

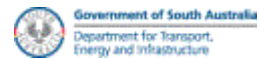
REVIEW OF SIGNIFICANT PORTS IN SOUTH AUSTRALIA

UNDER THE

COMPETITION AND INFRASTRUCTURE REFORM AGREEMENT

DEPARTMENT FOR TRANSPORT ENERGY AND INFRASTRUCTURE

2008



EXECUTIVE SUMMARY	3
INTRODUCTION.....	5
COAG AGREEMENT	5
REVIEW SCOPE	5
PUBLIC CONSULTATION	6
ESCOSA 2007 PORTS PRICING AND ACCESS REVIEW	6
THE ROLE OF ESCOSA	6
ESCOSA REVIEW FINDINGS.....	6
THE PORT OF ADELAIDE.....	8
OVERVIEW	8
INTERNATIONAL TRADE.....	10
SHIPPING SERVICES	11
INTERNATIONAL CONTAINER TRADE FORECASTS	12
MARKET STRUCTURE AND PERFORMANCE	12
BACKGROUND	12
CONTAINERISED TRADE	12
CONTAINER TERMINAL PERFORMANCE.....	13
COMPETITION AND REGULATION.....	16
BACKGROUND	16
CONSISTENCY WITH THE CIRA.....	17
CONCLUSION.....	24
BIBLIOGRAPHY	25

EXECUTIVE SUMMARY

The Council of Australian Governments (COAG) Competition and Infrastructure Reform Agreement (CIRA) commits South Australia to undertake a review of South Australia's significant ports. As agreed by COAG, Port Adelaide is South Australia's significant port for the purposes of this review.

The Port of Adelaide is South Australia's largest port, but is relatively small compared to Australia's other capital city ports. It faces strong competition from other transport modes and from other ports, particularly Melbourne. The Port of Adelaide and a number of other regional ports in South Australia are operated by Flinders Ports, a private operator. The legislative framework established for privatisation has provided a stable environment to facilitate competitive provision of port related services to the state's exporters and importers.

Regulatory arrangements covering pricing and third party access were introduced in 2001 and are contained in the *Maritime Services (Access) Act 2000*. The Act aims to ensure access to regulated services on fair commercial terms through a negotiate-arbitrate access regime. This light-handed form of access regulation is intended to strike the right balance between promoting competition and facilitating timely investment in port facilities.

Monitoring of ports pricing and access is undertaken by South Australia's independent regulator, the Essential Services Commission of South Australia (ESCOSA).

A review of ports pricing and access was conducted by ESCOSA in 2007. The review of pricing concluded that there is potential for market power to be exercised by port operators but that there was no evidence to suggest that port operators were exercising such power. ESCOSA therefore recommended that the current light-handed form of price regulation (price monitoring) be maintained.

In terms of access, ESCOSA found that port users were able to negotiate their own contract terms and conditions under the negotiate/arbitrate access model and that users were actively negotiating prices with Flinders Ports below the listed prices.

ESCOSA concluded that the ports access regime is generally consistent with the relevant CIRA principles, although it identified some areas where greater consistency could be brought about and where some general improvements to the access regime could be made.

In accordance with the recommendations of ESCOSA, the price monitoring arrangements and access regime have been extended for a further three year period.

This review considered other aspects of regulation and competition at the Port of Adelaide relevant to clause 4 of the CIRA, which were not covered by the ESCOSA review.

The cross-ownership provisions of the *SA Ports (Disposal of Maritime Assets) Act 2000* were examined. These provisions are aimed at limiting the concentration of ownership, and therefore market share, amongst container stevedores operating at the Port of Adelaide and competing inter-state ports. This measure was judged to promote inter-port competition in the national market for container stevedoring services.

The government's policy to not permit a second container stevedore to operate at Outer Harbor until annual throughput at the existing container terminal exceeds 225,000 full TEUs per annum is aimed at ensuring market stability and the ongoing provision of services. It is a potential restriction on entry to container stevedoring. However, the volume of container activity required to achieve minimum efficient scale and the substantial capital outlay required to establish a new terminal constitute significant barriers to entry. Annual container throughput at the port would need to be considerably higher than 225,000 TEUs before a second operator would be viable. In practice, the government's volume constraint on the operation of a second container stevedore is regarded as not discouraging entry to this market.

The government's policy directions for physical development of the state, consistent with the *Development Act 1993*, are contained in the *Planning Strategy for South Australia*. Zoning and land banking are used to secure land around ports for port related developments. An examination of development assessment processes applying to the Port of Adelaide found that there are no strategic land use planning issues restricting the entry of new suppliers of port and related services.

This review has found no evidence to suggest that regulatory and contractual arrangements in place for the Port of Adelaide are not warranted. The regulatory and policy frameworks considered by the review appear to strike an appropriate balance between discouraging the use of market power and encouraging efficient investment in and use of port infrastructure.

The regulatory and contractual arrangements examined by the review are considered to be consistent with the principles of clause 4 of the CIRA.

It is recommended that the South Australian Government:

- consider amendments to the *Maritime Services (Access) Act 2000* in the light of the findings of this review and the 2007 ESCOSA review of ports pricing and access;
- continue to monitor infrastructure planning and development at Outer Harbor and to facilitate consultation between providers of port infrastructure and services and users of those services to promote timely and efficient investment in port facilities.

INTRODUCTION

COAG AGREEMENT

At the February 2006 Council of Australian Governments (COAG) meeting all jurisdictions signed the Competition and Infrastructure Reform Agreement (CIRA). This Agreement aims to establish a simpler and consistent national approach to the economic regulation of significant infrastructure, thereby promoting more efficient investment in and use of this infrastructure.

Clause 4 of the CIRA commits all jurisdictions to allow for competition in the provision of port and related infrastructure facility services and requires a review of regulation at significant ports.

As a part of their 3-yearly review of ports pricing and access, the Essential Services Commission of South Australia (ESCOSA) was asked for advice on whether the ports access regime complies with certain requirements under clause 2 of the CIRA. This review was completed in September 2007.

As there is a substantial overlap between clause 2 and clause 4, many aspects of the CIRA clause 4 were reviewed as part of the ESCOSA review.

This review of port competition and regulation, according to clause 4 of the CIRA, investigates those matters that were not examined in ESCOSA's "2007 Ports Pricing and Access Review".

The review was conducted by the Department for Transport, Energy and Infrastructure (DTEI).

REVIEW SCOPE

Clause 4 of the CIRA includes specific principles relating to port competition and regulation. Clause 4.3 specifies that:

Each party will review the regulation of ports and port authority handling and storage facility operations at significant ports within its jurisdiction to ensure they are consistent with principles set out in clauses 4.1 and 4.2.

Clause 4.2 sets out the need for a transparent public review to investigate the costs and benefits of any restrictions on competition:

The Parties agree to allow for competition in the provision of port and related infrastructure facility services, unless a transparent public review by the relevant Party indicates that the benefits of restricting competition outweigh the costs to the community...

For the purposes of the CIRA, significant ports are defined to include:

- major capital city ports and port facilities at these ports;
- major bulk commodity export ports and port facilities, except those considered part of integrated production processes;
- major regional ports catering to agricultural and other exports.

Port Adelaide is South Australia's largest and most significant port which accounts for about 80%¹ of port activity (by value). Adelaide has South Australia's only dedicated container handling facility and is the only South Australian port with regular container shipping services. The Port of Adelaide therefore meets the CIRA definition of significant, as agreed by COAG April 2007.

As part of its 2007 review, ESCOSA reviewed pricing and third party access at Port Adelaide and a number of regional ports. Rather than duplicating that work, this review

¹ ABS International Trade Statistics/Maritime Database 2007

focuses on those matters in clause 4 that were not examined in ESCOSA's 2007 ports pricing and access review.

PUBLIC CONSULTATION

DTEI invited key stakeholders to make submissions to this review by 16 November 2007.

Six submissions were received: Shipping Australia Ltd (SA Committee), the South Australian Freight Council, the Maritime Union of Australia, DP World, Primary Industries and Resources SA (PIRSA) and the Department of Trade and Economic Development (DTED).

ESCOSA 2007 PORTS PRICING AND ACCESS REVIEW

THE ROLE OF ESCOSA

ESCOSA was established under the *Essential Services Commission Act 2002* to perform the following functions:

- regulate prices and perform licensing and other functions under relevant industry regulation Acts;
- monitor and enforce compliance with and promote improvement in standards and conditions of service and supply under relevant industry regulation Acts;
- make, monitor the operation of, and review from time to time, codes and rules relating to the conduct or operations of a regulated industry or regulated entities;
- provide and require consumer consultation processes in regulated industries and assist consumers and others with information and other services;
- advise the Minister on matters relating to the economic regulation of regulated industries, including reliability issues and services standards;
- advise the Minister on any matter referred by the Minister;
- administer the Act;
- perform functions assigned to the Commission under this or any other Act;
- in appropriate cases, to prosecute offences against this Act or a relevant industry regulation Act.

In performing these functions, ESCOSA has as its primary objective the protection of the long term interests of South Australian consumers with respect to the price, quality and reliability of essential services. ESCOSA must at the same time have regard to the need to:

- promote competitive and fair market conduct;
- prevent misuse of monopoly or market power;
- facilitate entry into relevant markets;
- promote economic efficiency;
- ensure consumers benefit from competition and efficiency;
- facilitate maintenance of the financial viability of regulated industries and the incentive for long term investment;
- promote consistency in regulation with other jurisdictions.

ESCOSA REVIEW FINDINGS

In 2007, as required under the *Maritime Services (Access) Act 2000*, ESCOSA conducted the 2007 ports pricing and access review. As part of the review it also inquired into whether the ports access regime is consistent with certain requirements in the CIRA.

ESCOSA's review commenced in February 2007 with the release of an issues paper for public consultation. Following consideration of submissions received in response to its issues paper and draft report, ESCOSA released its final report in September.

The review concluded that:

- price regulation of Essential Maritime Services should continue beyond 30 October 2007 for at least another three year period. ESCOSA recommended the continuation of a price monitoring form of regulation;
- the ports access regime should continue beyond 30 October 2007 for at least another three year period;
- coverage of the access regime should be extended to the new bulk loader at Port Adelaide (Outer Harbor) and be removed from the port at Ardrossan; and
- the ports access regime is generally consistent with the relevant CIRA principles.

ESCOSA identified the need for changes to the access legislation related to the objects of the Act, the pricing principles to be used by an arbitrator and the introduction of timeframes for decision making by the regulator, to meet the requirements of clause 2 of the CIRA.

ESCOSA also proposed the following improvements to the access regime:

- Greater consistency should apply to the coverage of the access regime to ports capable of handling bulk cargoes, and to the associated bulk facilities within these ports;
- There are various procedural improvements that could be introduced into the negotiate-arbitrate framework; and
- The length of the regulatory period for the price and access regimes could be extended from three years to five years.

In regards to port pricing, the final report found that there exists the potential for market power to be exercised by port operators but that there is no evidence to suggest that port operators are exercising such market power. ESCOSA concluded that there was no justification for introducing more heavy-handed price regulation than currently existed. It argued that the major benefit from price monitoring was that it provided transparency to access seekers through publication of the price list.

As recommended by ESCOSA, the access regime and price monitoring arrangements have been extended for a further 3 years.

THE PORT OF ADELAIDE

OVERVIEW

Port Adelaide is South Australia's largest port. A number of recent infrastructure developments at the port will enhance its export competitiveness and capacity to handle expected growth.

A \$45m deepening of the main shipping channel at Outer Harbor has been completed. The port can now accommodate larger container ships and fully laden panamax sized vessels. An extension to the container berth is progressing and will extend its length by 125 metres at a cost of about \$20m.

A new deep sea grain berth and grain terminal will significantly improve the ability of the grain industry to export product in larger ships. The port is also gearing up to meet the resources boom and progressing plans to establish a world class bulk port precinct.

The Port of Adelaide



Source: Flinders Ports

Information on the port, throughput, vessel calls, regular shipping services, key commodities and key infrastructure at and leading to the port is presented below.

Port Adelaide at a Glance

Operator:	Flinders Ports www.flindersports.com.au
Key Products:	Grain, Limestone, Fuel, Soda ash, Vehicles, Containerised, Wine, Fertiliser, Livestock, Break-bulk, General
Landside Connections:	Connected to the National Highway with b-triple access. Rail access at the port links directly with the standard gauge Interstate Mainline rail network. Road and rail linkages are being further improved with construction of the Port River Expressway (stage 2) bridges and LeFevre Peninsula rail upgrades.
Total Throughput:	11.4 million tonnes (2005/06) ²
Total Vessel Calls:	834 (2005/06) ²

Outer Harbor

Channel Depth:	14.2m (Lowest Astronomical Tide) ³
Handling Equipment:	4 cranes, ro-ro vehicle, livestock, general ³
Container handling capacity:	300,000 lifts/year (approximate, including empty containers) ⁴

Inner Harbour

Channel Depth:	9.32m (varies with berths) ³
Handling Equipment:	Roll-on roll-off and bulk cargoes including exports of meat, grains, flour, malt, fruit, wool, cement clinker, iron and steel scrap, tallow, soda ash, non-ferrous metals and a wide variety of manufactured products. Facilities are also provided for the import trade of timber, sulphur, refined petroleum, paper and paper products, fertiliser, iron and steel, and motor vehicles and components ³ .
Bulk Cargo loading rates:	No 27 Berth, Bulk Grain loader Loading Rate ⁵ : 1000 tonnes per hour (wheat) No 29 Berth, Common User Ship loader Loading Rate ³ : 1000 tonnes per hour (depending on product)

Source: Flinders Ports: Guide to the Ports

² BTRE Information Paper 60. 2005/06 Australian sea freight.

³ Flinders Ports. Port User Guide.

⁴ DP World Adelaide. Container handling capacity is an indication of the maximum number of containers currently able to be handled at the terminal in a year. Factors limiting capacity include container storage space and crane lift capacity.

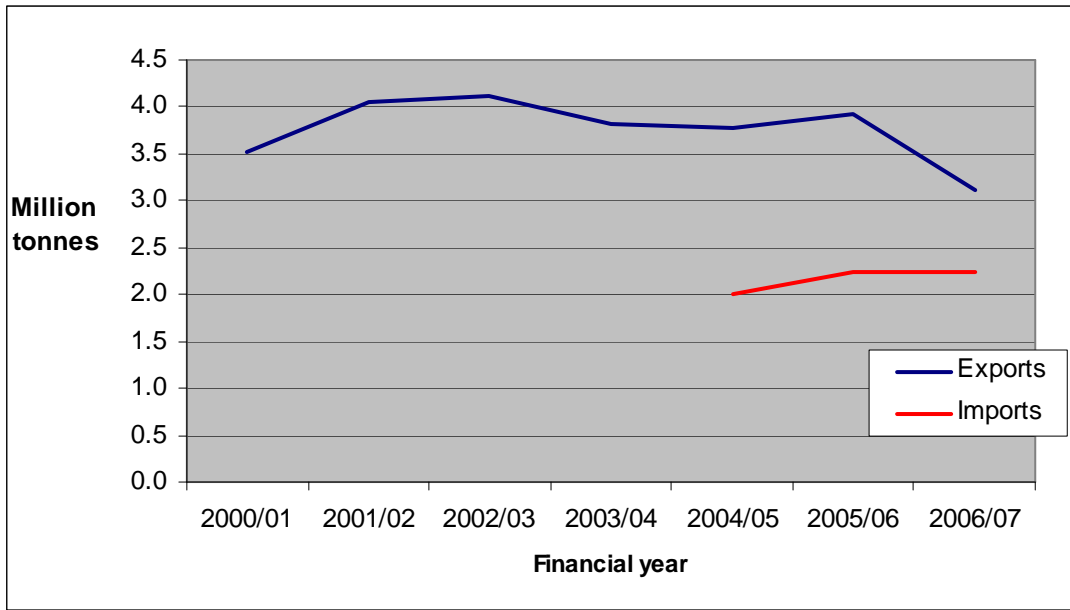
⁵ ABB Grain. http://www.abb.com.au/Portals/0/pdf/abb_grain_map.pdf

INTERNATIONAL TRADE

Recent trends in exports and imports through Port Adelaide are shown in the graphs below. Total annual export volumes have fluctuated over the last six years. Seasonal factors are an important determinant of the total volume of South Australian and Port Adelaide exports, particularly in relation to wheat and other grain crops. Overall export value has increased, reflecting higher prices overall for Port Adelaide exports.

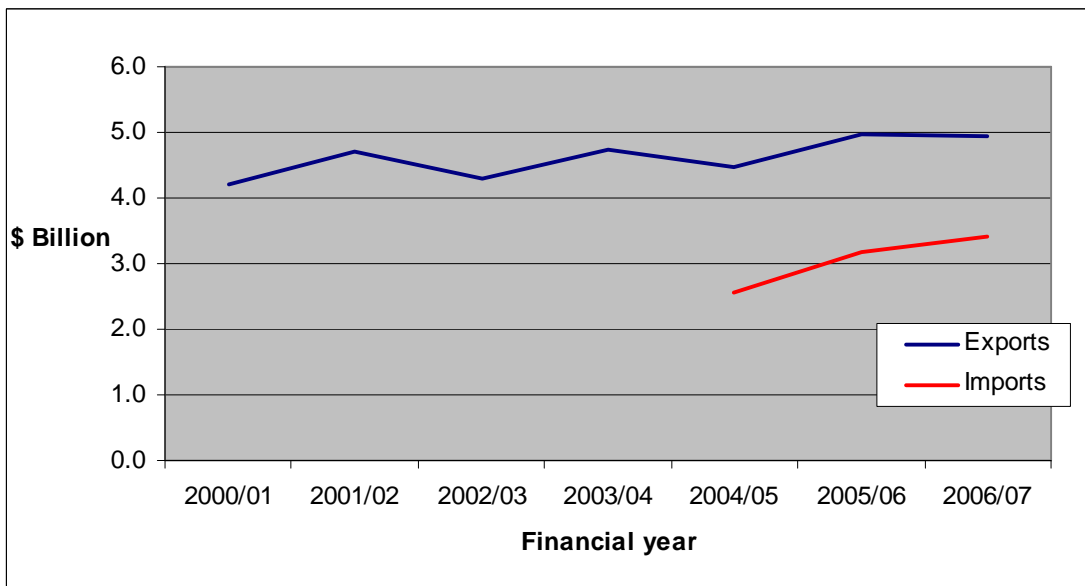
Total annual import volumes have increased slightly in recent years. Over 75% of the import volume of freight into Port Adelaide is petroleum. Petroleum along with vehicles and machinery account for the majority of imports by value.

Total Volume of Trade through the Port of Adelaide



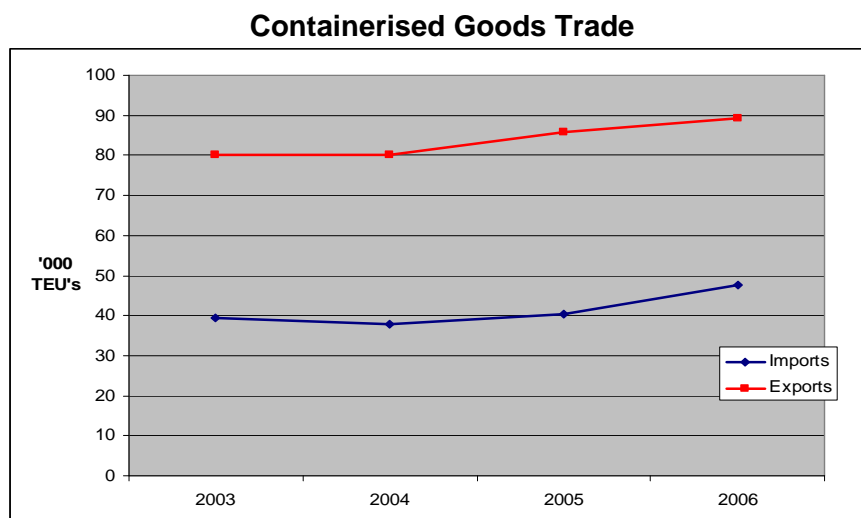
Source: ABS International Trade Statistics/MariTrade Database 2007

Total Value of Trade through the Port of Adelaide



Source: ABS International Trade Statistics / MariTrade Database 2007

Containerised trade through Port Adelaide continues to grow with increases seen in exports and imports in recent years.



Source: Flinders Ports

SHIPPING SERVICES

Below is a list of the regular liner shipping services calling at Adelaide and the ports to which these services call. In addition to the direct services many of South Australia's imports and exports pass through hub ports, including Singapore and Port Klang, which link to services across the world.

Adelaide Direct International Container Shipping Services

Region	Service	Frequency	Shipping Lines
Europe	Round the World Service - Suez Direct	Weekly	Hapag Lloyd, CMA-CGM, Marfret
Europe/South Asia / South East Asia	Nemo Service	Fortnightly	CMA CGM, ANL Containerline, Deutsche Afrika-Linien
Europe/South East Asia	Mediterranean Shipping Company (MSC Europe)	Weekly	Mediterranean Shipping Company (MSC Europe)
South East Asia	AAA (Australia Asia Alliance)	Weekly	OOCL, MOL, MISC, PIL (Agents- Pacific Asia Express)
	Australia Asia Express (AAX)	Weekly	ANL Container Line, NYK Line, APL, Djakarta Lloyd, China Shipping, Hyundai Merchant Marine
	Maersk Australia (AU3)	Weekly	Maersk, Hamburg SUD
North and South East Asia	Austral Asia Line	Every 18 days	AAL
USA, NZ	Trident	Fortnightly	Hamburg Sud
	VSA	Fortnightly	Hamburg Süd, HapagLloyd, Maersk Line

Source: Flinders Ports

INTERNATIONAL CONTAINER TRADE FORECASTS

International trade forecasts were examined as part of the Meyrick and Associates “International and Domestic Shipping and Ports Study” undertaken in 2007 on behalf of government transport agencies.

The study concluded that Australian international container movements will continue to grow at the same pace as world container volumes, resulting in Australian international container growth rate forecasts of 7.0% p.a. until 2010 and 5.6% p.a. from 2010 to 2020.

Applying these rates of growth to Adelaide’s 2005 container volumes the consultants forecast the following container throughputs over the next 15 years.

International Container Volumes (TEU), 2005 - 2020 (Constant Market Share)

	Adelaide
2005	172,711
2010	241,748
2015	320,520
2020	420,697

Source: Meyrick and Associates

If Adelaide was to gain a direct shipping call to both North Asia and North America and there was a shift in market share towards Adelaide, then the Meyrick study predicted the volume of containers handled at Adelaide would be expected to rise further, potentially up nearly 700,000 TEU in 2019/20.

MARKET STRUCTURE AND PERFORMANCE

BACKGROUND

Competition discourages the abuse of market power and monopolistic rent seeking by port operators & service providers and drives innovation. The World Bank (2007)⁶ suggests that port competition can be defined as:

- *inter-port competition*, where ports or port service providers compete within the same cargo hinterland;
- *intra-port competition*, where service providers compete at the same port for the same market using different terminals, which they typically control;
- *intra-terminal competition*, where suppliers provide competing services from the same terminal.

CONTAINERISED TRADE

DP World operates the Adelaide container terminal at Outer Harbor under a lease arrangement with Flinders Ports, the port operator. The Adelaide container terminal is the only dedicated import/export container terminal in South Australia.

DP World and Flinders Ports compete with other ports within Australia and globally for direct ship calls. This was evident in 2003, when Adelaide was dropped from the Vessel Sharing Agreement (VSA) service. Despite good loadings ex Adelaide, increasing ship charter costs at the time forced the shipping line to reduce the number of vessels operating on the service, and hence 3 ports from the service’s international port network were dropped.

Strong inter-port competition also exists, particularly between the ports of Adelaide and Melbourne. Analysis of Australian Bureau of Statistics (ABS) maritrade statistics suggests that 25% of South Australian export products by value exit Australia through Melbourne. This figure takes into account bulk and containerised exports and thus, given the

⁶ The World Bank, 2007, Port Reform Toolkit, Second Edition. Module 6, Port Regulation Module, pg. 270.

propensity for bulk products to use the closest suitable port, understates the proportion of South Australian containerised exports using the Port of Melbourne. Some industry estimates suggest that up to 40% of South Australian origin containerised trade exits through Melbourne, demonstrating strong inter-port competition from Melbourne.

Strong national and global competition in the container trade promotes efficient operation of the Port Adelaide container terminal, both to attract and retain regular shipping services and to attract import and export freight.

Since the privatisation of the port in November 2001 throughput at the container facility has increased steadily. The port has direct shipping services to most major markets, including three new container shipping services which have begun calling directly at Adelaide within the past 12 months. Where Adelaide lacks direct shipping services, efficient transshipment services are available via an overseas hub port (such as Singapore), or an interstate port (such as Melbourne). This suggests that current market settings are achieving positive commercial outcomes.

CONTAINER TERMINAL PERFORMANCE

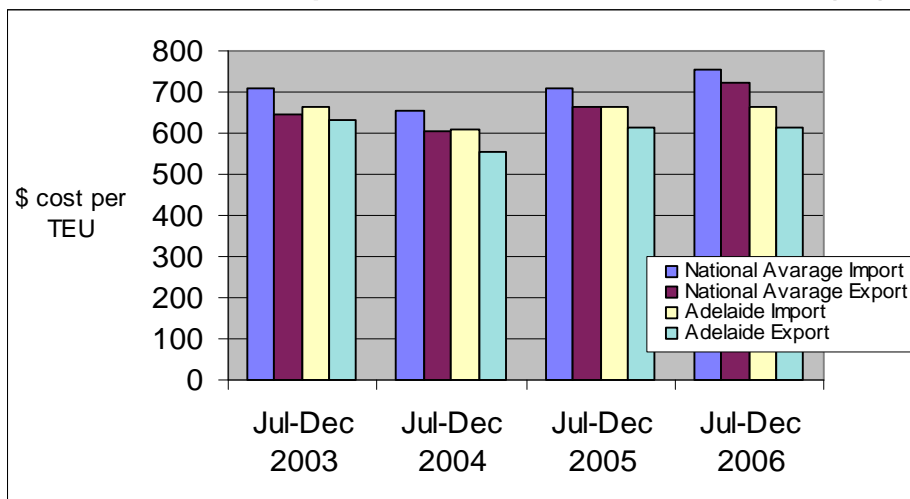
The Bureau of Transport and Regional Affairs (BTRE) Waterline indicators, which compare Australia's top 5 container ports, highlight Port Adelaide's efficiency, excellent industrial relations record and un-congested nature.

The indicators presented below from Waterline and the Meyrick and Associates "Benchmarking of Port Pricing in Australia" report cover key areas of port performance including port operations, stevedoring and waterside operations.

Port Interface Cost

The port interface cost index is a measure of shore-based shipping costs or charges for containers moved through mainland capital city ports. These are called 'shore-based' because they are that part of the charges paid by importers and exporters of containers which are directly related to the activity which occurs in the port and on the wharf. Adelaide has the second lowest port interface cost amongst Australia's major container ports, according to BTRE data shown below.

Port Interface Costs for ships in the 35,000-40,000 Gross Tonne (GT) Range*



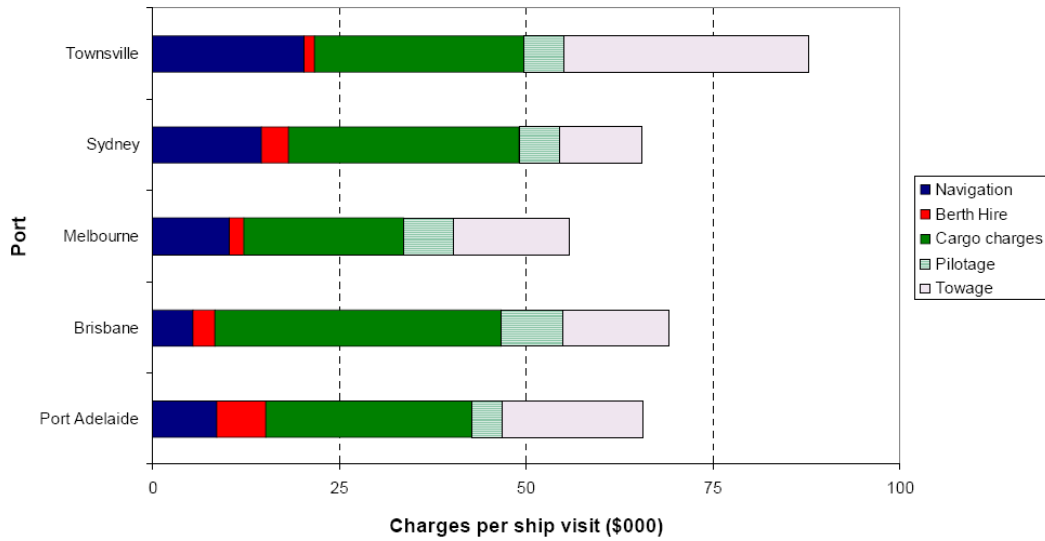
Source: BTRE Waterline issues 36, 38, 40, 42

* 35,000-40,000 GT range is representative of the size of ships calling at Adelaide

Container Vessel Charges

Benchmarking of port prices by Meyrick and Associates considered various charges for different types of ships (container, livestock, grain etc.). Of the ports included in the benchmarking study only five have significant container cargo shipping operations. Based on 2007 data for these ports shown below, Adelaide has a middle order ranking on container vessel visit costs.

Container Vessel Visit Costs, 2007

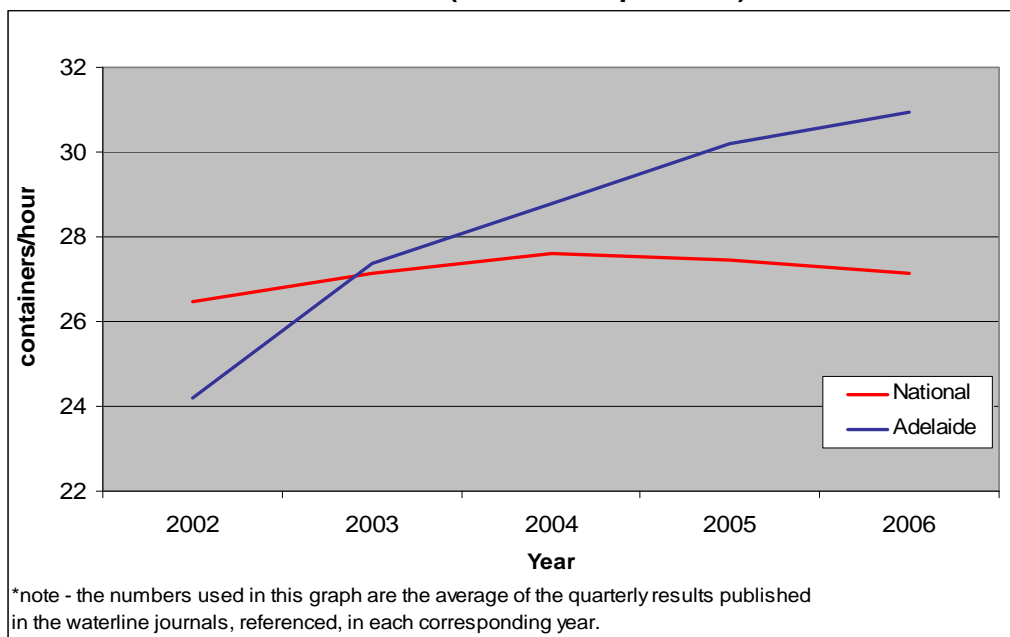


Source: Meyrick and Associates "Benchmarking of Port Pricing in Australia", April 2007

Container Crane Rates

The crane rate is the number of containers moved per allocated crane hour less operational and non-operational delays. Higher values indicate higher productivity. Crane rates in Adelaide have improved over the last five years to now exceed the national average, as shown below.

Crane Rate (Containers per hour)



Source: BTRE Waterline, Issue 42, July 2007, page 11, Issue 38, March 2005, page 3, Issue 35, October 2003, page 15

The Productivity Commission⁷ noted the Adelaide container terminal crane rate was the highest amongst Australian ports in 2005-06. Potential productivity improvements in container ports with full implementation of the COAG National Reform Agenda (NRA) were estimated by the Commission at 3% for Adelaide compared to 8-10% for other Australian ports. This reflects the efficiency levels already being achieved at the Adelaide terminal.

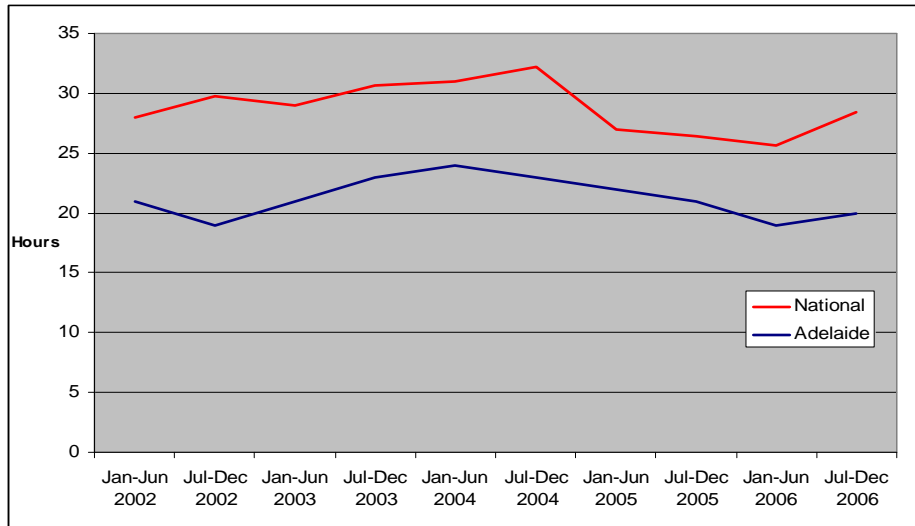
⁷ Productivity Commission Research Paper, Potential Benefits of the National Reform Agenda. Chapter 7 Ports and associated infrastructure.

Turnaround times

The BTRE publishes a number of ‘turnaround time’ measures which give an indication of efficiency in port operations. Shorter times indicate higher efficiency and are beneficial for shipping lines and port operators.

Port turnaround time is the length of time between a ship arriving at a port and being ready to depart from that port. According to BTRE data shown below, Adelaide has consistently recorded a turnaround time better than the national average.

Port turnaround time (hours per ship)

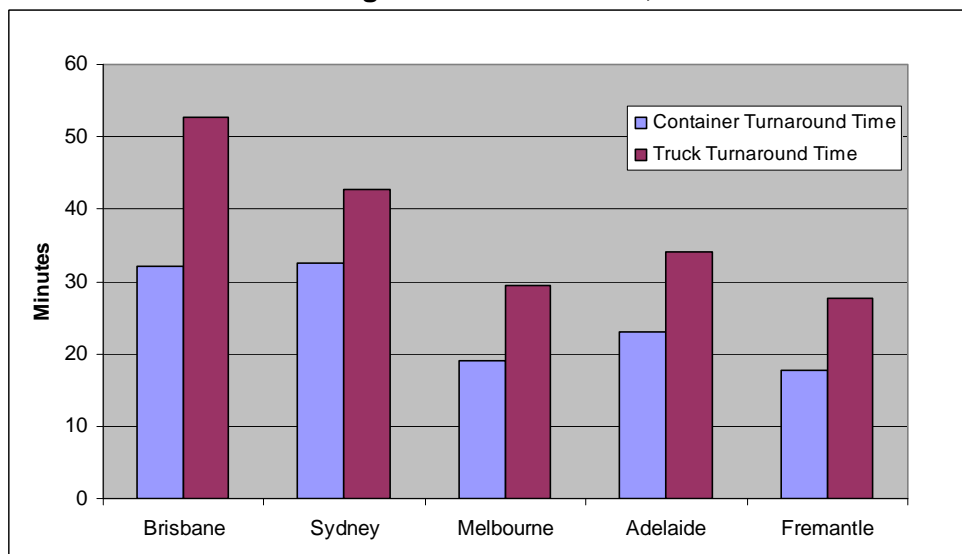


Source: BTRE Waterline, Issue 42, July 2007, page 20

Truck turnaround time is a measure of the efficiency with which trucks are processed within a terminal. The indicator measures the length of time (in minutes) that a truck takes from the time it enters to the time it exits the port terminal. Container turnaround time is related to truck turnaround time and is defined as truck turnaround time/number of containers on the truck. Container turnaround time (CTT) recognises the task for the terminal and is a better measure of the performance of a terminal.

CTT improves (that is, it falls) if either the vehicle utilisation rate improves, implying that the number of containers per truck increases, or the port terminal operator is faster in processing each truck. The most recently available BTRE data shown below indicates a middle order ranking for Adelaide’s performance, compared to larger container terminals.

Container and truck average turnaround times, December Quarter 2006



Source: BTRE Waterline, Issue 42, July 2007, page 9

Overall it can be seen from the graphs above that Adelaide records highly competitive turnaround times in comparison with other ports and the national average. However geographical and other factors need to be considered when making comparisons between ports.

Conclusions

Despite the relatively small size of the Port of Adelaide, the container terminal performance indicators show the terminal to be relatively efficient and competitive with other Australian ports.

COMPETITION AND REGULATION

BACKGROUND

In 2000 the South Australian Parliament passed the *South Australian Ports (Disposal of Maritime Assets) Act 2000*; the *Maritime Services (Access) Act 2000*, and the *Harbors and Navigation (Control of Harbors) Amendment Act 2000*. These Acts established the legislative framework for the privatisation of the SA Ports Corporation and the subsequent management regime. The disposal of the Ports Corporation and its assets was intended to meet four major objectives:

- encourage economic development through expanded freight service business and investment opportunities;
- encourage improved services for exporters and importers through improvements and cohesion in the transport chain;
- enable resources tied up in the corporation to be put to better use such as debt reduction or the provision of government services;
- remove future risks to government from commercial competition in ports business.

The *Harbors and Navigation (Control of Harbors) Amendment Act 2000* established the concept of a Port Operating Agreement to provide for the safe and equitable control and management of the ports then owned by the State Government.

The *Maritime Services (Access) Act 2000* established the price and access regulation of the State Government owned ports, with monitoring and control the responsibility of the Independent Industry Regulator (now ESCOSA). The Act was enacted to:

- provide access to maritime services on fair and commercial terms;
- facilitate competitive markets in the provision of maritime services;
- protect the interests of users of essential maritime services by ensuring that regulated prices are fair and reasonable for the industry concerned;
- ensure disputes about access are dealt with efficiently.

The *South Australian Ports (Disposal of Maritime Assets) Act 2000* provided for the disposal of assets and assignment of employees of the SA Ports Corporation. The Act includes provisions to ensure the container terminal is managed and operated in the best interests of the state. In this regard, the Act established the Port Adelaide Container Terminal Monitoring Panel, comprised of private sector users and stakeholders, to monitor and report on container terminal performance. The Panel establishes performance objectives and performance criteria with objective measurements for the container terminal. If the operator fails to meet performance criteria for a particular quarter, the panel may issue a notice of non-performance to the operator. If the panel issues notices of non-performance to the operator for 2 successive quarters, the panel must inform the Minister, providing details of the nature of the non-performance.

In 2001 Flinders Ports Pty Limited acquired the port infrastructure from the government for the ports located at Port Adelaide, Port Lincoln, Thevenard, Port Giles, Port Pirie, Wallaroo

and Klein Point. In addition they acquired a 99 year lease over the port and land and an operating licence for these ports. DP World operates the container terminal under a lease agreement with Flinders Ports. Key documents associated with these ports transactions include:

- Memorandum of Lease (including requirements for remediation of identified port lands);
- South Australian Ports Business and Asset Sales Agreement (detailing the assets at each of the ports);
- Capital Expenditure and Maintenance Deed (outlining the requirements for port investment including channel deepening and other maintenance);
- Tripartite Deed (terms of interaction between Minister, Flinders Ports and banks);
- Port Operating Agreements (to provide for safe management of ports).

Responsibility for monitoring compliance with these contractual arrangements lies with DTEI. Compliance is monitored and reported to the Chief Executive and Minister to fulfil general due diligence and probity requirements. A review of compliance with the various agreements undertaken in 2006 found that Flinders Ports had largely completed or had been working towards finalisation of all its initial obligations, including those in relation to the upgrading of ports as required by the Capital Expenditure and Maintenance Deed.

CONSISTENCY WITH THE CIRA

Clause 4 of the CIRA outlines aspects of port competition and regulation to be examined in this review. This section addresses each part of clause 4.

Economic Regulation

“Ports should only be subject to economic regulation where a clear need for it exists in the promotion of competition in upstream or downstream markets or to prevent the misuse of market power” – 4.1 a

South Australian economic regulation of ports was reviewed by ESCOSA in the 2007 ports pricing and access review.

The report concluded there is potential for market power to be exercised by port operators but no evidence to suggest that port operators are exercising such power. ESCOSA concluded that whilst there are costs associated with price monitoring, it is a light handed form of regulation, which produces benefits that outweigh the costs given the potential for misuse of market power. ESCOSA recommended continuation of the current price monitoring form of price regulation for at least a further 3-year period.

The report also concluded that there is potential for the exercise of market power in the provision of services subject to access regulation but that there is no evidence of misuse of market power. ESCOSA therefore recommended continuation of the negotiate-arbitrate form of access regulation. This provides a light-handed regime as it only imposes regulatory intervention in the event of a dispute.

Third party access

“Wherever possible, third party access to services provided by means of ports and related infrastructure facilities, should be on the basis of terms and conditions agreed between the operator and the person seeking access.” – 4.1 b i

ESCOSA reviewed the extent of commercial negotiation of port services as part of the 2007 ports pricing and access review.

The report identified that current published reference prices are an important starting point for port users to negotiate individual contracts. Port users are able to negotiate their own contract terms and conditions under the negotiate/arbitrate regulatory model. ESCOSA had not been notified of any pricing disputes and, based on the submissions to the review, the regime appears to have been successful in encouraging commercial negotiations.

ESCOSA reviewed information from Flinders Ports and concluded that port users are actively negotiating prices with Flinders Ports below the listed prices.

Promotion of commercial outcomes

“Where possible, commercial outcomes should be promoted by establishing competitive market frameworks that allow competition in and entry to port and related economic infrastructure services, including stevedoring, in preference to economic regulation.”

– 4.1 b ii

ESCOSA reviewed competition in regulated port services as part of the 2007 ports pricing and access review, the 2004 ports access review and the 2003 ports pricing review.

Container stevedoring is not a regulated essential maritime service in South Australia and was not covered in detail by ESCOSA in their review. ESCOSA noted that competition exists for containerised cargo in South Australia and that there was little opportunity for any misuse of market power in relation to containerised cargo.

To ensure that South Australia has an efficiently operating container terminal and to promote inter-port competition, an agreement exists between the Minister for Infrastructure, DP World and Flinders Ports to not permit another container terminal to be operated at Outer Harbor until the current facility’s throughput exceeds 225,000 TEU of full container movements per annum. In the context of minimum efficient scale, industry estimates suggest that throughput would need to be significantly larger than 225,000 full TEU movements per annum to support commercially viable operation of two stevedores. This is due to a number of factors including changes in shipping and container handling technologies and increased capital investment required to build a new terminal since this agreement was reached. Container growth at the terminal is likely to see the 225,000 figure eclipsed in the foreseeable future. The economics and commercial realities of commencing a new terminal in such a relatively small market are likely to be the main barrier to entry into the future.

Submissions by the South Australian Freight Council and the Maritime Union of Australia highlighted the small size of the Port Adelaide container operation on a global scale. The South Australian Freight Council noted potential difficulties for the state and community if a second terminal operator were to enter the small Port Adelaide market. PIRSA indicated that the mechanism for allowing a second container terminal operator is appropriate and that effective port competition is currently achieved through the competing operations of Fremantle and Melbourne ports.

While intra-port competition is sometimes favoured by port users, the World Bank⁸ notes that this is not always feasible. Intra-port competition requires a volume of cargo which must be sufficient to allow two or more operators to each run a profitable and effective business. An important condition of intra-port competition is that the market should be double Minimum Efficient Scale (MES) before it is viable and sustainable for a second operator to enter the market⁹. MES is reached when marginal and average costs no longer decrease when capacity is expanded. De Langen and Pallis⁹ note that for operations such as a container terminal this MES is quite large.

In discussing the ability to create competition within ports, the World Bank¹⁰ notes that, intra-port competition for services such as stevedoring or terminal operations may be feasible in a large volume port, but not feasible in a small volume port. Melbourne is Australia’s largest container port, but its throughput ranks just 50th in size in the world¹¹. In

⁸ The World Bank, 2007, Port Reform Toolkit, Second Edition. Module 4, Legal Tools for Port Reform, pg. 150.

⁹ De Langen, PW and Pallis, AA 2005, Analysis of the Benefits of Intra-Port Competition. Pg 9.

¹⁰ The World Bank, 2007, Port Reform Toolkit, Second Edition. Module 1, The Evolution of Ports in a Competitive World, pg. 10.

¹¹ American Association of Port Authorities, World Port Rankings – 2005.

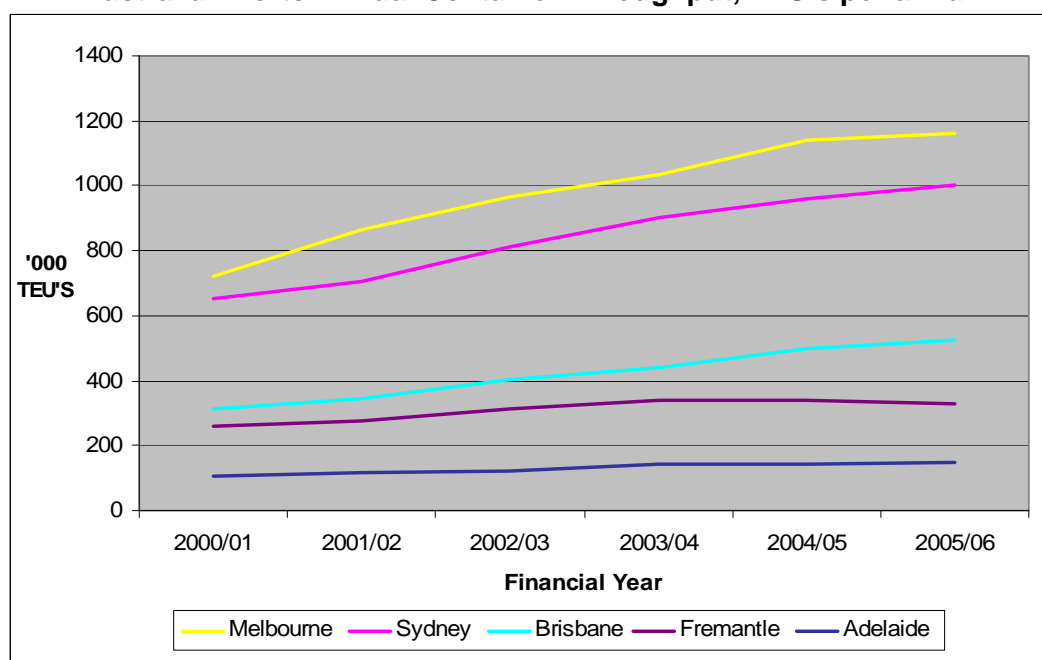
comparing the Adelaide container terminal with other Australian ports, and globally¹², it can be seen that Adelaide is a very small container market.

Australian Ports Container Throughput, 2006

	Containers	No. Terminal Operators
Melbourne	1,217,314	2
Sydney	1,055,456	2
Brisbane	562,166	2
Fremantle	338,508	2
Adelaide	151,998	1

Source: BTRE Waterline Issues 41 and 42, December 2006 and 2007

Australian Ports Annual Container Throughput, TEU's per annum



Source: BTRE Waterline, Issue 42, July 2007, page 20

Significant shipping and stevedoring industry consolidation is occurring globally. DP World and Patrick dominate container stevedoring nationally, with strong intra and inter-port competition. There is potential for the Adelaide container terminal to run in a manner that disadvantages South Australian exporters, by operators preferentially supporting an alternative container terminal operation interstate. In 1990, the government formed the view that the then operator of the Adelaide container terminal was not operating the facility in a manner consistent with the best interests of South Australia. This resulted in the State Government purchasing the facility, and an independent operator (SeaLand) being given the right to use the facility.

In order to protect against a recurrence of this, the *SA Ports (Disposal of Maritime Assets) Act 2000*, established cross-ownership provisions for the Adelaide container terminal. The provisions under section 26 of the Act give the Minister for Infrastructure power to order the operator of the Adelaide container terminal to divest its assets where they have a sizeable interest in a container terminal at either Melbourne or Fremantle. This was put in place to ensure that in the case of cross-ownership, the operator is not abusing its market power and choosing to divert SA origin containers through its interstate facilities.

¹² Notteboom, 2002, Consolidation and contestability in the European container handling industry. This paper includes a figure highlighting the total throughput at a number of European ports and the size of the largest operator at those ports. There are numerous ports with a single terminal operator and annual throughput in excess of 1 million TEU.

Recently, DP World sought changes to the cross-ownership provision to create an atmosphere more conducive to investment. The State Government agreed to amend the Act to protect the state's interest and encourage infrastructure investment at the terminal. The *South Australian Ports (Disposal of Maritime Assets) (Miscellaneous) Amendment Act 2007* has recently come into operation. The Minister's power remains in place, but a process for using the power has been detailed. This process includes a 'right of reply' for the stevedore in the event that the Minister identifies a problem.

Submissions from MUA and PIRSA offered support for these provisions of the Act as appropriate measures to promote national competition. The provision was also recognised by the South Australian Freight Council and DTED as a mechanism to protect the interests of the state.

Independent Regulatory Oversight

"Where regulatory oversight of services is warranted pursuant to clause 2.3, this should be undertaken by an independent body which publishes relevant information." – 4.1 b iii

Ports price monitoring and the ports access regime are overseen by ESCOSA, South Australia's independent industry regulator. The 2007 ports pricing and access review was a transparent and public review to determine whether price monitoring and the access regime were warranted.

Access Regime Certification

"Where access regimes are required, and to maximise consistency, those regimes should be certified in accordance with the Trade Practices Act 1974 and the Competition Principles Agreement." – 4.1 b iv

The 2007 "Ports Pricing and Access Review" report recommended that the government consider amending the *Maritime Services (Access) Act 2000* to provide consistency with clause 2 of the CIRA. The report also recommended that the government consider commencing the certification process at the earliest opportunity following any required amendments to the Act.

Port Planning

"Port planning should, consistent with the efficient use of port infrastructure, facilitate the entry of new suppliers of port related infrastructure services." – 4.2 a

The *Development Act 1993* is the primary legislation regulating land use and development around ports in South Australia. The Act requires the Minister to review and update the Planning Strategy for South Australia every 5 years.

The Planning Strategy is the key statutory document providing strategic direction for land use and development across the state. It guides amendments to council local area Development Plans, against which development applications are assessed.

The various region-based volumes of the Planning Strategy provide consistent direction for development around ports infrastructure. Specifically, the objectives and strategies for development around ports are:

- *Objective:* protect and build on the region's strategic freight transport, storage and processing infrastructure;
- *Strategies:*
 - cluster primary production, processing and storage activities in strategic locations, particularly key freight transport nodes, to maximise transport efficiencies;
 - provide for future expansion of industry clusters and establish appropriate buffers to protect strategic infrastructure from encroachment by sensitive uses;
 - manage interfaces with residential areas and other sensitive uses.

Across the state zoning around ports provides for:

- limiting development in ports to a combination of port operations, bulk handling, mineral processing, industrial activities, warehousing and storage, container terminals and cargo handling facilities;
- provision of land for long-term growth of port and associated activities dependent upon a port-side location;
- land adjacent to main port zones to provide for a spatial, visual and auditory separation between the port and sensitive land uses (e.g. residential). Separations are achieved through zoning for open space, conservation, deferred industrial and general farming;
- specific provisions to achieve protection from encroachment by incompatible uses and activities likely to affect continued port operations and development within a zone.

Development Assessment

The following is an overview of the processes that would need to be followed, as a requirement of the *Development Act 1993*, for the:

- change in use of a berth (e.g. conversion of a general cargo berth to a fuel import berth)
- expansion of an existing port facility (e.g. expansion of a motor vehicle berth);
- development of a new berth at an existing port (e.g. the Outer Harbor grain berth & storage facility).

The *Development Act 1993* requires different development assessment processes for Crown Developments (Section 49) and private developments.

In all the scenarios above, developments would need to comply with the zoning or require rezoning of land for specific uses. This would require approval from the relevant authority. The relevant authority is either the local council or the Development Assessment Commission.

With the exception of the change of the use of a berth, the project is likely to require a detailed 'Major Development' assessment and planning process. This process seeks to ensure the development will support ongoing neighbouring land uses and examines social, economic and environmental impacts.

Projects of this type can be dealt with as Crown Developments under Section 49 of the *Development Act 1993*. To be eligible for assessment under Section 49 requires the South Australian Government to solely undertake the project (as owner of the land, facility or infrastructure) or act as a 'sponsor' of a private developer where such a development is considered by the government as necessary public infrastructure (for example, dredging of a strategic port facility).

Private applications for smaller facilities may be the subject of council decision-making in some instances.

Most applications go through the Development Assessment Commission because many of South Australia's ports are located or impact on land outside of council areas (i.e. coastal waters) or are located on Crown lands. The Development Assessment Commission also provides assessment on any activities listed under an Environmental Protection Authority Schedule (i.e. requiring a licence).

As part of the process the application may be referred to other agencies for advice or direction. Depending on the type of application these could include: the Coast Protection Board, the Commissioner of Highways and Commonwealth transport agency, Environment Protection Authority, Country Fire Service and agencies responsible for fisheries, mining, water resources, health and heritage legislation.

Recent experience of development of new ports

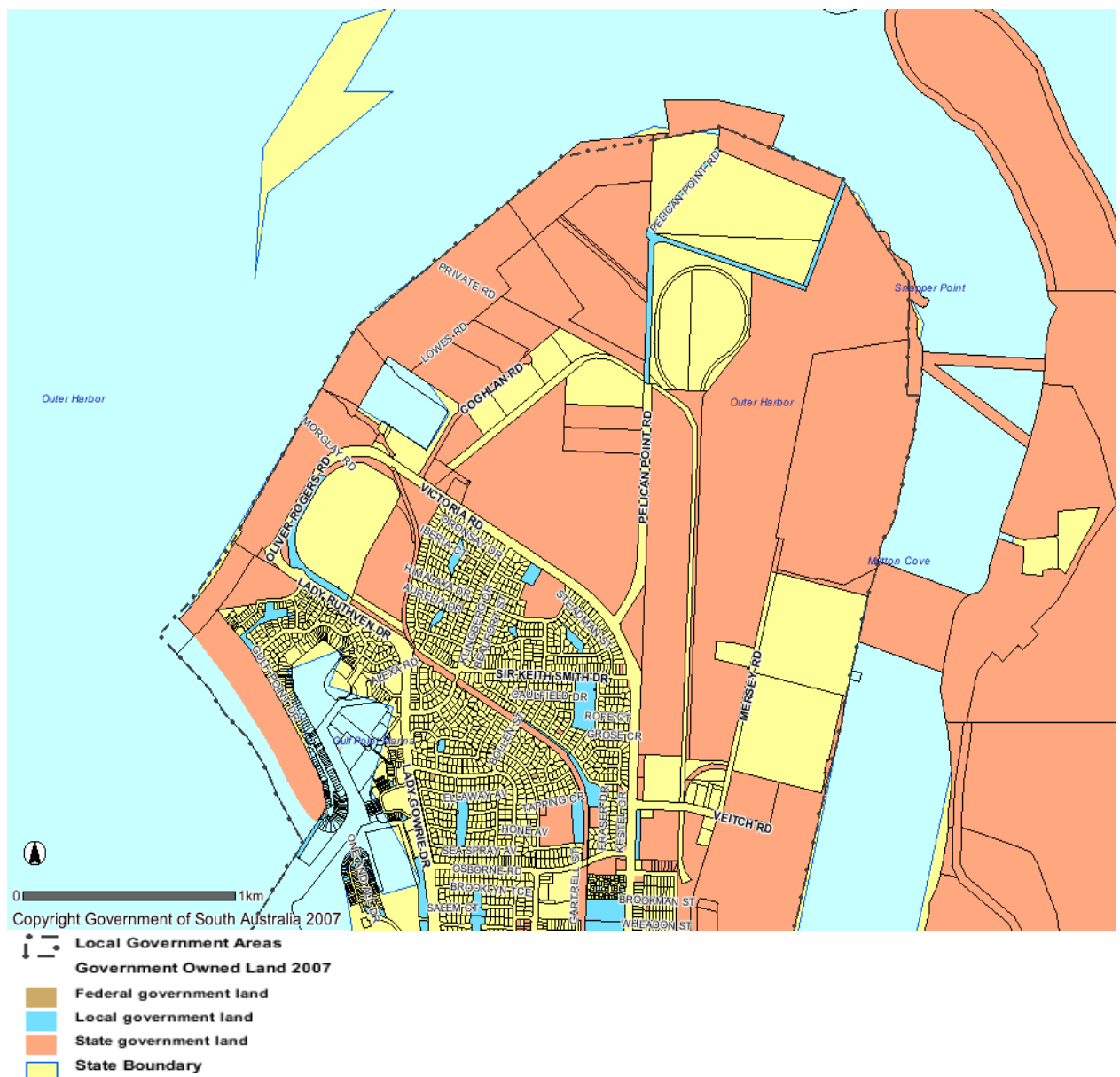
In the last five years two new port berths have opened in South Australia, at Wallaroo and Lucky Bay. These privately owned facilities were developed to provide a landing point for a roll-on roll-off ferry between Wallaroo and Lucky Bay. These developments did not involve all the requirements for establishing a full port.

While there was some level of complexity to the overall processes in both instances, all issues were manageable and able to be worked through in a timely manner. This indicates there are no substantial barriers in South Australian planning processes to the entrance of new suppliers of port related infrastructure services.

Land Availability and Port Development

As discussed above, zoning provisions and land use planning allow for future port developments. The map below shows ownership of land at Outer Harbor. The State Government has a port-related land bank¹³ to enable future port related development at Outer Harbor.

Outer Harbor land ownership



Source: Planning SA, www.atlas.sa.gov.au/minimapper

¹³ Metropolitan Adelaide Industrial Land Strategy. April 2007.

The 2007 ports pricing and access review considered access to land. ESCOSA found that while market power exists there was no evidence of the misuse of market power in providing access to land.

Port Infrastructure and Investment Planning

Flinders Ports has been active in development of port infrastructure at Port Adelaide including the deepening of the Outer Harbor channel, jointly funded with the State Government, and the development of the new grain berth. A 150m extension of the container berth has recently commenced and developments for mineral handling at the Inner Harbour have also been announced.

DP World plans to increase capacity at the container terminal with the purchase of new straddle carriers and post-panamax capable container cranes. DP World has also been working with Flinders Ports in planning for increased storage space for containers.

Third party access

“Where third party access to port facilities is provided, that access should be provided on a competitively neutral basis.” – 4.2 b

In South Australia, regulated services are subject to the ports access regime set out in Part 3 of the *Maritime Services (Access) Act 2000*. Regulated services are proclaimed in accordance with the *Maritime Services (Access) Act 2000*. The following maritime services have been proclaimed to be Regulated Services:

- providing, or allowing for, access of vessels to the port;
- pilotage services facilitating access to the port;
- providing berths for vessels at selected wharves;
- providing port facilities for loading or unloading vessels at berths adjacent to the loading and unloading facilities;
- loading or unloading vessels by selected bulk handling facilities;
- providing access to land in connection with the provision of the above maritime services.

The ports access regime seeks to have access to regulated services occur on fair commercial terms, through a light-handed negotiate-arbitrate form of access regulation.

The preference is for parties to reach their own commercial agreement on access. If agreement cannot be reached, then a 'dispute' exists and one of the parties to the dispute may refer it to ESCOSA. Parties to the dispute first move into conciliation and, failing that, arbitration. The objective throughout is to seek an agreement that reflects fair commercial terms. The *Maritime Services (Access) Act 2000* defines the processes to be followed.

The Australian Council for Infrastructure Development (AusCID) commissioned the development of a scorecard for the evaluation of economic regulation throughout Australia¹⁴. For South Australian ports, the AusCID scorecard described South Australia's regimes as well designed and ranked South Australia the highest or equal highest in all categories assessed (covering service pricing and infrastructure access by port authorities). The regulation of ports in South Australia was the only sector and only jurisdiction to achieve a “very good” ranking.

Commercial Charters

“Commercial charters for port authorities should include guidance to seek a commercial return while not exploiting monopoly powers.” – 4.2 c

Port Adelaide is operated by Flinders Ports, which is a privately owned port operator, in contrast to many interstate ports that still remain as government owned and operated. This clause does not apply to Port Adelaide.

¹⁴ “A scorecard of the design of economic regulation of infrastructure.” Access Economics, February 2006.

The possibility of potential conflicts between the commercial objectives of the private port operator and the operation of the port in the best interests of port users and the state was raised in some submissions. Some expressed the view that there has been under-investment in port infrastructure and highlighted the need for more open port planning, including a greater role for government oversight. At the time of the sale/lease of the ports, the State Government established a number of safeguards (including pricing and access regimes, and operating agreements) to protect the interests of the state and port users. Guided by these safeguards, DTEI continues to work with port operators and port user groups to encourage appropriate maintenance of port infrastructure and to facilitate timely investment in additions or upgrades to port facilities.

The government has recently established a Resources Sector Infrastructure Council to work more closely with the resources sector to address port and other infrastructure requirements to support the development of this sector.

Conflicts of interest

“Any conflicts of interest between port owners, operators or service providers as a result of vertically integrated structures should be addressed by the relevant Party on a case by case basis with a view to facilitating competition.” – 4.2 d

No such conflicts were identified during the review.

CONCLUSION

This review has drawn on the 2007 ESCOSA review of ports pricing and access and submissions received from key stakeholders, to consider competition and regulatory arrangements at the Port of Adelaide, as required by clause 4 of the CIRA.

It found no evidence to suggest that regulatory and contractual arrangements in place for the Port of Adelaide are not warranted. The regulatory and policy frameworks considered by the review appear to strike an appropriate balance between discouraging the use of market power and encouraging efficient investment in and use of port infrastructure.

The regulatory and contractual arrangements examined by the review are considered to be consistent with the principles of clause 4 of the CIRA.

It is recommended that the South Australian Government:

- consider amendments to the *Maritime Services (Access) Act 2000* in the light of the findings of this review and the 2007 ESCOSA review of ports pricing and access;
- continue to monitor infrastructure planning and development at Outer Harbor and to facilitate consultation between providers of port infrastructure and services and users of those services to promote timely and efficient investment in port facilities.

BIBLIOGRAPHY

Access Economics, A scorecard of the design of economic regulation of infrastructure. For AusCID. February 2006.

American Association of Port Authorities, World Port Rankings – 2005

Australian Competition and Consumer Commission Container stevedoring. Monitoring report no. 8. November 2006.

Bureau of Transport and Regional Economics. Information Paper 60. Australian Sea Freight 2005-06. October 2007.

Bureau of Transport and Regional Economics. Waterline, Issue 42. July 2007.

Competition and Infrastructure Reform Agreement

De Langen, PW and Pallis, AA 2005, Analysis of the Benefits of Intra-Port Competition.

ESCOSA, 2007 Ports Pricing and Access Review Draft Report, June 2007. (<http://www.escosa.sa.gov.au/webdata/resources/files/070531-D-PortsPriceAccessDraftReport.pdf>)

Flinders Ports. Ports User Guide.

Metropolitan Adelaide Industrial Land Strategy. April 2007.

Meyrick and Associates, Benchmarking of Port Prices in Australia, Final report prepared for ESCOSA, April 2007. (<http://www.escosa.sa.gov.au/webdata/resources/files/070427-D-MeyrickPortsBenchmarkingAust.pdf>)

Meyrick and Associates, International and Domestic Shipping and Ports Study. May 2007.

Notteboom, T. The changing face of the terminal operator business: lessons for the regulator. ACCC Regulatory Conference July 2007. Institute of Transport and Maritime Management.

Notteboom, T.E. Consolidation and contestability in the European container handling industry. Institute of Transport and Maritime Management Antwerp. Maritime Policy and Management. 200. Volume 29 No.3 257-269.

Upper Spencer Gulf Common Purpose Group.

http://www.upperspencergulf.com/default.aspx?pageid=infrastructure_transport

Productivity Commission. International Benchmarking of Container Stevedoring. July 2003.

Productivity Commission Research Paper, Potential Benefits of the National Reform Agenda. Chapter 7 Ports and associated infrastructure.

Robinson, R. A Third Container Terminal in the Port of Melbourne: The Critical Issues. Victoria University of Technology. September 2001.