugars, sugar preparations and honey	107 466	170 227	54 231	812 751
Rubber manufactures nes	1 156 358	155 258	282 131	37 245
Cork and wood manufactures (exc furniture)	559 930	131 271	329 594	212 809
Apparel and clothing access	2 023 619	123 927	151 184	8 850
Other textile fibres	87 841	80 626	46 715	55 783
Coffee, tea, cocoa, spices	471 789	70 526	129 067	18 745
Tobacco and tobacco manufactures	156 918	51 638	18 179	4 365
Fertilisers	773 351	48 833	4 001 591	122 438
Pulp and waste paper	231 901	41 474	327 839	333 996
Footwear	699 340	29 410	55 928	1 955
Crude rubber (incl synthetic)	108 166	12 981	77 342	13 482
Miscellaneous	22 145	4 360	7 982	2 857
Gases, natural and manufactures nes	56	3 413	8	932
<b>Total</b>	<b>76 464 477</b>	<b>78 162 734</b>	<b>56 564 747</b>	<b>462 229 158</b>

*Note:* nes – not elsewhere specified.

incl – including.

exc – excluding.

Confidential items may only be confidential for weight or value or both, eg Liquefied natural gas is confidential by weight but not value.

*Source:* ABS, International Cargo Statistics, unpublished.

In terms of trading partners, Japan is Australia largest market for imports and exports by value and weight followed by the United States of America and then China (Not weight for imports). Our near neighbours of NZ (5<sup>th</sup> imports and exports), Indonesia (7<sup>th</sup> exports and 9<sup>th</sup> imports) and Papua New Guinea (19<sup>th</sup> imports and exports), are all important to Australia.

TABLE 4.6 TOP TWENTY TRADING PARTNERS BY SEA, 1999–2000

<i>Imports</i>			<i>Exports</i>		
<i>Country of origin</i>	<i>\$'000s</i>	<i>Tonnes</i>	<i>Country of final destination</i>	<i>\$'000s</i>	<i>Tonnes</i>
Japan	12 432 874	3 956 899	Japan	17 597 159	188 661 216 1
United States of America	11 245 695	4 794 676	United States of America	7 294 748	10 673 122 2
China (including Hong Kong)	7 445 784	2 062 662	China (including Hong Kong)	6 503 108	43 670 353 3
Germany	4 892 207	747 319	Korea, Republic of	6 190 359	54 256 453 4
New Zealand	3 272 245	2 854 113	New Zealand	4 320 938	4 399 205 5
United Kingdom	3 196 476	450 499	Taiwan	4 155 238	28 851 242 6
Korea, Republic of	2 839 665	1 294 710	Indonesia	2 863 981	6 015 008 7
Singapore	2 654 870	2 301 559	United Kingdom	2 184 990	12 983 279 8
Malaysia	2 548 288	3 522 896	Singapore	2 184 465	4 274 395 9
Indonesia	2 472 067	5 378 513	Malaysia	1 786 905	4 516 835 10
Thailand	2 246 682	1 004 101	Italy	1 520 859	7 670 658 11
Italy	2 215 666	644 441	India	1 478 659	12 615 615 12
Taiwan	2 186 760	725 137	Thailand	1 364 135	1 716 500 13
Viet Nam	1 702 528	5 294 696	Saudi Arabia	1 232 668	1 171 164 14
France	1 397 214	285 099	Philippines	1 156 370	4 092 349 15
Sweden	1 062 563	252 353	Netherlands	1 037 802	10 186 371 16
Canada	1 040 167	1 870 968	Canada	1 007 473	2 610 267 17
Saudi Arabia	1 001 839	4 492 577	South Africa	915 529	2 354 627 18
Papua New Guinea	946 688	2 915 927	Papua New Guinea	803 016	892 539 19
Netherlands	658 833	188 956	Germany	791 998	6 467 405 20
Rest of the world	9 005 366	11 526 646	Rest of the world	11 772 334	54 150 555
Total	76 464 477	56 564 747	Total	78 162 734	462 229 158

Source: ABS, International Cargo Statistics, unpublished.

## SHIP TYPES

In terms of ship types carrying Australian trade, not surprisingly dry bulk carriers dominated by weight of exports, Tankers dominated by weight of imports, and container ships dominated by value for imports and exports, Table 4.7.

TABLE 4.7 SEA EXPORT AND IMPORTS BY SHIPTYPE, 1999–2000

<i>Ship type</i>	<i>Value (\$'000s)</i>		<i>Tonnes</i>	
	<i>Imports</i>	<i>Exports</i>	<i>Imports</i>	<i>Exports</i>
Container	47 588 674	30 692 614	11 155 004	14 269 144
Dry bulk	2 223 534	26 485 709	10 886 203	404 577 138
Gas carrier	319 101	0	684 562	0
General	2 667 631	5 543 513	1 903 400	5 551 834
Livestock	4 437	566 937	4 322	598 895
Multi-purpose	309 642	666 621	452 938	1 387 552
OBO (Dry/Liquid)	214 440	364 752	1 589 101	3 174 871
Other <sup>a</sup>	11 249 634	2 384 971	1 176 635	205 213
Passenger	521	393	1	781
Roll-on/Roll-off	3 437 286	1 545 361	825 208	621 543
Tanker	8 055 995	9 064 880	27 045 620	29 530 186
Vehicle carriers	393 581	846 983	841 753	2 312 001
Total	76 464 477	78 162 734	56 564 747	462 229 158

a. Other includes ships of the other types which were carrying confidential cargoes, eg Gas carriers in export lng trade.

Source: ABS, International Cargo Statistics, unpublished

## LINER TRADE

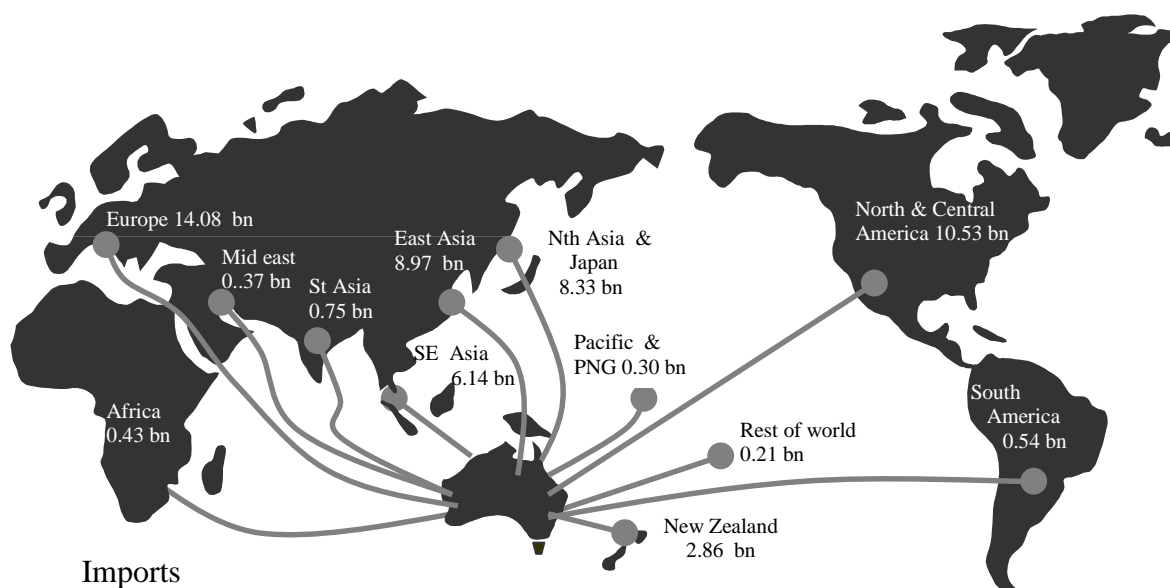
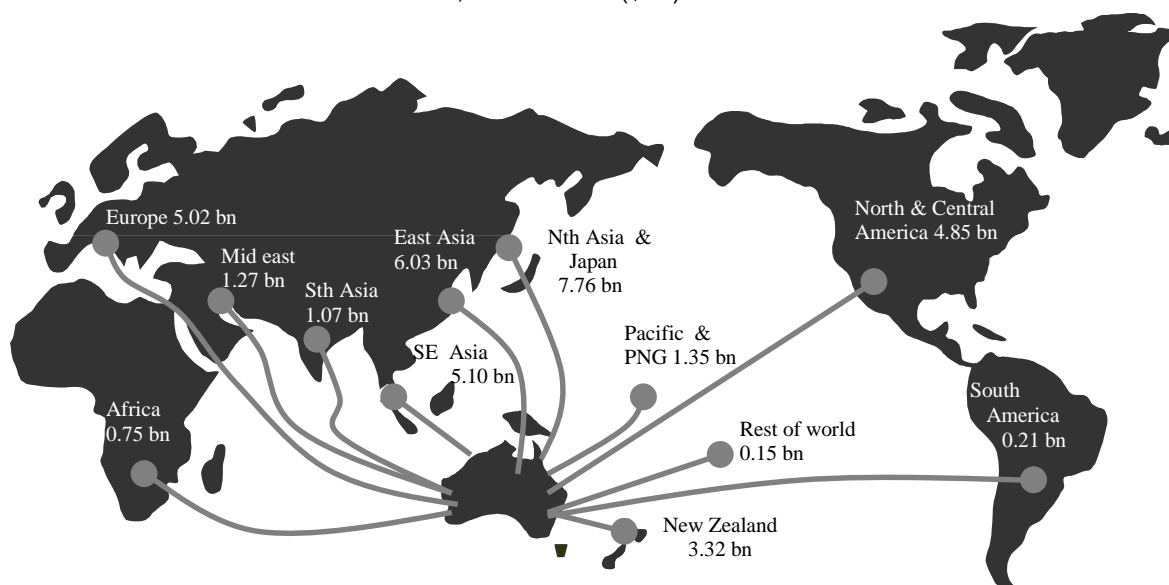
Australian liner trade in 1999–2000 valued 90.5 billion dollars, Table 4.8. Europe was the largest market we imported from, while our Japan North Asia, East Asia and South East Asia were our largest markets for our liner exports, Figure 4.3.

TABLE 4.8 INTERNATIONAL LINER TRADE BY REGION, 1999–2000

<i>Region of origin / final destination</i>	<i>Value (\$'000s)</i>		<i>Tonnes</i>	
	<i>Imports</i>	<i>Exports</i>	<i>Imports</i>	<i>Exports</i>
Africa	433 406	745 942	285 331	351 079
East Asia	8 972 216	6 028 587	1 955 663	3 336 321
Europe	14 077 387	5 022 916	3 150 526	1 643 604
Japan and North Asia	8 326 218	7 756 724	1 333 951	5 531 068
Middle East	368 068	1 272 819	273 038	725 019
New Zealand	2 862 824	3 324 707	1 663 252	1 642 680
North and Central America	10 530 840	4 851 731	2 068 769	1 625 363
Pacific Islands and PNG	303 364	1 352 250	119 610	922 947
Rest of World	210 312	147 342	83 650	92 427
South America	537 356	207 965	213 614	69 454
South East Asia	6 136 246	5 104 113	2 491 273	3 555 888
Southern Asia	750 730	1 068 347	297 610	1 236 321
Total	53 508 967	36 883 443	13 936 287	20 732 171

Source: ABS, International Cargo Statistic, unpublished.

FIGURE 4.3 INTERNATIONAL LINER FREIGHT EXPORTS AND IMPORTS BY REGION OF FINAL DESTINATION, 1999–2000. (\$bn)



Source: ABS, International Cargo Statistics, unpublished

## CHAPTER 5 AUSTRALIAN MERCHANT FLEET

The Australian merchant fleet continued to diminish in deadweight and gross tonnage terms with some larger ships particularly engaged primarily in the international trade leaving the Australian fleet. Although the major trading fleet, reduce by one, six vessels left the Australian coast, while five newer ships joined the fleet, but the net effect was a 8.9 per cent reduction in deadweight and a 7.6 percent drop in gross tonnage terms.

TABLE 5.1 SUMMARY OF THE AUSTRALIAN TRADING FLEET, AS AT 30 JUNE 2000

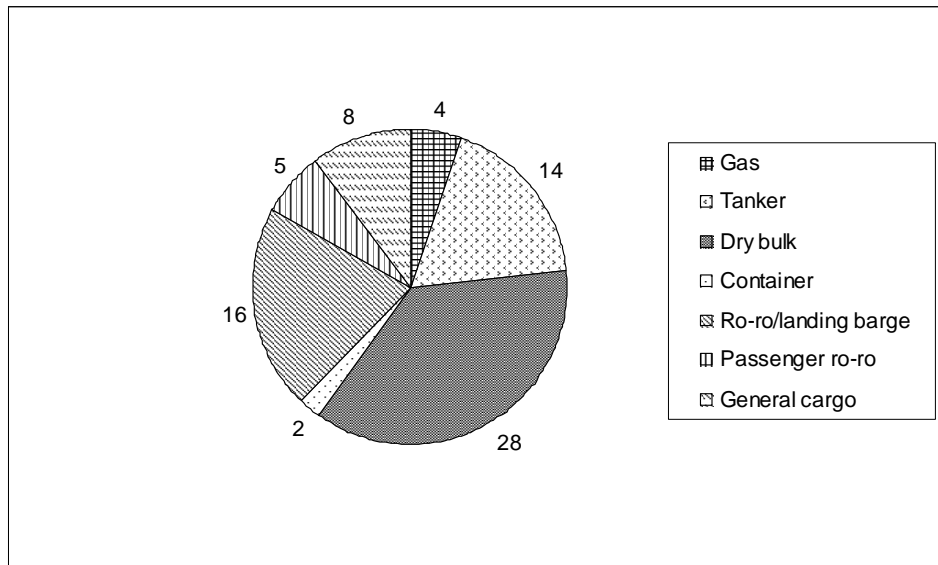
<i>Trade</i>	<i>No. of vessels</i>	<i>Deadweight tonnes</i>	<i>Gross tonnage (tonnes)</i>
<i>Major Trading Fleet (&gt;2000 dwt)</i>			
Coastal			
Australian registered	40	1 362 268	912 856
Overseas registered	5	124 353	75 881
Total Coastal	45	1 486 621	988 737
Overseas			
Australian registered	8	633 694	636 346
Overseas registered	1	149 235	88 122
Total Overseas	9	782 929	724 468
Total major trading fleet	54	2 269 550	1 713 205
<i>Other (minor) Trading ships (&gt;150grt &lt; 2000 dwt)</i>			
Australian registered	22	12 986	10 947
Overseas registered	1	800	5 618
Total other trading ships	23	13 786	16 565
Total Australian trading fleet	77	2 283 336	1 729 770

*Sources:* Department of Transport and Regional Services—personal communications; Lloyd's Maritime Information Services, unpublished; Fairplay, World Shipping Directory 2000-2001, 2000; Baird Publications, Australasian Shipping Directory 2000, 2000; Lloyd's List, Lloyd's Maritime Directory 2000, 2000; Shipping companies (various)—personal communications.

In terms of number of ships by ship type (Figure 5.1), the biggest changes were:

- in a large decrease in general cargo, 13 to 8, and
- an increase in passenger ro-ro, 1 to 5ship (mainly in the minor trading vessels).

FIGURE 5.1 NUMBER OF SHIPS BY SHIP TYPE, AS AT 30 JUNE 2000.



Sources: Department of Transport and Regional Services—personal communications; Lloyd's Maritime Information Services, unpublished; Fairplay, World Shipping Directory 2000-2001, 2000; Baird Publications, Australasian Shipping Directory 2000, 2000; Lloyd's List, Lloyd's Maritime Directory 2000, 2000; Shipping companies (various)—personal communications.

Table 5.2 and 5.3 show the main trades the major trading vessels were engaged in during 1999–2000.

TABLE 5.2 SHIPS IN THE MAJOR TRADING FLEET—OVERSEAS TRADES

<i>Name</i>	<i>Trade</i>	<i>Products</i>	<i>Ports called at</i>
<b>Tankers</b>			
Flinders	o	Crude oil	Tramp world wide
Nivosa	o	Crude oil	Sydney, Varanus Terminal, Brunei, Vietnam, Singapore, Indonesia, Oman, Kuwait, United Arab Emirates, China
Northwest Sanderling	o	LNG	Dampier, Japan
Northwest Sandpiper	o	LNG	Dampier, Japan
Northwest Snipe	o	LNG	Dampier, Japan, Taiwan
Northwest Stormpetrel	o	LNG	Dampier, Japan
<b>Bulk carriers</b>			
Alltrans	o (c)	Alumina	Gladstone, Gove to Bluff, Launceston
Iron Kembla	o (c)	Iron ore coal	Pt Hedland to Pt Kembla Hay point, Gladstone, Newcastle, Pt Kembla to Korea
<b>General Cargo</b>			
Australian Endeavour	o	Liner	Botany Bay, Brisbane, Melbourne, Adelaide/ Japan, South Korea

*Notes:* c Coastal. o Overseas

(o) Also undertakes occasional overseas voyages. (c) Also undertakes occasional coastal voyages.

*Sources:* Prepared by BTRE using Lloyd's Maritime Services, unpublished; Shipping companies (various)—personal communications.



TABLE 5.3 SHIPS IN THE MAJOR TRADING FLEET—COASTAL TRADES

<i>Name</i>	<i>Trade</i>	<i>Products</i>	<i>Ports called at</i>
<b>Tankers</b>			
Australian Pride	c (o)	Petroleum products	Fremantle, Adelaide, Singapore to Pt Hedland, Darwin, Broome, Esperance, Albany, Geraldton, New Zealand, Fiji, Papua New Guinea
Barrington	c (o)	Petroleum products	Brisbane, Botany Bay, Melbourne to Mackay, Cairns, Townsville, New Zealand
Broadwater	c (o)	Crude oil	Westernport, Kumul Terminal (PNG), Dampier, Cossack field to Botany Bay, Brisbane
Helix	c (o)	Petroleum products	Geelong, Sydney, Botany Bay, Melbourne to Pt Lincoln, Adelaide, Devonport, Burnie, Hobart, Townsville, Brisbane, Solomon Is, Papua New Guinea,
Palmerston	c	Petroleum products	Botany Bay, Brisbane to Cairns, Townsville, Mackay
Samar Spirit	c (o)	Crude oil	Westernport, Barrow Island, Kumul Terminal (PNG), Indonesia to Botany Bay, Brisbane
Seakap	c (o)	Pitch	Newcastle, Portland, Gladstone, Botany Bay, Pt Kembla, Whyalla, Korea, Taiwan, Singapore
Stolt Australia	c (o)	Caustic soda, sulphuric acid, molasses, ethanol, petroleum products	Interstate chemical trades NSW, SA, Vic, Tas, Qld, and New Caledonia
Tasman	c	Petroleum products	Geelong, Botany Bay, Melbourne, Pt Stanvac to Adelaide, Port Lincoln, Launceston, Burnie, Hobart, Eden, Sydney, Brisbane
<b>Bulk Carriers</b>			
Aburri	c	Metal concentrates	Bing Bong wharf to terminal
Accolade II	c	Limestone	Adelaide, Klein Point
Cementco	c (o)	Cement Clinker	Gladstone, Brisbane/New Caledonia, Adelaide, Townsville, Mackay, Newcastle, China, Japan
Claudia	c	Sand	Sydney, NSW Coastal ports
CSL Yarra	c (o)	Bulk cargoes varied	Queensland, New South Wales, Tasmania, South Australian and Chinese ports
Darra	c	Sand	Brisbane
Endeavour River	c	Bauxite	Gladstone, Weipa

TABLE 5.3 SHIPS IN THE MAJOR TRADING FLEET—COASTAL TRADES (continued)

<i>Name</i>	<i>Trade</i>	<i>Products</i>	<i>Ports called at</i>
<b>Bulk Carriers (continued)</b>			
Enterprise	c	Bulk cargoes varied	Queensland, New South Wales, Victoria, Tasmania, South Australian ports
Fitzroy River	c	Bauxite, alumina	Gladstone, Weipa and occasionally Newcastle.
Goliath	c	Cement	Devonport to Melbourne, Sydney, Newcastle
Iron Carpentaria	c (o)	Coal, Dolomite, Iron ore, Coke, Ferro Manganese	Hay Point, Gladstone, Pt Kembla, Newcastle; Ardrossan, Launceston, Pt Latta.
Iron Chieftain	c	Coal, iron ore, coke	Port Latta, Whyalla, Pt Kembla, Hay Point
Iron Sturt	c	Steel products	Victoria, South Australia, Tasmania and New South Wales ports
Iron Whyalla	c (o)	Iron ore, coal	Pt Hedland to Pt Kembla; Newcastle to Japan, Taiwan
Iron Yandi	c (o)	Iron ore, coal	Pt Hedland to Pt Kembla, Newcastle; Newcastle, Hay Point to Japan
Kowulka	c	Sugar, gypsum, alumina	Mackay, Gladstone, Brisbane, Harmond, Newcastle, Sydney, Melbourne, Devonport, Geelong, Thevenard.
Lindesay Clark	c	Alumina, Dolomite, Gypsum	Fremantle, Bunbury, Geelong, Portland, Adelaide, Ardrossan, Melbourne, Thevenard, Pt Kembla, Brisbane
Ormiston	c	Sugar, Gypsum, Dolomite	Mackay, Sydney, Melbourne, Ardrossan, Thevenard, Pt Kembla.
Pioneer	c (o)	Sugar	Mackay to Sydney, Bunbury, Iran, Singapore, Philippines, Sri Lanka
Portland	c	Alumina, dolomite	Fremantle, Bunbury to Portland, Geelong; Ardrossan to Portland, Whyalla
River Boyne	c	Bauxite, alumina	Gladstone to Weipa (occasionally Newcastle)
River Embley	c	Bauxite, alumina	Gladstone to Weipa (occasionally Newcastle)
Wallarrah	c	Coal	Catherine Hill Bay, Newcastle
Warden Point	c	Cement Clinker, Fly ash and slag	Gladstone, Townsville, Melbourne, Pt Kembla
Wunma	c	Metal concentrates	Karumba
River Torrens	c (o)	Bulk cargoes varied	Queensland, New South Wales, Victoria, South Australian, New Zealand and Chinese ports

TABLE 5.3 SHIPS IN THE MAJOR TRADING FLEET—COASTAL TRADES (continued)

<i>Name</i>	<i>Trade</i>	<i>Products</i>	<i>Ports called at</i>
<b>General Cargo</b>			
Frances Bay	c	General Cargo	Darwin, Elingoola, Gove, Groote Eylandt
Hakula	c (o)	General and bulk cargoes varied	Queensland, New South Wales, Victoria, Tasmania, South Australia, New Zealand, and Fijian ports
Iron Monach	c	Steel slabs, steel products	Pt Kembla, Westernport
Kimberley	c	General Cargo	Fremantle, Pt Hedland, Broome , Wyndham, Darwin
Searoad Mersey	c	General cargo, containers	Melbourne, Devonport, Grassy
Searoad Tamar	c	General cargo, containers	Melbourne, Devonport
Spirit of Tasmania	c	General cargo, passengers	Melbourne, Devonport, Sydney
Tasmanian Achiever	c	Containers	Melbourne, Burnie
Trinity Bay	c	General Cargo	Cairns and North Australia
Victorian Reliance	c	Containers	Melbourne, Burnie

*Notes:*

c Coastal.

o Overseas

(o) Also undertakes occasional overseas voyages.

(c) Also undertakes occasional coastal voyages.

*Sources:* Prepared by BTRE using Lloyd's Maritime Services, unpublished; Shipping companies (various)—personal communications.

## CHAPTER 6 AUSTRALIAN PORT ACTIVITY

In 1999–2000, there was a 1.5 per cent increase in the number of voyages, 0.7 per cent decrease in international trading ships made to Australia and a 3.8 per cent increase in the number of ports they visited. Brisbane was the busiest port in terms of number of different ships and first port of arrival, Table 6.1. Melbourne though was busier in terms of number of ship visits.

TABLE 6.1 PORT CALLS AT AUSTRALIAN PORTS 1999–2000

<i>Port</i>	<i>Total</i>		<i>First port of arrival from overseas</i>	
	<i>Visits</i>	<i>Ships<sup>a</sup></i>	<i>Voyages<sup>b</sup></i>	<i>Ships<sup>a</sup></i>
Abbot Point	91	76	75	65
Adelaide	664	322	107	96
Airlie Island Terminal	1	1	0	0
Albany	118	107	68	64
Ardrossan	31	21	9	8
Australia	105	96	81	78
Barrow Island Terminal	3	3	0	0
Bing Bong	17	17	12	12
Botany Bay	1 215	314	535	164
Brisbane	2 203	759	1075	481
Broome	56	24	33	15
Bunbury	293	240	188	162
Bundaberg	38	35	32	29
Burnie	533	93	49	42
Cairns	234	89	83	47
Cape Cuvier	40	25	35	21
Cape Flattery	34	17	31	16
Challis Terminal	2	2	1	1
Cossack Field	8	8	1	1
Dampier	976	514	849	448
Darwin	786	157	453	114
Derby	29	26	22	19
Devonport(Tas)	523	28	2	2
Eden	23	10	14	5
Esperance	107	95	66	61
Exmouth(WA)	1	1	0	0

TABLE 6.1 PORT CALLS AT AUSTRALIAN PORTS 1999–2000 (continued)

<i>Port</i>	<i>Total</i>		<i>First port of arrival from overseas</i>	
	<i>Visits</i>	<i>Ships<sup>a</sup></i>	<i>Voyages<sup>b</sup></i>	<i>Ships<sup>a</sup></i>
Fremantle	1 683	751	902	497
Geelong	533	304	231	175
Geraldton	246	201	182	155
Gladstone	672	421	414	300
Gove	131	114	124	110
Grassy	34	1	0	0
Griffin Terminal	9	9	2	2
Hastings	215	74	29	28
Hay Point	734	464	651	420
Hobart	252	110	60	38
Jabiru Terminal	5	5	4	4
Karumba	49	18	30	13
Laminaria-Corallina Field	1	1	2	2
Launceston	243	134	104	64
Lucinda	15	15	13	13
Mackay	153	89	46	40
Macquarie Island	6	3	3	2
Melbourne	2 908	587	486	185
Milner Bay	48	43	39	36
Mourilyan	33	26	26	22
Newcastle	1 219	596	747	417
Port Alma	82	56	24	21
Port Bonython	25	18	12	9
Port Giles	24	24	5	5
Port Hedland	594	327	544	307
Port Kembla	601	329	205	180
Port Latta	54	31	20	19
Port Lincoln	35	30	10	10
Port Pirie	33	23	7	7
Port Stanvac	102	52	22	17
Port Walcott	199	129	192	124
Portland	217	122	90	62
Saladin Terminal	1	1	0	0
Shark Bay	15	10	14	9
Sydney	1 214	423	308	156
Thevenard	53	19	10	10
Thursday Island	50	3	5	3
Townsville	680	323	370	208
Varanus Island Terminal	6	6	3	3
Wallaroo	55	54	22	22
Wandoo Terminal	3	3	1	1
Weipa	209	91	77	71
Whyalla	54	32	0	0

TABLE 6.1 PORT CALLS AT AUSTRALIAN PORTS 1999–2000 (continued)

<i>Port</i>	<i>Total</i>		<i>First port of arrival from overseas</i>	
	<i>Visits</i>	<i>Ships<sup>a</sup></i>	<i>Voyages<sup>b</sup></i>	<i>Ships<sup>a</sup></i>
Wyndham	47	30	27	20
Yamba	10	2	9	1
Total	21 683	3 254	9 893	3 165

a. Count of ships calling at a port not ship visits or calls made by these ships.

b. Voyages is calculated as the number of first port call on arriving from overseas. It does not include voyages made by coasting vessels since they do not leave Australia.

Note These figures will differ from port authority figures due to vessels not appearing in the source data.

Source: Lloyd's Maritime Information Services, Lloyd's Voyage Record, unpublished.

In terms of cargo handled in 1999–2000 the busiest ports in order, starting at the busiest, were Dampier, Newcastle, Port Hedland, Hay Point, Gladstone, Port Walcott, Port Kembla, Brisbane, Melbourne and Sydney, Table 6.2.

TABLE 6.2 CARGO LOADED AND DISCHARGED BY AUSTRALIAN PORTS, 1999–2000.

TABLE 3.2 - CARGO LOADED AND DISCHARGED BY ACCOUNTING PORTS, 1999-2000							
State	Destination	Coastal		International		Total	Rank
		Discharged	Loaded	Imports	Exports		
(tonnes)							
NSW	Catherine Hill Bay		1 267 583			1 267 583	39
NSW	Coff's Harbour			110	2	112	86
NSW	Eden / Twofold Bay	29 001			802 048	831 049	45
NSW	Grafton			308	6 275	6 583	78
NSW	Lord Howe Island	6 659	368		2	7 029	76
NSW	Newcastle	3 318 485	369 570	956 241	68 208 886	72 853 182	2
NSW	Port Kembla	7 495 093	3 201 973	1 774 600	11 678 198	24 149 864	7
NSW	Sydney / Port Botany	5 836 063	693 734	11 488 488	4 495 323	22 513 608	10
NSW	Yamba / Ballina	368	3 899		1	4 268	80
Vic	Geelong	878 311	1 886 672	4 900 747	3 855 600	11 521 330	13
Vic	Melbourne	4 212 524	2 512 037	8 251 594	7 958 600	22 934 755	9
Vic	Portland	776 860	67 146	316 154	2 590 613	3 750 773	23
Vic	Welshpool	13 221	2 698	379		16 298	73
Vic	Westernport	978 782	2 406 040	111 381	1 197 453	4 693 656	19
Qld	Abbot Point				8 255 188	8 255 188	16
Qld	Brisbane	3 136 288	2 331 577	9 140 051	8 420 047	23 027 963	8
Qld	Bowen				168 401	168 401	62
Qld	Bundaberg	123 443	15 630	10	715 325	854 408	44
Qld	Cairns	683 970	114 119	105 622	2 404 582	3 308 293	26
Qld	Other Qld ports	3 160				3 160	81
Qld	Gladstone	9 582 970	2 896 546	1 269 772	32 117 402	45 866 690	5
Qld	Gulf ports	2 051				2 051	83
Qld	Hay Point		165 276		63 893 490	64 058 766	4
Qld	Innisfail				245 829	245 829	58
Qld	Lucinda				427 480	427 480	52
Qld	Karumba	34 565	72 784		223 191	330 541	53
Qld	Mackay	442 489	513 338	130 894	978 775	2 065 496	33
Qld	Quintell Beach	2 907	219			3 125	82
Qld	Rockhampton	7 201	81 879	6 306	66 629	162 015	63
Qld	Thursday Island	84 861	0	21	12 618	97 500	67
Qld	Townsville	1 102 368	196 915	3 797 411	3 576 638	8 673 332	15
Qld	Weipa	9 467	9 319 309		3 956 442	13 285 218	12
SA	Adelaide	2 057 184	809 886	2 276 384	2 901 719	8 045 173	17
SA	Ardrossan		475 382		297 484	772 866	46
SA	Cape Jervis		29 881	226 500		256 381	57
SA	Kangaroo Island		107 574			107 574	66

TABLE 6.2 CARGO LOADED AND DISCHARGED BY AUSTRALIAN PORTS (continued)

State	Destination	Coastal		International		Total	Rank
		Discharged	Loaded	Imports	Exports		
(tonnes)							
SA	Klein Point		1 534 297			1 534 297	37
SA	Port Augusta				56 640	56 640	68
SA	Port Bonython		412 987		631 305	1 044 292	42
SA	Port Giles / Edithburgh				319 613	319 613	54
SA	Port Lincoln	119 193		67 159	1 171 504	1 357 856	38
SA	Port Pirie	294 668	224 062	8 685	548 441	1 075 856	41
SA	Port Stanvac	980 900	693 370	592 842	147 810	2 414 922	31
SA	Thevenard		1 231 564		343 848	1 575 412	36
SA	Wallaroo	3 039		41 745	822 568	867 352	43
SA	Whyalla	1 137 235	1 186 200		232 018	2 555 453	29
WA	Albany	100 640		108 126	2 357 245	2 566 011	28
WA	Barrow Island		298 849			298 849	55
WA	Broome	93 853	479 840	115 931	402 432	1 092 056	40
WA	Bunbury	87 391	305 061	822 151	8 423 172	9 637 775	14
WA	Carnarvon				19 000	19 000	72
WA	Challis Venture		29 032			29 032	71
WA	Cape Cuvier				2 464 414	2 464 414	30
WA	Cape Lambert			14 867		14 867	74
WA	Cossack Pioneer		170 254			170 254	61
WA	Dampier		620 227	391 959	92 124 993	93 137 179	1
WA	Derby		385 687		156 790	542 477	50
WA	Esperance	159 566		204 779	3 084 705	3 449 050	25
WA	Exmouth				5	5	87
WA	Fremantle / Kwinana	2 261 405	1 940 937	6 816 395	11 111 987	22 130 724	11
WA	Geraldton	216 221		165 934	3 504 323	3 886 478	21
WA	Griffin Venture		224 687			224 687	59
WA	Jabiru		48 930			48 930	69
WA	Offshore rig	5 810	2 566			8 376	75
WA	Port Hedland	121 457	4 733 154	159 685	60 303 700	65 317 996	3
WA	Port Walcott				26 437 341	26 437 341	6
WA	Saladin Marine Terminal		216 535			216 535	60
WA	Thevenard Island		490 695			490 695	51
WA	Varanus Island		121 149			121 149	65
WA	WA (not specified)		600 228			600 228	49
WA	Withnell Bay		284 737			284 737	56



TABLE 6.2 CARGO LOADED AND DISCHARGED BY AUSTRALIAN PORTS (continued)

State	Destination	Coastal		International		Total	Rank
		Discharged	Loaded	Imports	Exports		
		(tonnes)					
WA	Wyndham	15 093	1 535	31 482	3 516 632	3 564 742	24
WA	Yampi Sound				130 000	130 000	64
WA	Useless Loop				675 208	675 208	48
Tas	Bridport	131				131	85
Tas	Burnie	821 306	1 313 423	124 683	1 513 056	3 772 468	22
Tas	Devonport	1 022 396	1 768 315	68 189	8 299	2 867 198	27
Tas	Flinders Island	16 516	13 435			29 951	70
Tas	Hobart	791 442	546 570	154 356	374 705	1 867 073	34
Tas	King Island	6 737				6 737	77
Tas	Lady Barron	675	5 802			6 477	79
Tas	Launceston	1 230 281	91 757	289 438	2 911 200	4 522 676	20
Tas	Port Latta		1 023 870		1 226 886	2 250 756	32
Tas	Spring Bay				694 042	694 042	47
Tas	Stanley		4			4	88
Tas	Whitemark	123	913			1 036	83
NT	Darwin	372 190	258 025	606 344	352 890	1 589 449	35
NT	Other Ports NT <sup>a</sup>	52 009	523 773		318 440	894 222	18
NT	Confidential NT Ports			1 027 066	4 784 965	5 812 031	
	Confidential			0	1 604 739	1 604 739	
Total		50 728 567	51 324 506	56 564 747	462 229 158	620 846 978	

a. Other Ports NT consists of Bing Bong, communities, Gove, Groote Eylandt and rigs, which are not split up easily.

Sources: BTRE Coastal Database; ABS, International Cargo Statistics, unpublished

## EXPLANATORY NOTES

### SOURCES

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

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

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

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

### DEFINITIONS AND ABBREVIATIONS

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

#### **Australian Transport Freight Commodity Code Classification (ATFCC)**

A systematic classification of commodities transported by sea, air, road, rail and pipeline, developed jointly by the former Commonwealth Department of Transport 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)<sup>1</sup> level of classification.

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<sup>1</sup> The ATFCC is a four-tiered classification. At the most detailed level there are about 300 commodity categories each identified by a four-digit item code. At the next level there are about 160 categories each identified by a three-digit group code. The commodity groups are assembled into 67 commodity

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

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

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

**Major Trading Fleet** Vessels of 2000 DWT or more.

**Minor Trading Fleet** Vessels of 150 GRT but less than 2000 DWT.

**nes** not elsewhere stated.

**State of origin or destination** Includes Northern Territory.

**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, including pilotage, between the two ports.

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

## STATISTICAL ISSUES

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

- Port authorities record cargo as having been discharged during the month the vessel arrives in port. Similarly, cargo loaded is recorded against the month of the vessel's departure. Consequently, cargo loaded at the end of June and discharged in early July will not be recorded in the same financial year by the two ports. The effect of this may be offset to some degree at the end of the financial year, when the reverse applies.
- A port authority's record of cargo loaded and discharged is based on information provided by the ships' 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

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divisions at the two-digit level of the classification, which, in turn, are aggregated to 10 sections at the broadest level of the ATFCC. Sections of the ATFCC are identified by a one-digit code.

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

liquid and dry bulk commodities, where the cargo originates from, or is destined for, several ports.

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

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

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

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