

Coastal Shipping

- 7.1 Moving more freight by sea may be an option to alleviate some of the growing pressure on land transport networks.¹ This potential to assist Australia's capacity to meet the challenge of the growing freight task warranted consideration by the Committee.
- 7.2 Australia is necessarily reliant on international shipping for its import and export needs. However, the coastal shipping option for transporting freight between Australian cities is overshadowed by road and rail. The Maritime Union of Australia has noted the lack of focus on shipping in the national transport policy debate.²
- 7.3 In response to the release of the NTC's *Twice the Task* report, the Australian Shipowners' Association Canberra Director commented:
- ...it is remarkable that such a comprehensive review of environmental, safety, infrastructure and cost implications for freight transport has overlooked sea transport altogether.³
- 7.4 Road and rail are the dominant modes for the movement of freight within Australia. Road, in particular, is anticipated to make substantial gains in its modal share as the freight task grows.⁴

1 Timber 2020, Transcript, 8 March 2006, Albany, p.25 and Shipping Australia Limited, Submission 49, p.2.

2 Maritime Union of Australia, Transcript, 1 February 2006, Wollongong, p.56. See also Amstead Marine Limited, Submission 34, p.2.

3 Australian Shipowners Association, <http://www.asa.com.au/news.asp#topic88>, accessed 11 September 2006.

4 National Transport Commission, "*Twice the Task*" A Review of Australia's freight transport tasks, Sinclair Knight Merz Pty Ltd and Meyrick and Associates, February 2006, p.84.

However coastal shipping still has an important part to play in the domestic freight task.

- 7.5 The European experience suggests that coastal shipping has significant potential to curb anticipated increases in heavy vehicle road traffic, rebalance modal shares, bypass land bottlenecks and provide a sustainable transport option.⁵

Sea freight⁶

- 7.6 When measured in tonnes, only a small proportion of freight between Australian cities is transported by sea.⁷ However, the tonne kilometres⁸ measurement better reflects coastal shipping's share of the freight task.⁹
- 7.7 The coastal shipping industry, like road and rail, is moving increasing amounts of freight. However, it now ranks third in terms of market share of the domestic freight task, as distributors have increasingly opted for the greater timeliness and reliability of road – and to a lesser extent – rail services.¹⁰ Sea transport's share of non-urban domestic freight has dropped significantly, from 44 per cent in 1984–85 to 28 per cent in 2002–03.¹¹ This trend is expected to continue, with a further decrease to 23 per cent forecast by 2020.¹²
- 7.8 The Committee is aware that forecast movements may be curtailed by the current and anticipated constraints on Australia's ports. However, given the crucial nature of export and import markets for the Australian economy, the Committee feels that port constraints are an issue that government and industry cannot afford to ignore.¹³

5 Adsteam Marine Limited, Submission 34, p.4.

6 The term for goods transported by sea is cargo, however for consistency this section will refer to these goods as freight.

7 For example, only 2 per cent of the domestic freight task in 2001-02. Department of Transport and Regional Services, Submission 103, p.3.

8 The tonne kilometres (tk) measurement is the product of the number of tonnes moved between two ports and the sea route distance between these ports, for example 800 tonnes of freight moved a distance of 1000 kilometres is 800,000 tonne kilometres.

9 Bureau of Transport and Regional Economics, *Australian Transport Statistics*, August 2006, p.9, *Freight Measurement and Modelling in Australia*, Report 112, March 2006, pp.29-30 and *Australian Sea Freight: 2003–2004*, Information Paper 56, March 2006, p.20.

10 Mode share calculations are based on billion tonne kilometres (btk).

11 Australian Shipowners Association, Submission 13, p.1.

12 National Transport Commission, *"Twice the Task" A Review of Australia's freight transport tasks*, Sinclair Knight Merz Pty Ltd and Meyrick and Associates, February 2006, p.84.

13 See Chapter 3 for a discussion of The Ports.

- 7.9 Overall, the Committee considers it important to highlight that despite this anticipated decrease, and any potential impacts if port constraints are not addressed, coastal shipping will still be carrying around a quarter of domestic freight¹⁴ in 2020. Consequently, the role of coastal shipping should not be overlooked when examining existing transport network operations and prospects for future freight efficiencies.
- 7.10 The primary task of the domestic shipping industry is transporting bulk cargo, in particular bauxite,¹⁵ alumina, crude oil, petroleum products, steel products and sugar.¹⁶ Much of the shipping task is in-house, with commodity suppliers owning and operating the service that transports their product.¹⁷
- 7.11 The *Twice the Task* report made the following forecasts for the growth in sea freight¹⁸:

Table 7-1 Predicted growth in domestic sea freight

Segment	% change per annum	Billion tonne km (btk) change between 2000–2020
<i>Intercapital movements (short-haul)</i>		
Melbourne – Sydney	-7.73%	-0.04
Sydney – Brisbane	-1.43%	-0.01
Melbourne – Adelaide	3.53%	0.01
Sydney – Adelaide	2.05%	0.01
<i>Intercapital movements (long-haul)</i>		
Eastern states – Perth	5.46%	3.54
Melbourne – Brisbane	-10.87%	-0.09

Source: "Twice the Task" A Review of Australia's freight transport tasks, Sinclair Knight Merz Pty Ltd and Meyrick and Associates, February 2006, pp.80-81.

- 14 Measured in tonne kilometres.
- 15 The intrastate shipment of bauxite from Weipa to Gladstone constitutes the single largest component of coastal trade.
- 16 Bureau of Transport and Regional Economics, *Australian Sea Freight: 2003–2004*, Information Paper 56, March 2006, pp.22 and 25.
- 17 Webb, Richard, *Coastal shipping: an overview*, Research Paper No. 12, 2003–04, Information and Research Services, Parliamentary Library of Australia, p.2 and Amstead Marine Limited, Submission 34, pp.2-3.
- 18 Taken from statistics provided in National Transport Commission, "Twice the Task" A Review of Australia's freight transport tasks, Sinclair Knight Merz Pty Ltd and Meyrick and Associates, February 2006, pp.80-81.

- 7.12 Overall, projections for the coastal shipping freight task indicated growth of approximately 1.5 per cent per annum between 1999 and 2025.¹⁹

East-West corridors

- 7.13 Coastal shipping particularly has a role to play in transporting freight between the Eastern States and Western Australia. Sea transport has been increasing its share of these freight movements since 1997.²⁰
- 7.14 In particular, a dramatic reversal in mode share is evident in freight moved by sea from Western Australia to Melbourne. Victorian Government findings indicated a mode share of 71 per cent in 2000, of total tonnage (not tonne kilometres) moved along this route.²¹ The Victorian Freight and Logistics Council observed that:
- At various peak times during the year it is becoming extremely difficult to get rail slots from Adelaide and from Perth across to the eastern states, so coastal shipping presents quite a good option there.²²
- 7.15 In 2004, coastal shipping moved 39 per cent of total tonnage of regional freight between Western Australia and South Australia, and roughly half of the freight task between Perth and Brisbane. Ernst and Young suggested that:
- The impending introduction of new coastal shipping services between Fremantle, Melbourne, Sydney and Brisbane indicates the viability and competitiveness of sea for distances of around 3,000 kilometres and above.²³
- 7.16 Forecasts for domestic freight movements between the Eastern States and Perth represent an increase of more than double its 2000 rate of 1.87 btk.²⁴ Table 7-1 indicated an annual rise of over 5 per cent in intercapital freight movements along these routes between 2000 and 2020.

19 Bureau of Transport and Regional Economics, *Demand Projections for AusLink Non-urban Corridors: Methodology and Projections*, Working Paper 66, February 2006, p.29.

20 National Transport Commission, *Impediments to Improving Efficiency in the Area of Intermodal Transport*, Discussion Paper, August 2004, p.70.

21 Victorian Department of Infrastructure, *The Freight Task in Victoria*, November 2002, p.16.

22 Victorian Freight and Logistics Council, Transcript, 25 July 2005, Melbourne, p.26.

23 Ernst & Young, *North-South Rail Corridor Study – Detailed Study Report*, Commissioned by the Department of Transport and Regional Services, June 2006, Chapter 4, p.64.

24 National Transport Commission, *“Twice the Task” A Review of Australia’s freight transport tasks*, Sinclair Knight Merz Pty Ltd and Meyrick and Associates, February 2006, p.91.

7.17 These predictions support industry arguments that, although carrying only a small portion of total market volume, coastal shipping is a good option for long haul bulk freight movements.²⁵ The National Transport Commission acknowledged that there are opportunities for modal shift to coastal shipping on the longer corridors.²⁶

North-South corridors

7.18 Sea freight movements for 2004, along the North-South corridor are also worth noting.

Table 7-2 Sea freight movements on North-South corridor

Segment	Modal share of corridor ²⁷ (%)
Intercapital movements (short-haul)	
Melbourne – Sydney	2
Sydney – Melbourne	1
Sydney – Brisbane	7
Brisbane – Sydney	17
Intercapital movements (long-haul)	
Melbourne – Brisbane	9
Coastal region freight (not intercapital)	16

Source Drawn from various sections of *Ernst & Young, North-South Rail Corridor Study – Detailed Study Report, 2006*

7.19 However, forecasts for the Melbourne to Brisbane route indicated coastal shipping will lose freight to other modes; dropping from one million tonne kilometres in 2000 to 100,000 tonne kilometres by 2020.²⁸

7.20 Despite these predictions, the *North-South Rail Corridor Study* acknowledged that the expected freight increases in the region justify some consideration of coastal shipping.²⁹ Estimates suggested that,

25 Industry Steering Committee of the Freight Transport Logistics Industry Action Agenda, *Freight Logistics in Australia: An Agenda for Action*, March 2002, p.24.

26 National Transport Commission, *“Twice the Task” A Review of Australia’s freight transport tasks*, Sinclair Knight Merz Pty Ltd and Meyrick and Associates, February 2006, p.2.

27 These share estimates are calculated based on total tonnage of freight moved.

28 National Transport Commission, *“Twice the Task” A Review of Australia’s freight transport tasks*, Sinclair Knight Merz Pty Ltd and Meyrick and Associates, February 2006, p.90.

29 Ernst & Young, *North-South Rail Corridor Study – Detailed Study Report*, Commissioned by the Department of Transport and Regional Services, June 2006, Chapter 2, p.16.

even with the introduction of an inland rail, there will still be a role for coastal shipping in the movement of freight in this region.³⁰

Industry limitations

- 7.21 The Australian coastal shipping industry does face a number of operational challenges, including a decline in the number of Australian-registered vessels, an ageing fleet, cabotage³¹, potential skills shortage, industrial issues and foreign competition.³²
- 7.22 In June 2004, Australia's coastal fleet comprised 40 vessels, four less than the previous financial year. Five of these vessels were registered overseas.³³
- 7.23 One significant challenge is the range of legislation that regulates the operation of the Australian coastal shipping industry.³⁴ For example, Part VI of the *Navigation Act 1912* regulates the transportation of freight by ship between ports in the states and Northern Territory, including the provision of licenses for ships to engage in coastal trade. Registered ships must adhere to a number of conditions, particularly on wages and other employment benefits for seafarers.
- 7.24 It is arguable that these, and related requirements, have been valuable in developing a domestic industry with quality, reliability and safety records that are high by world standards.³⁵ These standards are in sharp contrast to the condition of some foreign vessels operating on the Australian coast. Two reports by the predecessor of this Committee, *Ships of Shame* (1992) and *Ships of Shame – A Sequel* (1995), drew attention to the number of ships of substandard safety and

30 Ernst & Young, *North-South Rail Corridor Study – Detailed Study Report*, Commissioned by the Department of Transport and Regional Services, June 2006, Chapter 4, p.7.

31 Cabotage restricts the domestic transport of goods to carriers of that country.

32 Webb, Richard, *Coastal shipping: an overview*, Research Paper No. 12, 2003–04, Information and Research Services, Parliamentary Library of Australia, p.4 and Australian Shipowners Association, Submission 13, p.7.

33 Bureau of Transport and Regional Economics, *Australian Sea Freight: 2003–2004*, Information Paper 56, March 2006, p.45.

34 Legislation affecting Australian domestic shipping includes: the *Navigation Act 1912*, *Customs Act 1901*, *Migration Act 1958*, *Workplace Relations Act 1996*, *Seafarers' Rehabilitation and Compensation Act 1992*, *Occupational Health and Safety (Maritime Industry) Act 1993*, and *Shipping Registration Act 1981*.

35 Webb, Richard, *Coastal shipping: an overview*, Research Paper No. 12, 2003–04, Information and Research Services, Parliamentary Library of Australia, p.4.

- seaworthiness that were operating on coastal shipping routes under permits, and highlighted the need for improvement in this area.³⁶
- 7.25 The Independent Review of Australian Shipping (IRAS), in its *A Blueprint for Australian Shipping* report, contended that the interaction of different pieces of legislation has created a competitive disadvantage for Australian operators. Cabotage does protect the industry for Australian-registered ships, but the costs associated with meeting the various legislative requirements reduce the attractiveness of the sea freight option. Unlicensed vessels operating under the single and continuous voyage permit systems are not similarly constrained.³⁷
- 7.26 Non-licensed ships can be exempted from cabotage restrictions if they are issued a single voyage permit (SVP) or a continuous voyage permit (CVP). The SVP allows an unlicensed ship, including foreign ships, to carry specified cargo for a single voyage between designated ports. The CVP extends this permission for an ongoing specified period, usually six months. These permits enable coastal shipping tasks to be undertaken by vessels in the course of scheduled international shipping visits.
- 7.27 The Department of Transport and Regional Services issues single and continuous voyage permits in cases where no licensed ship is available, or the existing services are unable to meet the freight needs of certain ports or coastal routes.³⁸
- 7.28 In 2003-2004, 31 per cent of the total coastal freight task was transported by ships operating under single or continuous voyage permits. BTRE maintained that the use of permits is irregular, and used for the longer coastal routes rather than the shorter routes where road and rail competition is fiercer.³⁹
- 7.29 However, the *Twice the Task* report suggested promoting greater use of coastal shipping for foreign flagged ships.⁴⁰ The domestic shipping

36 These reports are available from the website of the current Committee:
<http://www.aph.gov.au/house/committee/trs/reports.htm>.

37 Australian Shipowners Association, Exhibit 4, p.2, Australian Shipowners Association, Submission 13, pp.4-5 and Transcript, 25 July 2005, Melbourne, p.47.

38 Bureau of Transport and Regional Economics, *Australian Sea Freight: 2003-2004*, Information Paper 56, March 2006, p.35.

39 Bureau of Transport and Regional Economics, *Australian Sea Freight: 2003-2004*, Information Paper 56, March 2006, pp.36-37.

40 National Transport Commission, *"Twice the Task" A Review of Australia's freight transport tasks*, Sinclair Knight Merz Pty Ltd and Meyrick and Associates, February 2006, p.28.

industry is likely to face increased foreign competition for coastal shipping routes if this initiative is pursued.

- 7.30 Ultimately, the significant growth in freight demand may require optimising the use of both Australian registered and foreign vessel freight capacities. However, the continued and necessary role for coastal shipping of freight, combined with the levels of domestic freight being moved by foreign shipping lines, strongly suggest to the Committee an opportunity to foster the national shipping industry for domestic freight movements. When examining the viability of the coastal shipping option, the Government will need to consider what, if any, protection or support the domestic shipping industry warrants.

Bass Strait

- 7.31 Generally, coastal shipping has not been a feature of Australia's freight logistics planning. However, an exception is in the movement of non-bulk freight across Bass Strait.
- 7.32 Tasmania relies more heavily on sea transport than the mainland states. However, shipping non-bulk cargo does not offer the cost-efficiencies of bulk cargo. Non-bulk items, such as fruit, vegetables and wheat require more attention and careful handling than, for example, bauxite. To alleviate this cost disadvantage, the Australian Government provides subsidies to operators shipping selected non-bulk goods between Tasmania and mainland Australia. This is administered under the Tasmanian Freight Equalisation Scheme (TFES) and the Tasmanian Wheat Freight Scheme (TWFS).
- 7.33 In its most recent assessment of the program, the Productivity Commission argued that the benefits to the Tasmanian economy are outweighed by the overall costs to Australia. In its current draft report on Tasmanian Freight Subsidy Arrangements, the Commission found that there was no sound underlying economic rationale for freight assistance, and recommended that TWFS be abolished and TFES be phased out from July 2007. It suggested that the Australian government pursue alternatives to address Tasmania's freight disadvantage.⁴¹
- 7.34 In response, the Australian Government indicated that while it will continue to review freight subsidy arrangements, it is committed to

41 Productivity Commission, *Tasmania Freight Subsidy Arrangements*, Draft Report, September 2006. Available at <http://www.pc.gov.au/inquiry/tasfreight/draftreport/index.html>.

continuing the schemes.⁴² This was reaffirmed in the recent 2007-08 budget, with the Australian Government providing \$130.1 million for Tasmanian freight and passenger vehicle subsidies during the financial year.⁴³

Environmental considerations

- 7.35 The International Maritime Organisation identified shipping as a significant contributor to the development of environmentally sustainable transport. In 2000, it released the *Study of Greenhouse Gas Emissions from Ships*. Overall, shipping was found to be only a small contributor to total world carbon dioxide emissions (1.8 per cent in 1996). The study also indicated that if available technical and operational measures were to be introduced on ships, further emission reductions would be possible.⁴⁴
- 7.36 In Australia, the transport sector generates 14 per cent of national carbon dioxide emissions. However, shipping generates only two per cent of the total transport sector emissions in Australia. Sea transport consumes 0.2 megajoules of energy per tonne kilometre, in contrast to rail's 0.4 and road's 1.4.⁴⁵
- 7.37 It is therefore logical to argue that even a small modal shift in favour of domestic shipping should reduce transport sector energy consumption and emissions.⁴⁶

42 Prime Minister John Howard, *Tasmanian Freight Equalisation Scheme*, Media Release, 7 September 2006,

http://www.pm.gov.au/media/Release/2006/media_Release2120.cfm accessed 12 September 2006 and Intermodal, *Howard rejects call to scrap Tasmanian freight subsidies* at <http://www.intermodal.com.au/article/>, accessed 12 September 2006.

43 Minister for Transport and Regional Services, Minister for Local Government, Territories and Roads and Parliamentary Secretary to the Minister for Transport and Regional Services, *Building a strong future for Regional Australia 2007-08*, Joint Statement, 8 May 2007, p.98.

44 International Maritime Organisation (IMO), *Study of Greenhouse Gas Emissions from Ships*, Final Report, Issue no. 2, 2000, Marintek, ECON Centre for Economic Analysis, Carnegie Mellon and Det Norske Veritas (DNV), pp.8-9.

45 Australian Shipowners Association, Submission 13, Attachment 1, p.1.

46 The Intermedia Group, *Australasian Freight Logistics*, October/November 2006, pp.32-33. The article draws on the findings of the IMO Study into greenhouse emissions from international shipping.

A viable option

- 7.38 Coastal shipping's potential lies in transporting less time critical freight. It represents an environmentally beneficial and cost effective alternative to rail and road modes, for bulk cargo shipped over long distances. Sea transport does not require the same infrastructure investment or maintenance:⁴⁷
- ... at the end of the day shipping is still the cheapest way to run large volumes of cargo long distances – by a mile. You do not have to construct a highway. You have to have a channel but once you get out to sea it is blue water. You do not have to maintain anything, apart from your channel.⁴⁸
- 7.39 Sea freight certainly has environmental advantages over road and rail, with lower gas emissions per tonne kilometre of freight moved. Rising fuel costs also present an opportunity for coastal shipping. Fuel constitutes around 20 to 30 per cent of total road freight costs, compared with between 7 and 10 per cent for rail and sea.⁴⁹
- 7.40 The Australian Logistics Council strongly supported the development of coastal shipping for domestic freight and emphasised the need to pursue efficiencies in both land and sea transport.⁵⁰ The Victorian Freight and Logistics Council argued that there is strong interest emerging in coastal shipping.⁵¹
- 7.41 Similarly, IRAS maintained that there is a future for the domestic shipping industry, but it would require the commitment and co-operation of industry and government.⁵²
- 7.42 A clearer government framework for the industry would help to combat perceptions that act as a barrier to investment.⁵³ The Maritime Union of Australia believed that government policy needs to support the emerging investment initiatives in coastal shipping. This could involve exploring new taxation policy options, including tonnage tax

47 Australian Shipowners Association, Submission 13, pp.6-7 and Freight Link, Transcript, 14 June 2006, Canberra, p.16.

48 Port of Brisbane Corporation, Transcript, 6 April 2006, Brisbane, p.27.

49 National Transport Commission, *"Twice the Task" A Review of Australia's freight transport tasks*, Sinclair Knight Merz Pty Ltd and Meyrick and Associates, February 2006, p.62.

50 Australian Logistics Council, Transcript, 13 September 2006, Canberra, p.15 and *Infrastructure Action Agenda 2006*, p.34.

51 Victorian Freight and Logistics Council, Transcript, 25 July 2005, Melbourne, p.25.

52 Australian Shipowners Association, Exhibit 4.

53 Australian Shipowners Association, Transcript, 25 July 2005, Melbourne, p.47.

regimes under which, for example, shipping companies pay a flat rate of tax or profits are derived based on net tonnage moved.⁵⁴

- 7.43 Overall, sea transport is not in a position to compete with road and rail.⁵⁵ However, there is considerable potential for sea freight services to complement land transport networks.

Committee Assessment

- 7.44 The Committee noted comments by the Chair of the International Commission on Shipping:

For the largest island continent in the world to be determining a land transport strategy to the exclusion of its own interstate shipping services is irresponsible.⁵⁶

- 7.45 It also noted evidence from the Australia Shipowners Association that:

... all transport modes should form a total transport package for Australia and should be the subject of a consolidated transport policy framework, not a framework that tends to concentrate on the land transport modes.⁵⁷

- 7.46 It is the Committee's view that it would be a natural extension of existing corridor strategies to include coastal routes. The Committee agreed with the *Twice the Task* report's recommendation that cost effective coastal shipping options be considered as an extension to the use of rail.⁵⁸
- 7.47 The Committee recognised that improving port facilities has already been highlighted as part of wider infrastructure requirements to

54 Maritime Union of Australia, Transcript, 1 February 2006, Wollongong, pp.58 and 63 and Supplementary Submission 171, pp.5-8.

55 However, the possibility has not been completely ruled out in the case of selected routes, for example East-West routes to Fremantle. See Ernst & Young, *North-South Rail Corridor Study - Detailed Study Report*, Commissioned by the Department of Transport and Regional Services, June 2006, Chapter 4, p.41 and Department of Transport and Regional Services, *National Intermodal Terminal Study*, Final Report, Meyrick and Associates and ARUP, February 2006, p.59.

56 Supply Chain Review, <http://www.supplychainreview.com.au/index.cfm?storyid=22198&li=displaystory>, accessed 12 September 2006.

57 Australian Shipowners Association, Transcript, 25 July 2005, Melbourne, p.42.

58 National Transport Commission, *"Twice the Task" A Review of Australia's freight transport tasks*, Sinclair Knight Merz Pty Ltd and Meyrick and Associates, February 2006, p.27.

enhance Australia's transport networks.⁵⁹ The Committee anticipates that the completion of necessary port infrastructure improvements, combined with strategies to better facilitate road, rail and international shipping connections, will also provide the foundation for an efficient domestic shipping industry.

7.48 The Committee considers that the coastal shipping industry warrants examination by the Australian Government. This consideration should include whether changes are required to ensure legislative arrangements are commercially appropriate, and consistent with measures applicable to investment and taxation of road and rail modes.⁶⁰

7.49 The Committee concluded that if Australia is to ensure it is in a position to meet the challenge of the growing national freight task, it must engage all transport sectors in logistics planning. With almost a quarter of the freight task predicted to be moved by sea in 2020, it is essential to take into account the coastal shipping industry and its capacity to share the freight task, as part of a comprehensive national transport strategy.

59 See Chapter 3.

60 Australian Shipowners Association, Submission 13, p.8.