

Bureau of Transport and Regional Economics



INFORMATION PAPER 48

AUSTRALIAN SEA FREIGHT, 2000–2001

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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 covers all sea freight activity around Australia during 2000–2001. Previous series papers 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 Mark Cregan and Stephen Wheatstone.

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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Bundaberg Port Authority	Port Kembla Port Corporation
Burnie Port Corporation	Port of Brisbane Corporation
Cairns Port Authority	Port of Broome
Carpentaria Management Services	Port of Devonport Corporation
Chevron Australia Pty Ltd	Port of Launceston Pty Ltd
Coal Operations Australia Ltd	Port of Portland Pty Ltd
CRDC Wyndham Port	Ports Corporation of Stanley
Dampier Port Authority	Ports Corporation of Queensland
Darwin Port Corporation	Ports Corporation Western Australia
Department of Transport, Western Australia	Robe River Associates
Esperance Port Authority	Rockhampton Port Authority
Flinders Island Ports Company	Samancor Gemco
Fremantle Ports	Sealink
Geraldton Port Authority	Shire of Derby-West Kimberley
Gippsland Ports Committee of Management	South Australia Ports Corporation
Gladstone Port Authority	Southern Shipping
Hobart Ports Corporation Pty Ltd	Sydney Ports Corporation
King Island Ports Corporation Pty Ltd	TOLL Westernport
Lord Howe Island Maritime	Townsville Port Authority
Mackay Port Authority	Toll Geelong Port Pty Ltd
Melbourne Port Corporation	Waterways Authority (NSW)
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SCOPE AND COVERAGE

This edition of *Australian Sea Freight, 2000–2001* is an update of *Australian Sea Freight, 1999–2001* (Information paper 47). The paper is 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 *2000–2001*. 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 2001.

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

CHAPTER 1 OVERVIEW

In 2000–2001, 653.6 million tonnes of cargo moved across Australian wharves. This represented a five per cent increase over 1999–2000. Seventy six percent of this cargo was international exports, eight per cent international imports, eight per cent coastal cargo loaded and eight per cent coastal cargo discharged.

INTERNATIONAL FREIGHT

In 2000–2001, 550.1 million tonnes of international cargo moved across Australian wharves, Table 1.1. This represented a six per cent increase in exports and a four per cent decrease in imports. However, in terms of value the increases were considerably larger, representing a 27 per cent increase in export and 8 per cent increase in imports.

TABLE 1.1 INTERNATIONAL SEA FREIGHT, 1994–1995 TO 2000–2001

<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
2000–2001	495.7	54.4	550.1	99.4	83.0	182.3

Source: ABS, International Cargo Statistics, unpublished

COASTAL FREIGHT

In 2000–2001, 103 million tonnes of coastal cargo were handled through Australian ports. This made up 15.9 per cent of all cargo moved across Australian wharves. Of this 52.0 million tonnes of coastal cargo was loaded and 51.5 million tonnes was discharged as illustrated in Table 1.2.

Coastal cargo tonnages are up by nearly 1.4 per cent overall, or 1.3 per cent for loaded cargo and 1.5 percent for discharged cargo. In terms of task performed, based on cargo

loaded, the Australian coastal fleet performed 104.5 billion tonne kilometres, which is down 4.0 per cent on the previous year.

TABLE 1.2 AUSTRALIAN COASTAL FREIGHT SUMMARY, 1994–95 TO 2000–2001

Year	Loaded (kilotonnes)			Discharged (kilotonnes)		
	Interstate	Intrastate	Total	Interstate	Intrastate	Total
1994-95	33 692	15 498	49 190	34 180	16 286	50 466
1995-96	31 982	15 815	47 797	31 808	16 229	48 037
1996-97	32 581	16 562	49 143	32 505	17 530	50 035
1997-98	34 322	18 200	52 522	34 741	18 968	53 709
1998-99	31 934	16 454	48 388	31 047	17 053	48 100
1999-00	32 743	18 582	51 325	32 359	18 369	50 728
2000-01	33 216	18 786	52 003	32 783	18 692	51 475

Note: Reasons for discrepancies between loaded and discharged tonnages in this and other tables are listed in the section 'Statistical Issues' on page 51.

Source: Australian port authorities—personal communications.

In 2000–2001, 693 single voyage permits (SVPs) and continuous single voyage permits (CVPs) were used to move 7.0 million tonnes around the Australian coast (Table 1.3), up from 3.7 million tonnes in 1999–2000. This represents 13.5 per cent of the loaded coastal task.

Note information provided in this paper on SVPs and CVPs is different to that appearing in the BTRE's *Waterline* series. Figures in *Waterline* report tonnes and TEUs as specified on the permits when issued; while in this paper the figures reported are the actual tonnes and TEUs carried, as estimated by the permit holders after they have used the permit.

TABLE 1.3 SUMMARY OF SVPS AND CVPS USED 2000–2001

Permit type	No of Permits	Tonnes carried	TEUs Carried
SVP	616	6 738 345	45 885
CVP	77	258 265	14 232
Total	693	6 996 609	60 117

Source: DOTARS, SVP and CVP Registers, unpublished

AUSTRALIAN FLEET

The Australian merchant fleet stayed about the same size in deadweight and gross tonnage terms, Table 1.4. In terms of ship numbers, the number of ships in the Australian trading fleet increased, due to BTRE locating ships not included in past years in the intrastate trade rather than new ships entering the fleet.

TABLE 1.4 AUSTRALIAN TRADING SUMMARY 1994 TO 2001

<i>Year as at 30 June</i>	<i>Number of ships</i>	<i>Deadweight (tonnes)</i>	<i>Gross Tonnage (tons)</i>
1994	90	3 499 527	2 414 844
1995	85	3 203 623	2 298 894
1996	82	3 303 294	2 267 719
1997	76	3 164 568	2 238 141
1999	77	2 505 369	1 864 976
2000	77	2 283 336	1 729 770
2001	81	2 323 983	1 764 298

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 2001-2002, 20020; Baird Publications, Australasian Shipping Directory 2001, 2001; Lloyd's List, Lloyd's Maritime Directory 2001, 2001; Shipping companies (various) — personal communications; Department of Workplace Relations and Small Business; Australian Shipping, 1994, 1995, 1996 and 1997.

AUSTRALIAN PORT ACTIVITY

In 2000-2001 there was a slight decrease in the number of international trading ships entering Australia, 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^a 1996-1997 TO 2000-2001

<i>Year</i>	<i>Number of ships entering Australia from overseas^b</i>	<i>Number of voyages into Australia from overseas^b</i>	<i>Number of ship calls at Australian ports (includes coastal)^c</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
2000-2001	3 162	9 738	21 542

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 2000-2001 the number of international voyages decreased by 1.6 per cent, while ship calls decreased by 0.6 per cent. Although ship activity declined, the amount of cargo that moved across Australia's wharves increased by five per cent making 2000-2001 the busiest period yet recorded.

CHAPTER 2 COASTAL FREIGHT

In 2000–2001, 103 million tonnes of coastal cargo were handled through Australian ports. Of this, 52.0 million tonnes of coastal cargo was loaded and 51.4 million tonnes was discharged.

In terms of task performed, based on cargo loaded, the Australian coastal fleet performed 104.5 billion tonne kilometres. This is down on the previous year, with slight drops in all the major categories except for Other Cargo, which exhibited a slight increase.

MAJOR COMMODITIES.

In 2000–2001, *bauxite alumina shipments* decreased in tonnage loaded, balancing an increase in *crude oil shipments* loaded (Table 2.1). Iron ore and general cargo shipments remained steady but petroleum products exhibited a decrease in shipments.

TABLE 2.1 COASTAL FREIGHT LOADED BY MAJOR COMMODITY,
1995–96 TO 2000–2001

ATFCC Code	Commodity	1996-97	1997-98	1998-99	1999-00	2000-01
<i>Tonnes (millions)</i>						
281	Iron Ore	8.3	8.2	8.6 ^b	6.8	6.7
282	Bauxite/Alumina	10.1	10.3	9.9	12.1	11.6
331	Crude Oil	8.3	8.9	6	6.6	7.5
33	Petroleum Products ^a	6.9	7.2	6.9	6.5	5.8
	Other Cargo	15.6	18	17	19.2	20.3
	Total	49.1	52.5	48.4	51.3	52.0
<i>Tonne-Kilometres (billions)</i>						
281	Iron Ore	38.1	40.9	40.3 ^b	29.7	28.3
282	Bauxite/Alumina	22.2	22.4	21.8	27.9	25.7
331	Crude Oil	18.8	21.7	15.1	17.1	15.2
33	Petroleum Products ^a	12.9	10.7	10.7	9.6	9.4
	Other Cargo	20.7	21.2	20.9	24.6	25.9
	Total	112.7	116.6	108.8	108.9	104.5

a. Excludes crude oil (AFTCC 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.

CARGO FLOWS.

Coastal freight flows between the States is detailed in Table 2.2. Of interest is that Queensland and Western Australia are ranked 1st and 2nd in terms of state of origin, while New South Wales and Queensland are ranked 1st and 2nd in terms of state of destination. Queensland's top ranking as state of origin was due to the increased tonnages of bauxite in its intrastate bauxite trade. Overall New South Wales' and Victoria's ranking have strengthened, while Western Australia's position has declined slightly.

TABLE 2.2 TOTAL COASTAL FREIGHT FLOWS, 2000–2001

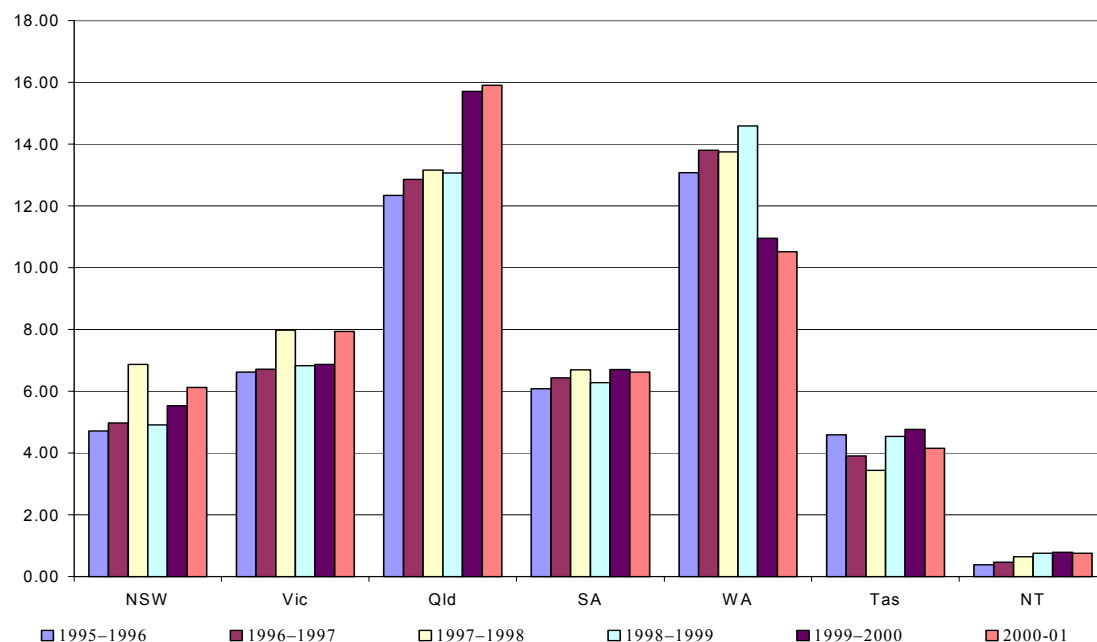
<i>State of origin</i>	<i>State of Destination (kilotonnes)</i>							<i>Total</i>
	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas</i>	<i>NT</i>	
NSW	1 021	2 587	679	1 160	305	363	10	6 124
Vic	3 942	85	1 353	224	437	1 889	0	7 931
Qld	2 082	605	12 483	232	104	323	80	15 908
SA	2 071	1 555	541	1 788	411	252	0	6 618
WA	5 075	1 526	320	156	3 177	7	249	10 510
Tas	1 760	2 135	11	41	37	166	5	4 156
NT	74	34	8	0	128	420	92	757
Total	16 026	8 527	15 394	3 600	4 599	3 420	437	52 003

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:

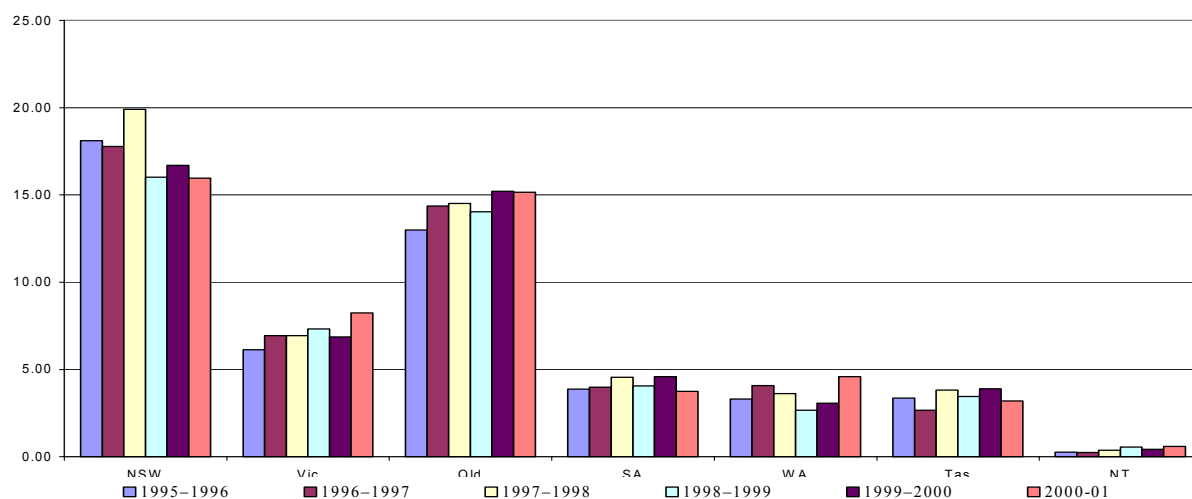
- The increasing tonnages loaded in New South Wales, Victoria and especially Queensland, with a corresponding decline in South Australia, Western Australia and Tasmania.
- The relative stability in the discharge of cargo for all States, with declines in South Australia, New South Wales and Tasmania balanced by increases in Western Australia, Victoria and the Northern Territory.

FIGURE 2.1 COASTAL FREIGHT LOADED BY STATE, 1996–97 TO 2000–2001.



Source: BTRE Coastal Freight Database, unpublished.

FIGURE 2.2 COASTAL FREIGHT DISCHARGED BY STATE, 1996–97 TO 2000–2001.



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 1999-2000 (BTRE, 2002) it can be seen that:

- the decrease in *Rest of WA* to Sydney and Brisbane is due to a decrease in crude oil moving from WA oil fields to the Sydney refineries, with a substantial increase in movements to Fremantle;
- there are large increases in shipments between the *Rest of Victoria* and the eastern capitals of Sydney and Brisbane; and
- there was a very significant (72 per cent) increase in cargo from *Rest of NSW* to *Rest of Vic* (1274 to 2202 kilo tonnes), attributable to an increase in iron and steel movements from Port Kembla to Geelong.

TABLE 2.3 COASTAL FREIGHT FLOWS BETWEEN AUSTRALIAN PORTS, 2000–2001

Port of Origin	Port of Destination (kilotonnes)						
	Sydney	Rest of NSW	Melbourne	Rest of Vic	Brisbane	Rest of Qld	Adelaide
Sydney	15	28	6	87	330	11	46
Rest of NSW	35	944	292	2 202	72	265	60
Melbourne	206	22	0	43	90	13	55
Rest of Vic	3 647	67	2	40	1058	189	146
Brisbane	615	39	14	19	1	1 696	92
Rest of Qld	239	1 190	429	169	712	10 055	25
Adelaide	142	5	667	109	450	0	0
Rest of SA	372	1 553	777	2	79	11	1 617
Fremantle	139	25	79	598	129	42	98
Rest of WA	300	4 612	345	505	148	0	58
Hobart	0	4	0	0	0	0	0
Rest of Tas	413	1 343	2 061	73	0	11	0
Darwin	0	0	0	0	0	8	0
Rest of NT	0	74	34	0	0	0	0
Total	6 121	9 905	4 706	3 847	3 070	12 303	2 197

TABLE 2.3 COASTAL FREIGHT FLOWS BETWEEN AUSTRALIAN PORTS, 2000–2001
(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	30	217	0	45	43	0	0	858
Rest of NSW	1 024	47	41	65	210	10	0	5 266
Melbourne	0	276	0	0	1 399	0	0	2 104
Rest of Vic	24	33	129	345	144	0	0	5 823
Brisbane	0	36	0	12	0	23	0	2 547
Rest of Qld	115	44	23	6	304	57	0	13 369
Adelaide	49	195	17	0	28	0	0	1 663
Rest of SA	121	199	0	150	74	0	0	4 955
Fremantle	0	0	915	0	7	249	0	2 281
Rest of WA	0	2 252	9	0	0	0	0	8 229
Hobart	0	0	0	0	0	0	0	4
Rest of Tas	41	37	0	141	25	1	5	4 152
Darwin	0	4	4	0	0	2	64	82
Rest of NT	0	120	0	0	420	26	0	675
Total	1 404	3 461	1 138	765	2 654	368	69	52 008

Source: Australian port authorities—personal communications.

PACK TYPE

Pack type is a description of the way cargo is package and moved. It is primarily split between bulk and non bulk. 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. 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 would 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 not classified and/or non-containerised.

Bulk cargo (see Tables 2.4 and Table 2.5) makes up the majority of coastal cargo, representing 87 per cent of all coastal cargo, down slightly from 88 per cent in 1999–2000 and significantly decreased from a high of 92 per cent in 1993–94.

Note the increase in non bulk cargo, from 1993–94 to 2000–2001: from 3.7/3.8 million tonnes loaded/discharge to 6.7/6.4 million tonnes loaded /discharged respectively. This is also up on the 1999-2000 levels of 6.4/5.8 million tonnes loaded/discharged. Most of this increase has been in containerised cargo. Non-containerised non-bulk cargo has generally declined over the same period, but has recently shown a slight increase.

The slump in liquid bulk cargo market recorded in 1998-99 continued the recovery started in 1999–2000, to 16.0/15.7 million tonnes loaded/discharged in 2000-2001. This was mainly due to a continuing increase in tonnages of liquid bulk into Sydney (Table 2.6), primarily from Victoria and recently from Western Australia.

Table 2.6 shows the flow of cargo between the states by pack type. Of significance are the mainland interstate movements of containerised cargo, which are down on the high of 1999-2000 levels, particularly for the destinations of NSW and Qld.

TABLE 2.4 COASTAL FREIGHT LOADED BY PORT AND PACK TYPE, 2000–2001

<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	3	575	211	68	858
Rest of NSW	2 592	253	53	2368	5 266
Melbourne	109	601	1 249	144	2 104
Rest of Vic	108	5 652	30	34	5 823
Brisbane	73	2 392	70	13	2 547
Rest of Qld	12 466	340	83	475	13 364
Adelaide	724	854	84	1	1 663
Rest of SA	4 472	481	1	0	4 955
Fremantle	623	1 562	90	6	2 281
Rest of WA	5 079	3 138	4	7	8 229
Hobart	4	0	0	0	4
Rest of Tas	2 488	0	1 078	585	4 152
Darwin	7	0	42	33	82
Rest of NT	505	154	15	0	675
Total	29 255	16 003	3 011	3734	52 003

Source: Australian port authorities—personal communications.

TABLE 2.5 COASTAL FREIGHT DISCHARGED BY PORT AND PACK TYPE, 2000–2001

<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	1 342	4 312	21	23	5 698
Rest of NSW	9 791	246	111	114	10 262
Melbourne	1 528	1 281	1 082	446	4 338
Rest of Vic	1 202	587	98	2 013	3 900
Brisbane	1 235	1 650	122	13	3 019
Rest of Qld	9 772	2 269	60	30	12 132
Adelaide	1 693	569	100	3	2 366
Rest of SA	1 292	89	1	0	1 382
Fremantle	242	2 576	538	148	3 504
Rest of WA	44	987	24	26	1 082
Hobart	0	323	0	0	323
Rest of Tas	1 097	413	1 137	231	2 878
Darwin	44	431	61	21	556
Rest of NT	0	0	35	0	35
Total	29 283	15 734	3 390	3 068	51 475

Source: Australian port authorities—personal communications.

TABLE 2.6 COASTAL FREIGHT LOADED BY PACK TYPE, 2000–2001

<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>
<i>Dry Bulk</i>								
NSW	885	310	203	955	36	206	0	2 595
Vic	2	20	2	41	9	142	0	217
Qld	1 265	538	10 233	147	10	304	42	12 539
SA	2 003	493	523	1 727	200	251	0	5 196
WA	4 637	1 064	0	0	2	0	0	5 702
Tas	1 687	603	10	40	0	147	5	2 492
NT	74	0	5	0	2	420	11	513
Sub Total	10 552	3 030	10 975	2 910	259	1 471	58	29 255
<i>Liquid Bulk</i>								
NSW	105	183	374	76	31	59	0	828
Vic	3 880	64	1 308	166	208	631	0	6 256
Qld	621	24	1 951	84	28	12	9	2 728
SA	65	1 011	15	60	183	0	0	1 335
WA	416	443	319	149	3 137	0	237	4 701
Tas	0	0	0	0	0	0	0	0
NT	0	34	0	0	120	0	0	154
Sub Total	5 087	1 759	3 967	535	3 707	702	246	16 003
<i>Container</i>								
NSW	9	5	35	26	145	41	4	265
Vic	28	0	40	16	174	1 021	0	1 279
Qld	13	11	68	1	27	6	28	153
SA	3	51	2	0	28	1	0	85
WA	22	19	1	6	29	6	11	94
Tas	21	1 035	1	1	12	8	0	1 078
NT	0	0	3	0	3	0	51	57
Sub Total	96	1 120	150	50	417	1 084	94	3 011
<i>Non-Bulk</i>								
NSW	22	2 088	67	103	93	57	6	2 437
Vic	32	0	3	2	47	95	0	178
Qld	184	32	231	0	40	0	1	488
SA	0	0	0	0	1	0	0	1
WA	2	1	0	0	8	0	1	13
Tas	52	496	0	0	25	11	1	585
NT	0	0	0	0	3	0	30	32
Sub Total	291	2 618	302	105	216	163	38	3 734
Total	16 026	8 527	15 394	3 600	4 599	3 420	437	52 003

Source: Australian port authorities—personal communications.

COMMODITY GROUPS

In terms of commodity groups moved (see Table 2.7), total tonnages for all commodity classifications only slightly changed over 1999-2000 figures. The greatest changes between 1999-2000 and 2000-2001 were in the commodity groupings *Chemicals and related materials not elsewhere specified (nes)*, showing an increase, and *Manufactured goods classified chiefly by material*, showing a decrease. In all other cases changes were minimal.

TABLE 2.7 COASTAL FREIGHT LOADED BY MAJOR COMMODITY GROUPS, 2000–2001

State of origin	State of destination (kilotonnes)							Total
	NSW	Vic	Qld	SA	WA	Tas	NT	
Food and live animals								
NSW	0	0	48	25	29	105	0	207
Vic	0	0	9	1	51	245	0	306
Qld	182	246	96	0	45	0	0	569
SA	0	0	11	0	9	0	0	20
WA	1	1	0	0	11	4	5	22
Tas	16	493	0	0	9	5	0	523
NT	0	0	0	0	0	0	3	3
Sub total	199	740	164	26	154	358	7	1 649
Beverages and tobacco								
NSW	0	0	0	0	8	0	0	9
Vic	0	0	1	1	11	32	0	46
Qld	0	0	0	0	1	0	22	23
SA	0	0	0	0	0	0	0	0
WA	1	0	0	0	0	0	1	2
Tas	2	51	0	0	2	0	0	55
NT	0	0	0	0	0	0	0	0
Sub total	4	51	2	1	23	32	23	135
Crude materials inedible except fuels								
NSW	1	252	4	0	45	70	0	372
Vic	19	20	5	0	7	133	0	184
Qld	1 129	230	9 215	64	5	285	0	10 929
SA	1 924	466	113	1 727	16	199	0	4 446
WA	4 637	1 065	0	0	7	1	2	5 712
Tas	1 124	199	11	40	5	143	5	1 525
NT	74	0	5	0	4	420	11	514
Sub total	8 907	2 233	9 353	1 831	90	1 251	18	23 682

TABLE 2.7 COASTAL FREIGHT LOADED BY MAJOR COMMODITY GROUPS, 2000–2001
(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	991	136	477	1 006	25	86	0	2 722
Vic	3 878	65	1 308	166	203	630	0	6 250
Qld	691	13	1 989	84	0	12	9	2 799
SA	65	1 022	17	60	209	25	0	1 398
WA	416	441	318	149	3 127	0	237	4 688
Tas	0	0	1	0	0	1	0	2
NT	0	34	0	0	120	0	0	154
Sub total	6 042	1 711	4 110	1 466	3 685	754	246	18 013
Animal and vegetable oils, fats and waxes								
NSW	0	19	8	0	0	0	0	27
Vic	2	0	0	1	0	0	0	3
Qld	11	0	12	0	0	0	0	23
SA	0	0	0	0	0	0	0	0
WA	0	2	1	0	0	0	0	3
Tas	0	0	0	0	0	0	0	0
NT	0	0	0	0	0	0	0	0
Sub total	13	20	21	1	0	0	0	56
Chemicals and related materials nes								
NSW	0	118	25	0	48	46	1	238
Vic	2	0	5	42	33	120	0	201
Qld	36	111	68	82	44	19	2	363
SA	78	40	10	0	6	0	0	134
WA	2	5	0	0	8	0	1	16
Tas	4	67	0	0	0	8	0	79
NT	0	0	0	0	0	0	0	0
Sub total	122	341	108	125	139	193	4	1 031
Manufactured goods classified chiefly by material								
NSW	23	2 060	80	117	110	49	6	2 444
Vic	31	0	4	3	82	135	0	254
Qld	24	1	941	0	5	6	43	1 020
SA	0	27	389	0	149	28	0	593
WA	15	8	0	5	8	1	2	40
Tas	612	971	0	0	20	0	1	1 605
NT	0	0	1	0	0	0	27	28
Sub total	706	3 068	1 414	126	373	218	79	5 984

TABLE 2.7 COASTAL FREIGHT LOADED BY MAJOR COMMODITY GROUPS, 2000–2001
(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>
Machinery and transport materials								
NSW	0	0	2	0	13	1	0	17
Vic	0	0	1	1	6	51	0	59
Qld	3	1	1	0	2	0	0	7
SA	0	0	0	0	0	0	0	0
WA	1	0	0	0	9	0	1	11
Tas	0	87	0	0	0	0	0	87
NT	0	0	0	0	3	0	0	3
Sub total	5	88	3	2	32	52	1	184
Miscellaneous manufactured articles								
NSW	1	0	9	0	21	4	0	35
Vic	1	0	7	6	40	485	0	538
Qld	1	0	0	0	0	0	0	1
SA	0	0	0	0	0	0	0	0
WA	1	1	0	0	1	0	1	3
Tas	0	7	0	0	0	0	0	7
NT	0	0	3	0	0	0	0	3
Sub total	4	8	18	6	62	489	1	587
Commodities and transactions nes								
NSW	4	1	26	11	5	2	3	53
Vic	9	0	13	4	5	58	0	89
Qld	6	2	161	0	1	0	5	175
SA	3	0	0	0	24	1	0	27
WA	2	4	0	1	6	1	0	13
Tas	2	259	0	0	1	10	0	272
NT	0	0	0	0	0	0	51	51
Sub total	26	266	201	17	41	71	59	681
Total	16 026	8 527	15 394	3 600	4 599	3 420	437	52 003

Source: Australian port authorities—personal communications.

TASMANIAN TRADE

The trade to and from Tasmania (Table 2.8) decreased in 2000–2001 as follows:

- 4.8 million tonnes to 4.0 million tonnes for Tasmania to the mainland;
- 3.9 million tonnes to 3.2 million tonnes for the mainland to Tasmania.

This decrease was primarily driven by decreases in *metalliferous ores and metal scrap* which declined by 21 and 52 per cent respectively, balancing last year's increases.

TABLE 2.8 TASMANIAN FREIGHT LOADED AND DISCHARGED BY COMMODITY,
2000–2001

ATFCC code	Description	Loaded in Tasmania (kilotonnes)	Discharged in Tasmania (kilotonnes)
0	Food and live animals	21	44
1	Meat and meat preparations	63	23
2	Dairy products and birds eggs	48	1
3	Fish, crustaceans and molluscs	3	0
4	Cereals and cereal preparations	0	78
5	Vegetables and fruit	339	36
6	Sugars, sugar preparations and honey	27	20
8	Feeding stuff for animals	5	4
9	Miscellaneous edible products & preps	17	13
11	Beverages	52	66
12	Tobacco and tobacco manufactures	2	0
21	Hides, skins and furskins, raw	7	0
24	Cork and wood	101	8
25	Pulp and waste paper	21	80
26	Textile fibres	18	0
27	Crude fertilisers and crude minerals	53	49
28	Metalliferous ores and metal scrap	1 317	743
29	Crude animal & vegetable materials, nes	8	0
32	Coal, coke and briquettes	0	99
33	Petroleum and petroleum products	2	711
34	Gases, natural and manufactured	0	23
51	Organic chemicals	1	0
56	Fertilisers, manufactured	76	59
59	Chemical materials & products, n.e.s.	2	20
63	Cork & wood manufactures (exc furniture)	19	5
64	Paper, paperbark & articles of paper	475	36
65	Textile yarn, fabrics, made-up articles	2	0
66	Non-metallic mineral manufactures, n.e.s.	1 046	87
67	Iron and steel	7	40
68	Non-ferrous metals	56	0
72	Machinery specialised particular industry.	3	2
74	General industrial machinery & equip nes	7	5
78	Road vehicles	78	110
82	Furniture and parts thereof	7	12
93	Special transactions and commodities	172	752
99	Other commodities and transactions	100	77
Total		4 156	3 201

a. nes Not elsewhere stated.

Source: Australian port authorities—personal communications.

CHAPTER 3 COASTAL VOYAGE PERMITS

In 2000–2001, there were 693 voyage permits used by foreign flag shipping to move cargo around the Australian coast. The split between single voyage permits (SVPs) and continuous voyage permits (CVPs), was 616 to 77 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, 2000–2001

<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	7	130 730	0
Crude oil	SVP	27	787 686	0
Iron ore	SVP	36	2 626 097	0
Petroleum products	SVP	94	1 441 001	0
Other	SVP	452	1 752 831	45 885
Other	CVP	77	258 265	14 232
Total		693	6 996 609	60 117

Source: DOTARS, SVP and CVP Registers, unpublished

Note information provided in this paper on SVPs and CVPs is different to that appearing in the BTRE's *Waterline* series. Figures in *Waterline* report tonnes and TEUs as specified on the permits when issued; while in this paper the figures reported are the actual tonnes and TEUs carried, as estimated by the permit holders after they have used the permit.

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 using coastal permits only represents 13.8 per cent of total coastal dry bulk cargo loaded, liquid bulk 14.9 per cent, containerised cargo 16.8 per cent and other non bulk 1.6 per cent.

TABLE 3.2 TONNES CARRIED UNDER SVP'S AND CVP'S BY PACK TYPE

<i>Pack type</i>	<i>1999–2000</i>	<i>2000–2001</i>
Dry bulk	1 864 074	4 049 276
Liquid bulk	1 431 537	2 380 265
Containerised	375 987	505 537
Other non bulk	43 666	61 531
Total	3 715 264	6 996 609

Source: DOTARS, SVP and CVP Registers, unpublished

The proportion of total coastal freight moved using voyage permit shippers in 2000–2001 was 13.5 per cent by weight or 28.9 per cent of tonne kilometres performed (Table 3.3). This up significantly from 1999–2000 when it was 7.2 per cent by weight or 9.1 per cent of tonne kilometres performed. In general the use of voyage permits is patchy, with permits being used more on longer coastal routes than on the shorter routes.

The largest group of shippers using coastal permits in terms of tonne kilometres is the iron ore industry, 53.8 per cent in terms of tonne kilometres performed but only 38.9 per cent in terms of tonnes loaded. For bauxite alumina industry the use is only 1.7 per cent and 1.1 per cent respectively.

TABLE 3.3 IMPACT OF CVP'S AND SVP'S ON COASTAL TRADE, 2000–01

<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	6.7	2.6	38.9%	28.3	15.2	53.8%
Bauxite Alumina	11.6	0.1	1.1%	25.7	0.4	1.7%
Crude oil	7.5	0.8	19.2%	15.2	3.5	23.2%
Petroleum products	5.8	1.4	13.6%	9.4	2.8	29.9%
Other	20.3	2.0	9.9%	25.9	8.2	31.8%
Total	52.0	7.0	13.5%	104.5	30.2	28.9%

Source: DOTARS, SVP and CVP Registers, unpublished

CHAPTER 4 INTERNATIONAL SEA FREIGHT

In 2000–2001 international sea freight to and from Australia increased by 17.9 per cent by value, and 6.0 per cent by weight. The largest exporting state was Western Australia (Table 4.1) while the largest importing state was New South Wales.

TABLE 4.1 INTERNATIONAL SEA FREIGHT BY AUSTRALIAN STATE OF ORIGIN / FINAL DESTINATION, 2000–2001.

<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	30 422 250	18 375 505	14 473 097	90 909 192
Victoria	28 226 917	17 158 824	12 562 511	15 935 534
Queensland	12 012 909	20 619 921	13 775 203	140 146 449
South Australia	4 494 473	7 466 574	3 993 190	9 220 247
Western Australia	6 668 553	25 474 189	7 322 734	218 788 203
Tasmania	520 364	2 079 333	744 708	7 127 850
Northern Territory	647 228	4 084 362	1 536 373	11 378 482
Australian Capital Territory	641	463	70	13
State confidential	0	590 966	0	1 730 559
Foreign Origin		3 504 537		477 429
Total	82 993 334	99 354 673	54 407 887	495 713 957

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, 2000–2001.

<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	431 874	0	9 198 939
Albany	53 692	352 347	153 381	1 427 587
Ardrossan	0	4 560	0	209 949
Ballina	0	32	0	2
Barrow Island	0	32 579	0	79 135
Bowen	0	9 950	0	209 130
Brisbane	10 521 331	7 357 370	8 388 145	8 912 592
Broome	29 308	151 269	23 906	604 386
Bunbury	162 216	2 610 437	1 106 935	8 783 940
Bundaberg	339	181 436	39	456 432
Burnie	130 042	358 854	156 700	1 455 314
Cairns	96 304	480 558	109 721	1 977 743
Cape Cuvier	0	60 278	0	2 270 966
Carnarvon	4	3 115	11	75 956
Coffs Harbour	365	3	57	1
Conf Aust Ports	0	590 966	0	1 730 559
Conf NT Ports	225 701	712 215	1 067 107	4 583 068
Dampier	189 203	10 514 221	223 589	90 340 246
Darwin	409 093	709 197	448 441	287 301
Derby	0	64 171	0	298 627
Devonport	30 493	3 961	73 492	5 605
Edithburg	0	129 297	0	526 856
Esperance	41 977	739 277	130 159	3 815 463
Fremantle	6 099 181	7 360 860	5 427 263	10 130 945
Geelong	1 980 773	1 315 453	5 043 051	4 856 434
Geraldton	39 899	884 074	130 086	2 569 957
Gladstone	307 808	4 011 528	1 252 116	38 519 224
Grafton	31	12 938	15	5 685
Hay Point	0	4 304 252	0	68 594 923
Hobart	54 784	405 730	174 947	567 074
Innisfail	0	82 118	0	510 635
Karumba	0	388 190	0	738 930
Launceston	174 507	892 947	317 465	3 291 144
Lucinda	0	96 794	0	245 152
Mackay	39 721	366 240	190 119	2 502 603
Melbourne	27 815 940	18 399 014	7 149 599	9 387 757
Newcastle	303 468	5 110 992	887 719	70 106 484
Other Ports NT	0	132 627	0	361 471
Port Adelaide	1 724 605	4 205 450	903 283	3 494 366
Port Bonython	0	351 284	0	692 263
Port Hedland	37 560	2 322 911	132 376	68 438 107
Port Kembla	344 045	2 078 468	1 614 178	13 762 032

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 Latta	0	57 367	0	1 075 751
Port Lincoln	17 962	437 129	59 253	1 455 723
Port Pirie	13 927	302 750	9 775	678 240
Port Stanvac	967 941	103 379	2 542 342	215 127
Port Walcott	16 811	544 508	559	28 665 182
Portland	120 171	1 353 891	433 453	2 833 738
Rockhampton	0	132 961	0	92 720
Spring Bay	0	50 336	0	642 050
Sydney	30 467 846	11 283 834	12 143 139	5 169 923
Thevenard	0	47 375	0	439 214
Thursday Island	3 791	26	363	25
Townsville	393 701	3 072 540	3 599 180	4 382 040
Twofold Bay	0	60 266	0	782 315
Useless Loop	0	18 613	0	744 358
Wallaroo	13 960	224 788	49 743	817 139
Weipa	35 761	97 257	83 433	3 849 660
Westernport	109 456	409 644	222 203	706 180
Whyalla	2 884	46 677	123 106	264 175
Wyndham	16 735	2 872 990	37 439	6 303 917
Yampi Sound	0	18 505	0	571 500
Total	82 993 334	99 354 673	54 407 887	495 713 957

Source: ABS, International Cargo Statistics, unpublished.

INTERNATIONAL TRADING PARTNERS BY REGION

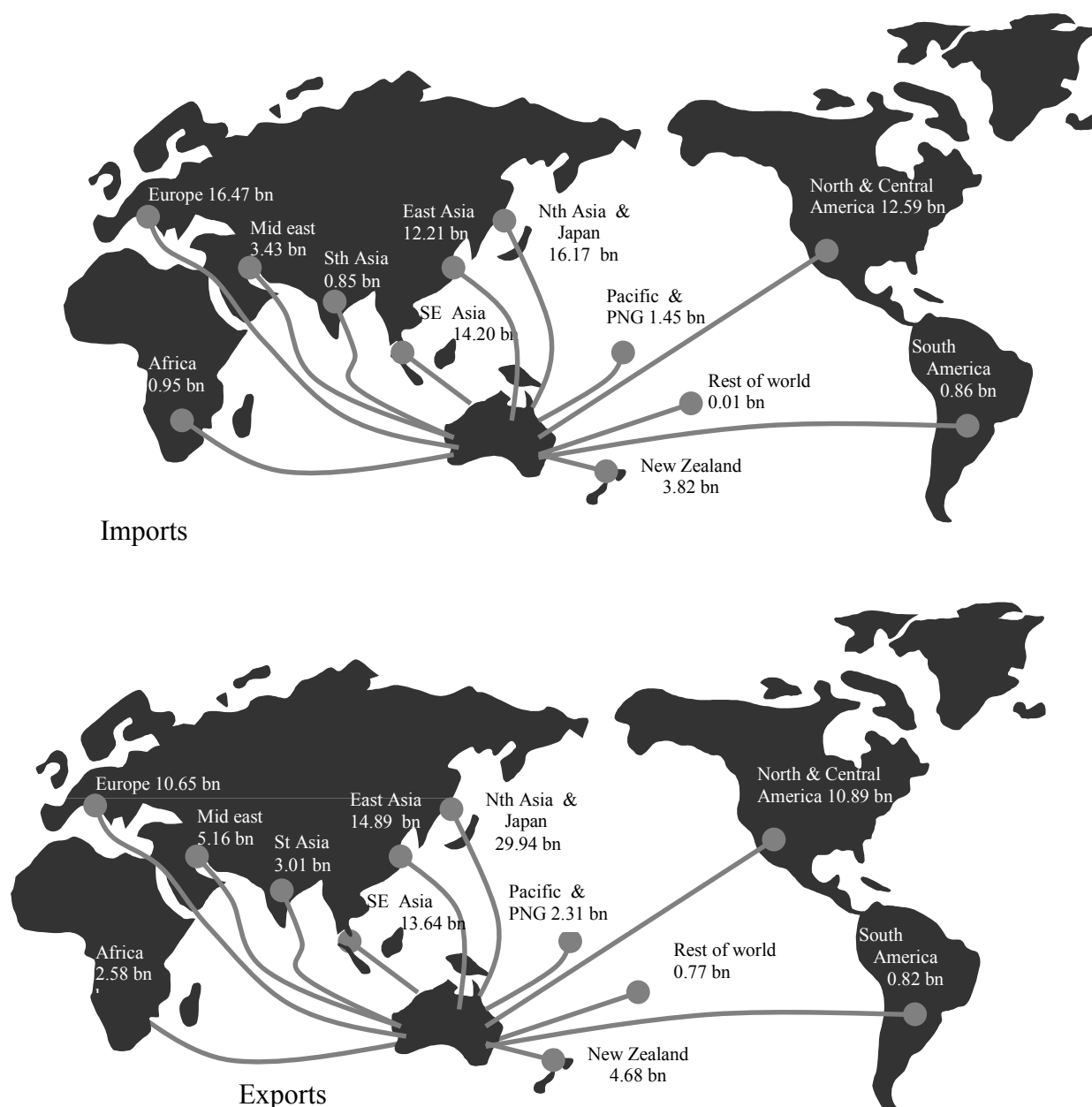
In terms of regions of origin of Australian imports, Europe was our largest supplier by value, but South East Asia dominated our imports in terms of weight (Table 4.3). In terms of exports, Japan/North Asia was Australia's preferred region of unloading by both weight and value. Figure 4.1 shows the same 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	945 630	2 575 311	773 615	6 092 999
East Asia	12 209 724	14 894 914	3 682 886	82 552 043
Europe	16 468 008	10 653 274	3 245 930	62 423 888
Japan and North Asia	16 168 608	29 940 013	4 500 735	261 779 686
Middle East	3 429 848	5 163 228	9 621 726	14 138 303
New Zealand	3 817 986	4 680 611	2 651 083	4 274 147
North & Central America	12 586 090	10 885 328	6 906 387	13 975 465
Pacific Islands and Papua New Guinea	1 450 257	2 313 392	4 474 646	3 319 957
Rest of World	9 301	770 086	122 512	1 886 621
South America	863 655	824 518	705 201	7 240 336
South East Asia	14 195 009	13 643 737	17 246 335	20 494 375
South Asia	849 217	3 010 262	476 830	17 536 137
Total	82 993 334	99 354 673	54 407 887	495 713 957

Source: ABS, International Cargo Statistics, unpublished.

FIGURE 4.1 INTERNATIONAL FREIGHT BY REGION OF LOADING / UNLOADING, 2000–2001, (\$BN).



Source: ABS, International Cargo Statistics, unpublished

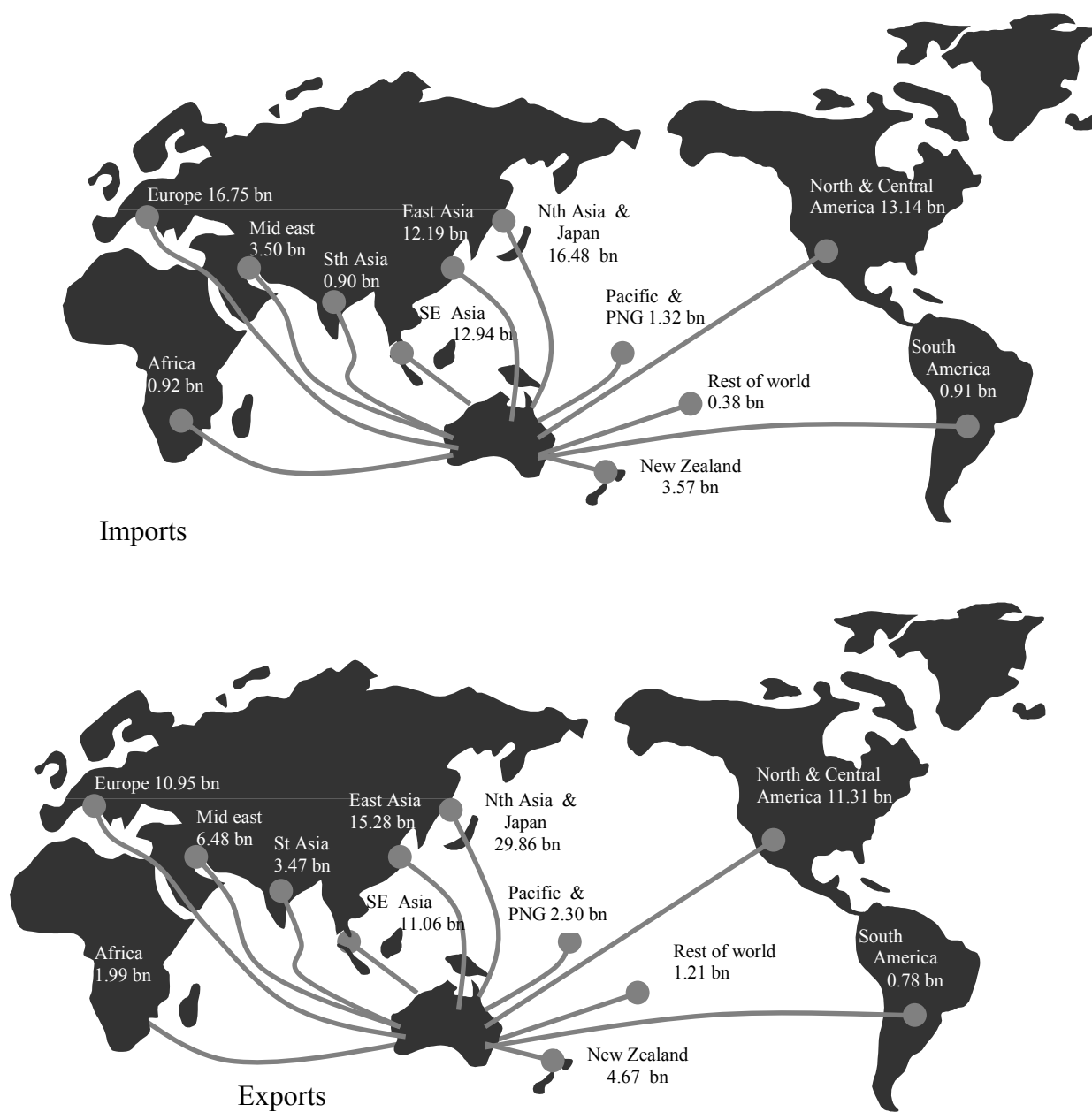
Not surprisingly the situation does not change when we study Australian sea trade in terms of region of origin/final destination, by weight and value. The same patterns are present, with Europe dominating as the source of Australian imports by value, South East Asia by weight (Table 4.4 and Figure 4.2)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

TABLE 4.4 INTERNATIONAL FREIGHT BY REGION OF ORIGIN / FINAL DESTINATION, 2000–2001.

<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	916 384	1 992 042	15 074	5 324 046
East Asia	12 194 954	15 282 599	3 815 026	82 653 815
Europe	16 752 079	10 950 617	4 360 679	63 472 375
Japan and North Asia	16 481 724	29 855 932	240 480	261 367 267
Middle East	3 502 243	6 471 805	282 571	15 168 129
New Zealand	3 566 958	4 666 324	2 623 429	4 261 508
North and Central America	13 141 543	11 305 126	7 215 776	13 588 350
Pacific Islands and Papua New Guinea	1 316 287	2 300 310	3 051 922	3 363 354
Rest of World	376 418	1 208 219	5 703 287	1 896 579
South America	908 393	784 117	9 610 976	7 186 092
South East Asia	12 940 022	11 064 400	17 000 431	19 577 943
South Asia	896 328	3 473 183	488 236	17 854 499
Total	82 993 334	99 354 673	54 407 887	495 713 957

Source: ABS, International Cargo Statistics, unpublished

FIGURE 4.2 INTERNATIONAL FREIGHT BY REGION OF ORIGIN / FINAL DESTINATION, 2000–2001, (\$BN)



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, 2000–2001.

Commodity	Value (\$'000s)		Tonnes	
	Imports	Exports	Imports	Exports
Coal, coke & briquettes	10 469	10 844 293	62 236	194 220 156
Petroleum oil	8 953 397	8 169 501	22 753 465	18 606 397
Confidential	965 121	5 972 865	145 459	17 277 931
Meat & meat preps	129 273	5 449 538	33 083	1 514 593
Cereals & cereal preps	299 210	5 185 026	168 626	18 562 245
Iron ore & concentrates	122 286	4 901 550	4 168 821	166 453 920
Aluminium & aluminium alloys	446 982	4 731 607	96 043	1 601 835
Aluminium ores & concentrate; alumina	13 765	4 391 220	12 466	12 325 717
Road vehicles & transport equipment	14 662 408	4 091 832	1 076 892	366 903
Machinery	18 477 120	3 671 343	1 283 098	531 753
Wool, sheep & lambs	43 692	3 559 266	12 281	651 097
Dairy products & birds eggs	282 249	2 914 563	80 322	998 665
Other metalliferous ores & metal scrap	62 891	2 727 633	105 658	10 134 443
Liquefied natural gas	0	2 670 995	0	0
Chemicals	5 734 835	2 423 528	5 096 028	1 343 702
Cotton	1 881	1 958 759	937	846 686
Beverages	673 824	1 908 932	269 744	791 401
Petroleum oils & refined prods refined	1 340 797	1 787 235	3 003 524	3 565 398
Copper & copper alloys	235 153	1 640 213	51 457	468 311
Miscellaneous manufactured articles	7 252 653	1 524 538	1 020 879	288 938
Nickel & nickel alloys	25 342	1 464 201	1 910	108 902
Vegetables & fruit	762 170	1 314 526	465 674	1 764 655
Lead & zinc ores & concentrates	60 565	1 305 412	131 854	2 563 723
Copper ores & concentrates	10 444	1 051 235	5 982	1 218 124
Zinc & zinc alloys	4 651	908 816	1 780	454 965
Cork & wood	493 199	886 741	465 447	10 581 680
Fish, crustaceans & molluscs	823 697	886 463	180 045	42 832
Liquefied petroleum gas (LPG)	166 892	830 352	329 372	1 516 313
Feeding stuff for animals	179 404	822 266	211 505	2 176 296
Hides, skins & fur skins, raw	1 574	785 592	430	655 488
Live animals	1 219	758 266	290	608 468
Iron & steel	1 373 943	728 571	1 127 429	1 575 616
Oil seeds & oleaginous fruits	81 694	724 436	168 035	2 243 515

TABLE 4.5 INTERNATIONAL FREIGHT BY COMMODITY, 2000 –2001 (CONTINUED).

Commodity	Value (\$'000s)		Tonnes	
	Imports	Exports	Imports	Exports
Miscellaneous edible products & preparations	1 012 741	615 974	249 075	195 747
Manufactures of metal nes	2 078 232	504 476	539 985	198 968
Paper, paperboard & articles	2 405 181	596 017	1 523 757	604 330
Manufactures of metal nes	2 232 229	567 701	506 644	207 976
Crude minerals	123 512	497 208	1 377 415	13 592 255
Textile yarn, fabrics, & articles	2 215 200	420 736	311 293	57 923
Leather, leather manufactures nes	134 015	403 970	5 489	68 221
Non-metallic mineral manufactures nes	1 333 884	386 153	1 436 708	880 101
Mineral sands	969	351 684	538	1 092 417
Plastics	1 957 443	335 927	751 026	169 479
Lead & lead alloys	15 014	307 268	18 205	317 285
Oils & fats	282 758	297 714	232 614	486 247
Other non-ferrous metals nes	45 974	244 802	8 573	21 834
Sugars, sugar preps & honey	121 680	215 565	56 432	512 772
Cork & wood manufactures (exc furniture)	514 872	212 870	258 256	376 608
Crude animal & veg mats nes	186 153	179 346	106 762	162 986
Rubber manufactures nes	1 302 269	152 425	282 517	95 859
Apparel & clothing access	2 482 797	145 072	168 051	12 311
Fertilisers	901 915	140 082	3 879 567	434 982
Other textile fibres	92 845	74 569	47 115	41 684
Coffee, tea, cocoa, spices	453 945	69 279	121 396	17 387
Tobacco & tobacco manufactures	216 026	55 107	29 647	3 854
Pulp & waste paper	328 757	44 419	352 191	288 740
Footwear	790 349	33 632	60 003	2 367
Crude rubber (incl synthetic)	130 772	9 536	79 918	5 451
Misc	19 152	3 752	13 902	3 373
Gases, natural & manufactures nes	81	2 550	17	1 102
Total	82 993 334	99 354 673	54 407 887	495 713 957

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.

INTERNATIONAL TRADING PARTNERS BY COUNTRY

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 (except for imports by weight). Our near neighbours New Zealand (5th imports and 6th exports), Indonesia (8th exports and 8th imports) and Papua New Guinea (19th imports and 22nd exports), remain important as trading partners for Australia.

TABLE 4.6 TOP TWENTY TRADING PARTNERS BY SEA, 2000–2001

<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	13 386 762	3 460 478	Japan	22 263 203	201 869 882	1
United States of America	11 612 884	4 414 339	United States of America	9 169 533	9 154 467	2
China (including Hong Kong)	9 623 245	2 601 147	China (including Hong Kong)	8 660 234	48 897 318	3
Germany	4 549 857	675 490	Korea, Republic of	7 550 194	59 390 286	4
New Zealand	3 566 958	2 623 429	Taiwan	5 247 861	31 322 149	5
Korea, Republic of	3 091 513	1 033 561	New Zealand	4 666 324	4 261 508	6
United Kingdom	3 059 684	386 856	Singapore	3 451 554	6 086 859	7
Indonesia	2 799 793	4 467 813	Indonesia	3 030 526	6 453 408	8
Malaysia	2 775 417	2 939 530	United Kingdom	2 424 919	13 256 897	9
Thailand	2 573 863	1 217 232	India	2 412 912	14 391 982	10
Viet Nam	2 411 393	5 361 621	Malaysia	2 112 623	4 270 179	11
Italy	2 296 908	593 178	Italy	2 041 701	7 697 954	12
Taiwan	2 261 746	647 096	Saudi Arabia	1 989 520	1 358 198	13
Singapore	2 023 933	2 144 437	Thailand	1 814 657	1 713 118	14
Saudi Arabia	1 612 409	5 287 476	Canada	1 563 369	2 962 233	15
France	1 483 829	262 994	Netherlands	1 436 956	10 409 779	16
Canada	1 120 188	2 041 108	Philippines	1 353 976	2 429 465	17
United Arab Emirates	1 110 564	2 805 153	South Africa	1 182 300	3 295 776	18
Papua New Guinea	1 056 148	2 317 007	United Arab Emirates	1 017 968	1 888 351	19
Sweden	847 928	161 040	Germany	968 940	5 289 724	20
Rest of the world	9 728 312	8 966 902	Rest of the world	14 995 403	59 314 424	
Total	82 993 334	54 407 887	Total	99 354 673	495 713 957	

Source: ABS, International Cargo Statistics, unpublished.

SHIP TYPES

In terms of ship types carrying Australian trade, 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 SHIP TYPE, 2000–2001.

<i>Ship type</i>	<i>Value (\$'000s)</i>		<i>Tonnes</i>	
	<i>Imports</i>	<i>Exports</i>	<i>Imports</i>	<i>Exports</i>
Container	52 238 146	38 261 777	10 753 365	16 344 617
Dry bulk	2 670 769	33 787 077	11 109 752	435 833 087
Gas carrier	256 735	0	467 903	1
General	2 234 138	6 210 002	1 407 980	5 493 100
Livestock	2 338	656 724	7 154	546 269
Multi-purpose	285 352	1 548 630	358 735	1 571 002
OBO (Dry/Liquid)	231 492	356 011	1 510 224	2 057 859
Other ^a	10 945 569	3 156 338	913 743	339 151
Passenger	5 378	0	1	1
Roll-on/Roll-off	3 170 842	1 549 480	763 612	612 705
Tanker	10 415 281	13 373 395	25 863 274	31 486 476
Vehicle carriers	537 294	455 239	1 252 143	1 429 692
Total	82 993 334	99 354 673	54 407 887	495 713 957

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

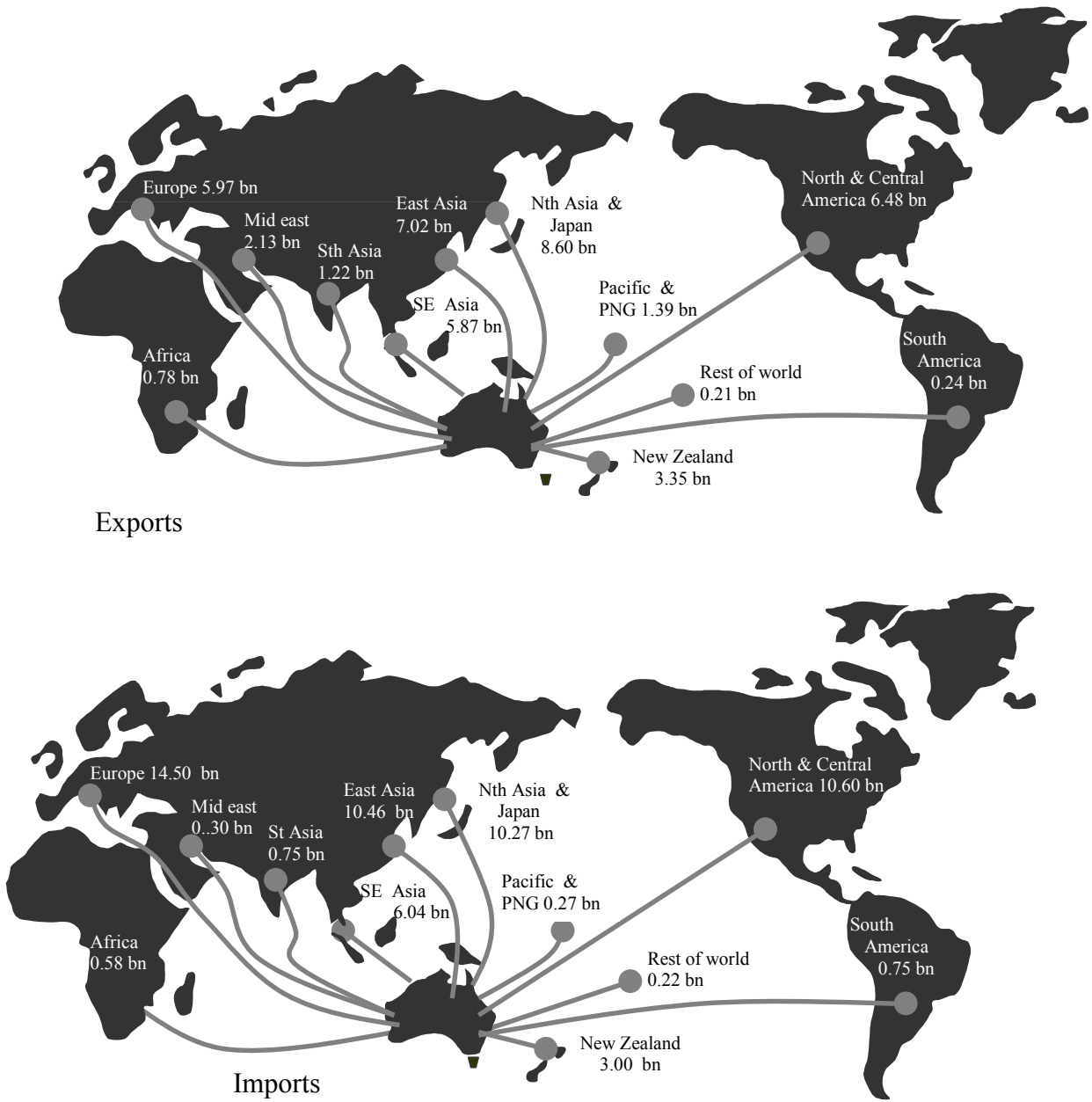
Australian liner trade in 2000–2001 was valued at 101.0 billion dollars, (Table 4.8). Europe was the largest source of imports, while Japan/North Asia, East Asia, North and Central America, and South East Asia were our largest markets for liner exports, Figure 4.3.

TABLE 4.8 INTERNATIONAL LINER TRADE BY REGION, 2000–2001

<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	557 480	781 455	243 858	379 086
East Asia	10 459 813	7 022 719	1 923 911	3 527 953
Europe	14 497 072	5 973 452	2 903 572	1 760 030
Japan and North Asia	10 267 367	8 595 818	1 262 253	4 396 988
Middle East	297 122	2 127 646	150 570	822 911
New Zealand	3 000 714	3 346 219	1 622 095	1 606 591
North and Central America	10 595 776	6 476 294	1 712 516	1 673 975
Pacific Islands and PNG	275 369	1 386 311	139 357	1 156 022
Rest of World	215 770	205 242	64 033	46 156
South America	753 127	235 620	208 432	72 526
South East Asia	6 046 409	5 872 284	1 958 503	3 750 979
Southern Asia	747 320	1 220 817	227 695	1 013 663
Total	57 713 339	43 243 877	12 416 795	20 206 877

Source: ABS, International Cargo Statistic, unpublished.

FIGURE 4.3 INTERNATIONAL LINER FREIGHT EXPORTS AND IMPORTS BY REGION OF FINAL DESTINATION, 2000–2001. (\$BN)



Source: ABS, International Cargo Statistics, unpublished

NON—LINER

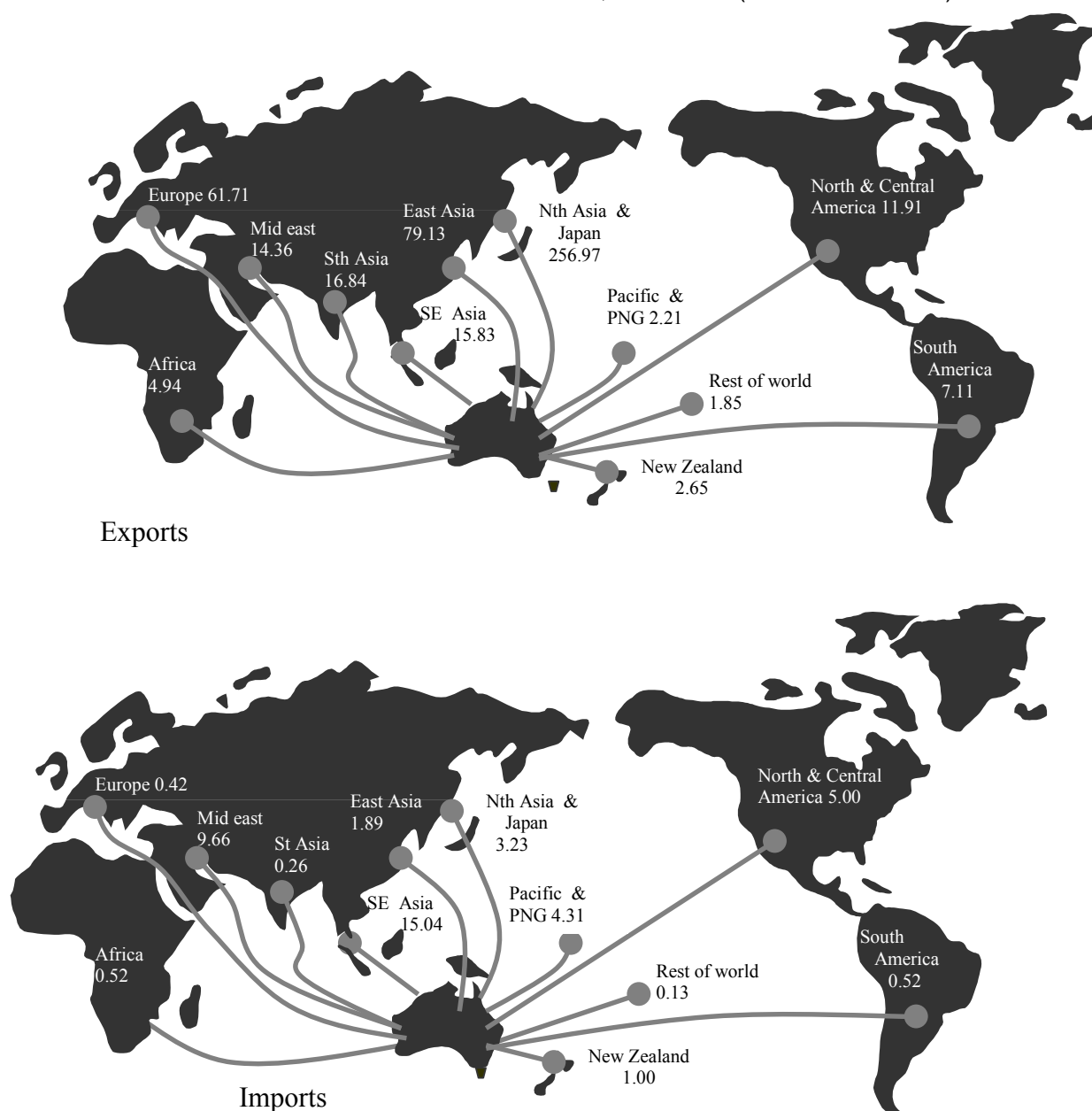
Non—liner cargo consists primarily of dry and liquid bulk, but includes general cargo not shipped on regular liner services such as charters, dedicated car carriers and passenger ships. Australian non—liner trade in 2000–2001 was valued at 81.4 billion dollars (Table 4.9). South East Asia was the largest source of imports, while Japan / North Asia was our largest market for non—liner exports, Figure 4.3.

TABLE 4.9 INTERNATIONAL NON—LINER TRADE BY REGION, 2000–2001

<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	358 904	1 210 586	516 469	4 944 960
East Asia	1 735 140	8 259 880	1 891 115	79 125 862
Europe	2 255 007	4 977 163	417 576	61 712 345
Japan and North Asia	6 214 357	21 260 114	3 233 945	256 970 279
Middle East	3 205 122	4 344 159	9 664 733	14 345 218
New Zealand	566 243	1 320 105	1 001 334	2 654 918
North and Central America	2 545 769	4 828 832	4 998 485	11 914 376
Pacific Islands and PNG	1 040 918	913 999	4 307 845	2 207 331
Rest of World	160 647	1 002 976	134 704	1 850 424
South America	155 266	548 498	522 416	7 113 566
South East Asia	6 893 613	5 192 116	15 041 929	15 826 964
Southern Asia	149 009	2 252 366	260 542	16 840 836
Total	25 279 995	56 110 797	41 991 093	475 507 080

Source: ABS, International Cargo Statistics, unpublished.

FIGURE 4.4 INTERNATIONAL NON—LINER FREIGHT EXPORTS AND IMPORTS BY REGION OF FINAL DESTINATION, 2000–2001 (TONNES MILLION)



Source: ABS, International Cargo Statistics, unpublished

CHAPTER 5 AUSTRALIAN MERCHANT FLEET

The Australian merchant fleet remained effectively unchanged in terms of deadweight and gross tonnage, with larger ships engaged primarily in the international trade. In 2000–2001 the major trading fleet continued to drop from 54 to 51 ships: ten vessels left the Australian major trading fleet, while seven newer ships joined the fleet. The increase in the minor fleet number provided in Table 5.1 below reflects BTRE's better understanding of these ships, particularly those engaged in the intrastate trade

TABLE 5.1 SUMMARY OF THE AUSTRALIAN TRADING FLEET, AS AT 30 JUNE 2001

<i>Trade</i>	<i>No. of vessels</i>	<i>Deadweight tonnes</i>	<i>Gross tonnage (tonnes)</i>
<i>Major Trading Fleet (>2000 dwt)</i>			
Coastal			
Australian registered	35	1 003 535	725 107
Overseas registered	4	115 144	71 983
Total Coastal	39	1 118 679	797 090
Overseas			
Australian registered	10	933 731	796 051
Overseas registered	2	255 899	147 411
Total Overseas	12	1 189 630	943 462
Total major trading fleet	51	2 308 309	1 740 552
<i>Other (minor) Trading ships (>150grt < 2000 dwt)</i>			
Australian registered	24	11 798	15 556
Overseas registered	6	3 876	8 190
Total other trading ships	30	15 674	23 746
Total Australian registered	69	1 949 064	1 536 714
Total Overseas registered	12	374 919	227 584
Total Australian trading fleet	81	2 323 983	1 764 298

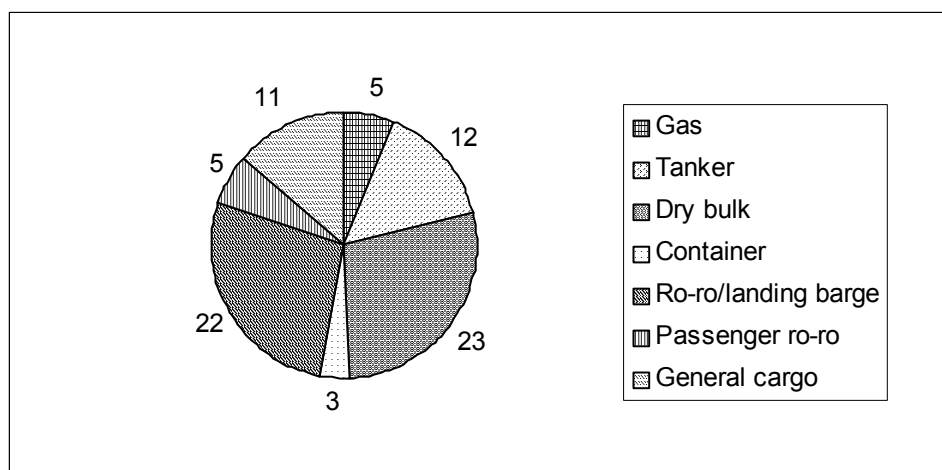
Sources: Department of Transport and Regional Services—personal communications; Lloyd's Maritime Information Services, unpublished; Fairplay, World Shipping Directory 2001-2002, 2001; Baird Publications, Australasian Shipping Directory 2001, 2001; Lloyd's List, Lloyd's Maritime Directory 2001, 2001; Shipping companies (various)—personal communications.

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

- a large decrease in dry bulk (28 to 23), and

- an increase in ro-ro landing barges (16 to 22 ships mainly in the minor trading vessels).

FIGURE 5.1 NUMBER OF SHIPS BY SHIP TYPE, AS AT 30 JUNE 2001.



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 2001, 2001; Lloyd's List, Lloyd's Maritime Directory 2001, 2001; Shipping companies (various)—personal communications.

Tables 5.2 and 5.3 show the main trades in which the major trading vessels were engaged during 2000–2001.

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>
Tankers			
Dampier Spirit	o	Crude oil	Tramp world wide
Flinders	o	Crude oil	Tramp world wide
Nivosa	o	Crude oil	Singapore, Brunei, Vietnam, Oman, United Arab Emirates to Sydney, Geelong, Thailand
Northwest Sanderling	o	LNG	Dampier, Japan
Northwest Sandpiper	o	LNG	Dampier, Japan, South Korea
Northwest Snipe	o	LNG	Dampier, Japan
Northwest Stormpetrel	o	LNG	Dampier, Japan
Bulk carriers			
Alltrans	o (c)	Alumina	Gladstone, Gove to Bluff, Launceston Portland
Iron Kembla	o (c)	Iron ore, coal	Gladstone, Hay Pt, Newcastle to South Korea (coal); Pt Hedland to Pt Kembla (iron ore)
Iron Whyalla	o (c)	Iron ore, coal	Dampier, Pt Hedland to Pt Kembla, Taiwan, Japan, China, South Korea (iron ore); Newcastle to Taiwan, Japan (coal)
Iron Yandi	o (c)	Iron ore, coal	Pt Hedland to Pt Kembla (iron ore); Pt Kembla, Newcastle, Gladstone to Japan
General Cargo			
Australian Endeavour	o	Liner	Melbourne, Sydney/Botany Bay, Brisbane to Japan (Yokohama, Shimizu, Yokkaichi, Osaka, Nagoya, Hakata), Sth Korea (Busan), China(Shanghai)

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>
Tankers			
Australian Pride	c (o)	Petroleum products	Fremantle, WA ports, Darwin, Adelaide, Brisbane, NZ (Lyttelton, Tauranga)
Barrington	c	Petroleum products	Brisbane, Botany Bay, Geelong to Sydney, Gladstone, Mackay, Cairns, Townsville,
Broadwater	c (o)	Crude oil	Kumul terminal (PNG) to Brisbane, Botany Bay; Vietnam, Thailand, Singapore, Dampier to Fremantle, Pt Stanvac, Melbourne, Botany Bay; Hastings to Botany Bay
Helix	c	Petroleum products	Geelong to Hastings, Devonport, Brisbane, Townsville, Botany Bay, Sydney, Hobart, Pt Lincoln, Adelaide
Palmerston	c	Petroleum products	Brisbane, Botany Bay, Sydney, Melbourne, Adelaide to Townsville, Cairns, Mackay, Gladstone
Samar Spirit	c (o)	Crude oil	Hastings, Dampier, Kumul Terminal (PNG), Cossack Field to Botany Bay, Brisbane, Sydney; Hastings to Westport (NZ); Botany Bay to Launceston, Westport (NZ); Botany Bay -Geelong;
Seakap	c (o)	Pitch	Newcastle ,Pt Kembla, Botany Bay, Portland, Sydney, Gladstone, Taiwan
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	Melbourne, Geelong, Fremantle to Burnie, Launceston, Hobart, Sydney, Botany Bay, Pt Lincoln, Pt Stanvac, Dampier
Bulk Carriers			
Aburri	c	Metal concentrates	Bing Bong wharf to terminal
Accolade II	c	Limestone	Adelaide, Klein Point
Cementco	c	Cement Clinker	Gladstone, Newcastle, Adelaide - Brisbane, Melbourne, Sydney, Devonport, Geelong, Launceston, Portland, Mackay, Fremantle
Claudia	c	Blue metal	Bass Pt to Sydney
CSL Yarra	c	Bulk cargoes varied	Qld, NSW, Vic, SA ports
Endeavour River	c	Bauxite, alumina	Weipa to- Gladstone (bauxite); Gladstone to Newcastle (alumina)

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>
Bulk Carriers (continued)			
Enterprise	c	Bulk cargoes varied	Queensland, New South Wales, Victoria, Tasmania, South Australian ports
Fitzroy River	c	Bauxite, alumina	Weipa to Gladstone (bauxite); Gladstone to Newcastle (alumina)
Goliath	c	Cement	Devonport to Melbourne, Sydney, Newcastle
Iron Carpentaria	c (o)	Coal, Dolomite, Iron ore, Pt Latta, Whyalla to Pt Kembla; Coke, Ferro Manganese, Ardrossan, Pt Kembla to Whyalla; alumina	Gladstone, Newcastle to Portland, Launceston; Gladstone, Pt Kembla, to Launceston, Whyalla
Iron Chieftain	c	Coal and coke; iron ore,	Whyalla, Pt Kembla
Iron Sturt	c	Steel products, zinc concentrate, zinc products,	Adelaide, Burnie, Geelong, Fremantle, Hobart, Newcastle, Pt Kembla, Pt Pirie, Pt Stanvac, Portland
Kowulka	c	Gypsum, salt, sugar, Alumina, chemicals	Thevenard to Sydney, Brisbane, Melbourne; Bundaberg, Mackay to Melbourne, Sydney; Gladstone to Geelong;
Lindesay Clark	c	Alumina; metal products, gypsum, salt	Bunbury, Fremantle, Gladstone to Geelong, Portland, Newcastle, Hastings; Portland; Geelong to Adelaide, Whyalla; Thevenard to Indonesia
Ormiston	c	Gypsum, salt, sugar, chemicals, dolomite	Thevenard to Melbourne, Sydney, Hobart, Fremantle; Mackay, Bundaberg, Townsville to Melbourne; Hastings to Pt Kembla; Ardrossan to Port Kembla.
Pioneer	c (o)	Sugar	Mackay, Gladstone to Sydney, Philippines, Taiwan, Bunbury
Portland	c	Alumina, Metal concentrates, Metal products, dolomite	Fremantle, Bunbury to Geelong, Portland, Burnie; Burnie to Hobart; Portland, Geelong, Whyalla to Burnie, Adelaide; Thevenard to Pt Kembla
River Boyne	c	Bauxite, alumina	Weipa to Gladstone (bauxite) ; Gladstone to Newcastle(alumina)
River Embley	c	Bauxite, alumina	Weipa to Gladstone (bauxite) ; Gladstone to Newcastle(alumina)
Wallarah	c	Coal	Catherine Hill Bay to Newcastle
Warden Point	c	Cement Clinker, Fly ash and slag	Gladstone to Townsville, Melbourne, Brisbane

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>
General Cargo			
Coral Trader	c (o)	General Cargo	Townsville, Port Moresby, Darwin, Brisbane, Newcastle, Gladstone, Wyndham, East Timor, Indonesia
Frances Bay	c	General Cargo	Darwin, Elingoola, Gove, Groote Eylandt
Iron Monach	c	Steel slabs, steel products	Pt Kembla, Westernport
Searoad Mersey	c	General cargo, containers	Melbourne, Devonport, Grassy
Searoad Tamar	c	General cargo, containers	Melbourne to Devonport, Burnie(1), Fremantle(1)
Spirit of Tasmania	c	General cargo, passengers	Melbourne to Devonport, Burnie(1)
Tasmanian Achiever	c	Containers	Melbourne, Burnie
Trinity Bay	c	General Cargo	Cairns to Cape York, gulf ports
Victorian Reliance	c	Containers	Melbourne, Burnie

Notes: c Coastal.
o Overseas
(p) 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 2000–2001, there was a 0.6 per cent increase in the number of ship calls at Australian ports and a 0.3 per cent increase in number of ships using Australian ports. There was also a 1.6 per cent increase in the number of international voyages made to Australia. Brisbane was the busiest port in terms of number of different ships using the port and first port of arrival (Table 6.1). However Melbourne was busier in terms of number of ship visits.

TABLE 6.1 PORT CALLS AT AUSTRALIAN PORTS 2000–2001

Port	Total		First port of arrival from overseas	
	Visits	Ships ^a	Voyages ^b	Ships ^a
Abbot Point	87	70	76	63
Adelaide	689	339	106	96
Albany(AUS)	72	64	40	36
Ardrossan(AUS)	21	15	5	5
Australia	92	84	81	76
Barrow Island Terminal	2	2	1	1
Bing Bong	17	16	7	7
Botany Bay	1 189	295	490	138
Brisbane	2 076	732	1 060	451
Broome	63	29	51	21
Bunbury	316	244	219	183
Bundaberg	23	21	10	9
Burnie	523	93	42	34
Cairns	229	83	80	49
Cape Cuvier	17	14	17	14
Cape Flattery	30	18	30	18
Dampier	1 000	496	819	425
Darwin	687	148	363	101
Derby	36	31	23	19
Devonport	603	35	4	4
Eden	13	5	12	4
Esperance	128	111	66	61
Fremantle	1 660	703	907	472
Geelong	540	276	211	153

TABLE 6.1 PORT CALLS AT AUSTRALIAN PORTS 2000–2001 (continued)

Port	Total		First port of arrival from overseas	
	Visits	Ships ^a	Voyages ^b	Ships ^a
Geraldton	156	138	117	107
Gladstone	813	461	456	341
Gove	128	109	122	105
Hastings(AUS)	181	63	41	22
Hay Point	764	486	670	445
Hobart	220	97	56	45
Karumba	30	23	22	19
Launceston	270	159	115	78
Lord Howe Is_	2	1	1	1
Lucinda	11	10	8	7
Mackay	139	81	37	33
Melbourne	2 864	582	439	170
Milner Bay	53	50	48	46
Mourilyan	19	18	18	17
Newcastle(AUS)	1231	587	763	425
Port Alma	71	46	18	15
Port Bonython	25	20	12	9
Port Giles	29	27	11	11
Port Hedland	685	362	621	337
Port Kembla	693	341	229	195
Port Latta	44	21	15	13
Port Lincoln	92	84	18	17
Port Pirie	48	28	9	9
Port Stanvac	114	62	38	27
Port Walcott	189	131	182	125
Portland(AUS)	227	130	76	57
Shark Bay	11	8	10	7
Sydney	1 149	395	303	135
Thevenard	72	27	12	12
Thursday Is_	42	1	12	7
Townsville	617	318	362	217
Wallaroo	58	53	32	31
Wandoo Term_	5	2	3	1
Weipa	206	86	79	72
Western Australia	3	3	2	2
Whyalla	57	30	11	10
Wyndham	54	29	35	17

TABLE 6.1 PORT CALLS AT AUSTRALIAN PORTS 2000–2001 (continued)

<i>Port</i>	<i>Total</i>		<i>First port of arrival from overseas</i>	
	<i>Visits</i>	<i>Ships^a</i>	<i>Voyages^b</i>	<i>Ships^a</i>
Yamba	7	1	7	1
Yampi Sound	1	1	1	1
Total	21 542	3 244	9 738	3 162

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

b. Voyages are 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 tonnes of cargo handled in 2000–2001 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, 2000–2001.

State	Destination	Coastal		International ^a		Total	Rank
		Discharged	Loaded	Imports	Exports		
		(tonnes)					
NSW	Catherine Hill Bay	0	884 708	0	0	884 708	42
NSW	Coffs Harbour	0	0	57	1	58	82
NSW	Eden / Twofold Bay	56 618	254	0	782 315	839 187	44
NSW	Grafton	0	0	15	5 685	5 700	70
NSW	Lord Howe Island	1 248	0	0	0	1 248	73
NSW	Newcastle	2 530 402	527 375	887 719	70 106 484	74 051 980	2
NSW	Port Kembla	7 673 676	3 850 731	1 614 178	13 762 032	26 900 617	7
NSW	Sydney	5 698 195	857 980	12 143 139	5 169 923	23 869 237	8
NSW	Yamba / Ballina	293	3 355	0	2	3 650	72
VIC	Geelong	962 087	2 143 836	5 043 051	4 856 434	13 005 408	13
VIC	Melbourne	4 337 759	2 104 261	7 149 599	9 387 757	22 979 376	9
VIC	Portland	809 267	90 554	433 453	2 833 738	4 167 012	22
VIC	Welshpool	4 743	3 220	0	0	7 963	66
VIC	Westernport	2 123 893	3 585 762	222 203	706 180	6 638 038	18
QLD	Abbot Point		56 090	0	9 198 939	9 255 029	16
QLD	Bamaga	100	0	0	0	100	79
QLD	Bowen	0	0	0	209 130	209 130	58
QLD	Brisbane	3 019 283	2 547 363	8 388 145	8 912 592	22 867 383	10
QLD	Bundaberg	112 175	21 114	39	456 432	589 760	49
QLD	Cairns	476 703	164 298	109 721	1 977 743	2 728 466	28
QLD	Cape Flattery	103	0	0	0	103	78
QLD	Fishing Grounds	206	0	0	0	206	
QLD	Fitzroy Island	69	0	0	0	69	81
QLD	Gladstone	9 715 928	2 785 824	1 252 116	38 519 224	52 273 092	5
QLD	Green Island	257	0	0	0	257	75
QLD	Gulf	2 315	0	0	0	2 315	
QLD	Hay Point	0	0	0	68 594 923	68 594 923	4
QLD	Horn Island	7 664	19			7 683	67
QLD	Innisfail	0	0	0	510 635	510 635	52
QLD	Karumba	8 270	102 784	0	738 930	849 984	43
QLD	Lucinda	0	5 180	0	245 152	250 332	56
QLD	Mackay	440 089	484 352	190 119	2 502 603	3 617 163	24
QLD	Mourilyan	0	6 027	0	0	6 027	69
QLD	Palm Island	80	0	0	0	80	80
QLD	Pormpuraaw	250	0	0	0	250	76
QLD	Rockhampton	168	53 451	0	92 720	146 339	60
QLD	Thursday Island	4 124	0	363	25	4 512	71

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

State	Destination	Coastal		International ^a		Total	Rank
		Discharged	Loaded	Imports	Exports		
		(tonnes)					
QLD	Torres Strait	7 034	0	0	0	7 034	68
QLD	Townsville	1 133 624	426 358	3 599 180	4 382 040	9 541 203	15
QLD	Weipa	221 270	9 258 110	83 433	3 849 660	13 412 473	12
QLD	Yorke Island	990	0	0	0	990	74
SA	Adelaide	2 305 770	796 857	903 283	3 494 366	7 500 276	17
SA	Ardrossan	0	461 648	0	209 949	671 597	47
SA	Klein	0	1 606 273	0	0	1 606 273	34
SA	Port Bonython	0	399 784	0	692 263	1 092 047	39
SA	Port Giles / Edithburg	0	0	0	526 856	526 856	51
SA	Port Lincoln	111 982	1 793	59 253	1 455 723	1 628 752	33
SA	Port Pirie	315 923	188 528	9 775	678 240	1 192 466	38
SA	Port Stanvac	59 944	866 138	2 542 342	215 127	3 683 551	23
SA	Thevenard	4 916	1 055 574	0	439 214	1 499 704	35
SA	Wallaroo	22 449	0	49 743	817 139	889 331	41
SA	Whyalla	927 011	1 161 300	123 106	264 175	2 475 592	29
WA	Albany	75 031	0	153 381	1 427 587	1 655 999	32
WA	Barrow Island	0	239 911	0	79 135	319 046	54
WA	Broome	100 636	85 246	23 906	604 386	814 174	45
WA	Bunbury	54 397	466 874	1 106 935	8 783 940	10 412 146	14
WA	Cape Cuvier	0	0	0	2 270 966	2 270 966	30
WA	Carnarvon	0	0	11	75 956	75 967	63
WA	Cossack Pioneer	0	1 298 240	0	0	1 298 240	37
WA	Dampier	0	58 547	223 589	90 340 246	90 622 382	1
WA	Derby	0	0	0	298 627	298 627	55
WA	Esperance	473 583	0	130 159	3 815 463	4 419 205	21
WA	Fremantle	3 504 087	2 280 888	5 427 263	10 130 945	21 343 183	11
WA	Geraldton	145 503	0	130 086	2 569 957	2 845 546	27
WA	Griffin Venture	0	482 417	0	0	482 417	53
WA	Jabiru	0	124 376	0	0	124 376	61
WA	Modec Venture	0	79 779	0	0	79 779	62
WA	Port Hedland	176 088	4 070 980	132 376	68 438 107	72 817 551	3
WA	Port Walcott	8 335	0	559	28 665 182	28 674 076	6
WA	Thevenard Island	0	153 459	0	0	153 459	59
WA	Useless Loop	0	0	0	744 358	744 358	46
WA	Varanus Island	0	221 728	0	0	221 728	57
WA	WA Ports – not stated	0	1 016 231	0	0	1 016 231	
WA	Wyndham	48 546	10 617	37 439	6 303 917	6 400 519	19

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

State	Destination	Coastal		International ^a		Total	Rank
		Discharged	Loaded	Imports	Exports		
(tonnes)							
WA	Yampi Sound	0	0	0	571 500	571 500	50
TAS	Burnie	713 213	1 223 110	156 700	1 455 314	3 548 337	25
TAS	Devonport	1 089 627	1 702 886	73 492	5 605	2 871 610	26
TAS	Flinders Island	35 546	13 164	0	0	48 710	64
TAS	Hobart	323 213	3 830	174 947	567 074	1 069 064	40
TAS	King Island	18 281	13 748	0	0	32 029	65
TAS	Launceston	1 021 403	175 022	317 465	3 291 144	4 805 034	20
TAS	Port Latta	0	1 023 826	0	1 075 751	2 099 577	31
TAS	Spring Bay	0		0	642 050	642 050	48
TAS	Stanley	0	149	0	0	149	77
NT	Conf NT Ports	0	0	1 067 107	4 583 068	5 650 175	
NT	Darwin	555 820	82 010	448 441	287 301	1 373 572	36
NT	Other ports NT ^b	34 807	674 708	0	361 471	1 070 986	
	Conf Aust Ports	0	0	0	1 730 559	1 730 559	
	Total	51 474 995	52 002 648	54 407 887	495 713 957	653 599 487	

a. ABS records offshore exports such as crude oil through the nearest mainland port, although the actual cargo does not pass through the actual port. For example most of the 6.3 million tonnes of exports through Wyndham are actually exported from offshore crude oil terminals.

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

Sources: BTRE 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*, 13th edition, 1993, published by the Australian Chamber of Shipping.

The vessel movement details for the Australian trading fleet have been obtained from Lloyd's 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

ABS Australian Bureau of Statistics.

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 Regional Services and the Australian Bureau of Statistics. It has been designed to facilitate standardised classification of goods carried by these modes to, from and within

Australia. The ATFCC is aligned with the Standard International Trade Classification (SITC) at divisional (2-digit)¹ level of classification.

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 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:

¹ The ATFCC is a four-tiered classification. At the most detailed level there are about 300 commodity categories each identified by a four-digit item code. At the next level there are about 160 categories each identified by a three-digit group code. The commodity groups are assembled into 67 commodity divisions at the two-digit level of the classification, which, in turn, are aggregated to 10 sections at the broadest level of the ATFCC. Sections of the ATFCC are identified by a one-digit code.

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

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- 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, variations in the loaded and discharged cargo totals will occur due to cargo being in transit at the beginning and end of the financial year.
- A port authority's record of cargo loaded and discharged is based on information provided by the ship's agents. This information could be incorrect because the agent may provide only summary statistics for different types of cargo. The agent may also not know the true origin or destination of particular consignments, and may therefore record the last or next port of call respectively. This particularly applies to liquid and dry bulk commodities, where the cargo originates from, or is destined for, several ports.
- The commodity recorded by the agent may not be classified in the same way at the ports of loading and discharge. For example, gypsum loaded in South Australia is classified as 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.

REFERENCES

BTRE, 2002, *Australian Sea Freight, 1999–2000*, BTRE information paper 47, BTRE, Canberra.

BTRE, 2003, *Waterline*, BTRE series published quarterly, BTRE, Canberra.

