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REVIEW OF VICTORIAN PORTS REGULATION

FINAL REPORT

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PREFACE

The Essential Services Commission (the **Commission**) is the independent economic regulator of the Victorian ports industry. Under the provisions of the *Port Services Act 1995 (PSA)*, every five years the Commission reviews the regulatory framework applying to Victoria's ports. Following the Commission's last review in 2004, a light-handed price monitoring framework has applied to Victorian port berth and shipping channel services.

This Review concerns whether the regulation of port prescribed services continues to be necessary, and if so the appropriate form of regulation. Additionally, on 29 January 2009 the Minister for Finance directed the Commission to include in its Review consideration of whether the Channel Access Regime should be retained, and whether the regime is able to be certified by the National Competition Council. The Review must have regard to the Competition and Infrastructure Reform Agreement (**CIRA**) made by the Council of Australian Governments (**COAG**).

The Commission released an Issues Paper on 7 January 2009 to canvas key issues for the Review, on which it received seven submissions. A public hearing was held at the Commission's offices on 3 March 2009. A Draft Report was released for public comment on 30 May 2009, and five further submissions were received. This Final Report presents the Commission's recommendations in relation to the economic regulation of the Victorian ports.

On the question as to whether prescribed services should continue to be regulated, the Commission recommends that prescribed services should be limited to the following services:

- the provision of channels for use by shipping in the port of Melbourne waters, including the Shared Channels used by ships bound either for the port of Melbourne or for the port of Geelong
- the provision of channels for use by shipping in the port of Hastings waters, only in respect of vessels carrying container or motor vehicle cargoes
- the provision of berths, buoys or dolphins in connection with the berthing of vessels carrying container or motor vehicle cargoes in the ports of Melbourne or Hastings, and
- the provision of short term storage or cargo marshalling facilities in connection with the loading or unloading of vessels carrying container or motor vehicle cargoes at berths, buoys or dolphins in the ports of Melbourne or Hastings.

The Commission also recommends that price monitoring should continue to apply to the above prescribed services. In addition, the Commission recommends that the shared channels should be subject to the Victorian Channel Access Regime, which will provide for dispute resolution of last resort. The Commission's assessment is that the Victorian Channels Access Regime is capable of certification as an effective state-based access regime in its current form.



Dr Ron Ben-David
Chairperson

SUMMARY OF RECOMMENDATIONS

Recommendation 1

The Commission recommends that prescribed services should be limited to:

- the provision of channels for use by shipping in the port of Melbourne waters, including the Shared Channels used by ships bound either for the port of Melbourne or for the port of Geelong
- the provision of channels for use by shipping in the port of Hastings waters, only in respect of vessels carrying container or motor vehicle cargoes
- the provision of berths, buoys or dolphins in connection with the berthing of vessels carrying container or motor vehicle cargoes in the ports of Melbourne or Hastings, and
- the provision of short term storage or cargo marshalling facilities in connection with the loading or unloading of vessels carrying container or motor vehicle cargoes at berths, buoys or dolphins in the ports of Melbourne or Hastings.

Recommendation 2

The Commission recommends that the form of price regulation be price monitoring.

Recommendation 3

The recommended price monitoring framework is similar to the present framework, with the key proposed difference being the removal of the Commission's powers to initiate reviews and intervene by imposing heavy handed regulation within the regulatory period currently in section 7 of the Price Monitoring Determination. The Commission's ability to bring concerns to the attention of the Government, and for the Commission to undertake a review under Part 5 of the ESC Act, would remain. Amendments to the Port Services Act should ensure that the Commission cannot introduce more heavy handed regulation without the approval of the Minister administering the PSA.

Recommendation 4

If asset revaluations are to be reflected in PoMC's asset base then the Commission recommends that:

- it is appropriate for the Commission to also have regard to gains from revaluation as part of income for the purposes of making its assessments in regard to whether there has been any exercise of substantial market power. That is, to use the concepts of financial capital maintenance and the economic rate of return, which include capital gains and losses. These concepts of income are considered to be the most appropriate basis for comparison against the opportunity cost of capital or WACC.

- approaches to valuing assets based on discounted future cash flows should not be used for the purpose of assessing rates of return for entities with market power due to the circularity involved. Where PoMC uses this method of valuation in its statutory accounts, the Commission will require an alternative valuation method to be used for regulatory accounts, on which it will undertake its monitoring of port prices.
- the line-in-the-sand method be used for valuing the pre-1996 shipping channel assets, and that the value of those assets should remain equal to zero for pricing purposes.
- PoMC should set its prices to ensure that they are smoothed over time, and not excessively disturbed by factors which may have influence over the valuation of certain assets in the short-term, such as exchange rate or interest rate movements.
- PoMC's Pricing Policy Statement should adequately address how it proposes to deal with returns over time from long-lived assets such as the CDP, which may have low returns in the early phases of the asset life and higher returns further in the future.

Recommendation 5

The Commission recommends that the Victorian Channels Access Regime with application to the shared channels used by ships visiting both the ports of Geelong and Melbourne is necessary in order to ensure competition or competitive tension in upstream and/or downstream markets. The Commission's assessment is that the Victorian Channels Access Regime likely satisfies all of the requirements of the CPA and so is capable of certification as an effective state-based access regime in its current form. The Commission recommends the Shared Channels be declared.

Recommendation 6

The Commission recommends the Shared Channels also be subject to the price monitoring framework in order to aid transparency through the requirement to publish prices and to provide greater regulatory certainty with respect to the shared channel pricing principles.

Recommendation 7

The Commission recommends that the next review of ports regulation under section 53 of the PSA should also include consideration of whether regulation is required for all prescribed and non-prescribed berth and channel services.

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ABBREVIATIONS

ACCC	Australia Competition and Consumer Commission
ACG	The Allen Consulting Group
ACIL	ACIL Tasman
ACT	Australian Capital Territory
AIF	Australian Infrastructure Fund
BITRE	Bureau of Infrastructure, Transport and Regional Economics
CDP	Channel Deeping Project
CIRA	Competition and Infrastructure Reform Agreement
Commission	The Essential Services Commission, Victoria
COAG	Council of Australian Governments
CPA	Competition Principles Agreement
CPI-X	Consumer Price Index minus 'X' (per cent per annum)
CSO	Community Service Obligation
DBCT	Dalrymple Bay Coal Terminal
DORC	Depreciated Optimised Replacement Cost
DoT	Department of Transport, Victoria
DPC	Darwin Port Corporation
EBIT	Earnings before interest and taxation
ESC Act	<i>Essential Services Commission Act 2001</i>
ESCOSA	Essential Services Commission of South Australia
FCM	Financial Capital Maintenance
GBE	Government Business Enterprise
GCUG	Geelong Channels Users Group
GDP	Gross Domestic Product

IPART	Independent Pricing and Review Tribunal
NCC	National Competition Council
NSW	New South Wales
NSW Maritime	Maritime Authority of New South Wales
NT	Northern Territory
PAA	<i>Port Authorities Act 1999 (WA)</i>
PC	Productivity Commission
PMAA	<i>Ports and Maritime Administration Act 1995 (NSW)</i>
PMD	Price Monitoring Determination
PoHC	Port of Hastings Corporation
PoMC	Port of Melbourne Corporation
PoPL	Port of Portland Pty Ltd
PPH	Patrick Ports Hastings
PPS	Pricing Policy Statement
PRC	Port Competition Review Committee (Queensland)
PSA	<i>Port Services Act 1995</i>
PwC	PricewaterhouseCoopers
QCA	Queensland Competition Authority
RAB	Regulatory asset base
SA	South Australia
SADTEI	South Australian Department for Transport Energy and Infrastructure
SAL	Shipping Australia Limited
TEU	Twenty-foot equivalent unit, standard unit for counting containers
TFP	Total Factor Productivity
TPA	<i>Trade Practices Act 1974</i>
VRCA	Victorian Regional Channels Authority
WA	Western Australia
WACC	Weighted Average Cost of Capital

Background

Under the *Port Services Act 1995* (**PSA**), the Essential Services Commission (**Commission**) is responsible for the economic regulation of the Victorian ports sector. The PSA establishes an economic regulation framework that applies to Victoria's four commercial seaports of Melbourne, Geelong, Portland and Hastings.

The port of Melbourne is Australia's largest container port and is owned by the Port of Melbourne Corporation (**PoMC**). The port of Geelong is privately owned by the Port of Geelong Unit Trust and operated by Patrick Ports, a subsidiary of Asciano. The shipping channels specific to Geelong are managed by the Victorian Regional Channels Authority (**VRCA**). The port of Portland in western Victoria, and the port of Hastings in Western Port Bay are owned by the Port of Portland Pty Ltd (**PoPL**), and the Port of Hastings Corporation (**PoHC**), respectively private and statutory companies. Patrick Ports Hastings (a division of Asciano), manages the port of Hastings under a Port Management Agreement with PoHC.

The ports regulatory framework identifies certain port infrastructure services, such as the provision of shipping channels, berth services, cargo marshalling areas and short-term storage adjacent to berths, as prescribed services. Under the *Essential Services Commission Act 2001* (**ESC Act**), the Commission has price regulation powers in respect of the prices charged for the provision of, or in connection with, prescribed services. The Commission has exercised these price regulation powers by establishing a price monitoring regime.

There is also an access regime for shipping channels in the PSA (**Victorian Channels Access Regime**), but given no shipping channels have been declared to date, that regime is inactive.

Under section 53 of the PSA, the Commission is required to conduct and complete a review of the regulation of prescribed port services by June 2009. The purpose of the current Review is to meet this requirement.

In addition to these matters, on 29 January 2009 the Minister for Finance referred related matters to the Commission as follows. These additional matters have been included in the scope of this Review:

- in making its recommendations about the regulation of Victorian ports, including pricing and access regulation, the Commission should have regard to the principles outlined in clauses 4.1 and 4.2 of the Competition and Infrastructure Reform Agreement (**CIRA**)
- the Commission is to assess whether the Victorian Channels Access Regime is necessary in order to ensure competition or competitive tension in upstream and/or downstream markets

- if it considers there is a net benefit from continuing the Victorian Channels Access Regime, the Commission should assess whether the regime in its current form is able to be certified by the National Competition Council (**NCC**), or if not, assess what changes would render it able to be certified, and
- the Commission should take particular note of recent amendments to the ESC Act, in particular, the insertion of Part 3A and the implications of this for the design and assessment of access regimes.

In summary, the purpose of this Review has been to determine whether the arrangements currently in place for the regulation of services and prices in the ports sector in Victoria continue to be appropriate, and if not, how they might best be amended to meet the objectives of both the ESC Act and the PSA. The Review has also established whether there is benefit from continuing the Victorian Channels Access Regime and assess whether the regime is capable of being certified by the NCC in its current form.

The regulatory regime

The economic regulatory framework applying to the Victorian ports sector essentially comprises two dimensions:

- Prices charged for the provision of, and in connection with, certain port services, defined as prescribed services in section 49(c) of the PSA, are subject to the Commission's price regulation powers. Specifically, prescribed services under the current regulatory arrangements are:
 - the provision of channels for use by shipping
 - the provision of berths, buoys or dolphins in connection with the berthing of vessels in the ports of Melbourne, Geelong, Portland and Hastings (**berth services**)
 - the provision of short-term storage or cargo marshalling facilities in connection with the loading or unloading of vessels at berths, buoys or dolphins in the ports of Melbourne, Geelong, Portland and Hastings.
- Division 4 of Part 3 of the PSA establishes the Victorian Channels Access Regime which provides potential users with the right to gain access to declared shipping channels and provides the Commission with powers to make determinations of access disputes (including for prices).

Price regulation of prescribed services

The Commission exercised its price regulation powers through the 2005 Price Monitoring Determination (**PMD**), which established a price monitoring regime to apply to the Victorian ports sector. This followed the Commission's 2004 review that recommended replacement of the building block approach to price regulation with a lighter-handed regulatory approach.

The 2004 review determined that the PoMC held substantial market power in its core container and motor vehicle trades, and determined that effective price monitoring therefore required complimentary regulatory principles that make clear what pricing conduct is acceptable and what is unacceptable. With respect to the regional ports, the Commission said:

Noting the uncertainty in relation to the degree of residual market power of the regional ports and regional channel operators, the Commission recommends that the provision of shipping channels and berth services by these port entities should continue to be prescribed services at the present time – as a transitional step to deregulation.¹

Given the market power the PoMC was considered to have in the 2004 review, the PMD set out principles that are to guide the PoMC when setting its prescribed prices. The PoMC was also required to prepare a Pricing Policy Statement that explains how the reference tariffs would be calculated, and how the pricing principles set out in the PMD, and the additional pricing principles specific to Shared Channels, would be complied with.

Accordingly, the main elements of the current price monitoring framework provided by the PMD include:

- a requirement for ports to maintain a published set of reference tariffs
- a requirement for the PoMC to comply with pricing principles contained in the PMD and to prepare and publish a Pricing Policy Statement
- clear requirements on the provision of information to the Commission to support its monitoring role
- the publication of an annual monitoring report by the Commission
- a credible threat of the application of more prescriptive regulation if market power is misused, and
- a scheduled review after five years to determine whether the prices monitoring framework is delivering the objectives of the ESC Act and the PSA.

Finally, the regulatory arrangements include a provision that enables the Commission to conduct inquiries within the term of the monitoring period, and in the event the Commission finds that there has been significant misuse of market power by a port service provider, or the price monitoring framework is not effectively meeting the Commission's statutory objectives, the Commission may amend the PMD. This could result in the reintroduction of direct price controls for one or more ports.

¹ Essential Services Commission (2004) 'Regulation of the Victorian Ports: Final Report', p.5

Access regime for shipping channels

The Victorian Channels Access Regime applies to channels declared by Order of the Governor in Council as prescribed channels under section 58 of the PSA. To date no channels have been declared, so the regime is not operational. However, the Commission has released a Guideline on how it would conduct the process of determining an access dispute (were a channel to be declared and an access dispute arise).

The Commission's approach

The approach taken by the Commission to the main questions in the Review, namely the need for, and form of, economic regulation of the ports, is to assess the market power of the ports, and the costs and benefits from the imposition of economic regulation in circumstances where market power is present. The degree of market power also informs consideration of the appropriate form of regulation.

Economic regulation of port services

Market power is commonly defined in terms of the scope for a firm to profitably raise prices above marginal costs for a sustained period of time. The Commission's approach involved assessing the scope for the misuse of market power in the provision of prescribed port services, such that there is the potential for consequential efficiency losses. Based on this assessment the Commission considered whether economic regulation remains appropriate.

The Commission's assessment of the need to continue (or not) some form of price regulation of port services requires making a judgment about the associated benefits and costs of regulation. The benefits of continuing some form of price regulation of port services is in turn heavily dependent on the Commission's view of the extent of any market power held by port service providers.

In this context, the Commission has first defined the relevant market(s), and then assessed the potential for competition for the provision of prescribed port and channel services within each market. To do this the Commission has determined that a number of factors are particularly relevant to this assessment of market power, namely:

- the potential for competition between ports (as part of a domestic supply chain) and other modes of transport within Australia
- the potential for substitution between port services
- the presence of entry barriers
- the degree of countervailing market power by port users, and
- relevant changes in the market that may influence or change any of these characteristics.

To determine whether price monitoring remains the most suitable form of regulation, the Commission has also examined what other forms of regulation (if any) would be sufficient to address the potential efficiency losses from misuse of market power, having regard to the economic costs and efficiency benefits of the imposition of regulation.

The Commission's decision on the appropriate form of regulation has been driven by its assessment of market power, including the potential for port service providers to exercise that market power. The possible forms of regulation considered include heavy-handed methods of price control regulation, such as rate of return regulation, price caps or revenue caps, negotiate/arbitrate forms of regulation, and lighter forms of regulation, such as price monitoring, application of pricing principles and threshold schemes.

The Commission's assessment of the appropriateness of applying a more or less intrusive form of regulation is based on its view as to what form of regulation will improve market outcomes the most, given the particular circumstances facing the business and taking account of the costs that regulation will impose. In addition, there are a number of principles in the CIRA and the Competition Principles Agreement (**CPA**) that are relevant to taking a decision on the appropriate form of regulation, where regulation is deemed desirable.

The Channel Access Regime

Insofar as the Commission's recommendation is to retain the Victorian Channels Access Regime, the Commission must advise the Minister as to whether that regime meets the requirements of certification as an effective State-based access regime, and if not, what changes would be necessary in order to obtain certification. This requires the Commission to assess whether:

- the facility is "significant" to the economy
- it would not be economically feasible to duplicate the facility
- access to the facility is necessary to promote a material increase in or effective competition in an upstream or downstream market, and
- the safe use of the facility by the access seeker can be ensured at an economically feasible cost.

Recommendations – scope of regulation

The Commission's assessment of the market power for the provision of port services and shared channel services begins by defining the relevant market(s) and proceeds with an assessment of the potential for competition for the provision of prescribed port and channel services within each market.

Defining the relevant market

As in the 2004 Review of Port Services, the Commission's view is that the geographical limit of the relevant market for the provision of port infrastructure services (channel and berth services) is south eastern Australia. The relevant port infrastructure services are those required for the safe and efficient transfer of goods or passengers between the land and the sea, distinct from the range of complimentary non-infrastructure services such as pilotage, towage, mooring and ship repair as well as stevedoring and warehousing. Non-infrastructure port services have been considered as separate but related market.

Having generally defined the market for port infrastructure services, the Commission identified a number of distinct sub-markets comprising the main cargo "pack types", namely: the container market, the general cargoes market, the dry bulk market and the liquid bulk market. In each case, these different types of cargoes are transported by different, specialised ships, requiring specialised land-side port infrastructure. For this reason, these sub-markets were considered to be sufficiently distinct so as to warrant separated analyses.

Containerised trade port services

The Commission's finding is that the PoMC retains the potential to exercise substantial market power with respect to the provision of port services for containerised trades. For this reason, the Commission's conclusion is that the channel and berth services provided in respect of container and motor vehicle trades should continue to be subject to economic regulation for a further five year period.

Specifically, the Commission considers that:

- there are potentially large barriers to new entry for the provision of containerised port services, given the economies of scale involved and the availability of sufficient land and land transport to provide these services. Therefore there is limited scope for existing ports, or new competing ports, to be redeveloped in order to provide direct competition to the PoMC, because of the large economies of scale required.
- there is little competitive constraint for the PoMC in its port services for containers. The capital city container ports provide only a relatively minor constraint on the prices of the PoMC's port services for containers.
- the potential to capture a greater share of the mainland interstate container freight tasks may not provide sufficient substitutability to provide an effective constraint on the market power of the port of Melbourne. The Commission has observed that the cost of domestic land transport is such that the substitutability between container ports in relation to handling international cargoes is relatively low, and the scope for shipping to compete with land transport for domestic transport tasks is constrained by the availability spare capacity on international ships to transport domestic containers between Australian capitals. These observations mean that land transport does not provide an effective competitive constraint on the market power of the port of Melbourne for domestic transport containers.

- the Commission has serious reservations about the degree to which shipping lines have the scope to constrain the pricing conduct of the PoMC through the exercise of countervailing market power, and
- demand for port services is highly price inelastic, primarily because port infrastructure charges are only a small component of the total transport costs (absorbed in the final product price). So the sensitivity of demand to changes in price for port services was found to be unlikely to be a factor inhibiting any exercise of market power.

Motor vehicle trade port services

The 2004 review found that the PoMC retains substantial market power for the provision of port infrastructure for motor vehicle trade. The Commission's decision remains of the view that the PoMC has market power in the provision of port services for motor vehicles. This conclusion is based on the following findings of the Commission:

- although barriers to new entry in the provision of motor vehicle port services appear to be relatively low, site availability may be limited, and because of this there is limited scope for new entrants to competitively constrain the market power of the PoMC for motor vehicle port services
- there is likely to be relatively little prospect for competition between existing ports in Victoria or between major capital city ports
- vehicle shippers have relatively weak countervailing market power.

The Commission also considers that the announced merger of the PoMC with the port of Hastings, as the only port capable of competing with the PoMC, will likely limit the scope for competition between ports in Victoria. This means the PoMC will likely retain its monopoly on port services for motor vehicles in the short to medium term.

However, the Commission understands that GeelongPort is actively exploring the opportunities for a motor vehicle terminal in the port of Geelong and the Commission proposes to monitor the progress. If such a terminal proves to be feasible the Commission will discontinue the regulation motor vehicle services.

Despite the Commission's view that the PoMC retains the potential to exercise substantial market power in relation to container and motor vehicle cargoes, the evidence available to the Commission does not support a conclusion that the PoMC has actually misused this market power.

Bulk cargo port services

The Commission's conclusion is that no Victorian port service provider has market power for the provision of port services for bulk cargoes, based on:

- evidence of active rivalry and scope for new entry in the provision of port services for bulk cargo, and
- the use of long-term contracts for bulk cargo port services provides an opportunity for users to exercise some degree of countervailing market power.

Shared channel services

The Commission's market power assessment extends to the provision of shared channel services by the PoMC, and particularly whether the potential for market power in these services might create the opportunity for the PoMC to impede competition in port services.

The focus of this assessment is on the shared channels at the entrance to Port Phillip Bay. The key regulatory issue is that these channels are required to be used by ships visiting either (or both) the ports of Melbourne and Geelong. These two ports compete in relation to a range of contestable trades, which creates a conflict of interest for the PoMC, and an incentive to price channel services in such a way that might be to its competitive advantage in the contestable parts of the market. The shared channels are therefore considered to be "monopoly bottleneck facilities" of the kind that may be subject to third party access regulation.

The Commission's conclusion is that the PoMC does have market power in the provision of shared channel services, and there is scope for this market power to impede competition in upstream or downstream markets – including competition in port services, and in certain industries.

The shared channels could not be economically duplicated and they are significant to Victoria's economy because the great majority of Victoria's seaborne trade (by value) passes through the shared channels. In summary, these facilities appear to qualify as significant infrastructure facilities. The benefits of activating the Victorian Channel Access Regime are that it will provide a more effective dispute resolution mechanism than the price monitoring framework can currently provide, and access to the shared channels on fair and reasonable terms will be of importance to the efficient location of economic activity in the State.

In forming this view, the Commission notes that the prospect of achieving certification is likely to be diminished significantly if an inappropriate form of regulation is imposed, ie, if a costly, heavy-handed form of regulation is put in place to mitigate against the potential abuse of market power, where that regulation is not proportionate to the potential costs imposed by any abuse of market power. Accordingly, the Commission considers that the Victorian Channel Access Regime should be covered by the relatively light-handed price monitoring framework, with specific pricing principles that apply to shared channels. The access framework will provide for dispute resolution as a last resort.

Finally, the Commission has assessed the Victorian Channel Access Regime against the requirements of the CPA for its certification as a state-based access regime. In the Commission's view, the regime satisfies all of the requirements for certification.

Regional Ports & Non-containerised/non-motor vehicle cargoes

As part of this Review the Commission is required to consider the extent of market power at Victoria's regional ports. The Commission has determined that the risk of market power being exercised at these ports is low, and as such recommends that price monitoring of regional ports be discontinued. In forming this view the Commission considers that there are workably competitive markets at these ports for the cargoes they handle, and there are alternative means through which "captive" customers are able to protect themselves against the potential abuse of market power by regional port operators.

Given the competitive tensions that exist between the PoMC and the other Victorian ports in these sub-markets, the case for ongoing price monitoring of the PoMC in respect of those contestable cargoes is also not strong. On this basis, the Commission recommends that price monitoring of the PoMC for cargoes other than container and motor vehicles be discontinued.

Definition of prescribed services

In light of the Commission's conclusion that a more limited set of port services should be regulated, within a narrower number of ports, the Commission has also considered the appropriate definition of prescribed services. Accordingly, the Commission's recommendation is that the services that should be prescribed services are the services of:

- the provision of channels for use by shipping in the port of Melbourne waters, including the Shared Channels used by ships bound either for the port of Melbourne or for the port of Geelong
- the provision of channels for use by shipping in the port of Hastings waters, only in respect of vessels carrying container or motor vehicle cargoes
- the provision of berths, buoys or dolphins in connection with the berthing of vessels carrying container or motor vehicle cargoes in the ports of Melbourne or Hastings, and
- the provision of short term storage or cargo marshalling facilities in connection with the loading or unloading of vessels carrying container or motor vehicle cargoes at berths, buoys or dolphins in the ports of Melbourne or Hastings.

As a result, the regional ports of Geelong and Portland, and the current activities at the port of Hastings, would no longer be regulated. Services at the port of Melbourne for non-containerised and non-motor vehicle cargoes would also no longer be subject to regulation.

Recommendations – Form of regulation

The Commission recommends that the appropriate form of regulation to apply to the prescribed services is a price monitoring framework, namely:

- price monitoring of services in relation to container or motor vehicle cargoes at the ports of Melbourne and Hastings if that becomes a port handling containers or motor vehicles

- price monitoring of shipping channel services in the channels serving the port of Melbourne, and
- price monitoring of the shared channels supplemented by a negotiate-arbitrate access regime.

Price monitoring framework

Notwithstanding the continuation of the price monitoring approach for the regulation of prescribed services at Victoria's ports, the Commission's recommendations differ from the current framework in one important respect, namely, the removal of the Commission's powers as reflected in the current PMD to initiate reviews and intervene by imposing heavy handed regulation within the regulatory period. Instead, the Commission would retain its ability, under Part 5 of the ESC Act, to bring concerns to the attention of the Government, and for the Government to direct the Commission to undertake a review if it considered it to be appropriate to do so.

The Commission recommends that the ability to undertake reviews within the regulatory term should be retained, but only under Part 5 of the ESC Act – that is, at the initiation of, or consultation with, the Government – and the Commission would not be able to introduce more heavy handed regulation without the approval of the Minister administering the PSA.² This recommended framework may go some way towards addressing issues raised by Alcoa concerning captive users at the regional ports.

This proposed process would be more consistent with analogous price monitoring regimes, particularly in airports (a Commonwealth regime), and has the benefit of adding an additional check or balance in association with the regulatory threat, and ensures the Commission does not have too much discretion in this regard.

Access regime

The proposed application of the Victorian Channel Access Regime to the shared channels will provide a clear, equitable and enforceable dispute resolution process with respect to any disputes over access to the shared channels. The Commission sees this process as having distinct advantages over its current investigatory powers and threat of heavy handed regulation.

The Commission considers that the Victorian Channel Access Regime should rely on a commercially driven approach that relies on parties resolving matters through commercial negotiation where possible. The access regime will provide an effective enforceable mechanism to resolve any disputes in relation to access to the shared channels on fair and reasonable terms. The existing access regime is suitable for the purpose as it provides that the Commission:

- can direct parties to explore reasonable avenues of negotiation or mediation where it is appropriate for it to do so – or alternatively it can determine a dispute

² Section 15(4) of the Grain Handling and Storage Act 1995 provides an example of the type of provision that can be included in the PSA to give effect to this recommendation. In addition section 7 of the PMD would be removed.

- has the discretion not to determine certain types of disputes. Examples include:
 - where the channel operator has complied with the pricing principles
 - if an access dispute concerns a direction of a harbour master.

Form of regulation – asset valuation & concept of profit

In carrying out its price monitoring role the Commission will need to establish what it understands to be a commercial rate of return which is consistent with a competitive market outcome. To this end the Commission has consulted on the question of whether and in what circumstances asset revaluations should provide a basis for ports to raise prices.

The Commission has formed the following views on how it should require asset reporting in regulatory accounts and the concept of profits it should employ when making its assessments under the monitoring framework.

If asset revaluations are to be reflected in PoMC's asset base then the Commission's recommendations are that:

- it is appropriate for the Commission to also have regard to gains from revaluation as part of income for the purposes of making its assessments in regard to whether there has been any exercise of substantial market power. That is, to use the concepts of financial capital maintenance and the economic rate of return, which include capital gains and losses. These concepts of income are considered to be the most appropriate basis for comparison against the opportunity cost of capital or WACC (weighted average cost of capital).
- approaches to valuing assets based on discounted future cash flows should not be used for the purpose of assessing rates of return for entities with market power due to the circularity involved. Where PoMC uses this method of valuation in its statutory accounts, the Commission will require an alternative valuation method to be used for regulatory accounts, on which it will undertake its monitoring of port prices.
- the line in the sand method be used for valuing the pre-1996 shipping channel assets, and that the value of those assets should remain equal to zero for pricing purposes.
- PoMC should set its prices to ensure that they are smoothed over time, and not excessively disturbed by factors which may have influence over the valuation of certain assets in the short-term, such as exchange rate or interest rate movements.
- PoMC's pricing policy statement should adequately address how it proposes to deal with returns over time from long-lived assets such as the CDP, which may have low returns in the early phases of the asset life and higher returns further in the future.

Other considerations

Having regard to clauses 4.1 and 4.2 of the CIRA, the Commission has considered whether PoMC's commercial charter provides sufficient guidance to PoMC to seek a commercial return while not misusing market power as contemplated by clause 4.2(c) of the CIRA.

The Commission's view is that PoMC's commercial charter includes its statutory charter in Part 2, Division 1 of the PSA, but is also affected by the Commission's Price Monitoring Determination (**PMD**). The PMD establishes pricing principles relevant to achieving a commercial return while not misusing market power.

Since it is the Commission's recommendation that the PMD should continue to apply to PoMC, including the requirement to produce a Pricing Policy Statement (**PPS**), this will mean that PoMC's commercial charter (broadly defined to include the PMD and the PPS) will be consistent with the CIRA requirement.

The Essential Services Commission (**Commission**) is the independent economic regulator in Victoria. The Commission regulates a number of industries, including water utilities, energy retailers, ports and rail infrastructure and export grain handling services, among others. The Commission's role differs for each regulated industry but generally involves the economic regulation of prices, service standards, and market conduct and in some cases, consumer protection.

The Commission is responsible for economic regulation of the port sector under the *Port Services Act 1995 (PSA)*. The PSA establishes an economic regulation framework that applies to Victoria's commercial seaports of Melbourne, Geelong, Portland and Hastings. This regulatory framework was established in the mid-1990s in the context of the privatisation of the ports of Portland and Geelong, and the structural reform of the statutory corporations that manage the port of Melbourne and the channels of Port Phillip Bay.

The ports regulation framework identifies certain port infrastructure services such as the provision of shipping channels, berth services, cargo marshalling areas and short-term storage adjacent to berths as prescribed services". Under the *Essential Services Commission Act 2001 (ESC Act)*, the Commission has price regulation powers in respect of the prices charged for the provision of, or in connection with, prescribed services. The Commission has exercised its price regulation powers in respect of prescribed services by establishing a price monitoring regime.

There is also an access regime for shipping channels in the PSA, but as no shipping channels have been declared to date, the access regime is inactive.

For the purpose of undertaking its regulatory roles, the Commission has regulatory powers to issue licences and establish licence conditions; establish standards and conditions of service and supply; issue guidelines; obtain information; and conduct inquiries into the ports industry.

1.1 Purpose and scope of the inquiry

Under section 53 of the PSA, the Commission is required to conduct and complete a review of the regulation of prescribed port services by June 2009. The purpose of the current Review is to meet this requirement.

The Review will determine whether the arrangements currently in place for the regulation of prices in the ports sector continue to be appropriate and, if not, how they might best be amended to meet the objectives of both the ESC Act and the PSA. This includes considering whether regulation of each port continues to be necessary, and if so the appropriate form of regulation. The Commission is also required under section 53 of the PSA to report on any transitional issues that arise in relation to any recommended changes to regulation.

In addition to these matters, on 29 January 2009 the Minister for Finance referred related matters to the Commission for inclusion in its inquiry pursuant to section 41 of the ESC Act. These additional matters are as follows:

- in making recommendations about the regulation of Victorian ports, including pricing and access regulation the Commission should have regard to the principles outlined in clauses 4.1 and 4.2 of the Competition and Infrastructure Reform Agreement (**CIRA**)
- the Commission is to assess whether the Victorian Channels Access Regime is necessary in order to ensure competition or competitive tension in upstream and/or downstream markets
- if it considers there is a net benefit from continuing the Victorian Channels Access Regime, the Commission should assess whether the regime in its current form is able to be certified by the National Competition Council (**NCC**), or if not, assess what changes would render it able to be certified, and
- the Commission should take particular note of recent amendments to the ESC Act, in particular, the insertion of Part 3A and the implications of this for the design and assessment of access regimes.

The additional terms of reference have been combined within the scope of the current Review.³

1.2 Objectives of the Commission

In carrying out the review the Commission will have regard to its statutory objectives.

Sections 48(a) and 48(b) of the PSA provide that the Commission's objectives in relation to the port industry in a commercial trading port are:

- to promote competition in the regulated industry; and*
- to protect the interests of users of Prescribed Services by ensuring that prescribed prices are fair and reasonable whilst having regard to the level of competition in, and efficiency of, the regulated industry.*

The Commission's general regulatory objectives are set out in section 8 of the ESC Act:

- In performing its functions and exercising its powers, the objective of the Commission is to promote the long term interests of Victorian consumers.*
- Without derogating from subsection (1), in performing its functions and exercising its powers in relation to essential services, the Commission*

³ In the Issues Paper, the Commission indicated its intention to provide timely advice to the Government in relation to the channel access regime prior to the scheduled Council of Australian Governments requirement that the Government seek certification of the regime. The Issues Paper consulted on the channel access regime including the net benefit from the regime, and whether it could be certified as an effective State-based regime in its present form.

must in seeking to achieve the objective specified in subsection (1) have regard to the price, quality and reliability of essential services.

Section 8A of the ESC Act states that in seeking to achieve these general objectives, the Commission must have regard to the following matters to the extent that they are relevant in any particular case:

- (a) *to facilitate efficiency in regulated industries and the incentives for efficient long-term investment;*
- (b) *to facilitate the financial viability of regulated industries;*
- (c) *to ensure that the misuse of monopoly or non-transitory market power is prevented;*
- (d) *to facilitate effective competition and promote competitive market conduct;*
- (e) *to ensure that regulatory decision making has regard to the relevant health, safety, environmental and social legislation applying to the regulated industry;*
- (f) *to ensure that users and consumers (including low-income or vulnerable customers) benefit from the gains from competition and efficiency; and*
- (g) *to promote consistency in regulation between States and on a national basis.*

The Commission must have regard to its general statutory objectives in a manner it considers best achieves the objectives stated in the PSA.

With regard to third party access regimes, Part 3A of the ESC Act has the following object:

...to promote the economically efficient operation of, use of and investment in, the infrastructure by means of which services are provided, thereby promoting effective competition in upstream and downstream markets.

1.3 Review Process and Timetable

The Commission issued an Issues Paper on 7 January 2009, to which it received submissions from seven stakeholders. Submissions were received from ANL (confidential), Asciano, Geelong Channels Users Group⁴ (**GCUG**), Port of Melbourne Corporation (**PoMC**), Port of Portland Limited (**PoPL**) (confidential supplement), Shipping Australia Limited (**SAL**) and the Victorian Regional Channels Authority (**VRCA**).

A public hearing was held at the Commission's offices on 3 March 2009 and presentations were made by representatives of the Commission, Asciano, the Department of Transport (**DoT**), PoMC and SAL. A transcript of the proceedings is available on the Commission's website.

⁴ Membership comprises Shell Australia, GrainCorp, Midway, Alcoa, Terminals Ltd and Incitec Pivot

A Draft Report was subsequently released, and submissions to the Draft Report closed at the end of May 2009. Five submissions were received in response to the Draft Report, from: Alcoa; Asciano; Australian Peak Shippers Association (**APSA**); PoMC, including an expert economic comment by Dr. Rhonda Smith; and SAL.

1.4 Structure of this Report

The structure of the remainder of the Report is as follows:

- Chapter 2 presents a summary of the Victorian ports regulatory framework, including the prescribed services, the price monitoring framework, the channel access framework, and the requirement to undertake regular reviews of the regulatory framework.
- Chapter 3 outlines the Commission's approach to the issues to be addressed in the Review, including relevant regulatory principles.
- Chapter 4 provides descriptive information on the Victorian ports industry, including a brief description of each of the four commercial ports, the service providers for the major types of port services, trends in vessel and cargo movements through the ports, trends in port prices, and selected benchmarks and service quality indicators.
- Chapter 5 summarises the views expressed by stakeholders in submissions made to the Issues Paper, or at the public hearing, and also summarises the findings of the Commission's 2004 review of ports regulation, and the main changes in the market and outcomes under the price monitoring framework.
- Chapter 6 outlines the ports regulatory frameworks, and the reviews of ports regulation recently undertaken, in Australia's other states and territories. Appendix E discusses those reviews in greater detail. There is also a summary of the price monitoring framework that applies to Australia's major airports.
- Chapter 7 addresses the question as to whether there is market power, and if so in what services. It addresses whether there is a demonstrated need for regulation in terms of preventing the misuse of market power, or facilitating competition in upstream or downstream markets. There is also the Commission's consideration of whether the benefits of regulation would outweigh the costs.
- Chapter 8 considered whether the prescribed services are appropriately defined, and how they would need to be defined under the recommended scope of regulation in Chapter 7.
- Chapter 9 examines the appropriate form of regulation for those services that should remain subject to regulation. This includes considering the effectiveness of the price monitoring framework, comparison of price monitoring against alternative regulatory regimes, the effectiveness of each of the elements of the monitoring framework, and the appropriate form of regulation of the shipping channels at the entrance to Port Phillip Bay used to access both the ports of Melbourne and Geelong. Chapter 9 also examines whether the statutory charters of PoMC and the Victorian Regional Channels Authority (**VRCA**) conform to the relevant principle in the CIRA.
- Chapter 10 addresses in detail questions about the appropriateness of asset revaluations as a basis for increasing prices within the price monitoring framework.

- Chapter 11 then reviews whether the recommended regulatory framework meets all of the applicable requirements and principles in the CIRA.
- The Commission's recommendations are summarised in Chapter 12.

2 | VICTORIAN PORTS REGULATORY REGIME

This section of the Report provides an overview of the current Victorian ports regulatory regime, which is the subject of this Review.

There are two main elements to the economic regulatory framework applying to the ports:

- Certain port services are subject to the Commission's price regulation powers in the ESC Act. These services are designated as prescribed services in the PSA, and the Commission has exercised its price regulation powers in respect of prescribed services by establishing a price monitoring regime through its 2005 Price Monitoring Determination (**PMD**).
- Division 4 of Part 3 of the PSA establishes an access regime for shipping channels which provides potential users with the right to gain access to declared shipping channels and provides the Commission with powers to make determinations with respect to access disputes (including with respect to prices). This regime only applies to channels declared by Order of the Governor-in-Council, and since no channels have been declared to date, the access regime has not been activated.

Section 2.1 describes the services that are covered (or potentially covered) by price regulation, namely prescribed and related services, and those which are not, namely excluded services and excluded contracts. The following sections describe the current price monitoring framework (section 2.2) and the Channel Access Framework (section 2.3).

2.1 Prescribed services, related services & excluded services

Prescribed Services

Prescribed services are subject to the price monitoring regime. They are defined in section 49(c) of the PSA as including:

- the provision of channels for use by shipping
- the provision of berths, buoys or dolphins in connection with the berthing of vessels in the ports of Melbourne, Geelong, Portland and Hastings
- the provision of short-term storage or cargo marshalling facilities in connection with the loading or unloading of vessels at berths, buoys or dolphins in the ports of Melbourne, Geelong, Portland and Hastings.

Channel Services cover the service of providing shipping channels, including the dredging of channels to maintain their depths, the installation and maintenance of associated navigation aids, and provision of the shipping control services associated with the role of the harbour master.

Berth Services include the services of providing berths and other moorings (i.e. buoys and dolphins), and of providing short-term storage and cargo marshalling areas directly behind the berths (i.e. the second and third of the prescribed services listed above). These are closely related because short-term storage and cargo marshalling areas are essential to the efficient functioning of the berths, and are essentially an extension of the berths themselves. The Commission's view is that berth services do not include warehousing and longer term distribution centres within the precincts of each commercial trading port which potentially compete with similar facilities at a range of other locations. This is because the regulatory scheme in the PSA was not intended to regulate contestable services. Berth services include those provided to passenger cruise ships (e.g. at Station Pier).

The prices charged for prescribed services are referred to as prescribed prices (section 49(b) of the PSA) over which the Commission has regulatory powers pursuant to section 32(1) of the ESC Act.

Related Services

The Commission can, at its discretion, take into account the costs of providing related services when making determinations. Thus section 54(4) of the PSA provides:

The Commission may, when making a determination in relation to prescribed services in a commercial trading port, have regard to the costs associated with any service related to the prescribed services if—

- (a) the related service is necessary or essential to the provision of prescribed services; and*
- (b) the related service cannot readily be provided by another provider; and*
- (c) it is not feasible to charge a separate price for the related service.*

Excluded services

Under Clause 2.3.1 of the PMD the Commission can exclude specific prescribed services from regulatory oversight:

If the Commission is satisfied that it would promote the Objectives if the provision of a specific service (which would otherwise fall within the definition of Prescribed Service) be excluded from the operation of this Price Monitoring Determination, it may notify the relevant Provider of Prescribed Services in writing.

Excluded contracts

Certain contracts in place prior to the enactment of the PSA have been defined as excluded contracts. They are excluded from the regulatory framework under Clause 2.2.3 of the PMD:

For the purposes of this Price Monitoring Determination, Prescribed Prices include prices charged for the provision of, or in connection with, Prescribed Services and Related Services under (a) existing contracts (as described in clause 2.2.2); and (b) contracts entered into under clause 2.2.1, but do not include prices charged under Excluded Contracts.

The Statement of Purpose and Reasons to the PMD elaborates:

Under the existing scheme for regulating prices of prescribed services, certain contracts in place prior to enactment of the PSA have been treated as exempt contracts, and thereby excluded from the regulatory framework. Clauses 2.2.3 and 3.4.1(a)(iii) provide for such contracts to continue to be excluded from the regulatory framework.

Table 6 in the Statement of Purpose and Reasons provides a list of excluded contracts for each of the Victorian ports.

2.2 The price monitoring framework

The main elements of the price monitoring framework provided by the PMD include:

- a requirement for ports to maintain a published set of reference tariffs
- a requirement for PoMC to comply with pricing principles contained in the PMD and to prepare and publish a Pricing Policy Statement (**PPS**)
- clear requirements on the provision of information to the Commission to support its monitoring role
- the publication of an annual monitoring report by the Commission
- a credible threat of the application of more prescriptive regulation if market power is misused
- a scheduled review after five years to determine whether the price monitoring framework is delivering the objectives of the ESC Act and the PSA.

2.2.1 Transparency

Within the price monitoring framework it is an objective of the Commission to facilitate commercial negotiation and competition. It does this by:

- ensuring that port users have adequate information for the purposes of negotiating access to prescribed services, through the obligations imposed on port operators to publish reference tariffs, and in the case of PoMC, its PPS, as well as the Commission's monitoring reports
- providing port industry participants with information about the regulatory framework, and
- wherever relevant and practicable, encouraging port users and port operators to seek to resolve matters of dispute through commercial negotiation.

Thus a key element of the framework is transparency. Transparency is provided through the publication of reference tariffs by port operators together with the

publication of monitoring reports by the Commission (discussed in section 2.2.2 below).

Regulated port operators are required to publish a Reference Tariff Schedule for prescribed services by the end of May each year (clause 2.1.1(a) of the PMD) for application for the financial year commencing 1 July of that year. A port operator can meet this obligation by publishing its Reference Tariff Schedule on its website (clause 2.1.2). Providers of prescribed services must also provide the Commission with a copy of their Reference Tariff Schedule for the following financial year (clause 2.1.1(b)). The Reference Tariff Schedule can be varied during the financial year, but the port operator must give port users and the Commission 60 days notice (clause 2.4.2).

The Reference Tariff Schedule is a “standing offer” of the terms and conditions upon which prescribed services will be provided (see clause 2.1.6). The Reference Tariff Schedule must be made freely available to all actual and potential port users (clause 2.1.3). A port operator is not required to obtain the approval of the Commission when establishing its Reference Tariff Schedule (clause 2.1.1(b)).

The Reference Tariff Schedule must clearly indicate the services to which each tariff relates, and any applicable standards of service (clause 2.1.4). Prescribed Prices must be separate from prices for other services to ensure there is no “bundling” of prescribed and non-prescribed services (clause 2.1.5(a)). In addition, there is a requirement (clause 2.1.5(b)) for the “ring fencing” of charges that come under the Channel Access Regime, to ensure that they are distinguishable from charges for other prescribed services and non-prescribed services.

While the Reference Tariff Schedule forms a “standing offer”, there is nothing to prevent port operators from negotiating different pricing arrangements with individual users where such arrangements are to the satisfaction of both parties (clause 2.2.1).

2.2.2 Information reporting & publication

Port operators are required to provide a range of information to the Commission. The information is used by the Commission to monitor the provision of prescribed services and related services.

Information disclosure by port operators

The main information requirements include:

- Financial statements for prescribed services, including revenues, operating costs and profits, assets and liabilities, capital expenditure and expenditure on related services (clause 3.2.2). The information must be accompanied by a Director’s Responsibility Statement, or if the Commission allows, certified by a competent officer of the regulated entity (clause 3.2.4(a)) and an audit statement must be provided to the Commission with the financial statements (clause 3.2.4(b)). A full and detailed statement of the accounting principles and policies used to prepare the regulatory financial statements should also be provided (clause 3.2.4(c)).
- Separate financial statements must be provided for prescribed channels, other prescribed services and non-prescribed services, and the whole of business of

the port operator (clause 3.2.1). A cost allocation statement must also be provided which details how costs and assets have been allocated between these services (clause 3.3). The cost allocation principles must conform to the methodology set out in clause 3.3.2 (and under clause 3.3.5 the Commission can reject a cost allocation statement that does not follow these requirements).

- Port charges and levels of demand for each of the prescribed port services (clause 3.4.1(a)).
- Indicators of service quality and productivity relating to the provision of prescribed services (clause 3.4.1(c)).
- Other statistical information to support the Commission's market and statistical analysis (clause 3.4.1(b)).

This information is to be provided annually to the Commission by each port operator, no later than four calendar months after the end of the financial year (clauses 3.2.4(d) and 3.3.4). The Reference Tariff Schedule must also be provided to the Commission by the end of May each year, as described in section 2.2.1 above.

In addition, subsection 56(3) of the PSA requires the provider of prescribed services to make financial and business records available to the Commission when required to do so by notice in writing given by the Commission.

Information Reporting by the Commission

The Commission publishes an annual Monitoring Report that provides information about the provision of prescribed services at each of the Victorian commercial ports (clause 4.1.1). The purpose of the Ports Monitoring Report is to present information on the economic performance of Victoria's ports. The publication of these reports supports the Commission's objective of facilitating commercial negotiation and competition by making information publicly available that will be relevant to port industry participants, for example, when they are negotiating the terms and conditions of obtaining access to prescribed services. The annual Monitoring Reports also contain some of the information relevant to the Commission's monitoring role, and to the effectiveness of the regulatory framework in meeting the Commission's statutory objectives (stated in section 1.2 above).

The 2005/06 report and the combined 2006/07 and 2007/08 report followed the same format, and included information on port activity, changes to the levels and structure of port charges, service quality indicators, findings of customer satisfaction surveys, and selected financial performance and productivity indicators.

2.2.3 POMC-specific elements, pricing principles and PPS

In the 2004 review of regulation of Victorian ports, the Commission determined that PoMC held substantial market power in its core container and motor vehicle trades. As a consequence, the Commission determined that effective price monitoring required clear regulatory principles that make clear to all stakeholders what pricing conduct is acceptable and what is unacceptable.

To this end, clauses 5.2 and 5.3 of the PMD set out the principles which are to guide the PoMC when setting prescribed prices. The pricing principles state that PoMC's prescribed prices:

- should generate expected revenue that is sufficient to meet the expected efficient long-run costs of providing the prescribed services, including a return on assets (appropriately defined and valued) commensurate with the risks involved
- should not provide a sustained level of revenue that is significantly above that which would be or would have been sufficient to meet the efficient long-run costs of providing the prescribed services, including a return on assets (appropriately defined and valued) commensurate with the risks involved
- should not be structured to advantage the operations of PoMC over those of a competitor in a related market, except on the basis of costs of supply
- should not discriminate between users of equivalent ("like for like") services where those users compete in a related market, other than on the basis of differences in the costs of supply
- may reflect efficient forms of price discrimination as follows:
 - multi-part pricing and price discrimination should be employed when these will promote efficient outcomes, and
 - the expected revenue raised from the prices applying to a particular service should be no lower than the forward-looking avoidable cost of providing that service and no higher than that required to support the provision of that service on a stand-alone basis.

In addition, the PoMC is required to have regard to the following pricing principles when setting prescribed prices for the use of Shared Channels⁵:

- charges for use of a Shared Channel should generate expected revenue equal to the specific costs of providing the Shared Channel and a reasonable allocation of common costs (including an appropriate return on capital)
- the rules by which common costs are allocated should be reasonable, the allocation basis verifiable, and the rules consistently applied
- the cost of improvements to a Shared Channel that can be demonstrated to benefit only the users of one port should be borne by users of that port, and
- except insofar as the application of paragraph (c) requires, charges for use of a Shared Channel should not discriminate between users on the basis of port or berth that will be used by the vessel, except on the basis of cost.

Under the PMD, PoMC was also required to prepare a PPS which remains in force over the five year regulatory period. In preparing the PPS, PoMC was required to consult with port users and the Commission.

⁵ The Shared Channels are defined as the shipping channels at the entrance to Port Phillip Bay that are required to be used by all ships visiting either the port of Melbourne or the port of Geelong.

PoMC's PPS⁶ explains how the reference tariffs have and will be calculated, and how the pricing principles (set out in clause 5.2 of the PMD) and the additional pricing principles specific to Shared Channels (in clause 5.3.1 of the PMD) have been complied with, as well as how other relevant economic principles have been applied. The PPS also explains the pricing strategy during the regulatory period (as required by clause 6.2.3 of the PMD), and how this corresponds with PoMC's business plans, and how the costs of major investments are to be recovered.

2.2.4 Complaint handling

Under the PMD, the Commission is not required to investigate complaints or to take action in relation to complaints. However, the Statement of Purpose and Reasons to the PMD sets out the proposed complaint handling process. Because it does not wish to intervene in matters that would normally be subject to commercial negotiation or commercial dispute resolution processes, the Commission refers complaints to the relevant port operator in the first instance. The Commission would only investigate a complaint if:

- it is of sufficient weight or substance, and
- the parties have exhausted normal avenues of commercial resolution, and
- it is likely that a regulated port or channel operator has significantly misused its market power.

All complaints are noted by the Commission, and statistical information about complaints is included in the reports published by the Commission.

2.2.5 Inquiries and investigations

An important element of the price monitoring framework is the Commission's ability to undertake inquiries and the possibility of reversion to a more prescriptive form of regulation.

Section 7 of the PMD provides that, within the five-year regulatory period, the Commission can initiate an inquiry into any matter relating to the supply of prescribed services (clause 7.1.1). For example, it may inquire into whether a port or ports have significantly misused market power, or whether the price monitoring regime is effectively meeting the Commission's statutory objectives (clause 7.1.3). Such an inquiry can be confined to a particular port, prescribed service or issue, depending on the nature and extent of the identified problem.

The Statement of Purpose and Reasons to the PMD indicates that the Commission will use its powers of inquiry sparingly. Consistent with the Commission's monitoring role, the inquiry power is intended to be used only in unusual circumstances, where the Commission has significant concerns with regard to the market conduct of a regulated port or ports under the price monitoring regime. For example, it is not intended that inquiries will need to be conducted unless there is

⁶ Available at: <http://www.esc.vic.gov.au/NR/exeres/220A5919-09F5-4B8E-B0D6-9203D770970F.htm>

evidence to suggest that a regulated port or channel operator may have significantly misused its market power.

2.2.6 Principles governing the reimposition of price controls

If an inquiry finds that there has been significant misuse of market power, or the price monitoring framework is not effectively meeting the Commission's statutory objectives, the Commission may amend the PMD – e.g. by reintroducing price controls for one or more ports, or in another way that the Commission feels is appropriate to ensure that the objectives of the PSA and the ESC Act are met (clause 7.2.1 of the PMD).

To ensure that the risk of re-introduction of prescriptive regulation does not act as a deterrent to efficient investment, clarity is needed regarding the regulatory treatment of investments undertaken during the price monitoring period in the event that price controls were reintroduced. Section 8 of the PMD is intended to provide such clarity. It contains specific commitments regarding the investments that have been prudently and efficiently undertaken during the price monitoring period. It also provides assurance that investments undertaken following an appropriate rigorous and open evaluation process, and executed consistently with that evaluation, would be regarded as prudent in the event of the re-imposition of price controls.

In particular, the Commission is committed to adopting the actual cost of investment as the relevant asset value for inclusion in the Regulatory Asset Base, provided the investment was used to provide prescribed and related services and was prudently made. The PMD states that the Commission will accept that an investment has prudently been made if it is satisfied that the project has:

- been the subject of a detailed cost-benefit assessment by reference to the Victorian Government's procedures for reviewing major capital project,
- the assessment demonstrated net economic benefits, and included analysis of the financial costs and benefits for the Provider of Prescribed Services,
- been implemented in accordance with projections (that were considered for the purposes of the cost-benefit analysis referred to above), and
- where there has been a significant deviation from the cost that was projected in the original cost benefit analysis, that all appropriate project and risk management processes were put in place and adhered to (clause 8.2.3).

2.3 Channel access framework

Under paragraph 49(c)(i) of the PSA, the provision of channels for use by shipping is a prescribed service. Therefore the prices charged for the provision of these services are prescribed prices and subject to regulation by the Commission through the price monitoring framework described above.

In addition, Division 4 of Part 3 of the PSA establishes the Victorian Channels Access Regime, which applies to channels declared by the Governor in Council by Order to be prescribed channels. However to date no channels have been declared, so the Victorian Channels Access Regime is not operational, although,

as discussed above, there is price monitoring of channel access charges under the monitoring framework. Notwithstanding that there are no declared shipping channels at present, the Commission has released a Guideline on how it would conduct the process of determining an access dispute (were a channel to be declared and an access dispute arise).⁷

2.3.1 Declaration of shipping channels

In its 2003 Inquiry into Port Channel Access in Victoria and its 2004 inquiry into port services regulation, the Commission examined the market power of channel operators and the effectiveness of the access regime relating to the channels in Victoria⁸. At that time the Commission recommended that the access regime should be retained and implemented through:

- declaration of provision of channel services in Port Phillip Bay for use by commercial shipping in the waters serving the ports of Melbourne and Geelong, and
- application to the NCC for certification as an effective State-based regime under the Competition Principles Agreement (CPA).

These shipping channels were not declared, and the Commission will reassess this question in the present Review.

2.3.2 Obligations of an access provider

Section 59 of the PSA sets out the access obligations of channel operators in the event of declaration of channel services. Under this section, the channel operator would be required to:

- provide access on fair and reasonable terms and conditions
- use all reasonable endeavours to meet the requirements of a person seeking access to prescribed channels (an "Access Seeker"), and
- make a formal proposal of terms and conditions within 30 business days of receiving a request for access, or within such reasonable lesser period as is fixed by the Commission.

The PSA also provides that a channel operator or any other person having access to a prescribed channel must not hinder access to the prescribed channel by an Access User⁹.

2.3.3 Access disputes

Sections 60 and 61 of the PSA give an Access Seeker the right to request a determination from the Commission on the terms and conditions on which access is to be provided. The role of the Commission in making determinations on

⁷ <http://www.esc.vic.gov.au/NR/exeres/E99347BD-44D1-4965-A458-34EA4325FF10.htm>

⁸ ESC, May 2003, "Inquiry into Port Channel Access in Victoria: Final Report"; ESC, June 2004, 'Regulation of the Victorian Ports: Final Report'

⁹ "Access User" is a party with a legitimate right of access.

disputes over access to prescribed channels would be additional to the Commission's price monitoring role.

Thus the Commission would have the power to determine access disputes in circumstances where:

- the Access Seeker cannot agree to the terms and conditions of access offered by the channel operator, or the channel operator has not made a formal offer to the Access Seeker as required under paragraph 59(2)(b) of the PSA and Part 3 of the Channel Access Guideline (section 60)
- an Access User's reasonable right of access to a prescribed channel has been hindered by the channel operator or another party (section 61).

When making a determination of this kind, the Commission must have regard to the factors specified in PSA and any other factors that the Commission considers relevant. In addition the Commission must consider the matters specified in paragraphs (i) and (j) of clause 6(4) of the CPA.

In addition, subsection 60(4) of the PSA provides that the Commission must not make a determination if it considers that doing so would substantially impede the existing right of access of another person, unless that person has been given an opportunity to make a submission to the Commission in respect of the matter.

2.4 Periodic Regulatory Reviews

Under section 53 of the PSA, the Commission is required to periodically review the regulatory regime and make recommendations to Government on whether continued regulation of prescribed prices is appropriate, and if so the form of economic regulation to be adopted. The second of these scheduled inquiries was completed in 2004.

In that review the Commission:

- considered whether continued price regulation of each of the prescribed port services was appropriate and recommended that harbour towage and the connection of electricity and water services to ships should cease to be prescribed services, and
- considered the appropriate form of regulation and recommended a change from "building block" price regulation to a price monitoring regime.

The review included consideration of the Channel Access Regime as mentioned in section 2.3.1 above.

3 | THE COMMISSION'S APPROACH

The purpose of this Review is to consider whether economic regulation of port services continues to be appropriate, and if so, whether price monitoring remains the most suitable form of regulation. In addressing this question the Commission will also consider whether the Channel Access Regime in the PSA should be activated through the declaration of one or more shipping channels, and if so what changes are required to ensure the regime is capable of being certified as an effective State-based access regime. In considering these issues the Commission must have regard to clauses 4.1 and 4.2 of the CIRA.

There are two principal questions for any assessment of the need for economic regulation, namely:

- Is there substantial market power, such that there is the potential for efficiency losses from its use?
- What form of regulation (if any) is sufficient to address those potential efficiency losses, having regard to the economic costs and efficiency benefits of its imposition?

These two questions form the basis of the Commission's assessment of the need for economic regulation. Having decided whether economic regulation is necessary for channel services in particular, the Commission must then assess whether the existing Channel Access Regime is capable of certification in accordance with the CPA requirements.

The remainder of this chapter sets out the Commission's approach in more detail. Section 3.1 outlines the Commission's approach to assessing the market power of ports as the starting point for its assessment of the need to continue with economic regulation of Victorian port services. Section 3.2 discusses the principles that guide the Commission's determination of the most appropriate form of regulation to apply, where regulation is warranted.

3.1 Is Economic Regulation Necessary?

The starting point for the Commission in considering the need for economic regulation of ports and channel services is an assessment of the market power characteristics of ports in the provision of prescribed services, and channel services. This section sets out the Commission's approach to this assessment and its considerations for the need for continuance of the Channel Access Regime.

3.1.1 General considerations

In February 2006, the Council of Australian Governments (**COAG**) agreed to establish a simpler and consistent national approach to the economic regulation of

significant infrastructure via the CIRA.¹⁰ Parties agreed that 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 power¹¹. Additionally, where the regulation of ports is warranted, it should ideally conform to a consistent, national approach.

It is a general principle of the National Competition Policy that economic regulation should only be applied where there is a convincing case that it is necessary, such that the benefits of regulation can be reasonably expected to outweigh the costs. For example, section 33(4) of the ESC Act requires that prior to making any price determination the Commission must ensure that the expected costs of the proposed regulation do not exceed the expected benefits.

The extent of market power that prevails in a market, and the net benefit of imposing some form of regulation to mitigate the misuse of that market power are closely related. In particular, the benefits that arise from economic regulation are largely associated with reducing the risk of substantial market power being exercised. Part of the assessment of the benefits of regulation therefore involves assessing whether the providers of port services have substantial market power, and whether the potential to exercise this market power is not otherwise constrained. Market power, if unchecked, may result in prices that are excessive due to inefficient costs or excessive profit taking, which in turn may lead to a reduction in economic efficiency. Additionally, in vertically integrated industries market power can be used to distort competition in upstream or downstream industries. The case for regulation is therefore driven by both the degree of market power that can be exercised by the service provider, and the magnitude of the economic consequences that would flow from any misuse of market power.

However, regulation also imposes costs on the community. The potential costs of regulation are likely to be relatively high where there is scope for greater competition in the market but the development of competition is stifled by the introduction of regulation, or where there is potential for investment to be impeded or delayed as a consequence of regulation.

In certain circumstances the promotion of competition requires that prices be allowed to rise to a level such that the potential profits facing a new entrant are sufficiently high to compensate for the risks associated with entering the new market. Regulation to eliminate "above normal" profits in this scenario would likely have the effect of discouraging new entry, and therefore competition, with possible implications for the achievement of greater economic efficiency in the longer term.

The Commission's recommendation regarding the need to continue (or not) some form of price regulation of port services will ultimately require making a judgment about the associated benefits and costs. The benefits may include avoiding the costs associated with any market failure that might otherwise arise in the absence of regulation, and the costs include direct regulatory costs as well as costs related to the risk of regulatory failure under continued regulation.

¹⁰ Clause 2.1

¹¹ Clause 4.1(a)

3.1.2 Assessing market power

There are a number of factors that are relevant to an assessment of the extent of any market power held by port service providers, namely:

- the potential for competition and substitution between ports
- the presence of entry barriers
- the presence of countervailing market power.

This assessment therefore necessarily involves considering how ports operate as part of export and import transport supply chains, and so the scope for either direct competition between ports, or the use of alternative substitutes (eg, land transport for domestic trade). Additionally, this assessment requires an understanding of the scope for expansion of existing ports into other cargoes, which includes consideration of land transport needs and the location of port users. Finally, it is necessary to consider the countervailing market power of freight carriers who make use of ports, and so can potentially use alternative ports as part of their shipping operations. These issues are considered in greater detail in chapter 7.

3.1.3 Assessment of the need for the Victorian Channels Access Regime

The final consideration for the Commission is whether there remains a need to continue the Victorian Channels Access Regime.

Part IIIA of the *Trades Practices Act 1974 (TPA)* provides a national framework for the provision of third party access to significant infrastructure facilities. There are three pathways for obtaining third party access by way of the TPA, namely:

- in accordance with an effective State based access regime
- by a party seeking declaration of a nationally significant facility, or
- in accordance with an access provider undertaking.

Common to each pathway is an assessment as to whether:¹²

- the facility is significant to the economy
- it would not be economically feasible to duplicate the facility
- access to the facility is necessary to promote a material increase in or effective competition in an upstream or downstream market, and
- the safe use of the facility by the access seeker can be ensured at an economically feasible cost.

Where these criteria are satisfied, a third party is able to obtain access to the infrastructure facility either by applying for declaration of a service, or in accordance with the requirements of the State-based access regime. These criteria ensure that access to a third party's infrastructure is not provided in circumstances

¹² See for example, section 44G, *Trade Practices Act 1974* and clause 6(1) of the Competition Principles Agreement.

where competition between facilities is feasible. This would be the case if the facility was economically feasible to duplicate, for example.

The criteria for declaration or certification of a state-based access regime are in essence criteria that should also be satisfied if some form of regulatory arrangement is needed for a service. This means that these criteria will also be relevant to the Commission's assessment of the ongoing need for the Victorian Channels Access Regime, and so ultimately whether the regime is likely to satisfy the requirements for certification.

3.2 Forms of regulation

3.2.1 Options for price regulation

There are a range of different approaches to the regulation of prices. These options vary by:

- the extent of intervention by the regulator in the setting of prices (and the associated profit outcome for the regulated business)
- the extent of information required by the regulator
- the regulatory compliance costs involved.

Different forms of regulation are often characterised as either "light-handed" or "heavy-handed", depending on their performance against each of these criteria. Lighter-handed forms of regulation are typically associated with less regulatory intervention, fewer information requirements and lower regulatory compliance costs, compared to heavier forms of regulation.

The possible forms of regulation therefore include:

- heavy-handed methods of price control regulation, such as rate of return regulation, price caps or revenue caps
- negotiate/arbitrate forms of regulation, and
- lighter forms of regulation, such as price monitoring, application of pricing principles and threshold schemes.

Determining the appropriate form of regulation will ultimately be driven by an assessment of the extent of market power that prevails, and the potential for port service providers to exercise that market power.

3.2.2 Considerations regarding light versus heavy handed regulation

In general, the greater the degree of market power, the greater potential there is to incur a significant efficiency loss. In turn, this suggests there is a stronger case for the introduction of more intrusive, heavy handed forms of regulation. Conversely, where market power is less substantial and the potential efficiency loss from the exercise of that market power is lower, a less intrusive or lighter handed form of regulation is likely to be more appropriate.

The choice between more or less intrusive regulation therefore amounts to a decision on what form of regulation will improve market outcomes the most, given the particular circumstances facing the business and taking account of the costs that regulation will impose. For example, where there is some level of competition in the industry, the risks of regulatory failure are exacerbated and lighter handed forms of regulation are generally more appropriate.

The current approach to regulation of Victorian port services is via a price monitoring framework. This form of regulation was recommended by the Commission as part of the 2004 review of port regulation. In balancing the foregoing considerations, the Commission came to the view that a light handed form of regulation would be appropriate and would be sufficient to meet the Commission's objectives¹³.

In making recommendations for the appropriate form of regulatory intervention to apply, the Commission also takes into account the principles of good regulation. These principles include:

- a preference for market solutions
- proportionality
- promotion and protection of competition
- consistency, and
- balancing short and long term benefits to consumers.

Finally, the Commission will also consider the conduct of the ports over the past regulatory period, including compliance with applicable pricing principles and the PPS of PoMC, as well as the other matters listed in the PMD. This will inform the Commission as to whether the current framework is effective or otherwise.

3.2.3 Principles in the CIRA and the CPA

There are a number of principles in the CIRA and the CPA that are relevant to making a recommendation on the appropriate form of regulation, where regulation is deemed desirable.

A general aim of the CIRA is to establish a simpler and consistent national approach to economic regulation of significant infrastructure, including with respect to ports. To further this aim it was agreed to submit all third party access regimes to the NCC for certification as effective state based access regimes by 2010 (clause 2.9), and the States agreed to each assess the need for economic regulation of the nationally significant ports within their jurisdiction (clause 4.3).

Where economic regulation of a port is warranted, it should conform to the following principles:

- wherever possible, 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 of the facility and the person seeking access

¹³ ESC, *Ibid*, p7.

- where possible, commercial outcomes should be promoted by establishing competitive market frameworks that allow competition in and entry to port and related infrastructure services, including stevedoring, in preference to economic regulation
- the introduction of price monitoring for services provided by means of significant infrastructure facilities should be considered, where this would improve the level of price transparency, as a first step where price regulation may be required, or when scaling back from more intrusive regulation (clause 2.3)
- where regulatory oversight of prices is warranted pursuant to clause 2.3, this should be undertaken by an independent body which publishes relevant information, and
- any conflicts of interest between port owners, operators or service providers as a result of vertically integrated structures should be addressed by the relevant jurisdiction on a case by case basis with a view to facilitating competition.

3.2.4 Principles specific to access regimes

The CIRA (and equivalently the ESC Act) establishes pricing principles that should apply to third party access frameworks. These principles provide that access prices should be set so as to:

- generate expected revenue for a regulated service or services that is at least sufficient to meet the efficient costs of providing access to the regulated service or services and include a return on investment commensurate with the regulatory and commercial risks involved
- allow multi-part pricing and price discrimination when it aids efficiency
- not allow a vertically integrated access provider to set terms and conditions that discriminate in favour of its downstream operations, except to the extent that the cost of providing access to other operators is higher, and
- provide incentives to reduce costs or otherwise improve productivity.

Further, where third party access to port facilities is provided, that access should be provided on a competitively neutral basis.

3.2.5 Regulation of Government Business Enterprises

The CIRA and the CPA also contains some specific regulatory principles relevant to Government Business Enterprises (**GBEs**).

The CIRA states that where nationally significant ports are government owned and have monopoly powers, then the commercial charters for those port authorities should include guidance to seek a commercial return while not exploiting monopoly powers.

Clause 2 of the CPA applies to GBEs that are monopoly or near monopoly suppliers of goods and services. For such businesses, States and Territories can establish an independent source of price oversight (clause 2.2), but if such an oversight regime is not established by the relevant State or Territory then, in certain circumstances, that business may be subject to prices surveillance by the Australian Competition and Consumer Commission (**ACCC**) (clause 6.6).

State-based independent price oversight should be carried out by a body that is independent from the GBE whose prices are being monitored, and its prime objective should be one of efficient resource allocation, but with regard to any explicitly identified and defined community service obligations (**CSOs**) imposed on the business by the Government. Any decisions the over-sighting body makes should be via transparent public consultation processes.

3.2.6 Effective state based access regimes

In the event the Commission recommends that the Victorian Channels Access Regime be retained, the Commission must advise the Minister as to whether the existing regime meets the requirements for an effective State-based access regime, and if not, what changes would be necessary for certification. The requirements for certification are set out in Appendix B.

The NCC has published guidelines on the matters it will consider when making recommendations on the effectiveness of access regimes.¹⁴

In 1997 the NCC reviewed the channel access framework in the PSA and expressed the view that these arrangements constituted an effective access regime. Although the PSA has been amended since, most of the non-price aspects of the access regime remain unchanged. However, there have been a number of changes to the national access framework (some of which have been discussed here) as well as some refinement of the interpretation of the access framework as a consequence of relevant tribunal and court decisions.

In summary, to be an effective State-based access regime, the Victorian Channels Access Regime must satisfactorily meet all of the principles and criteria set out in clauses 6(3) to 6(5) of the CPA. These are reproduced in Appendix B and discussed in detail in Appendix C, which presents the Commission's assessment of the question of effectiveness. At a high level, and aside from the question of coverage discussed in section 3.1 above, a State-based access regime must have:

- an effective negotiation framework
- an effective dispute resolution framework
- enforceability of access rights
- a form of regulation that provides sufficient confidence that the terms and conditions of access will be fair and reasonable and meet the specific criteria and principles, and
- address other specific matters, such as appropriate treatment of interstate issues.

3.3 Summary

In summary, the Commission's approach involves assessing the market power of port service providers, and the subsequent costs and benefits from the imposition

¹⁴ NCC, January 2009, 'Certification of State and Territory Access Regimes: A Guide to Certification under Part IIIA of the Trade Practices Act 1974 (Cth)'.

of economic regulation in circumstances where market power is present. This assessment of the costs and benefits of economic regulation also forms part of the Commission's considerations as to the need for less as compared to more intrusive forms of regulation.

Chapter 7 sets out the Commission's assessment of market power and the costs and benefits of economic regulation.

4 | THE VICTORIAN PORTS INDUSTRY

This chapter provides a general overview of the activities undertaken by the Victorian commercial ports including:

- a discussion of the ports that are subject to this Review and the role of the corporations that manage these ports (section 4.1),
- some relevant information on trends in port throughput and market shares, and trends in port prescribed prices (sections 4.2 and 4.3), and
- benchmarking of port charges between Victorian and interstate Australian ports (section 4.4), and trends in service quality (section 4.5).

4.1 The Victorian commercial ports

The commercial trading ports are key engines for Victoria's economic growth. At its simplest, ports allow the transfer of cargoes or passengers between ships and the land. They are critical transfer points in Victoria's overall transport network and are a part of a regional and global transport system which needs to operate efficiently for the benefit of the Victorian and Australian economies.¹⁵ Victoria has four commercial ports, at Melbourne, Geelong, Portland and Hastings.

4.1.1 Port of Melbourne

The port of Melbourne is owned by the Port of Melbourne Corporation (**PoMC**) - a statutory corporation established under Part 2, Division 1 of the PSA. It has 34 commercial berths, over 500 hectares of land, and manages all of the shipping channels serving the port, including the channels at the entrance to Port Phillip Bay.¹⁶ The port of Melbourne handles \$75 billion in international and coastal trade each year and contributes more than \$2.5 billion every year to the Victorian economy.¹⁷

The port of Melbourne handles a broad range of cargoes. It is Australia's largest container port, handling 38 per cent¹⁸ of Australia's container trade. There are international container terminals in Swanson Dock and coastal container terminals at Webb Dock and Appleton Dock.

¹⁵ Department of Infrastructure (2004). Victorian Ports Strategic Framework, November, p.4.

¹⁶ <http://www.portofmelbourne.com.au/business/aboutport/whodoeswhat.asp>, accessed on 24 November 2008.

¹⁷ <http://www.transport.vic.gov.au/Doi/Internet/Freight.nsf/AllDocs/89050061DB069A00CA256FF000235DDC?OpenDocument>, accessed on 24 November 2008.

¹⁸ <http://www.portofmelbourne.com.au/business/aboutport/>, accessed on 24 November 2008.

The major classes of non-containerised cargo handled at the port include motor vehicles; liquid bulk products such as petroleum products and chemicals; and dry bulk products such as grain, gypsum, timber, paper and cement. Motor vehicle terminals are at Webb Dock and liquid bulk facilities are in Yarraville, Coode Island and Williamstown. Dry bulk facilities are at Yarraville, Fisherman's Bend and Appleton Dock, and break bulk facilities are at Webb Dock and Appleton Dock.

Most of the major terminals at the port are subject to long-term lease, although these operate alongside unleased multi-purpose common-user berths. Major tenants at the port include DP World, Patrick Stevedores (a subsidiary of Asciano), Toll Shipping, ANL, Exxon Mobil, Melbourne Cement Facilities and Terminals Australia.

The port of Melbourne also caters for cruise ships at Station Pier. Approximately 60 cruise ships call at the port each year in addition to the daily service by the Spirit of Tasmania.

The major investment activity occurring at the port of Melbourne is the \$969 million Channel Deepening Project, which is being undertaken in order to remedy the current and future draught constraints placed on all ships entering Port Phillip Bay.¹⁹ Other capital works that are currently in progress include the \$119 million Dynon Port Rail Link, rehabilitation works and crane rail replacement at Swanson Dock, Webb Dock wharf rehabilitation, Yarraville deck replacement and a Footscray Road truck facility.

Direction 10 of the Victorian government's *Freight Futures* policy states:

the Government intends to progress the process to test the market to secure additional stevedoring capacity over the next 12 months

4.1.2 Port of Geelong

The port of Geelong is situated in the city of Geelong at the head of Corio Bay. It has 14 berths at seven terminals and is served by a dedicated 32.5 km one-way shipping channel. The port is privately owned by the Port of Geelong Unit Trust²⁰ (comprising Asciano Limited, the Australian Infrastructure Fund and Deutsche Bank) and is operated by Patrick Ports, a subsidiary of Asciano. The shipping channels are managed by the Victorian Regional Channels Authority (VRCA). The port handles 25 per cent of Victoria's overseas exports²¹.

Major users of the port include Shell (at Corio) and Alcoa (at Point Henry), for liquid bulk products and alumina. There are common user berths in Corio Quay and Lascelles Wharf that handle a range of cargoes including woodchips, logs and fertiliser. GrainCorp owns its own berth facilities at the port for grain and woodchips.

¹⁹ Currently limited to 11.6 metres at all tides.

²⁰ <http://www.hfm.com.au/assets/seaports/geelong/>. Australian Infrastructure Fund holds a 35% interest.

²¹ VRCA Annual Report 2007-08, p.8.

The port of Geelong is currently undertaking a \$25 million expansion of Corio Quay north to create a dedicated woodchip berth.²² The port is also considering several growth opportunities, such as extensions to Corio Quay south and/or Lascelles Wharf facilities to support growth in demand for existing trades or for new trades²³, and development of further storage capacity for hire by shippers.²⁴

4.1.3 Port of Portland

The port of Portland in western Victoria is privately owned by the Port of Portland Pty Ltd (**PoPL**) (50% owned by the Australian Infrastructure Fund, and 50% by its unlisted affiliate, the Utilities Trust of Australia²⁵). It is a natural deep-water port with six berths; one of which is under long-term lease to Alcoa. The port primarily handles bulk commodities, such as woodchips, grain, mineral sands, alumina, fertiliser, and also livestock. It is currently building new facilities to accommodate an increase in woodchip volumes.

The port of Portland is developing a large new hardwood chip facility, forecast to increase woodchip volumes by in excess of two million tonnes per annum.²⁶ The woodchip terminal is expected to commence operations in 2010²⁷.

4.1.4 Port of Hastings

The port of Hastings in Western Port Bay is owned by the Port of Hastings Corporation (**PoHC**), a statutory corporation established under Division 1A in Part 2 of the PSA. Patrick Ports Hastings (**PPH**) (a division of Asciano), manages the port under a Port Management Agreement with PoHC. PoHC retains responsibility for planning future port infrastructure requirements, and is currently planning future developments, of which the first stage is for additional berths for bulk and break bulk cargoes.

The port of Hastings has five berths at three separate locations: Long Island Point; Crib Point; and Stony Point. The main products handled are petroleum products (exports of crude oil and LPG and imports of refined products) and steel.

There are currently no infrastructure projects underway or committed at the port of Hastings. However the Victorian government has indicated:

As trade volumes continue to grow through the Port of Melbourne, there is increasing interest in the potential for moving non-containerised bulk and break bulk trades through the Port of

²² GeelongPort 2008, PORT NEWS September/October 2008, p1.

²³ Port of Geelong 2007, Draft Port Land Use Strategy, p29

²⁴ <http://www.hfm.com.au/assets/seaports/geelong/>.

²⁵ http://www.portofportland.com.au/index.php?option=com_content&task=view&id=68&Itemid=85.

²⁶ <http://www.hfm.com.au/assets/seaports/portland/>.

²⁷ ABC News, "Credit crunch takes toll on blue gum harvest", 27 January 2009, <http://www.abc.net.au/news/stories/2009/01/27/2475353.htm>

Hastings. The emergence of interest in the export of products derived from brown coal from Gippsland may also influence the timing of a Stage 1 development at the Port of Hastings. Stage 1 development would involve the construction of three new berths in the Long Island Point precinct.²⁸

The *Freight Futures* policy announced that:

as trade grows through Melbourne and the need to plan actively for the growth of trade through Hastings intensifies ... the interlinkages of planning and development between the two ports will become increasingly marked. To maximise the planning and development efficiencies and minimise duplication ... The government will develop proposals and a timeframe for the integration of the management of the ports of Hastings and Melbourne.²⁹

4.1.5 Activities of port managers

Although port authorities differ widely in the range of services and facilities they provide, a key element common to all port authorities is the provision and management of basic port infrastructure such as facilities for the berthing of ships and loading cargo; and navigation infrastructure, such as shipping channels, to provide for the safe access of ships to the berths. Harbour masters employed by the ports are responsible for directing shipping movements within the port waters. These services are prescribed services within the regulatory framework (which is described in the following section).

Ports also provide land in the vicinity of the berths on which cargoes can be assembled for loading or placed temporarily following discharge, as well as road and rail access and other services within the port environs.

In addition, many port authorities provide complementary infrastructure and superstructure, such as cargo storage facilities or specialised cargo handling equipment. PoMC's statutory role encompasses facilitating trade and enhancing the efficiency of the land-side interface of the port. Some ports may also provide services within the port such as pilotage, towage, mooring or ship repair (see Table 4.1), but in Victorian ports, for the most part, these activities are carried out by other service providers. Table 4.1 summarises the main port service providers in Victoria.

²⁸ *Freight Futures*, p.31

²⁹ *Freight Futures*, p.73

Table 4.1 **Providers of infrastructure and other services – Victorian ports**

<i>Services</i>	<i>Melbourne</i>	<i>Geelong</i>	<i>Portland</i>	<i>Hastings</i>
Development/Management of Channels	PoMC	VRCA	PoPL ^a	Patrick Ports Hastings ^a
Development/Management of Berths & Cargo Marshalling Infrastructure	PoMC	GeelongPort, GrainCorp ^b	PoPL	Patrick Ports Hastings ^c
Pilotage	Port Phillip Sea Pilots Pty Ltd	Port Phillip Sea Pilots Pty Ltd	PoPL	Port Phillip Sea Pilots Pty Ltd
Towage	Svitzer Australasia, PB Towage	Svitzer Australasia	PoPL	Svitzer Australasia
Mooring	Melbourne Port Services, Skilled Maritime Services	Svitzer, L.W. Marine Services, Corio Bay Shipping Services (vessels at anchor), Victorian Marine Services.	PoPL	L.W. Marine Services
Stevedoring	Patrick Stevedores, DP World, P&O Automotive & General Stevedoring, ANS	P&O Ports ^d , Patrick Bulk & General Ports Stevedoring (Geelong)	P&O Ports ^d , PoPL	Patrick Stevedores WesternPort

^a Delegated under contract with the VRCA

^b Note that the Commonwealth Government owns and operates the Point Wilson Explosives Pier

^c Patrick operates the port of Hastings under a management contract (PMA) to PoHC

^d P&O Ports is a subsidiary of DP World

4.2 Activity at the Victorian ports

This section summarises information on trade activity and usage of prescribed services at each of the ports. Such information is relevant to a number of questions being considered by the review, including assessing the degree of competition between ports, and the existing role of ports as part of import and export supply chains, and so the scope for substitution between ports.³⁰

The information below describes:

- the use of shipping channels at each port
- the trade throughput at each port
- the container throughput at the port of Melbourne
- the market shares of non-container trades.

4.2.1 Use of shipping channels – shipping movements

Table 4.2 presents data on the number of ship visits to each port. In 2007-08, there were 4,599 ship visits in total, with almost 80 per cent of ship visits at the port of Melbourne.

Ship visits increased between 2003-04 and 2007-08 by an average 1.5 per cent per annum, although there is some variation on this average from year to year. Most of the increase has been at the port of Melbourne, where ship visits increased by 2.3 per cent each year over the period. At the regional ports, the number of ship visits has been relatively constant, and in some cases decreased. This may be partly the result of recent poor grain harvests, and so an overall reduction in grain exports.

Table 4.2 **Number of ship visits by port**

<i>Year ending June</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>4-year average change (%)</i>
Melbourne	3,268	3,411	3,543	3,524	3,580	2.3
Geelong	527	558	545	478	540	0.6
Portland	331	336	450	261	279	-4.2
Hastings	202	203	178	183	200	-0.2
Total	4,328	4,508	4,716	4,446	4,599	1.5

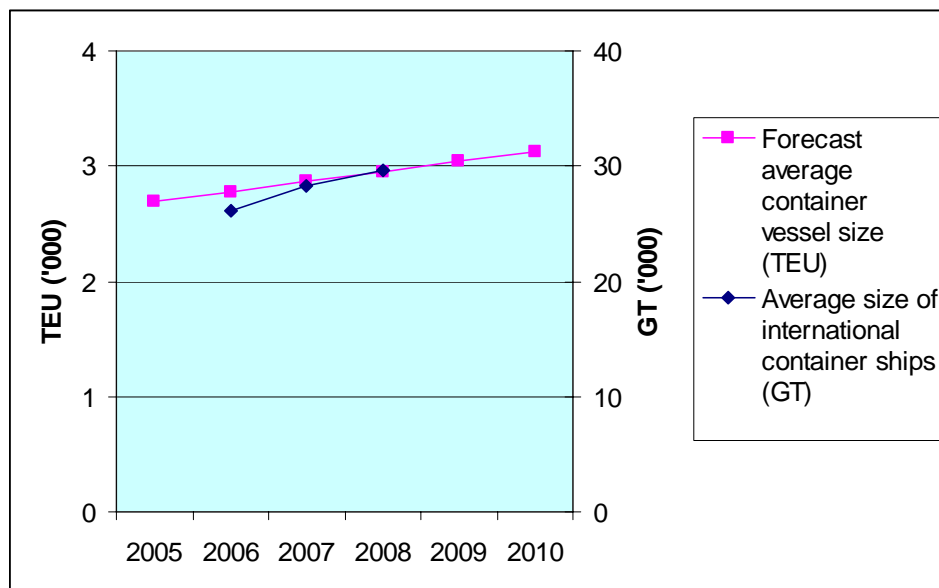
Source: Victorian port operators.

³⁰ It is also relevant to consider the scope for potentially competing ports to undertake investment in order to compete directly on particular types of cargoes. The scope for such 'new entry' can be an important constraint on any possible market power a port may have in a particular commodity. This is discussed more fully in chapter 7.

At the port of Melbourne cargo volumes (discussed below) have increased faster than the number of ship visits because of the trend to larger vessels. Figure 4.1 shows the average vessel size for container ships visiting the port of Melbourne, and forecast average vessel size.

Another indication of the increase in ship sizes is the proportion of ships visiting the port of Melbourne that have a draught³¹ greater than 12.1m. The proportion of ships with a draught greater than 12.1m has almost doubled in the last four years, from just over 6 per cent in 2004-05 to 12 per cent in 2007-08.³²

Figure 4.1 **Average size of container ships visiting the port of Melbourne**



Source: Meyrick and Associates (2006), 'Benefit Cost Analysis and Economic Assessment'; in chapter 16 of PoMC (2006) 'Supplementary Environmental Effects Statement: Channel Deepening Project'.

4.2.2 Use of berth services – cargo throughput by port

Table 4.3 presents data on the growth in cargo throughput at each port. The average growth in total cargo throughput at all ports over the five year period from 2003-04 to 2007-08 was 1.0 per cent per annum. However, the port of Melbourne was the only port to experience growth over this period, with an average growth rate of 3.7 per cent per annum. The combined throughput of the regional ports

³¹ The draught of a ship is the vertical distance between the waterline and the bottom of the hull (the keel). Maximum summer draught is the maximum height taking into account the worst-case scenario of weather conditions.

³² Source: PoMC.

decreased from 18.1 million tonnes in 2003-04 to 15.8 million tonnes in 2007-08, an average annual rate of decline of 3.4 per cent per annum.

This growth in cargo throughput at the port of Melbourne was mainly due to strong growth in containerised cargo (on the basis of mass tonnes this increased at an average rate of 5.9 per cent per annum over the same period) and motor vehicles (which increased at an average rate of 14.3 per cent per annum over this period). Excluding containers and vehicles, the port of Melbourne's other cargoes decreased by an average 1.2 per cent per annum over the five year period to 2007-08.

Table 4.3 Cargo throughput by port ('000 mass tonnes)

<i>Year ending June</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>4-year average change (%)</i>
Melbourne						
Containers	16,800	18,370	18,552	19,744	21,092	5.9
Vehicles	450	593	605	677	768	14.3
Other	9,400	9,345	8,604	9,095	8,962	-1.2
Sub-total	26,650	28,308	27,761	29,515	30,822	3.7
Geelong	9,740	10,043	9,435	9,859	9,555	-0.5
Portland	3,798	3,645	3,513	3,044	3,258	-3.8
Hastings	4,572	3,512	3,083	3,250	2,954	-10.3
Total	44,760	45,507	43,754	45,668	46,589	1.0

Source: Victorian port operators.

4.2.3 Container throughput at the port of Melbourne

The port of Melbourne is the only Victorian port that handles large volumes of containers³³. In the 2004 Port Review the Commission indicated that there is some potential for competition with interstate container ports through land-bridging or transhipment of containers.

Table 4.4 shows the shares of container trades originating from and destined to several Australian markets that were handled through the port of Melbourne in 2003-04 to 2007-08. These shares are based on the throughput of containers measured in mass tonnes.

Over the five year period, the Port of Melbourne's share of total container trade to and from:

- Victoria increased from 94 per cent to 96 per cent

³³ The ports of Geelong and Portland handle a small quantity of container trade.

- Tasmania increased from 33 per cent to 52 per cent
- South Australia increased from 28 per cent to 34 per cent
- New South Wales and ACT remained at 6 per cent
- all other states and territories combined remained at 3 per cent.

Over the same period, the port of Melbourne's share of Australia's total container trade increased from 34 per cent to 35 per cent. The reason that its Australia-wide share increased more slowly than its shares of some of the individual states is due to the relatively strong economic growth occurring in states such as Queensland.

Table 4.4 Port of Melbourne share in container trade by state

<i>Year ending June</i>	<i>Export origin</i>		<i>Import destination</i>		<i>Total container trade</i>	
	<i>2004</i>	<i>2008</i>	<i>2004</i>	<i>2008</i>	<i>2004</i>	<i>2008</i>
Victoria	90.2	91.7	96.8	99.4	93.8	96.1
Tasmania	36.0	58.6	21.2	24.9	33.1	51.8
South Australia	24.9	28.8	35.5	37.9	28.1	31.5
NSW & ACT	12.6	12.1	0.2	0.3	6.1	5.8
Other Australia	2.7	3.1	4.4	2.8	3.4	3.0
- Total	32.0	32.6	36.7	37.3	34.2	34.9

Source: BITRE unpublished data

4.2.4 Market shares of other cargoes

Table 4.5 presents the volumes and market shares in non-container trade of the Victorian ports.

Melbourne continues to have the largest shares in break bulk and dry bulk, while Geelong maintains the largest share in liquid bulk, with over half of all liquid bulk trade.

Break bulk trade at all of the Victorian ports increased at an average rate of 2.5 per cent per annum over the period from 2003-04 to 2007-08. The most significant change in market share was Portland's, which decreased from 18.3 per cent in 2003-04 to 11.9 per cent in 2007-08. This appears to be due in part to a significant reduction in logs. By contrast the port of Hastings benefited from increased steel volumes.

Dry bulk trade over all the Victorian ports increased at an average rate of 1.5 per cent per annum between 2003-04 and 2007-08, notwithstanding the drought conditions affecting the latter year. Geelong increased its share of dry bulk from 22.9 per cent to 29.1 per cent over this period, which appears to be largely due to an increase in fertiliser trade at the port.

In liquid bulk, there was a significant decline in total throughput over the same period, averaging 4.5 per cent per annum. The port of Hastings' share dropped

from 23.4 per cent to 14.0 per cent over this period, and represented the main source of the decline. This appears to be due to decreased production from the Bass Strait oil and gas fields.

Table 4.5 **Victorian ports non-container trade**

	<i>Throughput ('000 tonnes)</i>		<i>4-year avg. change (%)</i>	<i>Share (%)</i>	
	<i>2003-04</i>	<i>2007-08</i>		<i>2003-04</i>	<i>2007-08</i>
<i>Break bulk^a</i>					
Melbourne	1,450	1,667	3.5	42.5	44.2
Geelong	394	491	5.7	11.6	13.0
Portland	625	448	-8.0	18.3	11.9
Hastings	941	1,164	5.5	27.6	30.9
Sub-total	3,410	3,770	2.5	100.0	100.0
<i>Dry bulk</i>					
Melbourne	3,600	3,065	-3.9	41.6	37.6
Geelong	1,982	2,372	4.6	22.9	29.1
Portland	3,053	2,705	-3.0	35.3	33.2
Hastings	25	-	-100.0	0.3	-
Sub-total	8,660	8,142	1.5	100.0	100.0
<i>Liquid bulk</i>					
Melbourne	4,350	4,231	-0.7	28.2	33.0
Geelong	7,364	6,692	-2.4	47.7	52.2
Portland	120	105	-3.3	0.8	0.8
Hastings	3,606	1,790	-16.1	23.4	14.0
Sub-total	15,440	12,818	-4.5	100.0	100.0
Grand Total	27,510	24,730	-2.6		

^a Excludes motor vehicles.

Source: Victorian port operators.

4.3 Movements in prescribed prices and sources of revenue

Under the present price monitoring framework the Commission monitors changes in port prices. This section presents summary information on average changes in prescribed prices at each of the Victorian ports, as well as identifying price benchmarks, and examining changes in the structure of port charges.

4.3.1 Real price trends

Table 4.6 presents the estimated nominal and real percentage changes in reference prices for each of the Victorian ports in each year from 2004-05 to 2008-

09. The 2008-09 prices are based on published prices applying from 1 July 2008 to the date of publication of this Report, and are subject to change.

Table 4.6 **Victorian ports - estimated average increase in reference prices (%)**

	<i>2005-06</i>	<i>2006-07</i>	<i>2007-08</i>	<i>2008-09</i>
<i>Nominal increase</i>				
Port of Portland	1.0	3.4	6.1	6.5
Port of Geelong ^b	2.0	2.6	8.6	4.9
VRCA	0.0	0.0	2.4	4.0
Port of Hastings ^c	13.1	6.1	17.9	24.1
Port of Melbourne	8.5	4.8	12.3	27.3
<i>Real increase^a</i>				
Port of Portland	-1.4	0.3	3.6	2.2
Port of Geelong ^b	-0.4	-0.4	6.0	0.6
VRCA	-2.3	-2.9	0.0	-0.2
Port of Hastings ^c	10.5	3.0	15.1	19.1
Port of Melbourne ^d	6.0	1.7	9.7	22.2

^a Using the change in consumer price index of the March quarter preceding the financial year over the corresponding March quarter of the previous year.

^b Includes only GeelongPort charges.

^c Hastings estimates are based only on wharfage and tonnage charges (including flag-fall charges).

^d The 2007-08 and 2008-09 real price increases for PoMC include the flow-through of new charges for the recovery of costs associated with the Channel Deepening Project.

Data source: Victorian port operators.

4.3.2 Sources of revenue

This section examines how the structure of revenues and prices has changed at the Victorian ports since price monitoring was introduced.

At the ports of Geelong and Portland the relative importance of cargo-based charges has increased as a source of prescribed revenue, while the port of Hastings has increased its reliance on ship-based charges (see Table 4.7). The mix of port charges remained relatively constant for the port of Melbourne. However, the introduction of the cargo-based Infrastructure Fee in April 2008 (which is only partially reflected in the average figures for 2007-08) will imply a

significant shift toward cargo-based charges once it has fully flowed through into annual results.

Table 4.7 Sources of prescribed revenues (%)

Year ending June	Melbourne		Geelong ^a		Portland		Hastings	
	2004	2008	2004	2008	2004	2008	2004	2008
Ship-based charges	19	17	26	21	34	33	41	56
Time-of-use charges	2	2	49	49	31	27	0	0
Cargo-based charges	79	81	25	30	35	40	59	44

^a Using actual VRCA revenue from prescribed services, and estimated VRCA revenue from prescribed services in 2003-04 based on proportion of revenue attributable to prescribed services in 2004-05.

Source: Victorian port operators.

4.4 Selected benchmarks of port prices

There have been a number of benchmark studies of port prices in Australia. The Bureau of Infrastructure, Transport and Regional Economics' (BITRE) publication *Waterline*, regularly reports a Port Interface Cost Index for the five major Australian container ports. The Essential Services Commission of South Australia (ESCOSA) has also reported benchmark comparisons in its monitoring reports, and in 2007 ESCOSA commissioned a benchmarking study of Australian ports by Meyrick and Associates.³⁴ For the purposes of this Review the Commission engaged ACIL Tasman (ACIL) to produce an updated benchmarking comparison of port charges. This section briefly summarises the key findings of the ACIL study.

The ACIL study included the ports of Portland, Melbourne, Port Kembla, Geelong, Hastings, Fremantle, Brisbane and Adelaide. The following types of cargoes were differentiated: bulk grain, standard dry bulk, liquid bulk, motor vehicles and containers. For each of these types of cargo a typical vessel was assumed (for grain two alternative vessel sizes were considered). In summary the results were as follows:

- Port Kembla was found to have the lowest port charges for grain ships, but closely followed by the Victorian ports (Portland, Geelong and Melbourne). These ports were well below Brisbane, Adelaide and Fremantle.
- For general dry bulk, Sydney had the lowest cost, closely followed by Portland and Geelong. Melbourne and Hastings were somewhat more expensive. Brisbane, Adelaide and Fremantle were significantly higher than the other ports.
- For liquid bulk vessels Portland and Hastings had the lowest costs, followed by Melbourne, Geelong and Sydney. Brisbane, Adelaide and Fremantle were significantly higher than the other ports.

³⁴ Meyrick and Associates (2007) *Benchmarking of Port Prices in Australia*, final report prepared for Essential Services Commission of South Australia

- Port charges of motor vehicles at the port of Melbourne were considerably higher than at Sydney and only slightly below those at Fremantle. Brisbane and Adelaide had significantly higher charges than these other ports.
- Brisbane and Fremantle were found to have the lowest cost for container vessels, with Melbourne broadly on a par with Sydney and Adelaide. This is a key change from previous benchmarking and may be due to recent price increases at the port of Melbourne associated with the Channel Deepening Project.

4.5 Service quality

Indicators of the quality of service and efficiency are relevant to a price monitoring regime, since these indicators may deteriorate in circumstances where market power is exercised, and improve where competition is more effective. For this reason the Commission regularly reports service quality indicators in its monitoring reports.

However, it is important to note that the performance statistics regularly reported by the Commission are not directly comparable across port operators, due to differences in geographic location, port infrastructure and the types of cargoes handled. Therefore, emphasis is given to trends in these service quality measures at each port.

In its submission, PoMC emphasised that while it provides infrastructure services (such as the planning and construction of channels and berths) and operates channel services and common user berths, some of the prescribed port services are actually supplied by tenants of PoMC, for example, berth services at terminals under long-term lease. Similarly, VRCA indicated:

Ship turnaround times for whole of port are misleading and also there are a number of factors which have an effect on this statistic. Delays in turnaround can be caused by factors outside the control of the port operator.

Aside from other implications for this Review, it will be important to ensure that the measurement of service quality is relevant to the services provided by the port in its capacity as a prescribed services provider.

Of the measures of port service quality and efficiency that are regularly monitored by the Commission, some measures, such as average ship turnaround time, are likely to be most influenced by the amount of equipment and operating efficiency of stevedores or other port tenants. The measures that are most influenced by the port corporation's infrastructure planning and construction responsibilities would include:

- the proportion of vessels that are draught constrained at the port of Melbourne (which is dependent on the channel construction and deepening activities of the port), and

- the proportion of vessels delayed from the scheduled berthing time or advised arrival time (which will be influenced by the construction of wharves and berths to meet shipping demand).

The following summary of service quality trends focuses on those two measures most influenced by the adequacy of channel and wharf infrastructure. Since the Commission does not have information on these two indicators for most of the regional ports³⁵, the data is only presented for PoMC. It is also noted that there are significant construction periods for infrastructure, which implies lags between investment and its influence on service quality measures, and for this reason it is considered important to also consider projected service quality indicators³⁶.

4.5.1 PoMC service quality indicators

The proportion of vessels visiting the port of Melbourne that were draught constrained is reported annually to the Commission by the PoMC. This measure differs from other similar indicators reported by PoMC in that:

- it is in respect of all vessels and not only container vessels
- it is based on the actual draught of the ships and not the summer draught, which represents the draught of the vessel when carrying its theoretical maximum cargo capacity. Hence this measure relates to the proportion of vessels that require tidal assistance to navigate the channels.

PoMC has indicated that it prefers the measure based on container ships and summer draught, however, the measure used here is that reported annually to the Commission.

Table 4.8 and Figure 4.2 show that the proportion of vessels that were draught constrained increased from 15.0 per cent in 2004-05 to 21.2 per cent in 2007-08. It is assumed that once the channel deepening project (**CDP**) is completed in December 2009 that this measure will fall close to zero.

Table 4.8 **PoMC service quality indicators (%)**

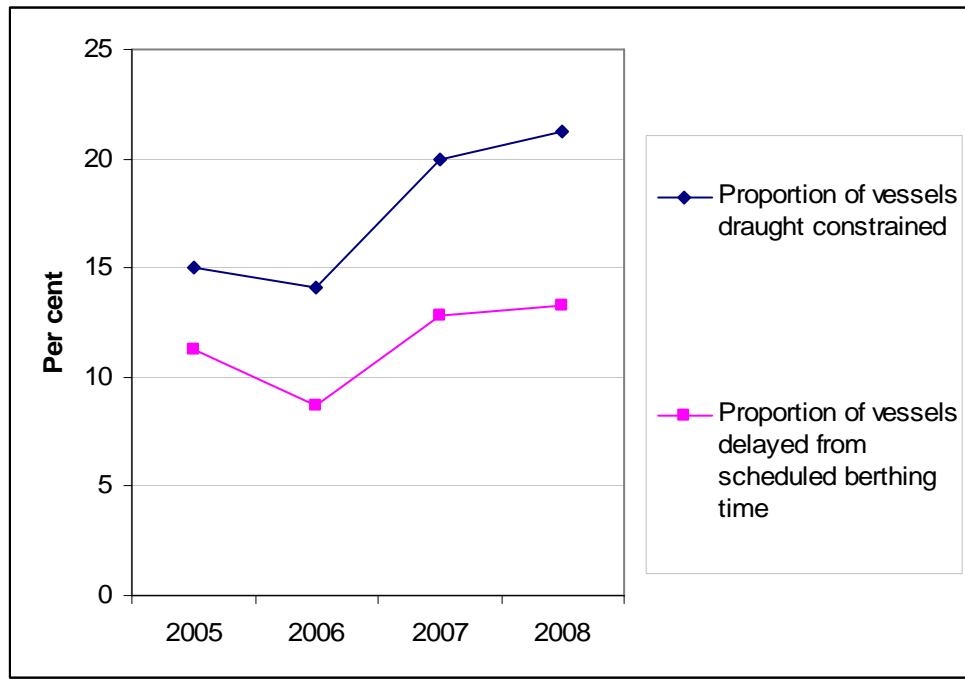
<i>Year ending June</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>
Proportion of vessels visiting the port of Melbourne that were draught-constrained	15.0	14.1	20.0	21.2
Proportion of vessels delayed from the scheduled berthing time or advised arrival time	11.3	8.7	12.8	13.3

Source: PoMC

³⁵ As shown in the Issues Paper these indicators were reported only by PoMC and PoPL. The ports of Geelong and Hastings have each reported the proportion of vessel delays was either zero or not available in each year.

³⁶ See section 9.1

Figure 4.2 PoMC service quality indicators



Source: PoMC regulatory accounts

Table 4.8 and Figure 4.2 also show trends in vessels delayed at the port of Melbourne other than due to the vessel not arriving on time. The proportion of vessels delayed from the scheduled berthing time or advised arrival time has increased at the port of Melbourne between 2004-05 and 2007-08 from 11.3 per cent to 13.3 per cent.

PoMC has a vessel delay target of less than 4 per cent for “on window” (scheduled arrival of vessel) and less than 15 per cent for “off window” (unscheduled arrival of vessel) for 2008-09, and 4 per cent and 11 per cent respectively from 2009-10 onwards.³⁷ In 2007-08, 3 per cent of container ships were delayed “on window” and 22 per cent were delayed “off window”.³⁸ This suggests that PoMC’s “off window” performance is outside its target range.

³⁷ PoMC Annual report 2007-08, p.87.

³⁸ Ibid.

This chapter recaps the Commission's 2004 review of the regulation of Victorian ports and reviews some of the developments since that review. Given the present Review must have regard to the CIRA, including the principle of greater national consistency, a summary of the CIRA reviews conducted in other jurisdictions is provided. Finally this chapter outlines the views presented by stakeholders in their submissions to the Issues Paper.

5.1 2004 Port Services Review

The Commission's 2004 review of port regulation was conducted under section 53 of the PSA. The purpose of the review was to make recommendations to Government on whether continued regulation of prescribed prices would be appropriate, and if so the form of economic regulation to be adopted. At that time a price cap framework applied to all of the Victorian ports. That framework was introduced at the inception of the regime in 1995.

In the 2004 review the Commission:

- considered whether continued price regulation of each of the prescribed port services was appropriate and recommended that harbour towage and the connection of electricity and water services to ships should cease to be prescribed services
- considered the appropriate form of regulation and recommended a change from "building block" price regulation to a price monitoring regime, and
- recommended the Channel Access Regime be retained and apply to the shipping channels in Port Phillip Bay.

5.1.1 Market power analysis

The first task for the Commission was to assess whether the providers of port services had substantial market power, and whether the exercise of this market power was otherwise constrained. The Commission used three broad indicators in forming a judgement on whether substantial market power existed in a particular market³⁹, namely:

- key features of the market structure, such as the existence and number of competitors, the extent of barriers to entry of new firms, the availability of

³⁹ ESC, June 2004, Op cit, p.51

substitutes for the products of the industry, and the degree of concentration on the buying side of the market

- active rivalry between service providers that extends to all aspects of price and service offered to consumers
- a comparison of market outcomes with those expected from a workably competitive market. However, it was recognized that where a market has been the subject of price regulation, this aspect of the market may provide little guidance in regard to the existence of substantial market power, as outcomes are constrained by the pricing rules set by the regulator.

In the 2004 review, the Commission concluded that PoMC retained substantial market power in its core container and motor vehicle trades⁴⁰. These trades represented over 80% of the port's wharfage revenue at that time.

The Commission considered that while there appeared to be increasing scope for competition from interstate container terminals, the extent of competition at that time could not in itself be considered to impose an effective constraint on the PoMC's pricing behaviour. Furthermore, there were high barriers to the entry of new container terminals, and while the countervailing power of shipping lines and stevedores was substantial, the ability to pass costs through to cargo owners tended to mitigate the effects of this countervailing power⁴¹.

On the other hand, the Commission considered that the regional ports had only limited market power, except in certain bulk trades⁴². Their core trades of dry bulk and general cargoes were generally contestable between ports because they were sourced from or destined for areas that can competitively access alternative ports. Market power situations were largely confined to major "captive" users - for example the Alcoa aluminium smelters, the Shell refinery at Geelong, and the BHP Steel (now Bluescope Steel) rolling mill at Hastings. These "captive" users were usually protected by long-term agreements with the ports (e.g. Alcoa), ownership of relevant berthing facilities (e.g. Bluescope Steel) or in some cases industry specific legislation⁴³. Exceptions, such as the Shell refinery at Geelong, nevertheless appeared to have feasible alternative options (e.g. the development of a private terminal, or transportation of oil via the W.A.G. Pipeline).

Ports operate in a business-to-business trading environment, and many of their customers are well-informed and powerful. International shipping lines, principal tenants and major bulk customers in particular appear to be in a position to exercise significant countervailing power. However this power is unevenly spread amongst the customer base, and in many cases was – at least in the short term – limited by the absence of a credible alternative port service provider.

⁴⁰ ESC, *Ibid*, p72

⁴¹ ESC, *Ibid*, p73

⁴² ESC, *Ibid*, p73

⁴³ e.g. see *Western Port Development Act 1967*, Parts III and IV

The Commission also found that the threat of new entry, typically in the form of an existing port beginning to play a role in the shipping of a type of cargo in which it had not previously been involved, was credible with respect to some trades, and there were important examples of this having occurred. However, there were a number of trade segments – primarily containers and motor vehicles in the port of Melbourne – for which the threat of new entry was unlikely to be a significant consideration⁴⁴.

The Commission considered whether competition between the regional ports may have been affected by cross-ownership/control⁴⁵. For example, the Australian Infrastructure Fund (**AIF**) had a significant interest in both the Geelong and Portland ports, and Toll Holdings at that time operated both the ports of Geelong and Hastings. However, given the minority position of AIF in the port of Geelong, and the possibility that PoHC might undertake new developments at the port of Hastings managed separately from the existing facilities, these circumstances were not considered to effectively limit competition between the ports.

The Commission identified several important developments that were increasing the degree of competition in the ports sector⁴⁶ including the ongoing improvements in the interstate freight rail network, together with overall improvements in logistics efficiency. These developments were being given further stimulus through the emergence of integrated logistics service providers. The Commission also considered it significant that key competitors to the port of Melbourne, such as the ports of Adelaide and Geelong, were privately owned, relatively efficient and vigorous competitors.

The overall rate of growth of seaborne trade was also found to be important, as well as the greater rationalization of services among shipping lines.

5.1.2 The Commission's 2004 conclusions on the need for regulation

In light of the substantial market power of PoMC the Commission recommended that its shipping channel and berth services remain prescribed services⁴⁷. For the regional ports, the Commission considered that although there was a case for deregulation of berth services, some uncertainty remained as to the extent of residual market power in relation to certain "captive" trades. As a result the Commission considered that berth services at the regional ports should continue to be prescribed services⁴⁸. The Commission also noted that it would give further consideration to whether regional ports should be fully deregulated at the next review of port regulation.

⁴⁴ ESC, Op.cit., p73

⁴⁵ ESC, Ibid, p73

⁴⁶ ESC, Ibid, p73

⁴⁷ ESC, Ibid, p98

⁴⁸ ESC, Ibid, p99

In considering the need for access regulation, the Commission was of the view that the Channel Access Regime should be retained. However, the Commission considered that channels should be declared only where there is an identified benefit that would be provided by the access regime. On this basis the Commission considered that it would be appropriate to declare only the shipping channels of Port Phillip Bay and its entrance⁴⁹.

The exclusion of the channels serving the ports of Portland and Hastings from the declaration was intended to ensure that regulation was not applied to situations where there is not a clear benefit. However the Commission noted that these channels could be declared should a clear benefit in such a declaration be identified at a future time.

The Commission also considered whether it would be appropriate to extend access regulation to the provision of key port infrastructure by PoMC. However, as no specific concerns had arisen with respect to the conduct of PoMC in relation to access to this infrastructure, the Commission did not propose that access obligations should be applied to berths and marshalling areas at that time. However, the Commission recommended that this matter be kept under review⁵⁰.

5.1.3 The form of regulation

Although the Commission identified substantial market power in core sectors of the market, it found that even in these sectors there was a significant competitive fringe which was contestable with interstate ports, and a number of other important developments that were working to increase the degree of contestability over time. These and other factors, such as the degree of countervailing power of major port users, while insufficient in themselves to prevent the misuse of market power, were nevertheless regarded as pertinent to:

- the minimum regulatory response necessary to protect port users from misuse of market power, and
- the form of regulation most conducive to promoting competition.

Given the differences in market power between PoMC and the regional ports, the Commission considered that complete consistency of regulatory treatment between the major and minor Victorian ports would require a degree of price regulation of the regional ports that would not be warranted. The recommended price monitoring approach was designed to achieve a significant degree of regulatory consistency between the ports, while also reflecting the differences in market power between PoMC and the regional ports.

The recommendations of the Commission's 2004 review meant all Victorian ports became subject to a clear requirement to maintain a published set of Reference Tariffs, and provide information to the Commission to support its price monitoring role.

⁴⁹ ESC, *Ibid*, p91

⁵⁰ ESC, *Ibid*, p05

In light of PoMC's greater market power, certain additional regulatory requirements were recommended to apply to PoMC berth and channel services. Specifically PoMC was required to comply with certain pricing principles and to prepare a public PPS which specified the economic rationale and principles that would govern its pricing strategy and approach.

The Commission's preferred approach to price monitoring also emphasised a clearly enunciated threat of re-regulation in the event that the systematic misuse of market power becomes evident. This included an ability by the Government or the Commission to initiate inquiries within the regulatory period if there were concerns that market power had been misused, and a scheduled review after five years to determine whether the price monitoring framework was delivering the objectives of the ESC Act and the PSA.

5.2 Outcomes under the price monitoring framework

The price monitoring framework has been in effect since 1 July 2005. From 2004-05, the last year of the price cap regime, to 2007-08:

- PoMC's prices increased at an average rate of 9.6 per cent per annum in real terms. This increase was in large part due to the cost recovery for the Channel Deepening Project. Patrick Ports Hastings increased prices on average by 11.8 per cent per annum, while GeelongPort increased prices at an average rate of 1.4 per cent per annum and PoPL increased prices by an average of 1.2 per cent per annum, all in real terms. On the other hand, VRCA's average prices decreased by 1.4 per cent per annum in real terms over this period.
- Berth utilisation at the Victorian ports has been relatively stable, except for a spike in berth utilisation for the port of Portland in 2005-06.
- Average ship turnaround time at the ports of Melbourne and Hastings remained relatively constant, while at the port of Portland there was a substantial increase in 2006-07. At Geelong the turnaround time increased sharply in 2006-07, but decreased even more sharply in 2007-08.
- There were no reports of non-compliance by any port with its Safety and Environmental Management Plan (SEMP) or of formal non-compliance with safety, environmental and security legislation.
- PoMC's real operating costs (excluding depreciation) per mass tonne of throughput increased gradually (except in 2006-07 when it spiked upwards) by 2.1 per cent per year on average over the period. However, apart from the spike in 2006-07, it has remained below the average of three interstate container ports (Sydney, Brisbane and Fremantle) which was relatively constant over the same period, with a yearly average increase of 0.4 per cent.

5.2.1 What has changed?

Some of the submitters to this Review, for example Asciano, indicated that there has been little material change in the market for port services in Victoria since the 2004 review. Asciano noted that shipping rates have fluctuated and this has reinforced the trend toward larger ships.

PoPL noted that competition between ports has increased, particularly with respect to the growing use of containerisation for bulk commodities. Changes within the rail logistics chain have also constrained grain movement through the port of Portland.

Asciano noted that there has been a change of control at the ports of Geelong and Hastings, and a number of leasehold terminals at the port of Melbourne, following the demerger of Asciano from Toll in June 2007. Asciano did not consider that this has changed the competitive dynamics of the market.

Other relevant developments include the following:

- The port of Melbourne's CDP is 71 per cent complete, with dredging schedule to be completed by the end of August 2009 and the project as a whole to be completed by the end of 2009.⁵¹ There will be dredging of berth pockets at Appleton Dock, Swanson Dock, Holden Dock and Gellibrand Pier.⁵² These docks handle international containers and certain dry bulk, liquid bulk and break bulk cargoes.
- The possible sale of Asciano's container stevedoring interests, its other port interests, and/or its other assets, or the company as a whole, has been flagged by Asciano⁵³.
- As mentioned, the Victorian government plans to integrate the management of PoMC and PoHC.
- Also mentioned, the Victorian government has announced the commencement of a process to establish a third container terminal at the port of Melbourne.
- The economic downturn has had a strong impact on container trade volumes in the period from December to February, with container volumes over those three months approximately 11 per cent below the corresponding period of the previous year, although volumes over the twelve month period to February 2009 were similar to the same period for the previous year.⁵⁴

5.3 Summary of stakeholder views

5.3.1 Response to the Issues Paper

The following is a summary of stakeholder views expressed in the seven submissions to the Issues Paper, organised under the main topics of questions asked of respondents.

Commission's approach

With regard to the Commission's approach to assessing market power and the net benefits of regulation, and assessing the form of regulation:

⁵¹ PoMC media releases 7 & 22 April 2009

⁵² Simon Upchurch, 'Port Phillip Bay Channel Deepening Project' (PoMC)

⁵³ Asciano media release 16 March 2006

⁵⁴ Lloyd's List DCN, 9 April 2009

- Both PoPL and Asciano supported the Commission’s proposed approach. Some submitters did not comment on these issues.
- PoMC did not agree with the Commission’s structural approach to the market power assessment, and stressed the need for a more “dynamic framework for analysis based on identifying commercial relationships and the nature of constraints of firms under analysis”.

Whether Victorian ports have substantial market power

The question of whether there is substantial market power is central to the case for regulation, as the major benefits of regulation are generally with respect to preventing or reducing the likelihood of substantial market power being misused, including restrictions on competition in related markets. If businesses do not hold substantial market power, it is usually considered that there is no case for regulation. The following views were expressed in relation to whether the ports have substantial market power.

PoPL indicated:

The core trades of regional ports are contestable – the loss of grain volumes from Port of Portland (pre-drought years), the import of paper pulp and the export of mineral sands and aluminium in containers through the Port of Melbourne are instances where competing supply chains are in play

Asciano provided information to show that a range of non-containerised cargoes are handled at several or all ports. For example, steel products, grain, woodchips, and to a lesser degree, bulk products. Although bulk liquids are handled at all ports “the option for customers who import or export petroleum products from either the port of Geelong or Hastings is somewhat more restricted due to the specialised infrastructure constructed at these sites ... however these customers enjoy countervailing power”. Overall, the regional ports are workably competitive.

SAL held the view that “there is little doubt that there is little competition between the Victorian regulated ports and even less between the other major ports in adjoining States”.

PoMC did not consider that it has market power because:

- it considers that “from a supply chain perspective, PoMC’s commercial customers are the shipping lines, to whom PoMC charges fees for the use of this physical infrastructure”, and although some charges are passed through to cargo owners, shipping lines have a significant degree of countervailing power due to their ability to switch routes and lack of sunk costs.
- PoMC’s relationship with “stevedores and other service providers is generally based on commercial property lease agreements”.
- in reality it cannot discriminate in price/service between “captive” and “contestable” trade and because up to 30% of trade is contestable, winning contestable trade is a central focus for PoMC. This is why it has offices in Griffith, Adelaide and Hobart. This reflects its direct competition with other ports.

- its statutory charter directs it to facilitate trade, efficiency and cost effectiveness of services, and in the environment it operates it could not do so without acting competitively.

Whether the market for port services has changed since the previous review

PoPL indicated that competition between ports has increased, for example, through the increased use of containers for bulk trades. There is also a high potential for further development of competition. The Blue Gum harvest will be contested by PoPL along with Geelong and Adelaide.

Asciano considered the structure of the market has not changed materially since the last review. Asciano's demerger from Toll has not materially changed the competitive dynamics of the market, and its joint control of Geelong and Hastings does not hamper competition. The core trades of the regional ports remain contestable.

With respect to inland logistics markets affecting port services, PoPL highlighted that the provision of rail services for grain has had an important effect. Other submitters suggested there have been no material changes.

With respect to seaborne trade, PoPL indicated that the global financial crisis will severely impact on trade in the short term. Asciano noted the low grain harvests, and said bulk shipping costs have fluctuated and larger ships are being used.

Conduct of port operators during the monitoring period

The conduct of ports during the pricing period is an important indicator of how effective the regime is. If ports have misused market power, then the regime may be regarded as too "light handed". Similarly if the pricing principles are not complied with then these may need to have greater force. Outcomes over the previous regulatory period are also relevant to whether regulation continues to be appropriate.

PoPL stated that "ports are mindful of the need to offer competitive prices to ensure lowest cost supply chains in order to retain existing trades and attract new business. Shipping lines wield considerable countervailing power as a reduction in port calls is a significant loss of revenue for ports."

Asciano observed that ports are cognisant that users have other options and the significant difference between reference charges and actual charges illustrates the constraints. It noted that non-price factors are also relevant – the continued excellent service quality is also an indicator of lack of market power. It maintained that there is no evidence of misuse of market power by the port operators during the monitoring period and no complaints have been recorded about Geelong or Hastings. Asciano observed that charges at the port of Geelong have increased by only 5 per cent over the regulatory period to 2007/08, and the Commission has overstated the effective price increase at Hastings which, on an average revenue per tonne basis, increased by 11 per cent in 2005/06, 1 per cent in 2006/07 and 17 per cent in 2007/08 (i.e. 31 per cent in total).

These price comparisons are of course only relative to previous years and not external benchmarks, for example the original

Hastings prices may have been too low compared to the wider ports market.

The GCUG highlighted that PoMC's charges for using the Shared Channel since April 2008 have applied to vessels with a summer draught of 12.1 metres (rather than actual draught), and considered that this impacts on Geelong-bound vessels. GCUG maintains this is contrary to the Pricing Principles applying to the Shared Channels in the PMD which state that "the cost of improvements to a Shared Channel that can be demonstrated to benefit only the users of one port should be borne by the users of that port". GCUG requests that Geelong-bound vessels be exempt from any increase in shared channel charges associated with channel deepening, because otherwise the port of Geelong is competitively disadvantaged.

Whether the existing prescribed services continue to be subject to regulation

Among the ports, VRCA stated that price monitoring appears to be working reasonably well, although it raised some issues with charges for channel use (i.e. in relation to the shared channels). PoPL supported the current level of regulation, or no regulation, but not increased regulation. Asciano observed that there is an opportunity to end the price monitoring regime without any appreciable effect on competition.

Representing some port users, SAL was "of the firm view that the ESC must retain its responsibility for economic regulation of the ports sector".

Several submitters such as PoPL and VRCA maintained that all ports should be treated equally. PoPL said: "To all Victorian ports, else abolish regulation for all". Similarly, VRCA said: "Either all prescribed services are subject to either regulation or control or none of them."

Whether the benefits of regulation exceed the costs

Asciano argued that there are no net benefits to regulation because there is workable competition, and consequently the benefits of price monitoring are small, whereas the costs are significant.

PoMC highlighted that recent reviews in NSW and Queensland concerning whether economic regulation of the major ports would be warranted both found that such regulation would not be needed given existing Ministerial oversight and lack of stakeholder evidence of market power misuse by port authorities.

It is not possible for one of these port corporations (PoMC) to have sufficient market power to warrant regulation if the others do not.

PoMC also argued that historical concerns about port authorities' substantial market power actually relate to "the interface between stevedores and landside transport operators".

What form of price regulation should apply (if any)

None of the ports supported price controls. PoPL opposed price controls or greater regulation, regarding this "as being detrimental to port investment".

In the event ongoing regulation was found to be appropriate, several ports supported the continuation of price monitoring. SAL also supported the continuance of price monitoring, but suggested that ESC's powers should be strengthened to permit it to intervene in a dispute between user and a port operator. SAL maintained that the Victorian ports regulatory regime is less heavy handed than the framework being legislated in NSW, which gives the relevant Minister in that state considerable powers of intervention.

Whether the shipping channel access regime should be implemented

POPL stated that "the entrance to Port Phillip Bay is the only channel in Victoria that could be considered as appropriate to be subject to a channel access regime. However, PoPL does not support this from a policy position." VRCA stated that "channel access appears to be working satisfactorily from an operational perspective ... the experience to date of channel access for the ports of Melbourne and Geelong appears to cause no serious issues for vessels moving into and from each port."

SAL stated that the shipping channels should be declared.

The reasoning behind this request is that in April 2008 SAL drew the Commission's attention to the increase in channel fees and in particular a one cent per gross tonne for Geelong bound ships which are designated as having an official draught of 12.1 metres or more but physically the Geelong Channel has a depth limitation of 11.8 metres with tide. ... We were rather disappointed that the ESC was unable to assist our members at that time.

In any event, SAL sought this issue to be examined in the current Review.

VRCA suggested that the only channel-related issues concerned the charges for their use (i.e. the shared channels), and that operationally there are no relevant issues to consider. PoPL indicated that it did not support the Channel Access Regime.

Effectiveness of the design of the current price monitoring framework

Asciano believed that the prescribed services are defined adequately, and that these services should not include warehousing behind berths. On the other hand, PoMC was of the view that prescribed services are inappropriately defined. While channel services are provided by PoMC to ships, in most instances berth services are provided by tenants of PoMC, with the exception of common user berths.

PoPL indicated that its compliance costs as a result of the price monitoring regime have been incremental. However, Asciano indicated that it expects to incur costs of around \$100,000 in 2008/09 on auditing fees alone. Asciano argues that if the current regime continues, options to reduce these costs should be considered:

A full formal audit is not necessary in providing the Commission with assurance regarding the accuracy and validity of a port operator's financial statements. ... there are a number of possible alternatives which could be considered. These include:

- *certification of the financial statements to be true and accurate by a responsible officer only (i.e. a letter of comfort);*
- *accepting information published for a company's half yearly and annual reports (group financial statements);*
- *reduced scope of the financial information currently required by the Commission. For example an income statement audit only ...*
- *auditing of financial statements every second year ...*

It should be noted that Asciano's estimated audit cost in 2008/09 includes the auditing of accounts for three financial years (i.e. 2006/07, 2007/08 and 2008/09) for both Geelong and Hastings.⁵⁵ Hence, the implied audit cost per port per year was around \$17,000.

Several submitters, including PoPL, VRCA and Asciano, indicated that the price monitoring regime has not inhibited investment or commercial flexibility, nor the development of competition. However, PoMC argued that the price monitoring regime exposes it to regulatory risk due to the level of discretion exercised by ESC under the regime, and creates an uncertain business environment.

PoMC maintained that "the focus of the current economic regulation with a five year pricing focus is not aligned with the longer term investment program of PoMC for the port and can only lead to pricing inefficiency". The other submissions didn't address this. On the other hand, VRCA stated that "it appears that the ESC's role has not been a factor in pricing decisions".

With respect to complaint handling, Asciano supported the Commission's approach, while VRCA indicated that it needs to be more transparent to be effective. SAL had specific concerns about the Commission's response to its complaint about Shared Channel charges made in 2008.

On whether asset revaluations a legitimate basis for raising prices

PoPL maintained that asset revaluations are a legitimate basis for raising prices especially when based on increases in the replacement cost of port assets.

On whether PoMC's statutory charter is consistent with the CIRA

Clause 4.2(c) of the CIRA states that the commercial charters for government-owned port operators should include "guidance to seek a commercial return while not exploiting monopoly powers". This provision potentially introduces an element of self-regulation to government-owned port operators. The terms of reference direct the Commission to have regard to clauses 4.1 and 4.2 of the CIRA, and

⁵⁵ See: Essential Services Commission 2009, *Ports Monitoring Report 2006-07 & 2007-08*, January, which states that due to a delay in receiving audited accounts from GeelongPort and PPH, the Commission delayed publication of the 2006-07 monitoring report and instead prepared a combined report for the 2006-07 and 2007-08 financial years.

hence to have regard to this corporate governance principle as part of the present Review. PoMC's submission contained a detailed discussion of its statutory charter and the objectives of the CIRA.

5.3.2 Response to the Draft Report

The following is a summary of stakeholder views expressed in the five submissions to the Draft Report, organised under the principal issues raised by respondents.

Deregulation of breakbulk (excluding motor vehicles), liquid bulk and dry bulk

The Commission's preliminary recommendation to deregulate breakbulk (excluding motor vehicles), liquid bulk and dry bulk, which would also effectively deregulate regional ports, was supported in most submissions.

Asciano indicated it:

supports the Essential Services Commission's ("the Commission") preliminary recommendation to deregulate port prices for breakbulk (excluding motor vehicles), liquid bulk and dry bulk trades in the Victorian ports. ... The removal of the price monitoring regime for the Victorian regional ports would be a welcomed outcome that would reduce the regulatory burden and significant direct regulatory compliance costs associated with operating a port in Victoria.

SAL stated:

Whilst Shipping Australia had initially recommended that the light-handed regulatory pricing regime that the ESC has used over the past five years should be continued for all Victorian ports previously regulated, we accept given the reasoning in the draft report, that the draft recommendations...are appropriate and should be implemented by the Victorian Government.

However, Alcoa expressed "considerable concerns with respect to the outcomes it is likely to deliver". Alcoa argued that it is difficult to understand why the same logic in continuing regulation of container trades, with a relatively high cargo value per tonne, is not "extended to bulk and break bulk trades where the larger volumes and lower values should exaggerate [the] impact [of land transportation costs]."

Alcoa also stated that the Commission's finding that long term contracts for bulk cargo port services provides a degree of countervailing market power "takes a simplistic view to the commercial realities of negotiating such an agreement". Alcoa argued that barriers to entry "will always place the cargo owner at a significant disadvantage and will force either a sub-economic outcome or result in the loss of the business altogether from Victoria and Australia's economy." Additionally, Alcoa commented that "the ability of Alcoa to use road based transport to enable it to discharge bulk alumina at any port other than those immediately adjacent to its smelting operations is nonexistent."

Dr. Rhonda Smith, who was commissioned to write an expert economic comment by PoMC, expressed concern with segmenting the market based on cargo types. The basis of Dr Smith's argument is that she believes it is doubtful whether PoMC could discriminate in terms of pricing and/or service quality between ships carrying freight for which the ports services are contestable and non contestable.

Assessment of market power

SAL fully supported the Commission's reasoning in finding that PoMC has the potential to exercise substantial market power, reiterating that "the Corporation is only subject to competitive pressures at the margins of its activities".

APSA argued that PoMC has "market power and through that market power it can levy [wharfage] charges that amount to tax on exports". The basis for APSA's argument is that PoMC's revenue significantly exceeds its costs, thereby enabling the government to collect an annual dividend. In support of this position, APSA noted that wharfage is charged by PoMC for the handling of containers at East and West Swanson Docks and Webb Dock despite the fact that no service is provided in relation to this charge. The Commission does not agree with APSA's view that the revenue from PoMC's prescribed port charges significantly exceeds the economic costs of providing the services, as discussed in section 9.1.

PoMC disagreed with the Commission's conclusion that it has substantial market power in containers and motor vehicles, arguing that the Commission presented little evidence to support such a conclusion and that econometric modelling referenced by the Commission was not proof of market power. PoMC believed that the Commission "has not properly taken into account the distinction between the port of Melbourne and PoMC and the position of PoMC within the supply chain".

Dr Smith also argued that the Commission's assessment of market power was not justified due to the scope for competition between capital city ports. Dr Smith contended that the trend towards rationalisation of shipping lines, whereby ships are seeking to minimise the number of ports they visit, is creating competition between ports for the associated business. In line with this argument, Dr Smith stated that any abuse of market power "would provide an incentive to increase the speed and efficiency of land transport from alternative ports to customers", resulting in substitution away from the port of Melbourne to interstate ports.

On the other hand Alcoa observed:

land based logistics costs associated with transporting the commodity to or from the port will have a far greater impact on the decision on port service provider than port service rates. This then enables port service providers to exploit the geographic constraints to impose opportunistic rates that can be set at any point up to just short of the freight margin for land transport to an alternate port.

Dr. Smith also claimed that section 13 of the PSA (i.e. PoMC's functions) provides a further constraint against PoMC exerting market power, and states that a number of amendments to the PSA further inhibit PoMC from behaving in an anti-competitive manner.

Market power in motor vehicles

Dr. Smith also disagreed with the Commission's finding that PoMC has substantial market power in relation to motor vehicles. In support of her position, Dr Smith reiterated the Commission's finding that, due to the inexpensive infrastructure facilities required, barriers to entry are low.

However, the Commission's findings were supported by SAL, who stated:

the preliminary conclusion that the PoMC will most likely retain its monopoly on port services for motor vehicles in the short to medium term also appears, to SAL, to be a valid conclusion.

Costs and benefits of regulation

PoMC suggested the Commission, in considering only the administrative burden of information reporting, has "understated the costs of regulation" and its impact on investment, and refutes the claim that the regime is "light-handed". PoMC claimed that the "requirement to comply with pricing principles set by the ESC and in particular the proposed principles for asset revaluation, assessing rates of return etc is heavy-handed" and diminished PoMC's flexibility with respect to "alternative funding models", and thus its ability to respond to the changing commercial environment and to fulfil a broader role beyond the port gate. PoMC also argued that the Commission "did not establish how regulating PoMC would deliver any benefit to users of the Port of Melbourne", and overstated the benefits of regulation.

Shared Channels

PoMC argued that the Commission has not established how retaining the Channel Access Regime and declaring the shared channels would ensure competition or competitive tension in upstream and/or downstream markets. Additionally, PoMC believed that the Commission "has not considered whether (if an access regime is required) declaration under Part IIIA of the *Trades Practices Act 1974* would be a more appropriate form of access regulation". PoMC gives the example of Sydney Airport, where Virgin Blue initiated an arbitration by the ACCC, resulting in a commercial agreement.

Asset Valuation

PoPL maintained that asset revaluations are a legitimate basis for raising prices especially when based on increases in the replacement cost of port assets.

In its submission to the Draft Report, SAL stated that it "fully agrees with [the Commission's] conclusion" that asset valuation based on future earnings would introduce circularity into the asset valuation process, and that market power could allow a firm to use asset values to capitalise monopoly rents. SAL stated that it "supports the approach which is recommended in [the Draft Report] to be adopted by the Commission determining a "commercial rate of return"."

PoMC also stated that it:

does concur that for valuing channel assets (where PoMC is required to use the discounted cashflow method) that the “line in the sand” approach is required to avoid the circularity involved.

However, PoMC went on to argue that the Commission:

is inconsistent in recommending the “line in the sand” approach for channels and at the same time amending this for the “old” channels (pre 1996) and requiring these be set at zero value. No rationale has been provided to support this.

6 | COMPARATIVE REGULATORY FRAMEWORKS AND REVIEWS

The Commission must have regard to the consistency of regulation between States and on a national basis. The purpose of this chapter is therefore to review the ports regulatory frameworks in other jurisdictions and how they have addressed the requirement of clause 4.3 of the CIRA to review the regulatory frameworks applying to ports. It also examines the comparative regulatory frameworks in the airports industry.

6.1 CIRA reviews in other jurisdictions

Most other Australian jurisdictions have recently reviewed port planning arrangements and the economic regulation of ports in accordance with the requirements of the CIRA. This section provides a brief overview of these reviews focussing only on the question of the economic regulation of ports. This focus is because the scope of this Review does not extend to the principles relating to port planning under clause 4.2(a) of the CIRA and is focussed only on economic regulation issues.⁵⁶

Summary of Australian ports regulation

Several alternative approaches have been used to regulate prices for port and other related services across Australian jurisdictions. These approaches can be categorised into three main approaches, namely:

- direct Ministerial approval of port charges
- the threat of an inquiry or declaration under Part IIIA of the TPA if there is any evidence of an abuse of market power
- a price regulatory arrangement for port charges (eg, price monitoring as applied in Victoria and South Australia), or an approved access undertaking (eg, Dalrymple Bay in Queensland).

Port charges in the Northern Territory and New South Wales are directly determined by the relevant Minister. In the NT all fees and charges levied by the Port of Darwin must be approved by the relevant Minister.⁵⁷ In NSW port charges are proposed, justified and calculated by the port authorities, with changes

⁵⁶ In 2007 the Commission undertook a Review of Port Planning which addressed Victoria's requirements under clause 4.2(a) to undertake a transparent public review with respect to whether port planning, where efficient, facilitates the entry of new suppliers of port and related infrastructure services and allows for competition.

⁵⁷ Northern Territory Government 2008, *Review of the Regulatory Framework for Port of Darwin: Discussion Draft Report*, March, p. 7.

approved by the relevant Minister in consultation with Shareholding Ministers.⁵⁸ For Western Australia, Ministerial approval of port charges is more indirect because the Minister does not have the power to determine port charges, but rather can issue directions to a port authority. Under the current legislative frameworks in WA and the NT, there is no independent regulatory oversight of port charges.

Queensland has a generic price regulatory framework that allows the Minister to refer for investigation by the Queensland Competition Authority (**QCA**) any concerns about the exercise of market power by monopoly businesses. The outcomes from these investigations would be recommendations to government, and so does not confer any direct price control power to QCA. To-date, no referral has occurred in the port industry. Queensland also has a generic access regime which can be applied to facilities that have been declared for the purposes of the regime. The Dalrymple Bay Coal Terminal (**DBCT**) is the only port facility in Queensland to be declared under this framework.

South Australia is the only other State to have adopted a light handed form of price regulation, through instigating price monitoring of port services. Under the price monitoring regime, port authorities can determine charges for prescribed services but do so under the threat of the reintroduction of direct price controls, if market power is seen to have been abused.

Two other States currently have state-based third party access regimes that apply to the ports industry and which operate through a negotiate/arbitrate framework, namely: South Australia and Queensland. SA has an access regime that applies to both port channels and a number of port services. The SA regime is scheduled to apply until October 2010. As previously discussed, Queensland has a third-party access regime applying to the common-user facilities at the DBCT. This regime was put in place by the submission of a draft undertaking to the QCA by the infrastructure facility owner, and its subsequent approval.

Third party access to port facilities in NSW, WA and the NT operates through the following measures:

- Provisions contained in exclusive licence arrangements and long-term leases, which in some cases require competitive access to be granted to a port facility or services, e.g. through common access provisions.
- Existing regulations in WA that facilitate access to bottleneck facilities, in particular through the *Western Australian Bulk Handling Act 1967*, *Wheat Export Marketing Act 2008* (Commonwealth) and the *Railway and Port (The Pilbara Infrastructure Pty Ltd) Agreement Act 2004*.

CIRA reviews

The Queensland Government established a Port Competition Review Committee (**PRC**) comprising four senior representatives from Queensland Transport, Queensland Treasury and the Department of Premier and Cabinet to carry out its CIRA review. A discussion paper and addendum were released in September 2007

⁵⁸ PwC 2007, *Review of Port Competition and Regulation in NSW*, November, p. 51.

with the final report titled “Review of Current Port Competition and Regulation in Queensland” released in December 2007.⁵⁹ The significant ports under review were the ports of Brisbane, Gladstone, Hay Point, Mackay, Abbot Point, Townsville and Weipa.

The NSW Government engaged PricewaterhouseCoopers (**PwC**) to conduct a review of current significant port operations and business practices for consistency with the CIRA principles (clauses 4.1 and 4.2). An Issues Paper was released in August 2007⁶⁰ followed by a roundtable discussion with industry stakeholders. The final report entitled “Review of Port Competition and Regulation in NSW” was submitted to the Minister in November 2007, and publicly released in September 2008. The NSW ports nominated by COAG as significant ports requiring review included: Sydney Harbour (Glebe Island, White Bay and Darling Harbour); Port Botany; the port of Newcastle; and Port Kembla.

The South Australian Government engaged the ESCOSA to review the port access regime for consistency with SA’s obligations under clause 2 of the CIRA. The SA Department for Transport Energy and Infrastructure (**SADTEI**) undertook a further review of significant ports in SA in 2008 consistent with SA’s obligation under clause 4.3 of the CIRA.⁶¹ The only port nominated by COAG as significant and requiring review in SA was Port Adelaide, although the ESCOSA review also included Port Adelaide, Port Giles, Wallaroo, Port Pirie, Port Lincoln, Thevenard, and Ardrossan.

The WA government engaged the Allen Consulting Group (**ACG**) to undertake a review of current significant port operations and business practices for consistency with the CIRA. In July 2008, ACG released an Issues Paper and in November 2008 released a Draft Report entitled “Council of Australian Governments Review of Western Australian Ports”. ACG is currently considering stakeholder responses before it releases its Final Report in 2009.

The NT government undertook a review of current significant port operations and business practices for consistency with the CIRA. The only port nominated by COAG as significant (and requiring review) in the NT was the Port of Darwin. A working group of officials comprising NT Treasury, Darwin Port Corporation (**DPC**) and the Departments of the Chief Minister; Business, Economic and Regional Development; and Planning and Infrastructure, was convened to undertake the review of the Port of Darwin. In March 2008, the NT Treasury released a discussion draft report in order to assist stakeholders in making submissions. The final report titled “Review of the Regulatory Framework for the Port of Darwin: Final Report” was released early in 2009.

⁵⁹ Queensland Transport 2007, *Review of Current Port Competition and Regulation in Queensland: Final Report*, December.

⁶⁰ NSW Maritime, *Review of Port Competition and Regulation in NSW*, http://www.waterways.nsw.gov.au/wh/issues_paper.html (accessed on 27 January 2009).

⁶¹ Department for Transport Energy and Infrastructure 2008, *Review of Significant Ports in South Australia under the Competition and Infrastructure Reform Agreement*.

COAG did not nominate any ports in Tasmania as significant and hence no CIRA review has been undertaken in that State.

Comparison between jurisdictions compliance with the CIRA

Generally speaking the CIRA reviews did not result in substantial changes to the pre-existing regulatory arrangements applying to ports in each jurisdiction, with the possible exception of NSW.

In Queensland, each port authority is government owned, although some port facilities are privately owned. The business activities of each port authority have been declared as significant businesses under the QCA Act for competitive neutrality purposes, allowing the QCA to investigate complaints that the ports have a competitive advantage as a result of their government ownership. Given that no major issues were raised by stakeholders in relation to market power of Queensland port authorities, the CIRA review did not recommend any changes to the existing arrangements.

In NSW, the significant ports under review are all controlled by state-owned port corporations, which are governed by a set of statutory obligations under NSW Treasury's Commercial Policy Framework and port charges are subject to Ministerial approval. Port corporations need to comply with the NSW Treasury Policy Statement on the Application of Competitive Neutrality. PwC found no evidence to indicate that competitive neutrality was in any way compromised by the government ownership of port corporations.⁶² PwC's main findings included:

- the existing oversight of port corporation charges, performed by the Minister, should continue, and port charges should be regularly and appropriately benchmarked against those in other Australian jurisdictions⁶³
- in order to improve transparency in how the terms and conditions for long-term leases are determined, government could develop principles or minimum requirements which can be made publicly available. Vertically integrated port service providers should be encouraged to improve the transparency of their pricing structures
- the terms and conditions of long-term leases should be reviewed, and potentially modernised, to ensure they sufficiently reflect changes in government policy.
- a consistent approach should be taken to setting common user status of facilities on government land, with any differential status subject to a transparent and publicly available net benefits test.

Following the PwC review, the NSW government has amended its ports legislation to establish significantly increased Ministerial powers of direction over the port corporations, particularly with respect to the achievement of new additional objectives to:

- foster competition and commercial behaviour in port operations

⁶² Ibid., p.86.

⁶³ This is inconsistent with clause 4.1(b)(iii) of the CIRA.

- advance productivity and efficiency in the port and the port-related supply chain.

The three port authorities in WA subject to review are all government-owned businesses and are not currently subject to economic regulation. The ACG review considered the extent of market power of these ports, and the issue of competitive neutrality with respect to the provision of third party access. In light of no concerns being identified in submissions to the review, the ACG concluded that in its Draft Report that no changes to the existing structure of government-owned port authorities were required. In addition, ACG concluded that the Esperance Port Authority did not have a conflict of interest that gave rise to anti-competitive behaviour, despite its vertically integrated structure. As a result, no significant changes to the regulatory environment for WA ports were recommended by the ACG at the Draft Report stage.

The majority of the throughput at the port of Darwin is controlled by the government-owned DPC. However, there is some competition from an independent terminal operator. In its Final Report, the NT Government identified several measures that should be implemented to improve the transparency of processes for allocating access to common user facilities, and non-exclusive pilotage arrangements. These reforms were required to address potential conflicts of interest due to DPC's vertical integration into some port services. Otherwise no changes to the regulatory environment were recommended.

SA has a price monitoring framework applying to 'essential port services' and a third party access regime applying to a similar range of 'regulated services'. In addition the framework includes a price notification process applying to certain maritime services. ESCOSA recommended that the port of Ardrossan no longer needed to be regulated as it is operated and used by a single user, AusBulk. ESCOSA also identified some changes that should be made to the negotiate-arbitrate access dispute resolution framework within the third party access regime to increase its effectiveness. The price monitoring and third party access regimes were otherwise unchanged and extended for a further three years to October 2010.

6.2 Comparative regulatory frameworks - Airports

A number of Australia's major airports are currently subject to price monitoring arrangements that are administered and enforced by the ACCC. These arrangements were first introduced in 2002, and in 2007 the government decided that this 'light-handed' approach to the regulation of airport services should continue. This section describes the initial rationale for implementing price monitoring arrangements in the airport services sector, and considers the effectiveness of this regime in terms of mitigating the abuse of market power by airport operators.

6.2.1 Privatisation and price caps

The privatisation of Australian airports was undertaken in 1997 and 1998⁶⁴ through the sale of long term leases to private operators. In recognition of the significant market power conferred on a number of these operators, privatisation was accompanied by price-regulation measures at 11 of the largest privatised airports. Specifically, a five year CPI-X price cap regime was introduced and complemented by cost pass-through provisions for “necessary new investment” and government-mandated security services, quality monitoring and special access arrangements designed to facilitate new airline entrants.⁶⁵

6.2.2 A light-handed approach

In 2002 the Productivity Commission (PC) undertook a review of the price cap arrangements.⁶⁶ The PC found that:

- four of the major Australian airports – Sydney, Melbourne, Brisbane and Perth – have substantial market power. Adelaide and, to a lesser extent, Canberra and Darwin, were considered to have moderate market power
- the scope for airports with market power to use (or abuse) that power is constrained by commercial pressures and opportunities, and
- because of the risks and potential costs of strict price controls relative to more light-handed regulation, such controls are judged not to be required even at the four airports with substantial market power.

In this context, the PC recommended that a light-handed regulatory regime be adopted for all seven airports assessed as having some market power - Adelaide, Brisbane, Canberra, Darwin, Melbourne, Perth and Sydney - for a probationary five year period.

The following section sets out in more detail how the PC developed its recommendation that price monitoring arrangements are the most appropriate regulatory response to the potential abuse of market power in the provision of airport services.

6.2.3 Assessing the level of market power

In order to identify those airports that have the potential to abuse market power the PC considered the materiality of barriers to entry at each of the airports and the sensitivity of users to price rises. The PC concluded that Brisbane, Melbourne,

⁶⁴ Excluding Sydney.

⁶⁵ The Government announced material changes to these regulatory arrangements in October 2001 following the terrorist attacks in the United States and the collapse of Ansett. Price caps were replaced with price monitoring arrangements at Adelaide, Canberra and Darwin airports. Melbourne, Brisbane and Sydney remained subject to price caps but were allowed to implement one-off increases for price-capped services.

⁶⁶ Productivity Commission, (2002), Price Regulation of Airports Services, Inquiry Report, Report No. 19, January.

Perth and Sydney airports possess significant market power in domestic markets on the basis of high proportions of business travellers and those “Visiting Friends and relatives”, as well as their status as the main international ports of arrival and departure in the country.⁶⁷

In addition, the PC considered that market power will be most significant for those airport services where there are few alternative suppliers and where they are services that an airline and its passengers must consume as part of any flight via the airport. Accordingly the PC found that market power was strongest for facilities for aircraft movements, including access to runways, taxiways and aprons and vehicle access, including front-door access to the airport for passengers, transport providers and off-airport car-parking providers.

6.2.4 Assessing the potential for abuse of market power

To determine whether regulation of those airports with market power was required, the PC sought to establish the likely conduct of these airport operators. In particular, the PC considered:

- whether there were any commercial incentives or constraints at play that would prevent the airport operator from using this power to its full extent, ie, the inquiry considered that non-aeronautical revenues may provide airports with an incentive to encourage extra passengers to the airport, and this could serve to constrain aeronautical pricing
- the economic consequences of the airport operator exercising market power, ie, an increase in average airport service charges, the distributional impacts of higher prices (ie, on passengers and shareholders) and any impacts on service quality and investment.

6.2.5 Feasible regulatory solutions

Having identified those airports with the potential to abuse market power the PC considered a number of regulatory options including, heavy-handed cost-based regulation, incentive regulation (price caps) and light-handed regulation such as price monitoring. In assessing these options the PC concluded that:

- there was not a strong case for the continuation of price caps, given the material risk of regulatory failure arising from the severe information problems confronting the regulator, and the significant costs imposed by heavy-handed regulation relative to the expected costs of market power abuse at these airports. In particular:
 - there was insufficient evidence to suggest airports will use market power in such a way that will impose a level of costs on society proportionate to the costs of heavy-handed regulation
 - airport operators face commercial incentives that should limit the scope to abuse market power

⁶⁷ The Commission noted that competition among those airports for international traffic is likely to moderate, but not eliminate, this latter effect.

- price monitoring would encourage airports and airlines to negotiate commercial agreements, and
- the potential re-introduction of stricter price controls provides additional incentives for airports to enter into reasonable agreements.

Accordingly, the PC concluded that price monitoring arrangements were the most appropriate regulatory option. The PC's recommendation was subsequently adopted by the Australian Government. The price monitoring arrangements were introduced for five years.

6.2.6 Assessing the price monitoring arrangements

In December 2006 the PC completed its review of the price monitoring arrangements for the purposes of examining the effectiveness of the light-handed regulatory regime.⁶⁸ The PC found that:

- price monitoring, as part of a light handed regulatory approach, has delivered some important benefits, ie,
 - it has been easier to undertake necessary investment
 - airports' productivity performance has been high by international standards
 - service quality has been satisfactory to good
- price outcomes to date do not appear to have been excessive
- some non-price outcomes have been less satisfactory, and commercial relationships between certain airports and their customers have been strained
- some of the "market" constraints on airports' behaviour — such as the countervailing power of airlines — have not been as strong as was envisaged
- some systemic shortcomings have detracted from the effectiveness of price monitoring and the light handed approach as a whole, ie,
 - policy guidance on the valuation of airport assets for pricing purposes is lacking, and
 - there is no clarity on when further investigation of an airport's conduct is required, and no process for initiating such investigation.

The PC concluded that these systemic shortcomings can be addressed without sacrificing the benefits of a light handed approach, and recommended that a further period of price monitoring would be preferable to a reversion to stricter price controls, with all of its attendant costs.⁶⁹

⁶⁸ Productivity Commission, (2006), Review of Price Regulation of Airports Services, Inquiry Report, Report No. 40, December.

⁶⁹ The Commission also recommended that the new price monitoring regime include a new process for triggering further investigation of an airport's conduct where there is prima facie evidence of significant misuse of market power.

On 30 April 2007 the Australian Government responded to the inquiry report and decided to accept the PC's recommendation that Sydney, Melbourne, Brisbane, Perth and Adelaide airports continue to be subject to price monitoring for a further six years.⁷⁰ The Government response also indicated that an independent review will be carried out in 2012, or earlier if there is clear evidence of unjustifiable increases or other misuse of market power across price monitored airports.

⁷⁰ Canberra and Darwin airports are not subject to the formal price monitoring arrangements that took effect from 1 July 2007.

7 | SHOULD ANY PORT SERVICES BE REGULATED?

Clause 4.1(a) of the CIRA states that a port 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. The purpose of this chapter is to examine whether there is a clear need for the regulation of any ports and any prescribed services with respect to either one of these two criteria. If so, the Commission will also consider whether the benefits of regulation are likely to outweigh the costs.

The chapter first discusses methodological issues about its assessment of market power, before defining the relevant markets and undertaking its assessment of market power in each market. The chapter concludes with consideration of the costs and benefits of regulation in circumstances where market power is present, and if so whether regulation should be imposed. The final section considers the need for competition in a number of related markets.

7.1 Is there market power?

Market power is commonly defined in terms of the scope for a firm to profitably raise prices above the marginal costs for a sustained period of time. Market power can also manifest as reduced service or product quality, a reduced variety of products or services, or reduced innovation, compared to what would result if market power was not present.

In practically all markets, firms have some degree of market power arising from the fact that competition is not perfect. However, whether there is cause for concern about the degree of market power depends on the effectiveness of competition in deterring the potential economic efficiency losses that can result from the exercise of market power.

As discussed in chapter 3, assessing the degree of market power is the first step in considering whether economic regulation should continue. If market power is present, then it is necessary to evaluate the costs and benefits resulting from the imposition of economic regulation. This subsequent assessment will necessarily be influenced by the degree of market power present. The assessment of whether the providers of port services have market power, involves:

- First defining the relevant market(s), the subject of section 7.2, particularly in relation to the geographic, product, and functional dimensions of ports, and
- Second, for each of the identified markets, assessing the potential for competition for the provision of prescribed port and channel services within each market, namely: the potential for competition between ports; the potential for substitution between port services (as part of a domestic supply chain) and other modes of transport within Australia; the barriers to entry; and the degree of

countervailing market power by port users, and relevant changes in the market that may influence or change any of these characteristics.

7.1.1 Views of stakeholders on market power

Stakeholders provided conflicting views on whether Victoria ports had the scope to exercise substantial market power.

The PoMC indicated that it is not able to exercise substantial market power within the transport supply chain for several reasons, namely:

- the extent of countervailing market power by shipping lines, as the principal customers of port services,
- it has a statutory obligation under the PSA to support the growth of the port in an economically sustainable manner and to provide services on a fair and reasonable basis. The requirements of the PSA guide the operations of PoMC and are reflected in its corporate planning.
- it is subject to direct competition from other ports and continues to invest in trade and business development to secure and grow trade throughput, and to further support the growth and investment in the Victorian economy.⁷¹

On the other hand, SAL expressed a differing view on market power:

There is little doubt that there is little competition, if any, between the Victorian regulated ports and even less between the other major ports in adjoining States, which are separated by long distances. It is therefore difficult to facilitate effective competition and to promote a competitive market.⁷²

SAL maintained that PoMC is only subject to competitive pressures at the margins of its activities. APSA also considered that PoMC has market power.

Asciano, the operator of the ports of Geelong and Hastings argued that there was no evidence to support a view that regional port operators were in a position to exploit any market power. As a consequence, Asciano argued that the cost of continued regulation of prescribed services at regional ports outweighed the likely benefits:

... there is no evidence that regional port operators having misused any alleged market power during the five year period from 2003-04 to 2007-08. In addition given the current market conditions there is no reasonable expectation that this will occur over the next regulatory period.⁷³

Asciano went on to argue that regional ports are workably competitive:

⁷¹ PoMC 2009, *Response to the ESC Ports Regulation Review Issues Paper*, February, p.5.

⁷² SAL, *op cit.*, p.2.

⁷³ Asciano 2009, *Submission in response to the Issues Paper*, February, p.5.

Regional ports operate in a workably competitive market. Asciano believes the core trades of regional ports regarding dry bulk and general cargoes remain contestable... the ports of Melbourne, Geelong, Portland and Hastings can or have the capabilities to handle similar cargo, which ultimately provides port users options to change ports should they become unhappy with the price or quality of service they are provided.⁷⁴

Similar to Asciano, the PoPL commented that:

The core trades of regional ports are contestable – the loss of grain volumes from Port of Portland (pre-drought years), the import of paper pulp and the export of mineral sands and aluminium in containers through the Port of Melbourne are instances where competing supply chains are in play.⁷⁵

Alcoa submitted that the regional ports have market power because bulk commodities tend to be expensive to transport over land, and therefore the locational advantages of ports are strongest in these products.

7.1.2 Methodological Issues identified by PoMC

The Commission has noted the PoMC's concerns with the structural approach to analysing market power, specifically the use of market shares as an indication of the degree of competition between ports. In its submission to the Issues Paper, the PoMC referenced the Australian Competition Tribunal, Federal Court and High Court rulings that have indicated shortcomings of a market share approach. The PoMC's view is that there is a:⁷⁶

...need for a more dynamic framework for analysis based on identifying commercial relationships and the nature of constraints on firms under analysis.

PoMC also observed that:

The Courts have consistently emphasized that market share or large size does not equate to market power. What is important are the constraints that exist in commercial reality, regardless of whether those constraints come from within or outside the traditional market definition used for competition analysis.⁷⁷

The Commission has looked into this matter and believes that its approach is consistent with accepted practice in the assessment of market power. Furthermore, it is not clear what the PoMC means by a "more dynamic framework for analysis".

⁷⁴ Ibid., p. 7.

⁷⁵ PoPL 2009, *Port Regulation Review 2009: Response to Issues Paper*, February, p. 3.

⁷⁶ PoMC submission to the Issues Paper, p8.

⁷⁷ PoMC, op cit., p.11.

Any assessment of market power (including as proposed by the Commission) involves consideration of both the market structure (ie, the number of competitors, the nature of users, etc) and the scope for substitution on the demand side of the market and competition on the supply-side, including by hypothetical new entrants, and the barriers to entry.

For ports, this involves consideration of the role of a port within the transport supply chain, which includes consideration of the logistical feasibility of port competition based on the characteristics of the product being transported. A combination of competition between existing ports, or the ease of new entrant competition, provides a potential constraint on the misuse of market power. The analysis must also consider whether the potential for the misuse of market power might otherwise be constrained by the countervailing market power of users. This clearly requires an assessment of the commercial constraints created by users of the regulated business' services, on it exercising market power. Finally, consideration must also be given to changes in the market that may alter some of these conditions, e.g. changes that might lower the barriers to entry, as well as regulatory or legislative constraints.

The PoMC's comments appear to have given emphasis to the limitations of market concentration alone as an indicator of market power. A similar view has been expressed by Professor David Round, Director of the Centre for Regulation and Market Analysis at the University of South Australia and member of the Australian Competition Tribunal:

*... concentration statistics or even market shares attributable to individual firms by themselves tell us nothing about the dynamics of competition within a relevant market. They present a snapshot only, and tell us neither how firms obtained those market shares, nor whether those shares are currently increasing or decreasing, and they certainly offer no guide as to what might happen as future market conditions change.*⁷⁸

Economic theory gives emphasis to the potential for competitive entry, including the barriers to entry and the extent of sunk costs incurred by potential new entrants. These barriers to entry may change over time with technology and potentially through changes in the balance between existing infrastructure capacity and demand. There may also be non-economic barriers to entry or a regulatory or legislative nature.

The PoMC quoted the Australian Competition Tribunal, saying:⁷⁹

In order to assess whether there will be competition in a market, the traditional approach has been to look to the structure of the market...However we believe that to determine whether participants in a market are in a position to compete, that is, to

⁷⁸ Round, D. K. 2006, 'The power of two: squaring off with Australia's large supermarket chains', *The Australian Journal of Agricultural and Resource Economics* 50, 51-64.

⁷⁹ Qantas Airways Limited [2004] ACompT 9 at paragraph 304, as quoted by PoMC submission to Issues Paper, p8

contest for the business of consumers, one should look at a number of factors that contribute to the way parties interact in the market.

However, this decision goes on to quote *Re Queensland Cooperative Milling Association* (1976):⁸⁰

Competition is a process rather than a situation. Nevertheless, whether firms compete is very much a matter of the structure of the markets in which they operate. The elements of market structure which we would stress as needed to be scanned in any case are these: (1) the number and size distribution of independent sellers, especially the degree of market concentration; (2) the height of barriers to entry, that is the ease with which new firms may enter and secure a viable market; (3) the extent to which the products of the industry are characterised by extreme product differentiation and sales promotion; (4) the character of 'vertical relationships' with customers and with suppliers and the extent of vertical integration; and (5) the nature of any formal, stable and fundamental arrangements between firms which restrict their ability to function as independent entities.

This suggests that a number of factors should be taken into consideration when assessing the potential for competition between ports, including market shares, structure of the market and the dynamic interactions between port users and port service providers. The Commission agrees “that competitive constraints are not static and strategic behaviour by market participants can affect competition.”⁸¹ The Commission believes that its structural approach which is augmented by analysis of dynamic elements is the most appropriate approach for the review, and is analogous to the approach used by the ACCC as set out in its 2008 Merger Guidelines for assessing the effects of a merger on market power⁸².

7.2 Market definition

The way the market is defined can have important implications for market power analysis. The assessment can be influenced by whether the market is narrowly or broadly defined.

A common way of defining the relevant market is in terms of the area of trade where there is a high degree of potential substitution by consumers between:

- different suppliers of the same or similar products or services; and/or
- different products or services that satisfy the same or similar purpose for the consumer.

⁸⁰ Queensland Cooperative Milling Association Ltd and Defence Holdings Ltd (1976), ATPR 40-112, at p 17 246, quoted in ACompT 9 at paragraph 305.

⁸¹ ACCC, November 2008, 'Merger Guidelines', p12

⁸² ACCC, November 2008, 'Merger Guidelines', pp11-12

In addition to these product and functional characteristics, there are also geographical dimensions which must be considered when defining the market. These relate to the area in which it might be logistically possible to substitute services from an alternative port.

This approach emphasises the availability of realistic alternatives to the consumer, and appears appropriate for the Commission's purposes.

In the 2004 Review of Port Services, the Commission defined the relevant market as the provision of port infrastructure services (channel and berth services) within South Eastern Australia. Infrastructure services are the provision of the basic infrastructure required for the safe and efficient transfer of goods or passengers between the land and the sea, distinct from the range of complimentary non-infrastructure services such as pilotage, towage, mooring and ship repair as well as stevedoring and warehousing. Non-infrastructure port services were considered a separate but related market.

While in principle substitution is possible with more distant Australian ports, at the present time the lack of fast and highly efficient long-distance freight rail services implies limited scope for substitution. Thus South Eastern Australia represents a reasonable relevant geographical extent of the market. (Substitution between distant ports is given further consideration in section 7.3.2 below).

The Commission has also identified distinct sub-markets comprising the main cargo "pack types", namely: the container market, the general cargoes market, the dry bulk market and the liquid bulk market. In each case, these different types of cargoes are transported by different, specialised types of ships, and land-side port infrastructure also tends to be specialised for these different cargo types, although they use shipping channels in common.

PoMC submitted an expert statement by Dr Rhonda Smith from the University of Melbourne. Dr Smith stated that the Commission has narrowed its definition of the market from its 2004 review. However, the Commission has in fact adopted the same definition from the 2004 review.

Dr Smith also contended that it is inappropriate to segment the market based on cargo types because:

it is doubtful that PoMC could, or has sufficient information, to discriminate in relation to the quality of service provided between ships carrying contestable and non-contestable cargoes or in relation to fees charged

However, PoMC's reference tariff schedule shows that it does charge different prices for cargoes of contestable and non-contestable cargoes. For example, PoMC currently differentiates wharfage charges (per TEU, per Revenue Tonne, or per tonne as applicable) between containerised cargo, non-containerised general cargo, motor vehicles, liquid bulk and dry bulk.

For these reasons the Commission does not find Dr Smith's arguments in regard to the market definition to be convincing. The Commission is not aware of any market

developments that would change its 2004 analysis. Consequently, the Commission has used the same market definition for this Review.

Given these observations, it is necessary when assessing the potential scope for the exercise of substantial market power to consider each of the separate sub-markets for each of the major categories of cargo.

7.3 Assessment of market power for containerised trade

The port of Melbourne is the only port in Victoria that regularly handles a significant amount of containers. These cargoes are usually handled at large scale dedicated container terminals. International and coastal containers are both carried on international ships that are serviced at the East and West Swanson Docks, while Bass Strait container transshipments to and from Tasmania are handled at Webb Dock and Appleton Dock.

This section sets out the Commission's assessment of market power for the provision of port services for containerised cargo, by considering barriers to new entry, competition between ports, and countervailing market power.

7.3.1 Barriers to new entry

The Commission has previously found that barriers to entry to the provision of port container services are high, particularly because of the significant costs associated with the construction of a container terminal of sufficient scale in order to compete with existing suppliers. Furthermore, liner shipping companies focus their calls on the ports where volumes of cargo are greatest.

There are significant scale efficiencies arising from the provision of port services for containerised trade. This is because of the land area and land transportation facilities needed in order to transport containers to and from the port. This means that there is only limited scope for other Victorian ports to enter the market for containerised port services. Unless an efficient scale container terminal was built at a regional port or at another location by a competing port operator, competition between ports within Victoria would not be feasible. The Commission has previously found that there are high barriers to entry and important location disadvantages in relation to development of a new container terminal at one of the two private ports, Geelong and Portland. The Commission's 2007 Review of Port Planning provided some relevant analysis of some of the alternative container terminal development options. This analysis highlighted the relevance of land transport costs to the feasibility of substituting between alternative terminals.

The Victorian government has indicated that it plans to develop the container terminal facilities at the port of Hastings to supplement the capacity at the port of Melbourne in the longer term.⁸³ It is reviewing the existing plans including with respect to the timing and sequencing of future port development as part of the forthcoming *Port Futures* policy. The Government has also indicated that the next

⁸³ DOT 2008, Freight Futures p.31

stage of container terminal development will be in the port of Melbourne, and that it has plans to integrate the management of the ports of Melbourne and Hastings.⁸⁴ This suggests that a competing new entrant container terminal development within Victoria does not appear to be a strong likelihood as a source of new inter-port competition in containers.

For short-sea container trade, such as to Tasmania, the barriers to entry to providing containerised port services are lower due to the relatively low cost infrastructure facilities used for roll-on roll-off cargoes.

Around 16% of the port of Melbourne's container trade (by TEU) is associated with the transshipment of containers between the port of Melbourne and Tasmania. In the 2004 review, the Commission found that while it may be economically feasible to establish alternative facilities at Hastings or Geelong for the container trade with Tasmania, competition is limited by the additional land transport costs that would be incurred if those ports were used. However, as 90 per cent of the Bass Strait trade is domestic freight and the remaining 10 per cent is transshipment of international containers⁸⁵ the locational advantages of the port of Melbourne should not be overstated.

Coastal trade represents a further 5% of container throughput at the port of Melbourne. Competition between Victorian ports for this trade was previously found to be severely limited by the fact that these containers are carried on vessels operating in the main international trades, which do not, and are unlikely to in future, call at other Victorian ports. However, this trade component may face competition from land transport – which is addressed in section 7.3.3 below.

In summary, there are potentially large barriers to new entry for the provision of containerised port services, given the economies of scale involved and the availability of sufficient land and land transport to provide these services.

7.3.2 Competition between ports

The second relevant factor that the Commission has examined is the scope for competition between existing ports for the provision of containerised trade. As has been outlined above, the port of Melbourne has the largest share of containerised trade, and there is little scope for other Victorian ports to upgrade their facilities in order to compete directly with the port of Melbourne.

That said, there is potential for competition for containerised cargo between each of the main container ports in other capital cities, eg, Adelaide, Sydney, Brisbane and Fremantle. Whether such competition is an effective potential constraint on market power of the PoMC will depend critically on land transportation costs, and the destinations (or sources) of containerised trade within Victoria.

⁸⁴ DOT 2008, Freight Futures p.74

⁸⁵ Meyrick and Associates et. al. (2007) "International and Domestic Shipping and Ports Study", p.111

In the 2004 review, the Commission found that, while there had been significant improvements in land transport efficiency, the cost of land transport remained a major barrier to competition between the capital city container ports. The majority of containers passed through the port closest to the point of production or consumption. As such, Melbourne faced significant competition from other container ports only for containers originating in or destined for certain regions. These contestable international containers, mainly from southern NSW and from South Australia, account for a relatively small part of the container movements at the port of Melbourne. Approximately 13 per cent of PoMC's container trade originates from NSW or SA.⁸⁶ Similarly, 85 per cent of the containers handled through Port Botany have origins or destinations within 40 km of that port.⁸⁷

Table 4.4 shows, for each state, the percentage of containerised imports and exports of that state that were handled through the port of Melbourne. This data is provided for 2003-04 and 2007-08. These shares are based on the quantities of container trade measured in mass tonnes. The Table indicates that the port of Melbourne handles approximately 96 per cent of containerised imports and exports with origins or destination in Victoria⁸⁸, and this share has increased incrementally over the period. The port of Melbourne's share of Tasmania's containerised trade has increased strongly from 33 per cent in 2003-04 to 52 per cent in 2007-08. The port of Melbourne's share of the container volumes of the other states does not appear to have increased or decreased appreciably over this period. Its share of South Australian trade increased slightly from 28 per cent in 2003-04 to 32 per cent in 2007-08. The reasons for the volatility in this share from year to year are not well understood but may suggest a degree of contestability for South Australia's containerised trade between Port Adelaide and the port of Melbourne. However, strong inferences cannot be drawn, given that container ports in South Australia and Tasmania are served by fewer shipping lines and can therefore directly access fewer international ports. Dr Smith has incorrectly claimed that the Commission has asserted that 10 per cent of the containerised cargo at the Port of Melbourne is contestable.⁸⁹

Finally, the elasticity of substitution between container ports provides an indication of the degree of pricing constraint imposed on ports from other container ports. One recent study has found that the elasticity of substitution between Sydney and Melbourne in containers is -0.1 per cent which means that 1 per cent increase in port fees in Melbourne results in an average impact on container volumes to Sydney of -0.1 per cent.⁹⁰ One possible explanation for this result suggested by the authors of this study was that container ports in Melbourne and Sydney were servicing different geographic markets:

⁸⁶ BITRE unpublished data

⁸⁷ Freight Infrastructure Advisory Board (2005) 'Railing Port Botany's Containers' p.14

⁸⁸ Dr Smith misinterpreted this statement as indicating that 96 per cent of the traffic through the port has its origins or destinations in Victoria (Dr Smith submission, p.3)

⁸⁹ Dr Smith submission, p.4

⁹⁰ Menezes, F. M., Praca, M. & Tyers, R. 2007, 'Strategic Interaction amongst Australia's East Coast Ports', *The Australian Economic Review* 40, pp. 267-78.

One possible explanation for this may be that many ships call at more than one port. Those calling at Sydney also exchanged goods at other ports on the east coast while ships calling at Melbourne were arriving along the southern coast of Australia, calling also at Fremantle and perhaps Adelaide. By this reasoning the low elasticity of substitution between Melbourne and Sydney would be caused by the fact that ships calling at these ports were actually serving different regions, with Sydney the key east coast port while Melbourne is recognised as the main port of the Southern Coast.⁹¹

In response to the Commission's preliminary findings, Dr Smith asserted that there is scope for effective competition between the mainland capital ports. This is partly because shipping lines are being rationalised, and so are seeking to minimise the number of ports that are visited. Accordingly rationalisation, in the opinion of Dr Smith, is creating competition between ports as they seek to attract shipping lines. In support of this argument, Dr Smith cited the example of MSC Mediterranean Shipping Company which is seeking to further rationalise its services from the Far East to the Mediterranean and Europe. Given this trend, Dr Smith argued that ports that would otherwise be viewed as operating in separate markets may become competitors to retain shipping lines.

The argument that shipping lines may rationalise ports of call to exclude a major port is not supported by the shipping industry. SAL stated:

In respect of containerised trade and the provision of port services for motor vehicles, shipping lines do not have the scope to constrain the pricing conduct of the POMC through the exercise of countervailing market power given the strong influence of the importers and exporters in Victoria to determine where shipping lines should call and having extensive influence on the provision of shipping services generally.

Dr Smith also argued that if PoMC were to exercise market power an incentive would arise for investment to increase the speed and efficiency of land transport from alternative ports in the medium to long term.

Dr Smith's reasoning is contingent on an assumption about the extent of substitutability between ports for users of the ports, as part of an integrated import or export logistical supply chain.

Customers transporting goods through the Port of Melbourne would only substitute for an interstate port if it reduced the overall cost (including time) of their entire logistical supply chain. This means that it would not be sufficient to simply compare PoMC's price/quality against interstate ports. It would be necessary to compare the entire supply chain costs for a specified cargo in order to assess whether an alternative port is a viable substitute.

⁹¹ Ibid., p.273.

For example, if the land transport costs associated with delivering freight to Sydney are high relative to the price differential between PoMC and Port Botany charges and the stevedoring charges, then PoMC would be able to raise prices substantially higher than the efficient level without resulting in any substantial loss of freight to Port Botany.

Indicative estimates suggest that the cost of road transport between Melbourne and Sydney is in the order of \$800 per TEU,⁹² whilst the cost of shipping freight between Melbourne and Sydney per TEU is believed to be considerably lower (the best available estimate is less than \$300 per TEU⁹³). Given that Port of Melbourne's and Port Botany's total port interface costs (including port charges, as well as towage, pilotage and mooring) are both estimated to be approximately \$89 per TEU⁹⁴, the net additional cost of land-bridging a container between Melbourne and Sydney, instead of shipping, is estimated to be approximately \$500 per TEU.⁹⁵

These cost estimates do not support Dr Smith's contention that the scope for land-bridging freight between Melbourne and Sydney is likely to give rise to a significant degree of substitutability between the ports.

The available evidence suggests that the other capital city container ports in the eastern States provide only a relatively minor constraint on the prices of the PoMC's port services for containers. Accordingly the Commission has concluded that there is insufficient competitive constraint for the PoMC in its port services for containers.

7.3.3 Potential for substitution between ports and alternative domestic land transport modes

The sensitivity of demand for the services of one port and the substitutability for users between alternative ports as points of entry or exit will depend on the efficiency of overland transportation ("land bridging"). Meyrick and Associates have noted:

Road and rail freight prices have steadily decreased in real terms from 1970 to 2000. Road and rail prices have fallen by 45% and 65% over 30 years, respectively. Over the same period, coastal

⁹² BTRE (2006) 'Freight Measurement and Modelling in Australia', p.152: Estimated road transport cost in 2000-01 of 5.66 cents per net tonne kilometre (ntk). This has been escalated by the CPI (weight average 8 capital cities) Transportation sub-index, to obtain a current estimated cost of 6.73 c/ntk. It is assumed there are 12 tonnes of freight per TEU and 963 km between Melbourne and Sydney.

⁹³ Ibid. p.152, based on the shipping cost per TEU from Perth to the eastern states of 2.08 cents per ntk in 2000-01, adjusted as per the foregoing footnote

⁹⁴ BITRE (April 2009) 'Waterline', p.33: Port interface charges for ships in the 35,000 – 40,000 GT range, Jul-Dec 2008. For the port of Melbourne, \$56.40 plus the Infrastructure Fee of \$32 per TEU from PoMC's current Reference Tariff Schedule. For Port Botany \$88.80 per TEU (average of imports and exports).

⁹⁵ These cost estimates do not take into account the cost of extra time taken to land-bridge containers to Sydney rather than shipping.

shipping prices increased by 45% ... based on Tasmanian shipping fees ... However, Tasmanian (Bass Strait) shipping fees, as used by the BTRE, are not reflective of permit shipping fees which are generally at marginal cost for containers and could have fallen in real terms over the same period.⁹⁶

For this reason it can be expected that the major container ports are in an increasingly competitive environment. However, recent economic analysis of the degree of competitive substitution between the major container ports finds that the degree of substitutability remains insufficient to impose a significant constraint on market power in relation to port services:

the Port of Melbourne Corporation, the Sydney Ports Corporation and the Port of Brisbane Corporation ... are the largest players in the Australian container ports industry and together they hold market shares totalling approximately 80 per cent. Although these ports tend to serve different hinterlands, land transport networks are sufficiently extensive that their markets overlap to some degree. It might therefore be assumed that their pricing decisions affect their respective throughput volumes both through their influence over total trade flows and via substitution between ports. ... Our main finding is that elasticities of substitution are quite small.⁹⁷

There is also the question as to the extent coastal shipping is used to transport goods around Australia in competition with land transport for domestic freight tasks. If so, this would mean that there is also scope for ports to compete against, for example, domestic rail terminals.

Meyrick and Associates observed that on the east-west domestic freight corridor between the eastern capitals and Perth, there has been a large increase in coastal shipping under the Single and Continuous Voyage Permit Program for international container vessels, and on this corridor coastal shipping reached a 20 per cent mode share by 2000.⁹⁸

Coastal shipping is most competitive on the east-west routes because rates are almost half that of rail, and delivery times are within the requirements of the customers.⁹⁹

However Meyrick and Associates noted that while this market segment has grown strongly, it is inherently constrained by the fact that it is only carried by international container ships:

⁹⁶ Meyrick and Associates et. al. (May 2007) 'International and Domestic Shipping and Ports Study', p.106

⁹⁷ Menezes, F. M., Praca, M. & Tyers, R. 2007, 'Strategic Interaction amongst Australia's East Coast Ports', The Australian Economic Review 40, pp. 267

⁹⁸ Meyrick and Associates et. al. (May 2007), p.105

⁹⁹ Meyrick and Associates et. al. (May 2007) p.108

Domestic containers (as opposed to transshipment containers ultimately bound for overseas destinations) are carried on spare slots on international vessels and hence low priority if capacity is tight ... Unless dedicated coastal shipping services are again re-introduced ... the volume of mainland containers will be limited to the volume of surplus capacity on international container shipping services.¹⁰⁰

These observations suggest that the potential to capture a greater share of the mainland interstate container freight tasks may not provide sufficient substitutability to provide an effective constraint on the market power of the port of Melbourne. The Commission believes that a combination of the cost of domestic land transport and the limited spare capacity on ships to transport domestic containers means that land transport does not provide an effective competitive constraint on the market power of the port of Melbourne for domestic transport containers.

7.3.4 Countervailing market power

Countervailing power arises where concentration on the supply side of a market is balanced by concentration on the buying side. Through size and commercial pressure buyers can counter the market power of suppliers, which in turn can result in lower prices for buyers.

In the container trades the main types of customers include port tenants (the stevedores), shipping lines, and cargo owners.

The Commission has previously found that port tenants have countervailing power when entering into leases. The two major container stevedores retain significant bargaining power, and are increasingly integrated into the land-side logistics chain – although whether this integration enhances market power is not clear.

Alcoa disputed the view that port tenants may have countervailing power when entering into leases. It maintained this is a simplistic view which does not recognise that the cargo owner will always be at a significant disadvantage – partly due to the high costs of transporting freight to alternative locations.

Some stakeholders, such as PoMC, have argued that shipping lines appear to have countervailing power, as most of Australia's containerised trade is handled by major shipping lines and consortiums that can potentially exercise pressure on port organisations, with the ability to vary their trade routes and ports of call. However, SAL has queried the extent to which shipping lines can exercise such pressure in practice with the major ports. As previously discussed in Section 7.3.2, the Commission agrees with SAL's position because the ability to vary shipping routes is limited by the fact that ships must go where the cargo is.

Assuming that stevedores and shipowners have significant countervailing market power, the incentive to exercise this is mitigated by their ability to pass port

¹⁰⁰ Meyrick and Associates et. al. (May 2007) p.115

charges on to cargo owners¹⁰¹. Given that container shippers can, for the most part, pass on charges to exporters and importers, it is unlikely that container shippers would exercise countervailing power against PoMC.

Dr Smith also recognised the ability of container shippers to pass on charges:

....port charges are passed on by shipping lines and so are spread across all of their customers and so are a very small proportion of the total cost of shipping imports and exports.

In light of the foregoing considerations, the Commission has serious reservations about the degree to which shipping lines have the scope to constrain the pricing conduct of the PoMC. The Commission has not been provided with any evidence that would change its previous assessment that while shipping lines and stevedores have some countervailing power, their ability to pass through costs to cargo owners, who are price inelastic, tends to mitigate the effects of this countervailing power.

Another potential factor that can mitigate market power is the extent to which consumer demand is sensitive to changes in price due to the scope for substitution between international traded goods and the domestic market. (As distinct from the scope for substitution between ports, this relates to the extent of demand response to a price increase at all ports uniformly). Even where a market is supplied by a single firm or few firms, if demand is highly elastic, the ability to raise prices may be limited.

The demand for port infrastructure services is derived from the domestic demand for imports and overseas demand for Australian exports. That is, port infrastructure services are not commercially demanded of themselves but rather as a means of transporting traded goods. Because port infrastructure usage is a derived demand, the elasticity of demand for port infrastructure services is a product of:

- the elasticity of demand and the elasticity of supply for exports and imports; and
- the importance of port infrastructure charges in the final price of the exported and imported goods.

The 2004 review found that the demand for port services is highly inelastic (indeed negligible), primarily because port infrastructure charges are only a small component of the total transport costs (absorbed in the final product price). Thus sensitivity of demand to changes in price for port services was found to be unlikely to be a constraining factor inhibiting any exercise of market power.

7.3.5 Economies of scale

Dr Smith suggested that given PoMC's expenditure is largely in the form of sunk costs, they have an incentive to improve service quality and/or lower prices in order to reduce unit costs. Hence the threat of substitution may deter the port from exercising market power because it would lead to higher unit costs. Dr Smith also

¹⁰¹ ESC, Ibid, p73

noted that the Commission has not quantified the container cargo from Tasmania and northern Victoria, and therefore may underestimate the contestable cargo.

This argument put forward by Dr Smith relies on an assessment of the responsiveness of port users to prices and service quality. As Dr Smith has noted, port charges are a small share of the total cost of loading and unloading cargo. Accordingly port users are unlikely to be responsive to small changes in port prices, i.e. the demand for port services is relatively inelastic. It follows from this that if PoMC raised prices it is unlikely they would lose significant volumes and correspondingly incur higher unit costs.

Therefore the critical question is whether the PoMC would lose sufficient business if service quality fell (or indeed if prices increased) such that it constrains PoMC from exerting market power. As with the scope for competition between ports, this assessment depends on the extent of substitutability between alternative ports and so requires an assessment of the logistical supply chain of importers and exports. Specifically, customers would only respond to a change in service quality at PoMC by reference to the cost and time of transporting goods overland to other ports.

As the Commission has previously argued, because there is limited substitutability between ports, the economies of scale of PoMC would not be an effective constraint.

7.3.6 Ownership

In addition to the above considerations, the PoMC's has maintained that its pricing conduct and propensity to exercise market power is effectively limited by the objectives set out in section 12 of the PSA (the objectives of PoMC).¹⁰² Dr Smith presented a similar view, referring to section 13 of the PSA (the functions of PoMC). Dr Smith stated that certain amendments to the Act would further inhibit PoMC from acting anti-competitively.

In the 2004 review, the Commission concluded that public ownership does not provide a reason for removing price regulation.¹⁰³ In this regard, the Commission noted that many publicly owned infrastructure service providers remain subject to price regulation despite public ownership. On the other hand it is recognised that many state-owned ports in Australia are not subject to independent economic regulation. Alcoa has made observations about the effectiveness of these arrangements. However, the Commission's survey of the CIRA reviews in each jurisdiction (presented in Appendix E) shows that those ports have been assessed by the relevant jurisdictions as not possessing substantial market power.

Section 9.5 discusses whether PoMC's statutory objectives give clear guidance to PoMC to seek a commercial return while not acting anti-competitively. Even if PoMC's statutory objectives were re-framed to give clearer guidance to PoMC not to exercise market power, they are not practically enforceable, and hence unlikely

¹⁰² Section 9.5, sets out the Commission's assessment as to the conformity of the PoMC's statutory charter with the requirements in clause 4.2(c) of the CIRA.

¹⁰³ ESC, op cit., p.4.

to be an effective means of preventing such conduct. For example, it is not apparent how the objective of promoting and marketing the port would prevent anti-competitive conduct. Furthermore the amendments suggested by Dr Smith which refer to the promotion of competition and the development of the port, are not directly relevant to issues regarding market power in non-contestable services – a key question for this Review.

It is also relevant to observe that clause 2 of the CPA establishes the requirement that state owned enterprises that possess substantial market power should be subject to independent price oversight. Hence arguments based on the notion that the state-ownership is sufficient to preclude any need for any independent price oversight are not consistent with National Competition Policy.

The Commission believes that sections 12 and 13 of the PSA, and the fact that the PoMC is publicly owned, are not sufficient to prevent the potential misuse of market power. Since PoMC is a government business enterprise with substantial market power it should be subject to independent price oversight.

7.3.6 Conclusion on market power for container port services

On the basis of the foregoing considerations the Commission's conclusion is that the PoMC retains the potential to exercise substantial market power with respect to the provision of port services for containerised trades. This is because there is:

- limited scope for existing ports, or new ports, to be redeveloped in order to provide direct competition to the PoMC, because of the large economies of scale required, and
- an absence of a credible competitive constraint either through countervailing market power or its statutory obligations.

Despite PoMC retaining the potential to exercise substantial market power, the Commission has no evidence to support a conclusion that the PoMC has actually misused this market power. This view was also expressed by the Chief Executive Officer of SAL in the Commission's public forum for the review.¹⁰⁴ Rates of return for the PoMC are not generating a level of profitability that could be considered as supra-competitive. While the charges at the port of Melbourne for containers have increased relative to other container ports, this increase is largely attributable to the increased costs associated with the channel deepening project.

7.4 Assessment of market power for motor vehicle port services

The 2004 review also found that the PoMC retains substantial market power with respect to the provision of port infrastructure for motor vehicle trade.

¹⁰⁴ ESC Hearing, Public Forum – Port Review, Tuesday 3 March 2009, Transcript of Proceedings, p.15.

7.4.1 Barriers to new entry

The port infrastructure needed to provide port services for motor vehicle shipping is relatively less complex compared to that necessary for container services, and so the cost of new entry is relatively lower. This means that there is potentially greater scope for new entry in the provision of motor vehicle port services.

Dr Smith agreed with the Commission's observation and argued that because of the low barriers to entry, the Commission should not have any concern that PoMC has substantial market power. However in making this statement, Dr Smith did not address the mitigating factors identified by the Commission (see below) that limit the scope for new entry. One of these factors is the scarcity of available sites. Mr Ward, the GeelongPort manager, has stated that 'large tracts of portside land are very rare both in Australia and around the world'.¹⁰⁵

GeelongPort's "Port Land Use Strategy" indicates that there is some potential for a new motor vehicle terminal at the port of Geelong. One option is to expand Corio Quay North and South.¹⁰⁶ Based on the Commission's inquiries, there may be space limitations and/or technical challenges that may impact on the design efficiency and/or scale of such a terminal.

GeelongPort has stated that 'the former ford site represents the largest developable and appropriately zoned land area around Corio Quay'.¹⁰⁷ This site has recently been acquired by a party for the development of a second hand market.¹⁰⁸

GeelongPort has indicated:

If the Port is successful in attracting the vehicle trade, a further 40 hectares of port-side land will be required. The Port of Geelong has limited available industrial land ... with a total of 28.9 hectares available. Only 17.9ha of land owned by Toll GeelongPort (west and north-west of Lascelles Wharf), may be developed, while the remaining 11ha (former landfill site) has poor foundations and would require highly engineered solutions to provide land uses beyond on site storage for such industries as forestry products. The usefulness of the site would depend on the end user and need to be considered on an individual basis. A further 5.8 hectares is bisected by Cuthbertson drain or subject to easement restrictions. Opportunities to expand port-related uses in industrial areas within the 'port area of interest' are valuable and are restricted by the limited availability of such land. The balance of the industrial land

¹⁰⁵ Geelong Advertiser (12/5/2007)

¹⁰⁶ Port of Geelong 2007, Draft Port Land Use Strategy, p.6-7

¹⁰⁷ Port of Geelong 2007 'Draft Port Land Use Strategy' p.18

¹⁰⁸ <http://www.realestatesource.com.au/massive-op-shop-centre-planned-for-ford-factory-geelong.html>

*may need to be sourced further afield, in areas such as Heales Road Industrial Estate.*¹⁰⁹

Although these constraints may pose challenges, there continues to be interest in the possibility of a car terminal in the port of Geelong.¹¹⁰ On the basis of presently available information there remains uncertainty about the feasibility of competitive entry of a vehicle terminal at the Port of Geelong.

Further complicating the issue is the fact that GeelongPort is managed by Asciano, which also operates (as part of a joint venture) the existing dedicated motor vehicle terminal at Webb Dock East as well as the general purpose roll-on roll-off terminal at Webb Dock West. Its presence at Webb Dock might create a disincentive for new entry in motor vehicle port services at Geelong, at least in the short to medium term.

Although Hastings could conceivably also be set up as a new entrant motor vehicle port as part of its proposed Stage 1 development at Tyabb, the Victorian government has announced that it will seek to integrate the management of PoMC and PoHC, and if so, such a potential development would not represent a threat of inter-port competition for PoMC.

In support of the Commission's position, SAL stated:

that the POMC will most likely retain its monopoly on port services for motor vehicles in the short to medium term also appears, to SAL, to be a valid conclusion.

In summary, the Commission's conclusion is that the barriers to new entry in the provision of motor vehicle port services appear to be relatively low, in terms of sunk costs. However, given the issues identified above in relation to land availability at the Port of Geelong, and the integration of the management of PoMC and PoHC, there is currently insufficient certainty that there is realistic scope for new entry to competitively constrain market power of PoMC with respect to these types of port services.

7.4.2 Competition between ports

While some motor vehicles are railed interstate, in general there does not appear to have been a significant scope for substitution between Victorian ports in handling the motor vehicle trade, at least in the short to medium term. The port of Melbourne is the only port in Victoria with specialised motor vehicle terminals (situated at Webb Dock) at the present time, and has locational advantages in relation to land transport to the major vehicle distributors in Melbourne (with respect to imports which represented over 70 per cent of motor vehicle throughput in 2005¹¹¹) and to the majority of the major plants for finished vehicles (the largest

¹⁰⁹ Port of Geelong 2007 'Draft Port Land Use Strategy' p.32

¹¹⁰ Geelong Advertiser 5 May 2009, 'Geelong should be State car port: says Denis Napthine'

¹¹¹ Meyrick et. al. (2007) 'International and Domestic Shipping and Ports Study' p.79, PoMC Draft Port Development Plan, p.32

exporter being Toyota at Altona¹¹²). However, given that motor vehicle cargoes have a relatively high value per unit of weight, these locational advantages may not be important in relation to the potential for inter-port competition within Victoria. On the other hand, given the high concentration of origins and destinations within the capital cities, there appears to be relatively little prospect of competition between the major Australian capital city ports in relation to motor vehicle cargoes.

Given the Government's plan to integrate the management of the ports of Melbourne and Hastings, there is little prospect of potential inter-port competition from the port of Hastings, although intra-port competition between different terminal operators remains a possibility. In summary there does not appear to be a strong likelihood of competition between Victorian ports in infrastructure for handling motor vehicle cargoes in the short to medium term, subject to the uncertainties about the scope for competitive entry at Geelong discussed in section 7.4.1.

In summary, the Commission's conclusion is that there is likely to be relatively little prospect for competition for motor vehicle port services between existing ports in Victoria or between major capital city ports, subject to the uncertainty about the scope for competitive entry at Geelong.

However, the Commission understands that GeelongPort is actively exploring the opportunities available and the Commission proposes to monitor the progress. If such a terminal proves to be feasible the Commission will withdraw price monitoring of motor vehicle services.

7.4.3 Countervailing market power

Finally, the Commission has considered the scope for countervailing market power by users of vehicle port facilities.

With the plans for the port of Hastings to be integrated with the port of Melbourne, it is uncertain whether there is potential for an efficient competing site for vehicle handling facilities. Additionally, the benchmarking analysis done by ACIL Tasman reveals that the vehicle charges at the port of Melbourne are substantially higher than at Port Botany, which is not indicative of countervailing power being exercised. In conjunction with the port of Melbourne's reliance on cargo charges (the source of 81 per cent of the port's prescribed revenue) which can be passed through to cargo owners, who have very low demand elasticity (because, as mentioned, such charges represent a relatively small proportion of the total cost of the delivered cargo), these factors suggest that countervailing market power is unlikely to be sufficient to limit market power.

7.4.4 Conclusions on market power for motor vehicle port services

For these reasons the Commission's view is that the PoMC is likely to have substantial market power in the provision of port services for motor vehicles, at least in the short to medium term. This is because:

¹¹² Meyrick et. al. (2007) 'International and Domestic Shipping and Ports Study' p.77

- there is limited scope for new entry or competition from existing ports to provide actual or a threat of competition if there are indeed space constraints and/ or technical challenges at the port of Geelong
- GeelongPort is managed by Asciano, who is a participant in the facilities at the port of Melbourne, and
- vehicle shippers have relatively weak countervailing market power.

This means that the PoMC will likely retain its monopoly on port services for motor vehicles in the short to medium term. Should this assessment prove over time to be incorrect, and land constraints or technical challenges at the port of Geelong are successfully resolved, then price oversight of motor vehicle trades at the port of Melbourne could be removed.

7.5 Assessment of market power for bulk cargo port services

The final category of port services relates to “other breakbulk” (such as logs and steel), dry bulk (such as woodchips, grain, fertiliser, gypsum, cement and alumina), and liquid bulk (such as crude oil, refined petroleum products and chemical products). These cargoes are handled at Victoria’s regional ports and at the port of Melbourne.

In its 2004 report, the Commission considered that the Victorian ports had only limited market power with respect to these types of cargoes, except in certain bulk trades.¹¹³ Their core trades of dry bulk and general cargoes were generally contestable between ports because they were sourced from or destined for areas that can competitively access alternative ports. Market power was found to be largely confined to major “captive” users – for example the Alcoa aluminium smelters, the Shell refinery at Geelong, and the BHP Steel (now BlueScope Steel) rolling mill at Hastings. These “captive” users were usually protected by long-term agreements with the ports (e.g. Alcoa), ownership of relevant berthing facilities (e.g. BlueScope Steel) or in some cases industry specific legislation. Exceptions, such as the Shell refinery at Geelong, nevertheless appeared to have feasible alternative options (e.g. the development of a private terminal, or transportation of oil via the W.A.G. Pipeline).

7.5.1 Competition between ports

Break bulk

A number of break bulk trades are specific to certain ports. For example, the port of Hastings has a multi-purpose terminal owned by BHP Steel that is used only to import steel from interstate for the adjacent BHP Steel rolling and coil mills. Most of Victoria’s steel cargoes are handled through that facility. The ports of Portland and Geelong both handle aluminium ingots produced by nearby aluminium smelters.

However, there is also a significant degree of substitutability between ports for several break bulk cargoes. For example, the ports of Melbourne and Geelong

¹¹³ ESC, op cit., p.73.

both have common user heavy duty berths that can be used for the loading of a wide range of these types of cargoes, and these ports are in relatively close proximity. The port of Melbourne handles 25 per cent, and Geelong 10 per cent of Victoria's steel cargoes through these facilities. The ports of Geelong and Portland both handle logs (69 per cent and 31 per cent market shares respectively), with most logs from the Gippsland region being handled through Geelong.¹¹⁴

Dry bulk

Dry bulk trade is spread fairly evenly amongst Victoria's three major commercial ports, and although specific commodities are more concentrated at some ports, there is also a significant degree of contestability. For example, some years ago¹¹⁵ Incitec-Pivot ceased its fertiliser operations at the port of Melbourne and consolidated at Geelong and Portland, and 76 per cent of fertilisers are now handled through Geelong (with 21 per cent at Portland and 3 per cent at Melbourne).¹¹⁶

The Commission's recent Review of the Grain Handling and Storage Access regime has found a significant degree of substitutability between grain terminals in Melbourne, Geelong and Portland, as well as competition from the containerisation of grain. This arises primarily because most grain is grown in the 'wheat belt' in the north west of the State and is roughly equi-distant from several ports.

The Green Triangle region is seeing a huge growth in woodchips, with PoPL establishing a large new woodchip terminal expected to commence operations in 2010¹¹⁷. Portland currently handles 61 per cent of the woodchip trade. Competition in the market is provided by the port of Geelong, which handles the other 39 per cent. PoPL stated in its submission that "[t]he blue gum harvest will be contested by Geelong and Adelaide".

There has been growth in mineral sands with the opening of Iluka's Hamilton processing plant. Mineral sands are handled mainly through the port of Portland, however the port of Melbourne provides competition through containerised mineral sands, and the port of Geelong is also capable of handling the cargo.

On the other hand, Alcoa has emphasised that certain bulk trades are not contestable between ports due to the proximity of their origin or destination to one port. For example, it could not substitute between ports for the Alumina imports required for its smelters in Geelong and Portland (although it may be able to shift production between the two facilities). Alcoa holds leases over some of the port facilities it uses at Portland and Geelong, and these were established prior to the

¹¹⁴ 2007-08 statistical data provided by Victorian port operators

¹¹⁵ Melbourne Port Corporation purchased Incitec's former Yarraville site in 2001

¹¹⁶ 2007-08 statistical data provided by Victorian port operators

¹¹⁷ ABC News, "Credit crunch takes toll on blue gum harvest", 27 January 2009, <http://www.abc.net.au/news/stories/2009/01/27/2475353.htm>

Victorian ports regulatory framework and are Excluded Contracts – i.e. excluded from the regulatory framework.¹¹⁸

Liquid bulk

Liquid bulk cargoes are handled in significant quantities in three of Victoria’s four major commercial ports. Crude oil is imported at both Geelong and Melbourne (associated with refineries at Geelong and Altona), and is a major export at Hastings. The W.A.G. Pipeline (which connects the Esso/BHPB facilities at Hastings with the refineries at Altona and Geelong) could also potentially be used to allow substitution between ports if pipeline capacity is available.

The ports of Geelong, Hastings and Melbourne all have the facilities to handle refined petroleum products, and both Hastings and Geelong are well placed to compete with the port of Melbourne for imported liquid bulk goods.

Hazardous chemicals are imported at both the ports of Melbourne and Geelong, although Geelong does not have storage facilities such as those available at Coode Island in the port of Melbourne. Environmental constraints may impose a barrier to entry for handling of these cargoes.

Table 7.1 the main types of break bulk, liquid bulk, and dry bulk freight that are handled by Asciano at the Victorian ports and the capabilities of each port with respect to those cargoes.

Table 7.1 Asciano cargoes handled/capability summary

<i>Port</i>	<i>Woodchips</i>	<i>Bulk Liquids</i>	<i>Fertiliser</i>	<i>Steel Products</i>	<i>Logs</i>	<i>Bulk Products</i>	<i>Mineral Sands</i>	<i>Livestock</i>	<i>Grain</i>
Geelong	Yes	Yes	Yes	Yes	Yes	Yes	No (but capable)	Very rare	Yes
Hastings	No	Yes	No	Yes	No	No	No	No	No
Portland	Yes	Yes	Yes (but rare)	No (but capable)	Yes	No (but capable)	Yes	Yes (rare)	Yes (rare)
Melbourne	No	Yes	No	Yes	No	Yes (gypsum)	No	No	Yes

Source: Asciano submission

¹¹⁸ Commission (2005) ‘Price Monitoring Determination for the Victorian Ports’, Statement of Purpose and Reasons, p.11

Evidence of active rivalry

Comments by some stakeholders supported the view that competitive tensions between regional ports for dry bulk and general cargoes remain. According to the PoPL in its submission:

The core trades of regional ports are contestable – the loss of grain volumes from Port of Portland (pre-drought years), the import of paper pulp and the export of mineral sands and aluminium in containers through the Port of Melbourne are instances where competing supply chains are in play ...

*Competition between ports has increased. For example, the increased use of containers for bulk trades.*¹¹⁹

PoPL went on to comment:

*PoPL is seeking new volumes to improve returns. The blue gum harvest will be contested by Geelong and Adelaide.*¹²⁰

Asciano contended that port customers have a real choice between many cargoes and that those customers that have less choice are protected by countervailing power and long term contracts.¹²¹ According to Asciano:

*The ports of Geelong, Melbourne, Hastings and Portland do handle or have the capabilities to handle many of the same cargoes, which ultimately provide port users with effective choice.*¹²²

Asciano also commented that Victorian regional ports operate in a workably competitive market.¹²³

Alcoa maintained:

Any active rivalry for the provision of port services is highly dependent on the origin or destination location of the bulk commodity in question. That is to say that the above mentioned land based logistics costs associated with transporting the commodity to or from the port will have a far greater impact on the decision on port service provider than port service rates. This then enables port service providers to exploit the geographic

¹¹⁹ PoPL submission, p.3

¹²⁰ PoPL submission, p.4

¹²¹ Asciano submission, p.2

¹²² Asciano submission, p.3

¹²³ Asciano submission, p.7. Note, that “workably competitive” means “effectively competitive”. The Trade Practices Tribunal has observed that “effective competition requires both that prices should be flexible, reflecting the forces of demand and supply, and that there should be independent rivalry in all dimensions of the price product service packages offered to consumers and customers.”, *Re Queensland Co-operative Milling Association Ltd* (1976), p.515

*constraints to impose opportunistic rates that can be set at any point up to just short of the freight margin for land transport to an alternate port.*¹²⁴

SAL initially expressed the view that there is little competition, if any, between the Victorian regulated ports.¹²⁵ The Chief Executive Officer of SAL, Mr Llew Russell, commented in the Commission's public forum:

*... if you go into regional ports you'll find fairly captured trades which are very, very expensive to shift. And that's Western Port, or Geelong or Portland. It is difficult for those users of that port to shift. Therefore, I'd suggest, even in those cases, one would question the levels of competition.*¹²⁶

However, in its final submission SAL accepted the Commission's analysis.

7.5.2 Scope for new entry

The 2004 review found that greater potential for the development of new facilities existed in relation to general and bulk cargoes, such as the export grain-handling terminal developed at the port of Melbourne and the consolidated Incitec-Pivot operations at Geelong, leaving a substantial site in the port of Melbourne vacant. Similar potential land development sites were identified at Hastings which in the medium term could be developed for handling general cargoes in competition with existing terminals at the port of Melbourne.

The Commission is unaware of any changes to this situation since 2004, and so believes that there remains considerable scope for new entry for the provision of port services for bulk cargoes.

7.5.3 Countervailing market power

The main types of customers in the bulk and break bulk trades differs from the container trades. For example, in the case of bulk trades, ships are generally chartered, and the port tenants may be users of dedicated terminals, and are also often the cargo owners.

The Commission recognises that a significant proportion of the cargo trades of the Victorian regional ports are captured. However, as the Commission previously noted in its 2004 report "captive" users are generally able to protect themselves through other means such as through the use of long term contracts. These users will commonly have countervailing power when entering into leases and these long term agreements may limit the discretion of the port to raise prices. For example, economist Paul Joskow has remarked:

¹²⁴ Alcoa submission, p.2

¹²⁵ SAL, Op cit., p.2.

¹²⁶ ESC Hearing, Public Forum – Port Review, Tuesday 3 March 2009, Transcript of Proceedings, p.16.

*A long-term contract that specifies the terms and conditions for some set of future transactions ex ante, provides a vehicle for guarding against ex post performance problems.*¹²⁷

These major tenants can negotiate directly and meaningfully with the port organisation in a business to business environment. However, where there are incomplete contracts (for example, if entered into under a different regulatory environment) and high sunk costs in shore-side facilities, they may be considered “captive” to the port and may have exposure to the exercise of market power by the port.

Alcoa maintained that this ‘takes a simplistic view to the commercial realities of negotiating such an agreement’. The Commission expects that were a long-term lease is entered into prior to a business making its location decision – as is believed to be the case at Portland (where a lease entered into in 1981¹²⁸ and commitment to construct the smelter in 1984¹²⁹) there is presumably significant countervailing power. However, where no such lease exists, or a lease is to be renewed, such a customer may be a captive customer.

Some of the risks, including with respect to incomplete contracts, cannot be addressed by the current regulatory framework. For example, certain contracts that pre-date the regulatory framework in the regional ports are excluded from the current regulatory regime.¹³⁰

The Commission acknowledges that there is the possibility for the potential misuse of market power over a captive user. Consideration has also been given to the likelihood of such customers being able to exercise some countervailing power during normal commercial negotiations. The recommended framework also permits that if market power concerns materialise in a significant way the Minister could direct the Commission to investigate the matter under Part 5 of the ESC Act.

Furthermore, the Commission recommends that the next review of ports regulation under section 53 of the PSA should also include consideration of whether regulation is required for non-containerised and non-motor vehicle cargoes.

7.5.4 Conclusions on market power for bulk cargo port services

Having considered all of the available evidence, the Commission’s view is that no Victorian port has market power for the provision of port services for bulk cargoes. This is because:

- there is evidence of active rivalry and scope for new entry in the provision of port services for bulk cargo; and

¹²⁷ Joskow, J. L. 1987, ‘Contract Duration and Relationship-Specific Investments: Empirical Evidence from Coal Markets’, *The American Economic Review* 77, pp. 168-185, p.169.

¹²⁸ PMD, Statement of Purpose and Reasons, p.11

¹²⁹ The Age, 1/8/1984

¹³⁰ Essential Services Commission 2005, Price Monitoring Determination for the Victorian Ports, Statement of Purpose and Reasons, p.11

- the use of long-term contracts for bulk cargo port services provides an opportunity for users to exercise some degree of countervailing market power.

7.6 Assessment of market power for channel services

The final service that the Commission has assessed market power is the provision of shared channel services by the PoMC, and particularly whether the potential for market power in these services might create the opportunity for the PoMC to impede competition in port services. The focus of this assessment is on the shared channels at the entrance to Port Phillip Bay.¹³¹

The structure of the PoMC channel network is such that any ship visiting either the Port of Melbourne or the Port of Geelong must pass through the shared channels and then may use one or both of two separate channels dedicated to serving the ports of Melbourne and Geelong. This means that the PoMC, as owner and operator of shared channels in addition to port services that compete with the Port of Geelong, has the potential to exercise its market power in shared channel services to affect competition in port services.

The PoMC is a vertically integrated operator of the shared channels. It operates or provides infrastructure services for a range of liquid bulk, dry bulk and general cargo facilities in the port of Melbourne which compete or are potential competitors to similar facilities at the port of Geelong. Access to the Shared Channels by ships using the port of Geelong is necessary for the GeelongPort to compete in the market for port services of this kind. GrainCorp competes in the market for grain handling services against a facility operated by Australian Bulk Alliance at the port of Melbourne. The ships visiting the GrainCorp facility require access to the Shared Channels to enable GrainCorp to compete in that market. The Shell petroleum products refinery at Geelong competes with the ExxonMobil refinery in Altona, as well as against imported refined products. The ships visiting the Shell refinery pier at Geelong will require access to the Shared Channels for Shell to effectively compete in the market for refined petroleum products.

Access to these channels by ships using the port of Geelong is necessary for the operators of the port of Geelong to compete in the market for port services, and for certain industries in Geelong to effectively compete in their respective markets against competitors located in Melbourne. The potential for some degree of misuse of market power by the PoMC in the provision of these shared channel services raises the risk that additional competitive impacts could also arise in related upstream or downstream markets, increasing the total costs of any misuse of market power.

In determining whether it is appropriate for a shared channel to be “declared” as a prescribed service, and so become subject to the Victorian Channels Access Regime, it is necessary to establish that:

- the shared channels would constitute significant infrastructure facilities for the purpose of clause 6(3)(a) of the CPA (see Appendix B), and

¹³¹ The Shared Channels comprise the Great Ship Channel and the South Channel.

- an access regime would provide a clear and material net benefit.

A significant infrastructure facility must satisfy the following criteria:¹³²

- it would not be economically feasible to duplicate the facility
- access to the service is necessary in order to permit effective competition in a downstream or upstream market, and
- the safe use of the facility by the person seeking access can be ensured at an economically feasible cost and, if there is a safety requirement, appropriate regulatory arrangements exist.

An assessment of the net benefits of declaration of the services must demonstrate that the provider of shipping channel services has substantial market power, and that the abuse of that market power imposes social costs of an amount that are materially larger than the social costs of imposing an access regime.

Accordingly, this section considers:

- whether the facilities might qualify as significant infrastructure facilities, and
- whether PoMC has the potential to exercise market power in the provision of shipping channel services.

The Commission's conclusions on the need for channel services to be declared as a prescribed service are set out in section 7.9.

7.6.1 Significant infrastructure facilities

The NCC has stated that:

*In essence, the clause 6(3)(a) principles refer primarily to the services of significant infrastructure, those provided by 'bottleneck' facilities—that is, monopoly facilities that occupy a strategic position in the service delivery chain whereby access is essential for effective competition in a dependent market or markets.*¹³³

Significance

The NCC has indicated that for state-based access regimes, the term “significant” refers to its size or importance to state-wide or regional trade or commerce, or importance to the state or regional economy.¹³⁴ This will depend not just on the size of the facility itself, but also on the importance of the related markets for which that facility is a bottleneck.

¹³² Clause 6(3)(a) of the CPA

¹³³ NCC (2009) 'Certification of State and Territory Access Regimes', p.29

¹³⁴ *Ibid.*, p.30

A recent economic paper has noted that the major Australian ports “command immense influence over the openness and flexibility of the national economy”.¹³⁵ The port of Melbourne is the largest container port in Australia, accounting for approximately 36 per cent of Australia’s containerised trade in 2007¹³⁶ and approximately 23 per cent of Australia’s, and 97 per cent of Victoria’s, seaborne trade¹³⁷ is shipped through the shared channels of Port Phillip Bay.

A study by PwC¹³⁸ has found that at least \$53 billion of traded goods passed through the port of Melbourne in 2004-05, and activity at the Port of Melbourne generated a total economic impact of \$2.5 billion in output in 2004-05, with value added to Australia equalling \$1.1 billion. In addition port activities supported 13,748 full time equivalent employees. The Port of Geelong is the second largest port in Victoria and handled over 12 million tonnes of cargo in 2004-05, worth an estimated \$5.6 billion. PwC’s analysis found that 1,385 full time equivalent jobs created by the Port of Geelong. These results are summarised in Table 7.2.

Table 7.2 Total economic impact of the ports of Melbourne and Geelong

	<i>Port of Melbourne Corporation</i>			<i>Port of Geelong</i>
	<i>Direct Effects</i>	<i>Indirect Effects</i>	<i>Total Effects</i>	<i>Total Effects</i>
Output (\$ million)	1,338	1,163	2,501	328
Value Added (\$ million)	596	545	1,140	177
Employment (FTEs)	7,563	6,185	13,748	1,385

Source: PricewaterhouseCoopers 2007, *Economic Analysis of the Port of Melbourne*, pp. 63, 82.

From a state-wide perspective the channels that provide entry to the ports of Geelong and Melbourne provide a crucial link in the transport of goods to and from Victoria by sea and the ports have a key role in supporting Victoria’s manufacturing, importing and exporting businesses. Competition between the ports of Melbourne and Geelong has important implications with respect to regional development.

Feasibility to duplicate

¹³⁵ Menezes, F. M., Praca, M. & Tyers, R. 2007, ‘Strategic Interaction amongst Australia’s East Coast Ports’, *The Australian Economic Review* 40, pp. 267

¹³⁶ As measured in TEU. BITRE (August 2008) ‘Waterline’, p.25

¹³⁷ As measured by value – unpublished BITRE data

¹³⁸ PricewaterhouseCoopers (2007) ‘Economic Analyses of the Port of Melbourne: A report by PricewaterhouseCoopers for the Department of Treasury and Finance and the Department of Infrastructure’, pp.3,4 & 63

A facility may be uneconomical to duplicate if there would be large sunk costs associated with constructing the facility and if the existing facility has significant additional capacity that can be used at relatively low cost.

The current CDP demonstrates the significant costs associated with dredging shipping channels. The CDP involves deepening the shared channels and the Melbourne channels to enable the draught of ships to be increased from 11.6 metres (at low tide) to 14 metres. The projected cost of the project is approximately \$970 million. The deepening of the Shared Channels represents a significant component of this cost. Given the comprehensive business case approval processes, it can be assumed that there was no available option of constructing alternative channels (i.e. duplicating the existing channels) at lower cost.

In designing the CDP, PoMC engaged Maunsell¹³⁹ to simulate channel use and estimate the forecast shipping delays due to channel congestion. Channel delays are primarily to do with “occupation conflicts” (ships seeking to use the channels at the same time). The South Channel was specifically designed to ensure minimal and acceptable levels of shipping congestion and delays over an extended forecast period (at least to 2025).¹⁴⁰ These observations suggest that the shipping channels will not be capacity constrained within the foreseeable future and support the view that it would be uneconomic to duplicate the Shared Channels.

Safe use

The NCC has previously found that access regulation of Victoria’s shipping channels would not impede the safe use of the facilities. It emphasised the statutory role of the Harbour Master in controlling shipping movements in the shipping channels.

In summary, the foregoing reasons suggest that the Shared Channels would satisfy the criteria in the CPA as significant infrastructure facilities.

7.6.2 Degree of market power in the provision of shared shipping channel services

With regard to the question as to whether substantial market power is likely to exist, there are the related questions as to the risk of this market power being misused by the PoMC in the provision of shared channel shipping services, and the materiality of the potential costs of such market power abuse, including the impacts for related upstream and/or downstream markets. This requires identifying whether or not:

- the PoMC has substantial market power in the provision of shipping channel services
- the PoMC faces an incentive to misuse market power, either in the provision of shared channel shipping services, and/or in any related upstream or downstream market, and

¹³⁹ Maunsell (2006) ‘Port of Melbourne Channel Capacity Simulation Model - Final Report’

¹⁴⁰ Maunsell 2007 ‘Channel Deepening Project: Channel Design Report’

- it is feasible for the PoMC to misuse market power, either in the provision of shared channel shipping services, and/or in any related upstream or downstream market.

To the extent that it can be demonstrated that these three conditions hold, we might reasonably conclude that the PoMC has the potential to misuse market power that in turn could support the introduction of some kind of third party access regulatory arrangements. As already indicated, whether such third party access arrangements are warranted will depend on the costs and benefits of imposing such arrangements in circumstances where the potential to misuse market power exists.

Existence of market power

By virtue of the joint use of the shared channels by ships bound for either the ports of Melbourne or Geelong, the Shared Channels are effectively a “bottleneck facility”. All cargo ships going to either or both of the two ports must obtain access to these channels, and the PoMC, as operator of the shared channels, is responsible for setting the terms and conditions for access to that channel, ie, channel access charges. This situation presents the risk of competition concerns to the extent PoMC has discretion to set channel access charges in such a way so as to (artificially) advantage ships visiting its own port as distinct from Geelong. This potentially could occur either through some form of anti-competitive pricing, or through service quality.

The bottleneck characteristics of the channel network therefore potentially confer on the PoMC – as owner and operator of the infrastructure – a degree of market power in the form of scope to offer more favourable channel access charges or other arrangements to ships using its own port, relative to ships visiting the competing facilities operated by GeelongPort and GrainCorp in the port of Geelong.

Incentive to misuse market power

The PoMC can be considered to face an incentive to misuse its market power where doing so would lead to a net benefit for the PoMC.

The Commission has found that competition between the PoMC and the port of Geelong for the landing of certain types of sea freight – namely non-containerised and non-motor vehicle freight – is likely to be sufficient to justify the removal of regulation from the ports services (ie, berthing charges, wharfage or channel charges specific to such cargoes). Where there is a material degree of competition between two independently owned and operated ports with respect to contestable cargoes, each operator faces an incentive to improve its own financial position as compared to its competitor and makes choices regarding the service quality and charges they offer accordingly. By the same reasoning, where the PoMC has discretion in setting access charges for the Shared Channels there is a significant risk PoMC will use this market power so as to further its own interests, which would likely come at the expense of the Port of Geelong.

This discussion suggests that as a consequence of its control of the bottleneck channels infrastructure the PoMC clearly does – in principle – have an incentive to

discriminate against ships visiting the competing Port of Geelong. To the extent that this incentive is acted upon, there may be associated adverse competition impacts in this market and/or markets upstream or downstream of the shared channel network.

Having established that the PoMC has market power with respect to the provision of channel access services and likely has an incentive to misuse its market power, it is relevant to then consider whether PoMC can feasibly do so in the absence of regulation. In other words, does the PoMC have sufficient market power to adversely affect competition in the market for shared shipping channel services, or affect competition in upstream and/or downstream markets? This is considered further below.

Capacity to abuse market power

It is not sufficient to conclude that where the PoMC has an incentive to misuse its market power it will automatically be able to do so. Rather, it is necessary to clarify that the PoMC can feasibly and practically misuse its market power in the commercial circumstances that it can be expected to face. Where this can be demonstrated, the risk of adverse competition impacts arising as a consequence of the PoMC's conduct necessarily increases.

Even in the absence of regulation, the PoMC may well be constrained, at least to some extent, in any attempt to misuse its market power. In particular, the PoMC's incentive to misuse its market power may be countered to some extent by:

- countervailing buyer power: it may be that there exists some material degree of countervailing market power that serves to limit the extent of market power misuse by the PoMC, and in turn lessen the potential competition impacts. However, given that the contestability between the ports of Melbourne and Geelong are in trades which are not predominantly served by liner shipping services, but rather by chartered vessels, no argument has been presented to suggest that there is countervailing power with respect to these relevant freight tasks.
- threat of action under the TPA. For example a party may seek to have the channels declared under Part IIIA or take action for a breach of a behavioural provision such as section 46. The prospect of dealing with a possible TPA breach accusation (including the cost of doing so) may well be sufficient to deter the PoMC from misusing its market power, although it may also be a deterrent to affected parties seeking a remedy.
- threat of heavier-handed regulation: under the present PMD the Commission has the ability to impose heavier handed regulatory arrangements if it finds through a public inquiry process that there has been a significant misuse of market power by a port. Accordingly, in setting channel access charges the PoMC would be well aware that if it seeks to disadvantage unfairly the port of Geelong, the Commission might respond with a change to the existing regulatory approach. However, it may be questioned whether this broad regulatory threat would be sufficiently credible, and hence as effective, as binding dispute resolution. This aspect of the regulatory framework is subject to this Review.

7.6.3 Conclusions on the assessment of market power for shared channel services

The Commission's conclusion is that the PoMC has market power in the provision of shared channel services, and the scope for this market power to impede competition in upstream or downstream markets. This assessment demonstrates that as a consequence of the likely market power held by the PoMC for the provision of channel access services, competition might be affected by an absence of regulation. This market power is only likely to be restrained by some form of regulation – either the threat of regulation, or an explicit regulatory framework such as an access regime.

The Victorian shipping channels can be considered to be natural monopolies and where there is vertical control of shipping channels that are required to access competing ports, then there is the potential for the exercise of substantial market power by the channel operator, with potential for significant economic inefficiency and important regional development implications attendant on the detrimental impacts on inter-port competition.

The existence of market power is not, of itself, sufficient to warrant the declaration of provision of channel services for use by commercial shipping. The Commission has previously stated that channels should only be declared where there is an identified benefit that would be provided by the access regime, ie, that there is a material benefit from the access regime over and above the costs imposed by the regulatory arrangements.

If an access regime is to be certified by the NCC as an effective, State-based regime it must comply with the relevant conditions set out in the CPA. These conditions include the following requirements:

- the services must be provided by significant infrastructure facilities with the characteristics discussed in section 7.6.1 above
- the access regime must incorporate a number of elements and principles, including a negotiation framework, pricing principles, binding dispute resolution, and so on.

In this context, the prospect of achieving certification is likely to be diminished significantly if an inappropriate form of regulation is imposed, ie, if a costly, heavy-handed form of regulation is put in place to mitigate against the potential abuse of market power, where that regulation is not proportional to the potential costs imposed by any abuse of market power.

In the absence of declaring the Shared Channels as prescribed channels, the regulatory options for protecting channel users from misuse of market power by PoMC are effectively to:

- rely on the threat of re-regulation and/or action under the TPA to constrain the PoMC's pricing conduct, or
- impose a relatively "light-handed" form of regulation such as price monitoring or publishing high-level pricing principles that will provide a clear indication of the types of things the Commission will look for when deciding whether to re-impose regulation.

Consideration of these alternative approaches is addressed in chapter 9.

7.7 Costs and benefits of regulation

The principles of National Competition Policy suggest that regulation is only warranted if there is a reasonable expectation that the benefits will outweigh the costs. This section assesses the identifiable benefits and costs of the regulation of port services in Victoria.

7.7.1 Stakeholder views

Stakeholders expressed the following views in relation to the costs and benefits of port regulation. PoPL indicated:

The compliance requirements do add costs to the business but these are acceptable". Port of Portland compliance costs as a result of the price monitoring regime have been incremental. We have been pragmatic in our record keeping, incorporating the prescribed services within our management accounting system, such that each prescribed service is treated as a separate cost centre that we use for management purpose as well as ESC reporting

VRCA stated that:

Price regulation and monitoring do not appear to have influenced investment or port planning

Asciano was of the view that the ports monitoring regime “delivers very limited benefit given the competitive nature of the market” and “imposes significant cost on operators”.

PoMC emphasised that the ports monitoring framework exposes the port to unnecessary risk:

the inherent risk involved in such regulation is that it will impede the incentives to invest in necessary infrastructure.

In its submission to the Draft Report, PoMC suggested that the Commission, in considering only the administrative burden of information reporting, has “understated the costs of regulation” and its impact on investment, and refuted the claim that the regime is “light-handed”. PoMC maintained that the:

requirement to comply with pricing principles set by the ESC and in particular the proposed principles for asset revaluation, assessing rates of return etc is heavy-handed

Accordingly regulation has diminished PoMC’s flexibility with respect to “alternative funding models”, and so its ability to respond to the changing commercial environment and to fulfil a broader role beyond the port gate. PoMC also argued that the Commission “did not establish how regulating PoMC would deliver any

benefit to users of the Port of Melbourne”, and overstated the benefits of regulation.

On the other hand, SAL maintained that the Victorian port monitoring regime is significantly less “heavy handed” than the form of Ministerial oversight of ports in NSW, as introduced recently through amending legislation.

7.7.2 Benefits of regulation

The benefits of regulation are largely associated with preventing the misuse of substantial market power. Such market power, if unchecked, may result in prices that reflect either inefficient costs or excessive profit taking, which subsequently result in a loss of economic efficiency. Additionally, in vertically integrated industries, market power may be used to distort competition in upstream or downstream industries (and hence extend market power into those industries).

The Commission’s assessment of market power in the Victorian ports has been discussed above. The benefits of regulation depend also on the magnitude of economic consequences that would flow from a misuse of that market power. The economic consequences of the misuse of market power will be more serious if the industry comprises a large share of the national economy; is essential to other significant industries; or involves actions that lead to major distortions in the pattern of demand. When a firm exercises market power in either of these ways, the resulting distorted price signals cause resource misallocation. This loss of efficiency through resource misallocation is the social cost of market power which regulation is intended to reduce, and represents the benefit of regulation.

The Commission proposes to consider the welfare impacts of monopolistic pricing in terms of the wider potential impact of reducing the social benefits flowing from the port to the rest of the State economy.

There are a number of markets that are related to the market for port services. For this reason there is a range of groups likely to experience the benefits and the costs of regulation, including:

- port service providers such as stevedores, bulk handlers, towage and pilotage operators
- logistic service providers, freight forwarders and transporters
- domestic and overseas shipping lines
- freight owners and buyers, and
- governments at the federal and state level, including customs houses.

In summary, the avoidance of any efficiency losses that could arise from the misuse of market power is the principal benefit arising from regulation. The size of these avoided costs is difficult to estimate. That said, the Commission expects that the removal of any form of regulation could result in either inappropriate cost rises, or profit taking. Such conduct has the potential to result in relatively large efficiency costs both directly, given the number of ship movements involved, and indirectly by raising costs in related markets.

7.7.3 Costs of regulation

Regulation also imposes costs on the community which need to be weighed against the expected benefits. For example, in its Review of the National Access Regime, the Productivity Commission identified five potential costs of regulation¹⁴¹:

- administrative costs for government and compliance costs for businesses
- constraints on the scope for infrastructure providers to deliver and price their services efficiently
- reduced incentives to invest in infrastructure facilities and/or inefficient investment in related markets, and
- potential for wasteful strategic behaviour by both service providers and access seekers.

The costs of regulation are likely to be higher where there is scope for greater competition that could be deterred by the impact of regulation on prices, or where there is potential for investment that may be impeded or delayed by certain forms of regulation.

In the 2004 review, the ESC also recognised that price signals can be important in promoting dynamic efficiency, and in encouraging new entry into markets¹⁴². In certain circumstances the promotion of competition requires that prices be allowed to rise to a level at which potential profits encourage companies to take the risk of entering new markets. Regulation to eliminate above normal profits in these circumstances may have the effect of discouraging competition.

Administrative costs

Designing, administering and enforcing regulation requires the regulatory agency to expend resources. These include staff hours for employees of the regulatory body, technical experts and other consultants, and advertising and publication costs associated with stakeholder consultation, among other things.

Within the financial framework which the Commission operates, most of the costs of administering regulatory frameworks are recovered from regulated businesses through licence fees. The Commission's costs of conducting periodic review of the regulatory frameworks are typically borne by government. If the Channel Access Regime was to be activated, and an access dispute was to arise, then the Commission's costs of determining the dispute would be recovered from the parties to the dispute. As no channels have been declared, costs relating to channel access disputes are not taken into account here.

The summary of the costs of regulatory administration and review incurred by the Commission in its ports regulatory functions over the period from 2004-05 to 2007-08 are set out in Table 7.3. These costs have largely been recovered through licence fees.

¹⁴¹ Productivity Commission, September 2001, Review of the National Access Regime, Inquiry Report.

¹⁴² ESC, June 2004, Op cit, p49

Table 7.3 ESC regulatory administration costs - Ports^a

	(\$)
2004-05	157,143
2005-06	46,940
2006-07	31,371
2007-08	12,458
Average	61,978

^a costs include allocated overheads

Source: Essential Services Commission

The average cost over the previous four year period was just over \$60,000 per annum. This figure includes the cost of implementing the price monitoring framework in 2004-05.

Compliance costs

Regulatory compliance costs may be defined as the value of extra resources (including time) used by regulated business to comply with the regulatory regime. This may include the costs of preparing information and having this information audited, the costs of any additional systems, training, management time, and capital required to meet regulatory requirements. Licence fees charged by the Commission are not included in these costs because the Commission's costs have been taken into account above.

The Commission previously engaged PricewaterhouseCoopers (**PwC**)¹⁴³ to estimate the compliance costs of regulated business, and estimates were prepared through consultation with those businesses. The study found that ports rarely received requests from the ESC to provide data on their operations. Each port or port-related business is required to complete and submit an independent audited annual report to the ESC and this represents the major source of administrative burden for these businesses (see Table 7.4).

Table 7.4 Administrative burden on ports (\$ per annum)

<i>Regulatory instrument and regulatory requirement</i>	<i>Total administrative burden (per annum)</i>
Port of Melbourne Corporation	\$68,000
Each regional port operator ^a	\$18,800
Total all ports	\$143,200

^a i.e. each of VRCA, GeelongPort, PoPL, and PPH

Source: PwC (2008)

¹⁴³ PwC (2008), Identification of Administrative Burden, Evaluation of administrative burden imposed on business regulated by the Essential Services Commission, Unpublished report.

Asciano's submission suggested that compliance costs were substantially higher than this. It indicated that it expects to incur costs of around \$100,000 in 2008-09 on auditing fees alone. However, Asciano did not previously carry out its required audits of its regulatory accounts for the 2005-06 and 2006-07 financial years and was obliged to have the accounts for all three years audited in late 2008. The implied audit cost per port per year is therefore around \$17,000, which is broadly consistent with PwC's cost estimates.

Other stakeholder costs

Stakeholders will incur costs when making submissions to the Commission's periodic review on the regime. While these costs will vary according to the nature of the issues being consulted on, for the purposes of the present analysis it will be assumed that these costs amount to \$100,000 for each five-year review (notionally based on assuming five submitters on average incurring \$20,000 each in preparing submissions).

Impact on investment

PoMC observed that the Victorian Government has given consideration to the role of PoMC to facilitate, participate and invest in the broader supply chain. PoMC suggested that the current form of regulation reduces its flexibility with respect to alternative funding models and therefore its ability to fulfil a broader role beyond the port gate.

In relation to this issue, it is unclear what alternative funding models PoMC is considering. The Commission would have concern if the additional flexibility enabled PoMC to cross-subsidise investment outside of the port gate from charges on non-contestable services. Such behaviour would underscore the need for regulation to prevent the misuse of market power.

7.7.4 Assessment of the costs and benefits of regulation

In summary, the Commission is of the view that the annual compliance costs of the existing port price monitoring regime is relatively small, amounting to approximately \$300,000 in total each year. When compared against the potential for the misuse of market power in port services for containers and motor vehicles, and for the provision of shared channel services, these costs are relatively minor.

Whilst PoMC has argued that it is not clear what benefits regulation would deliver, the submissions from SAL and APSA indicate that there are benefits in maintaining the current regulatory regime.

The Commission is therefore of the view that the existing, relatively light-handed, price monitoring regime is net beneficial given the costs likely to be avoided through its continuation.

7.8 Assessment of the need for regulation in other related markets

The CIRA requires consideration of whether economic regulation is necessary to facilitate competition in related markets. For example, markets that are related to the market for the provision of port infrastructure services include shipping services, stevedoring, pilot services, towage services and line mooring services. There is the potential for competition in these markets to be affected as a result of vertical integration of a port operator in the provision of these related services.

In its 2004 review the Commission addressed a number of concerns about harbour towage and more recently in the 2007 Port Planning Review a number of concerns about stevedoring. The Commission noted that "the ability for PoMC to restrict competition in the provision of ancillary port services within the port is a matter that the Commission needs to consider"¹⁴⁴ and "it is important to ensure that: the operator of any business which (among other things) provides or proposes to provide services at the port of Melbourne for the purposes of its business, is able to gain access to "essential facilities"¹⁴⁵ (such as the port waters).

In this Review stakeholders have not raised significant concerns about the potential for conflicts of interest to arise with respect to related markets. However, port reviews in other jurisdictions and some of the stakeholder comments for this Review have suggested that there might be concerns about access to common user berths, and pilotage services.

The Terms of Reference include consideration of clauses 4.1 and 4.2 of the CIRA and since other jurisdictions have considered these matters within the scope of their CIRA reviews, they are considered to be within the scope of this Review.

7.8.1 Common user berths

Some of the CIRA reviews have highlighted that improvements could be made to the transparency of the process for allocating access and operating entitlements at common user facilities. The development of a dispute resolution process might also be necessary.

For example, in the Port of Darwin it was found that stevedores were licensed to operate on common-user berth facilities, with the Darwin Port Corporation charging the vessel owner directly for use of these facilities, including equipment rental. The Northern Territory port review found that, while access to common user facilities appears to be allocated on a competitively neutral basis, the processes of determining use of common user facilities and allocating stevedoring licences lacked transparency because there were competing interests seeking use of those facilities, and the criteria for their allocation was not publicly available and reasons for access decisions were not disclosed. Therefore, it was recommended that the Darwin Port Corporation should establish the criteria for determining access in its

¹⁴⁴ p.94

¹⁴⁵ p.94

Port Handbook, in a formal policy statement, or its Charter of Operations. It also recommended an independent appeal process be established.

PoMC has published a process for allocating common user facilities and conditions of use.¹⁴⁶ For any vessel visiting a common user facility there must be a hirer of both the wharf and the terminal area, and although not necessarily the same party, both applications must be made. Presumably the terminal is allocated on a first-come, first-served basis. The terminal hirer must be licensed and is the site manager at the terminal until the vessel is cleared. Only after clearing of the vessel is another hirer permitted to use the terminal.

7.8.2 Pilotage

During the public hearing to this Review, SAL raised some concerns about pilotage charges. Although pilotage would normally be outside the scope of an inquiry into port services regulation under section 53 of the PSA (which is confined to services currently regulated), facilitating competition in port services and issues of conflict of interest are relevant for an assessment of port services in line with the requirements of the CIRA.

Pilotage is currently provided at the port of Melbourne by the Port Phillip Sea Pilots on a non-exclusive basis as a registered pilotage service provider with Marine Safety Victoria. Although Port Phillip Sea Pilots is currently the only pilotage service provider for Port Phillip Bay, pilotage is not an infrastructure service, and is presumably a relatively contestable service.

The CIRA gives emphasis to the principle that competition in port services should not be impeded unless a public inquiry demonstrates that there would be a net benefit in doing so. Therefore, the pro-competitive options available to address concerns about pilotage charges should be preferred, and include:

- do nothing in the expectation that high pilotage prices would provide an incentive for the entry of competing pilotage service providers
- PoMC could provide pilotage services in competition with Port Phillip Sea Pilots (abiding by competitive neutrality principles), or
- PoMC could seek to facilitate the entry of another pilotage service provider, for example, by assisting to provide training to sea pilots.

7.8.3 Conclusions on common user berths and pilotage

In summary, the Commission has found that:

- PoMC has published a process for allocating common user facilities and conditions of use, and
- there are no effective market power concerns for the provision of pilotage services, which would warrant the imposition of regulation of these services.

¹⁴⁶ PoMC, 24 September 2004, 'Notice to Port Users: Implementation of Common User Licence'

7.9 Conclusions

This chapter has set out the Commission's assessment of the market power for the provision of port services and shared channel services, by evaluating the scope for competition between ports, the potential for new entry for the provision of services, and the countervailing market power.

Regional Ports & Non-containerised/non-motor vehicle cargoes

In relation to the Victorian regional ports, the evidence suggests that there are workably competitive markets for the cargoes they handle and therefore a relatively low risk of market power being exercised, and there are alternative means through which "captive" customers are able to protect themselves against the potential abuse of market power by regional port operators. In these circumstances, the case for ongoing price monitoring is not particularly strong as measured against the principles of best regulatory practice.

Under these circumstances, the Commission is therefore not convinced there is an ongoing problem that needs to be addressed by economic regulation and as such recommends that price monitoring of regional ports be discontinued.

By the same token given the competitive tensions that exist between the PoMC and the other Victorian ports in these contestable sub-markets, the case for ongoing price monitoring of the PoMC in respect of those cargoes is also not strong. On this basis, the Commission recommends that price monitoring of the PoMC for cargoes other than container and motor vehicles should be discontinued.

However, to give users of regional ports an added measure of comfort, the Commission recommends that this situation be reconsidered in the next review of price regulation as required under section 53 of the PSA.

Port of Melbourne – Containerised and motor vehicle cargoes

It is the Commission's conclusion that the PoMC retains the potential to exercise substantial market power in relation to container and motor vehicle cargoes. As measured against the principles of best regulatory process, the Commission believes that the PoMC still retains market power in the provision of these services. For this reason, the Commission's conclusion is that the channel and berth services provided in respect of container and motor vehicle trades should continue to be subject to economic regulation for a further five year period.

With regard to motor vehicle cargoes, if realistic contestability emerges, the price monitoring of those services can be withdrawn.

Shared Channels

The shared channels at the entrance to Port Phillip Bay are considered to be "monopoly bottleneck facilities" of the kind that may be subject to third party access regulation. The key regulatory issue with respect to the shared channels is that these channels are required to be used by ships visiting either (or both) the ports of Melbourne and Geelong. The market power analysis has found that these two ports compete in relation to a range of contestable trades – namely those break bulk, liquid bulk and dry bulk cargoes that the Commission proposes be removed

from other aspects of the regulatory framework. It is the existence of this competitive component of the market which creates a conflict of interest for PoMC, and an incentive to price channel services in such a way that might be to its competitive advantage in the contestable parts of the market.

The increased charges for the shared channels to Port Phillip Bay associated with the CDP for large Geelong bound ships has been controversial. Some of the aspects of that particular issue, to the extent they relate to this Review, are discussed in section 9.3.2. However, there is the more general issue relating to the ongoing risk as to whether Geelong bound shipping will be treated equitably by comparison to Melbourne bound shipping.

In light of the concerns raised, the Commission believes that there is also a regulatory problem with respect to the shared channels that should be addressed. The nature of the regulatory problems likely to arise with respect to the shared channels appear to differ from those with respect to PoMC's dedicated channel and berth services for its core and relatively non-contestable cargo trades:

- the issues encompass, and primarily arise with respect to, different types of cargoes and ships (hence different market segments), and
- the nature of the regulatory issues that are most likely to arise are of a kind that may involve resolving disputes about whether the conduct of PoMC, as access provider, has acted detrimentally to a competing upstream or downstream party.

8 THE PRESCRIBED SERVICES

Having formed conclusions on the port services that should be subject to economic regulation, it is then necessary to consider whether the current definitions of prescribed services as set out in the PSA remain appropriate.

As discussed in section 2.1, the prescribed services are defined in section 49(c) of the PSA to include:

- the provision of channels for use by shipping
- the provision of berths, buoys¹⁴⁷ or dolphins¹⁴⁸ in connection with the berthing of vessels in the ports of Melbourne, Geelong, Portland and Hastings, and
- the provision of short term storage or cargo marshalling facilities in connection with the loading or unloading of vessels at berths, buoys or dolphins in the ports of Melbourne, Geelong, Portland and Hastings.

In addition there are a number of related services and excluded services.

8.1 Views in submissions

Asciano indicated that the existing definitions of prescribed services are adequate, but that warehousing behind berths should not be included.

PoMC argued that prescribed services are inappropriately defined because, aside from certain common user berths, it is not responsible for berthing services, which are primarily provided by tenants of the PoMC, and yet it is regulated for these services. This contrasts with channel services that are provided directly by the PoMC.

8.2 Consideration of issues

Shipping channels

The Commission understands that the prescribed service of providing shipping channels includes the provision of navigation aids that delineate the channels of ships, as well as the services provided by the Harbour Master for managing vessels. The services provided by the Harbour Master include operating information and communication systems for shipping control which are integral to the provision of shipping channels.

¹⁴⁷ an anchored float

¹⁴⁸ a bollard or pile for mooring

Berths and wharves

The term “berth” usually refers to the water space a vessel is allotted and occupies while it is moored, whereas a “wharf” is the structure against which vessels moor. Berths and wharves are generally constructed by the port corporation. The port tenants who operate terminals at the port will generally lease the land behind the berths and wharves and may have a licence with respect to exclusive or priority use of the berths and wharves. The port usually retains the right to charge ships for using the adjacent berths and wharves – i.e. wharfage charges, which may be based on the quantity of cargo loaded or unloaded, or on the time the ship is at berth, or in some other way.¹⁴⁹

Cargo marshalling areas

PoMC has indicated that at the port of Melbourne, most sites are leased to long term tenants, with the main exception being common user berths. Aside from the latter, the cargo marshalling areas behind the berths are situated on land that is typically leased by the PoMC to a tenant on commercial terms, often relying on an independent valuation of the land to determine rents from time to time. The hardstands for cargo marshalling at container terminals are commonly constructed at the tenant’s cost, and therefore are not recoverable through port corporation charges.

Implications of recommendations on services to be regulated

The services that would be prescribed services under the Commission’s recommendations would be the following services:

- the provision of channels for use by shipping in the port of Melbourne waters, including the Shared Channels used by ships bound either for the port of Melbourne or for the port of Geelong
- the provision of channels for use by shipping in the port of Hastings waters, only in respect of vessels carrying container or motor vehicle cargoes
- the provision of berths, buoys or dolphins in connection with the berthing of vessels carrying container or motor vehicle cargoes in the ports of Melbourne or Hastings, and
- the provision of short term storage or cargo marshalling facilities in connection with the loading or unloading of vessels carrying container or motor vehicle cargoes at berths, buoys or dolphins in the ports of Melbourne or Hastings.

Excluded contracts

When the economic regulation of port services was introduced in Victoria in 1995, the Victorian government established Pricing Orders which specified price caps for the first five years. As mentioned in section 2.1 above, certain services were provided under contracts that were designated by the Government as Exempt Contracts. This originally included most, if not all, of the site leases at the port of

¹⁴⁹ Section 74 of the PSA indicates that wharfage charges are a “fee in respect of the provision of a site in the port”.

Melbourne at that time.¹⁵⁰ However, in 2000, at the PoMC's request these lease rentals were brought within the price cap regulatory framework in order to facilitate the rebalancing of rental and wharfage charges.

In the Draft Report the Commission flagged whether these contracts should revert to the status of Excluded Contracts. However, there was no comment from submissions on this subject. In light of the lack of information and perspectives on this issue, the Commission's view is that there would be a risk in such a change potentially having unforeseen or unintended consequences. For this reason, the Commission's recommendation is that the charges under these lease rentals for short-term storage and cargo marshalling areas at the Port of Melbourne should not be excluded from the price monitoring framework at the present time.

Prescribed Channels

Part 3, Division 4 of the PSA (Access) applies to a channel declared by Order of the Governor in Council to be a significant infrastructure facility. Application of the Channel Access Regime to the Shared Channels would require such an Order to be made with respect to those channels.

¹⁵⁰ At the port of Melbourne this included approximately 50 contracts including leases, preferential berthing agreements, licences and permissive occupancies.

9 THE FORM OF REGULATION

Chapters 7 and 8 concluded that fewer port services should continue to be regulated, and that the regulation should be restricted to a smaller number of ports in Victoria. This chapter considers the most appropriate form of regulation.

The approach taken to identify and subsequently recommend the proposed form of regulation has been to:

- consider the effectiveness of the current framework in restraining the misuse of market power over the price monitoring period. If misuse of market power was not restrained then the framework may be too light handed (section 9.1)
- consider the outcomes of CIRA reviews relating to ports regulation in other jurisdictions, as well as comparative regulatory frameworks in comparable industry sectors (section 9.2)
- consider the effectiveness of each of the elements of the current price monitoring framework in light of stakeholder comments and specific issues that have arisen over the price monitoring period, as well as the Commission's market power assessment in chapter 8 (section 9.3)
- consider the appropriate form of regulation that should apply with respect to the channels access services provided to all cargo ships accessing the Shared Channels (section 9.4)
- examine whether the PoMC's statutory charter conforms to the specific requirements of the CIRA (section 9.5), and
- examine whether the requirements of Part IIIA of the TPA provides sufficient restraint on the behaviour of the PoMC such that no other form of regulatory oversight is needed (section 9.6).

9.1 Effectiveness of price monitoring in restraining market power

The starting point for establishing whether the price monitoring framework has been effective at restraining the misuse of market power while at the same time facilitating competition and economically efficient investment is to consider the extent to which there has been any significant exercise of market power by the providers of prescribed services during the price monitoring period.

9.1.1 Stakeholder views

The evidence from stakeholders suggests that market power has not been exercised by the Victorian regional ports over the price monitoring period. For example, PoPL stated that:

ports are mindful of the need to offer competitive prices to ensure lowest cost supply chains in order to retain existing trades and attract new business.

Asciano observed that charges at the port of Geelong have only increased by 5 per cent in real terms by 2007/08, and held the following view regarding the use of market power:

*there is no evidence that regional port operators have misused any alleged market power during the five year period from 2003-04 to 2007-08.*¹⁵¹

According to the VRCA:

*Price monitoring appears to be working reasonably well except where disagreement exists.*¹⁵²

SAL was also of the opinion that market power has not been exploited by the Victorian regional ports during the period of price monitoring:

*There's no evidence that they have abused that power ... it's the evidence of the potential to abuse it that is the point that we're making*¹⁵³

These observations suggest that where competition has not been effective, then the regulatory framework has been sufficient to deter misuse of market power.

9.1.2 Other sources of information

The views expressed by stakeholders are consistent with other available evidence. For example, recent published economic and econometric analysis of Australia's east coast container ports suggests that while the PoMC has substantial market power, that market power is not being misused, and part of the reason may be the influence of economic regulation, among other things.¹⁵⁴

Other evidence includes trends in key indicators. As shown in Table 4.6, the ports of Portland and Geelong have had relatively modest price increases over the monitoring period. No complaints have been received in relation to the port of Geelong and while a stakeholder has submitted concerns in the course of this Review regarding the market power of PoPL, the services in question are provided under an Excluded Contract, and hence not covered by the regulatory framework.

The price increases at the port of Hastings have been more significant. Hastings is a relatively small volume port with two major users, and throughput of liquid bulk

¹⁵¹ Asciano 2009, Submission in response to the Issues Paper, February, p.5

¹⁵² VRCA, op cit.

¹⁵³ Ibid., p.15.

¹⁵⁴ Menezes, F. M., Praca, M. & Tyers, R. 2007, 'Strategic Interaction amongst Australia's East Coast Ports', The Australian Economic Review 40, pp. 268

cargoes is affected by the declining production profile of the Gippsland oil and gas fields. It is not possible to form a view, based on the available information, as to whether the price increases at the port of Hastings give rise to any concerns about market power. No complaints have been received by the Commission in relation to the port of Hastings.

With respect to the PoMC, price increases have been more substantial. These increases have been driven in large part by the need to recover the costs of the Channel Deepening Project from port users. Given the findings of chapter 7, closer attention to changes in prices, profits, service quality and productivity at the port of Melbourne is likely to be warranted.

In 2006 the Commission engaged Mr Larry Kaufmann from the Pacific Economic Group to formulate an index based approach to assess the likelihood that market power had been exercised. This analytical framework was subsequently published.¹⁵⁵ The approach is based on considering the movements of four indicators: prices, profits, service quality; and productivity. It is mainly useful for shedding light on whether there has been an increase in the degree of market power exercised during the period analysed (or whether it is inconclusive), rather than measuring the degree of market power. Table 9.1 illustrates the trends in the four indicators for the PoMC's prescribed services over the price monitoring period.

Table 9.1 Performance indicators: PoMC prescribed services (%)

<i>Year ending June</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>Trend</i>
Real price increase ^a	6.0	1.7	9.7	22.2	+
Return on capital employed	7.3	5.8	8.1	n.a.	+
Productivity increase	←	2.0 (avg)	→	n.a.	+
Service quality ^b	77.2	67.2	65.4	n.a.	-

^a The 2008-09 real price increase for PoMC includes costs associated with the Channel Deepening Project.

^b Combined total of the percent of ships' draught constrained and the percent of ships delayed from their scheduled berthing time. Increases in this composite service quality indicator therefore represent deteriorating service quality.

Source: PoMC regulatory accounts, ESC estimates

The increase in real prices increases for the prescribed services shown in Table 9.1 are the same as those reported in Table 4.6. The rate of return on capital employed in providing prescribed services is reported in the Commission's monitoring reports and is defined as earnings before interest and taxation (**EBIT**) divided by the average non-current assets employed (excluding tax assets and certain financing lease assets). The PoMC's rate of return on prescribed services has been significantly higher than its return for the whole of its business by the

¹⁵⁵ Kaufmann L (2007), *Performance Indicators and Price Monitoring: Assessing Market Power*, published in *Network*, Issue 24, May 2007, a publication of the Utility Regulators Forum.

same measure. The return on capital employed in providing prescribed services has been below the PoMC's target rate of return indicated in its PPS. The rate of profit in 2007-08 has been negatively impacted by the revaluation of assets in June 2008.

The Commission has estimated the trend in total factor productivity at the port of Melbourne over the price monitoring period. This analysis is documented in Appendix D.

Service quality has been measured by the composite of the percent of ships draught constrained and the percent of ships delayed from their scheduled berthing time, shown in table 4.8. The total of these two indicators has been subtracted from 100 to derive the indicator shown. PoMC questioned the appropriateness of this measure, in part because it claimed the measure of the percentage of ships delayed is not within the control of PoMC, but is instead a function of stevedoring services. However, as stated in chapter 4, the proportion of ships delayed will also be a function of the activity of PoMC as the constructor of wharves and berths in terms of its performance in matching infrastructure supply against demand over time.

Kaufmann's analysis suggests that this combination of trends is indicative of substantial market power being exercised (see Table 9.2, scenario 6). However, there are several other important factors which need to be taken into account before such an inference can be drawn. One problem with an assessment based on the trends shown in Table 9.1 is that it does not adequately address lumpy investments such as the CDP. This type of project may require price increases to finance, but will only improve service quality standards with a considerable delay. Hence market power could be incorrectly construed to have been exercised if these improvements in service quality over time are not taken into consideration. If the proportion of vessels that are draught constrained is negligible after the CDP is completed then by 2010-11 the service quality index may be 80-85 per cent, which would represent a more uncertain basis for making a conclusion with regard to the exercise of market power under the Kaufmann framework (see scenario 5, Table 9.2).

It is not yet fully clear whether the 22 per cent price increase in 2008-09 is a result of market power, or is being driven by the combination of the substantial capital expenditure for the CDP and the implications of adopting new accounting standards for valuing assets. Based on PoMC's projections of its total assets and its return on capital employed for its whole business¹⁵⁶ there is every expectation that the return on capital employed in providing prescribed services, as defined in Table 9.1, will decline slightly in 2008-09 through 2010-11. This would suggest that the outlook is for rates of return on capital to be steady rather than continuously increasing, which would alter the conclusions using the Kaufmann framework (between scenarios 7 and 5, Table 9.2).

Finally, PoMC's rates of return for the provision of prescribed services are below the target of 8.7 per cent that PoMC established in its PPS at the commencement

¹⁵⁶ PoMC Annual Report 2007-08, pp.87-88

of the price monitoring period.¹⁵⁷ The returns achieved may in part reflect relatively low rates of productivity growth in comparison to the growth in port throughput. It does not imply that the regulatory framework is applying undue pressure on PoMC. Indeed, as discussed in chapter 10, these measures of return on capital do not provide an appropriate comparator to the cost of capital for a business that benefits from significant capital gains through revaluation of its assets, e.g. land. Looking at PoMC's business as a whole over the four year period from 2004-05 to 2007-08, the four-year average rate of return (defined as EBIT over average tangible assets) was only 4.4 per cent. However, when capital revaluations are included as part of income, to approximate the economic rate of return, the average return over the same period was 11.5 per cent. This was slightly higher than the estimated nominal pre-tax WACC of 10.2 per cent (based on the same WACC parameters used by PoMC to set its post-tax WACC target of 8.7 per cent)¹⁵⁸.

The Commission's conclusion is that the available evidence is inconclusive at the present. At this stage there is insufficient evidence to adequately support a conclusion that PoMC has exercised substantial market power during the price monitoring period with respect to its overall levels of prices and profits, although the evidence does suggest it is possible.

Table 9.2 Kaufmann Framework for Assessing Market Power

Table 1: Performance indicators and market power assessment: evaluation of specific scenarios

Scenario	TFP	Price	Quality	Profit	Customer welfare	Company welfare	Market power abuse?
1	+	-	+	+	+	+	No
2	+	-	-	+	?	+	?
3	+	-	+	-	+	-	No
4	+	-	-	-	?	-	No
5	+	+	+	+	?	+	Probably yes
6	+	+	-	+	-	+	Yes
7	+	+	+	-	?	-	No
8	+	+	-	-	-	-	No
9	-	-	+	+	+	+	No
10	-	-	-	+	?	+	?
11	-	-	+	-	+	-	No
12	-	-	-	-	?	-	No
13	-	+	+	+	?	+	?
14	-	+	-	+	-	+	Yes
15	-	+	+	-	?	-	No
16	-	+	-	-	-	-	No

Source: Kaufmann (2007), p.4

¹⁵⁷ Note that rates of return may themselves difficult to interpret in the context of long-lived assets with strong underlying growth in usage

¹⁵⁸ PoMC 2005 'Pricing Policy Statement', pp 11-12

9.2 Comparative regulatory regimes

The foregoing analysis suggests that heavier handed regulation is not warranted at this stage. Nevertheless it is relevant to consider the regulatory arrangements applying in other states. In its submission to the Review, PoMC has referred the Commission to the CIRA reviews conducted in NSW and Queensland to make the case that no price regulation of its operations is required.

In the case of Queensland, PoMC makes the point that its CIRA review relied on the views on stakeholders in arriving at its conclusion that no price regulation was required. In this regard, the Commission notes that at least one significant stakeholder in the course of this Review, SAL, has been firmly of the view that price regulation of Victorian ports, including the PoMC, should continue. For NSW, the Commission notes that price regulation, rather than being absent altogether, takes on the nature of an entirely different form with port charges being subject to approval by the relevant Minister.

The Chief Executive Officer of SAL, Mr Llew Russell, has raised significant concerns regarding regulatory arrangements in NSW, with a clear preference for the light-handed regulatory arrangement in Victoria and South Australia. At the public hearing Mr Russell stated, in regards to the NSW arrangements:

*The Minister has the power to set prices in the port. He has the power to set minimum conditions for which there are substantial penalties if the stevedores or trucking companies or anyone detracts from those standards. He has the power to acquire information and there's no protection of commercial confidentiality in that legislation.*¹⁵⁹

Given the differences between Queensland and Victoria, as well as the concerns raised in relation to NSW, the Commission believes that there is limited scope to draw upon those examples for application in Victoria.

On the other hand, SAL has given strong endorsement to the price regulatory regime that operates in SA. In this regard, the Commission notes that SA has adopted a similar process to its assessment of price regulation as the Commission and has adopted a similar light-handed price regulatory regime.

In the previous section it was concluded that the current price regulatory framework had proven effective in constraining the substantial market power of the PoMC. The consideration of other regulatory regimes supports the Commission's conclusion that the existing price monitoring framework should continue to apply for containers and motor vehicle cargo for the PoMC.

¹⁵⁹ Public hearing 3 March 2009, transcript

9.3 Consideration of the elements of the monitoring framework

This section examines the effectiveness of each of the elements of the Victorian ports price monitoring framework. As outlined in chapter 2, the main elements of the price monitoring framework provided by the PMD include:

- a requirement for ports to maintain a published set of reference tariffs for prescribed services, including requirements regarding the notification of port users and the Commission of changes to the schedule of reference prices
- a requirement for PoMC to comply with pricing principles contained in the PMD and to prepare and publish a PPS
- clear requirements on the provision of information to the Commission to support its monitoring role
- the publication of an annual monitoring report by the Commission
- a credible threat of the application of more prescriptive regulation if market power is misused, including the ability of the Commission to undertake investigations or inquiries if concerns about substantial market power arise within the regulatory period
- a complaint handling process designed to ensure that ports have the opportunity in the first instance to address the matters raised, and only as a last resort, and if there are *prima facie* concerns about significant market power misuse, would the Commission investigate
- a scheduled review after five years to determine whether the prices monitoring framework is delivering the objectives of the ESC Act and the PSA.

9.3.1 Published reference tariffs

The PMD requires 30 days' notice be provided to users and the Commission prior to a change to the reference price schedule on 1 July of each year, and 60 days notice of changes within a financial year.

No concerns have been raised by stakeholders with respect to the publication of reference prices. However, the Commission has noted inconsistencies and omissions of the port service providers in regard to notifying the Commission of changes to their reference tariff schedules¹⁶⁰.

It should be noted that under the recommended changes to the coverage of the price regulatory regime, the obligations of the regional ports to publish reference prices would fall away, and similarly for PoMC with respect to those types of cargoes no longer covered. However, the Commission considers it to be good business practice for the ports to publish their standard prices.

9.3.2 Pricing principles applying to PoMC

The pricing principles include general principles that apply to all services, as well as specific pricing principles relevant to the Shared Channels at the entrance to

¹⁶⁰ The Commission has noted this in its monitoring reports

Port Phillip Bay. There is an additional principle in section 2.1.7 of the PMD that prohibits the bundling of prescribed and non-prescribed services.

No specific issues have been raised by stakeholders with respect to the framing or application of the pricing principles. One issue has been raised in regard to whether there has been non-compliance with certain pricing principles by PoMC in relation to Geelong-bound vessels using the Shared Channels. The Commission has also flagged the issue of asset valuation and pricing within the price monitoring framework. Each of these topics is addressed below.

Framing of the pricing principles

It is relevant to compare the pricing principles in the PMD with the pricing principles established in the CIRA for third party access regimes – see Box 9.1.

<p>Box 9.1 CIRA access pricing principles</p> <p>2.4.b Regulated access prices should be set so as to:</p> <ul style="list-style-type: none">(i) generate expected revenue for a regulated service or services that is at least sufficient to meet the efficient costs of providing access to the regulated service or services and include a return on investment commensurate with the regulatory and commercial risks involved;(ii) allow multi-part pricing and price discrimination when it aids efficiency;(iii) not allow a vertically integrated access provider to set terms and conditions that discriminate in favour of its downstream operations, except to the extent that the cost of providing access to other operators is higher; and(iv) provide incentives to reduce costs or otherwise improve productivity. <p>Source: CIRA</p>

The pricing principles in the PMD are consistent with pricing principles established in the CIRA. In the Commission's view the PMD pricing principles provide valuable guidance to PoMC with respect to setting prices in accordance with broader obligations not to misuse market power while seeking a commercial return and promoting competition and efficiency. The Commission's view is that the pricing principles that apply to PoMC continue to have merit as part of the price monitoring framework.

Levy on deep draught ships bound for Geelong

With respect to compliance with the principles, the GCUG has expressed concerns regarding the PoMC's charges. Specifically the GCUG noted that PoMC's charges for using the Shared Channels since April 2008 have applied to vessels with a summer draught of 12.1 metres (rather than actual draught) and therefore impact Geelong-bound vessels. GCUG maintains this is contrary to the pricing principles applying to the Shared Channels in the PMD which state that "the cost of improvements to a Shared Channel that can be demonstrated to benefit only the

users of one port should be borne by the users of that port". GCUG requested that Geelong-bound vessels be exempt from any increase in shared channel charges associated with channel deepening, because otherwise the port of Geelong is competitively disadvantaged.

This issue was the subject of a complaint by SAL in mid 2008, to which the Commission responded in accordance with its complaint handling procedure by referring the matter to PoMC and encouraging the parties to commercially resolve the issue. SAL raised the matter again in its submission and at the public hearing of this Review. In accordance with the complaint handling procedure, the Commission may investigate complaints where the parties have had the opportunity to resolve the issue and have been unable to do so, and the Commission has decided to investigate whether there has been any non-compliance with the PMD. The Commission is establishing the facts of the matter and once it has formed its views it will write to the complainant, SAL, and PoMC and outline its thoughts about the appropriate course of action, if any.

The issue that has been raised in respect of Geelong-bound vessels has not highlighted any shortcomings with the framing of the pricing principles relating to the Shared Channels, and neither PoMC nor user representatives such as SAL and GCUG identified any issues with respect to those principles. For this reason the Commission's conclusion is that the pricing principles for the Shared Channels remain appropriate.

Asset valuation and pricing

Another issue related to the pricing principles is the reference to the return on assets "appropriately defined and valued" and what this may mean in practice. Whether PoMC is attaining a commercial rate of return, or a return in excess of the normal levels and suggestive of misuse of market power, will depend on the values ascribed to the assets against which that rate of return is measured.

The question of asset valuation for price monitoring purposes has been flagged as an issue that the Commission feels it should address in this Review. Chapter 10 addresses this issue and the associated issue of defining the economic rate of return associated with the asset valuation approach.

9.3.3 PoMC's Pricing Policy Statement

PoMC indicated that:

the focus of the current economic regulation with a five year pricing focus is not aligned with the longer term investment program of PoMC for the port and can only lead to pricing inefficiency.

This comment appears to have direct relevance to the requirement to have a PPS more than any other feature of the price monitoring framework. This is because the

PPS has the potential to constrain PoMC's pricing flexibility within a regulatory period.¹⁶¹

PoMC is currently undertaking its major CDP, with an investment cost of approximately \$970 million, to be recovered over a long period of time based on forecast long-term revenues from its cargo-based Infrastructure Fee and higher channel charges for vessels with summer draught greater than 12.1 metres. As mentioned, the Victorian government has stated in *Freight Futures* that it intends to progress the development of a process to test the market for additional stevedoring capacity at the port of Melbourne. This will presumably also involve lumpy long-lived investments. PoMC therefore has a legitimate concern that some of its prescribed charges will need to be planned over longer time horizons than five years.

It is also notable that comparative price monitoring frameworks such as the federal airports monitoring regime and ESCOSA's ports price monitoring regime in SA do not have an equivalent requirement to the PPS.

Despite the concerns expressed by PoMC, the Commission continues to see merit in the PPS as identifying how PoMC proposes to address the general principle of seeking a commercial return on its investment while not misusing market power. It provides greater clarity to PoMC in regard to its obligations as well as greater transparency to port users.

PoMC may wish to frame its PPS differently to its current PPS. Further, the Commission's view is that there would be some advantages in PoMC having a greater degree of flexibility with respect to making changes to its PPS from time to time subject to appropriate consultation arrangements.

9.3.4 Information reporting

The ports must provide, on an annual basis, audited financial accounts and statistical information to the Commission. These financial accounts must also include a cost allocation statement with cost allocation principles that must be acceptable to the Commission. The Commission produces an annual monitoring report with some of this information.

Asciano raised concerns about the cost of compliance with this information reporting regime (see section 7.3.3 above). Asciano observed that it expects to incur auditing costs of approximately \$100,000 in 2008-09 in relation to the regulatory accounts for the ports of Geelong and Hastings. However, this follows Asciano's non-compliance with the auditing requirements for several years, the rectification of which has resulted in a bunching of costs in the 2008-09 year. PoPL indicated that its compliance costs as a result of the price monitoring regime have been incremental and acceptable.

Asciano argued that if the current regime should continue, options to reduce the costs of having financial accounts audited should be considered:

¹⁶¹ The PPS has a term of five years (section 6.3.1(d) of the PMD).

A full formal audit is not necessary in providing the Commission with assurance regarding the accuracy and validity of a port operator's financial statements. ... there are a number of possible alternatives which could be considered. These include:

- *certification of the financial statements to be true and accurate by a responsible officer only (i.e. a letter of comfort);*
- *accepting information published for a company's half yearly and annual reports (group financial statements);*
- *reduced scope of the financial information currently required by the Commission. For example an income statement audit only ...*
- *auditing of financial statements every second year ...*

The Commission regards clear requirements for the provision of information by relevant ports to support its monitoring role as an essential part of the monitoring framework. A reduction in the quality or timeliness of such information would introduce a degree of information asymmetry which would be likely to reduce the effectiveness of the monitoring framework.

The Commission has also recognised that it is desirable for these information disclosure requirements to be established and documented clearly. This will minimise uncertainty and compliance costs for those entities that regularly produce their annual regulatory accounts in a standard report format. For this reason the Commission developed Information Notices in consultation with the ports to establish a standard set of information to be provided each year. The formalisation of these information requirements has played an important part in minimising the administrative burden on regulated entities.

The Commission does not see merit in changing the nature of the auditing requirements or the scope of the information to be provided to the Commission from those relevant ports that will be subject to price monitoring. Given the proposed changes to the scope of the price monitoring regime, these information reporting requirements may no longer apply to the regional ports, and changes relevant to PoMC would arise from the proposed changes to the definition of prescribed services.

9.3.5 Complaint handling process

The Commission has received approximately five complaints from port users since the commencement of the price monitoring period, including three in 2005-06¹⁶², one in 2007-08¹⁶³ and one in 2008-09.

¹⁶² Essential Services Commission 2007, *Ports Monitoring Report 2005-06*, p.6

¹⁶³ Essential Services Commission 2009, *Ports Monitoring Report 2006-07 & 2007-08*, p.6

The Commission established a complaint handling process in the Statement of Purpose and Reasons to the PMD to ensure that its investigatory powers under the PMD would only be used sparingly.

In submissions to this Review, Asciano supported the Commission's approach to complaint handling. However, VRCA indicated that it needs to be more transparent to be effective. SAL's submission had specific concerns about the Commission's response to its complaint about Shared Channel charges made in 2008, which reinforced the view that the complaint handling or dispute resolution process was perceived as inadequate.

The investigatory powers of the Commission under section 7.1 of the PMD do not constitute a dispute resolution mechanism as such, since the Commission does not have powers to decide disputes. However, if an investigation were to find non-compliance with the pricing principles, the Commission could:

- rely on the threat of amending the PMD pursuant to section 7.2 of the PMD. For example, the Commission could invoke the threat of introducing more heavy handed regulation (if it retains the ability to amend the PMD during its term as is presently in section 7.2 of the PMD), or
- rely on its powers under the ESC Act to ensure compliance with its regulatory determinations. Sections 53 and 54 of the ESC Act provide for the Commission to issue Enforcement Orders to comply with a determination, and if they are not complied with, to apply to the Supreme Court of Victoria for an injunction.

This latter power may have weight if the Commission were to investigate an alleged non-compliance with the pricing principles and find that there was indeed non-compliance. However, this course of action may not be available for disputes of a different nature that do not concern compliance with specific provisions of the PMD.

The Commission considers that the existing investigatory powers under section 7.1 of the PMD provides a process in which it can seek to resolve disputes between ports and users about whether the port has complied with express regulatory obligations in the PMD. However, the investigatory powers may not be well suited to the types of complaints or disputes that may arise with respect to the Shared Channels. This is discussed further in section 9.3.6 below.

The complaint handling procedure remains appropriate to meeting its objective of ensuring that the Commission's investigatory powers are only used sparingly. The ability of the Commission to rely on its powers under the ESC Act in relation to enforcing its determinations may be sufficient to resolve certain types of complaints, particularly those clearly related to non-compliance.

Section 9.3.6 discusses whether, and in what circumstances, the Commission's investigatory powers may need to be retained.

The Commission also notes that there may not be sufficient information available to relevant stakeholders on the Commission's complaint handling processes. Accordingly, the Commission's finding is that this information deficiency should be remedied.

9.3.6 Threat of more prescriptive regulation & scheduled reviews

In the 2004 review the Commission emphasised that the possibility of reversion to a more prescriptive form of regulation is an important feature of the effectiveness of the price monitoring approach. Similarly, the threat of more prescriptive regulation is an important element of the price monitoring regimes for the major airports and for ports in SA.

In each of those two comparative frameworks a scheduled review takes place at a predefined time. For example airports are reviewed every six years, whilst SA ports are reviewed every three years. In each framework the regulator can only introduce more prescriptive regulation at the next scheduled review. However, the Federal Government can initiate mid-term reviews in the airports framework.

The Commission believes that the threat of more prescriptive regulation is enhanced by allowing a review to be triggered within a monitoring period. Accordingly in 2004 the Commission recommended that it should also be possible to trigger a review within the monitoring period.

In its 2007 review of the airports monitoring regime the PC recommended that the possibility of within-period re-regulation should be introduced into the airports monitoring framework. The proposed mechanism was that:

the Government be required to make an explicit judgement on whether the conduct of any of the monitored airports warrants further scrutiny. Specifically, this would entail the responsible Minister – having accessed the monitoring reports and other relevant information – publicly indicating either that no further investigation of conduct is warranted, or alternatively that one or more airports will be asked to ‘show cause’ why further investigation into their conduct should not take place.¹⁶⁴

While the reliance solely on a scheduled review after a period of time is “lighter handed” as it limits the risk of regulatory intervention to a defined period of time, rather than that risk being present at all times, the PC found that the lack of a well defined process for triggering further investigation of an airport’s conduct within the monitoring period was a deficiency that undermined the confidence in the light handed monitoring approach.

The question as to whether there should exist a trigger for an *ad hoc* review within the monitoring period, and if so of what form, involves the balancing the objectives of facilitating commercial negotiation, competition and investment, against the objective of preventing the misuse of market power. The appropriate balance between these objectives will depend on the individual characteristics of the industry. In the previous review the Commission considered that the ability to inquire into significant misuse of market power within a monitoring period was warranted. Furthermore, the Commission could undertake such a review at its own

¹⁶⁴ Productivity Commission 2006, ‘Review of Price Regulation of Airport Services’, p.67

initiative and re-impose more “heavy handed” regulation if it determined that there was a significant concern about substantial market power misuse.

During the monitoring period, the Commission has not been called upon to undertake any review about significant market power misuse. The only issue of significant concern to port users has been with respect to pricing issues in relation to the Shared Channels which the Commission is currently investigating, and has not indicated a view on.

The principle of the minimum regulatory response suggests that the Commission could adopt a mechanism for triggering a mid-term review more akin to that recommended by the PC for airports. The Commission could bring to the notice of the Government any conduct or outcomes of the monitoring process which it considered raises significant concerns about substantial market power misuse. The Government could then decide whether to direct the Commission to undertake further investigations and make recommendations to the Government on the matter.

This proposed process would be more consistent with analogous price monitoring regimes, particularly in airports, and has the benefit of adding an additional check or balance in association with the “regulatory threat”, and ensures the Commission does not have too much discretion in this regard.

With respect to the Shared Channels, the removal of within-period powers of intervention by the Commission would require, as an alternative, specific dispute resolution arrangements to be established with respect to the types of issues that may arise in relation to those channels. The dispute resolution framework within the Channel Access Regime can be applied to the Shared Channels as an alternative to the present powers of intervention.

Absent an access regime for the Shared Channels, the Commission would need to rely on its powers of investigation and intervention under the PMD to provide a proxy form of dispute resolution mechanism. The investigation powers under the PMD are not likely to be as effective as a dispute resolution role under the negotiate/arbitrate access regime because:

- the trigger to determine when an investigation is not as clear. Accordingly, the Commission would need to rely on its complaint handling procedures, and make judgements about whether it should or should not undertake an investigation. Under the negotiate/arbitrate access regime the Commission’s role is triggered by a notification of a dispute by a party to the dispute
- the costs of an investigation would be borne by the Commission rather than the parties to a dispute. As the Commission has the policy of recovering its regulatory costs from regulated businesses through licence fees, a disproportionate burden of the costs may end up being borne by PoMC. Further, the allocation of costs to the parties to a dispute has an important role to play in encouraging parties to resolve disputes, and discouraging parties seeking regulatory intervention in relation to matters that are insufficiently material
- the ability of the Commission to enforce the outcomes of an investigation may depend on the nature of the matters in dispute. If the matter were one of

compliance with the pricing principles, the Commission might seek to enforce compliance with the PMD using its powers under Part 7 of the ESC Act. However, if the issues in dispute are not strictly compliance related and instead involve some judgement on the part of the Commission, there may be uncertainty concerning the ability of the Commission to enforce its dispute resolution decisions if it is to rely solely on its investigatory powers under the PMD. On the other hand, the negotiate/arbitrate regime has explicit enforcement powers.

These reasons tend to suggest that a specific dispute resolution procedure in relation to the Shared Channels may be preferable to reliance on the investigatory powers under the price monitoring regime. This is examined further in section 9.4 below.

If there is a dispute resolution framework in place for the Shared Channels, the Commission's view is that powers to initiate reviews at its own discretion, and impose heavier handed regulation, during a regulatory period within the price monitoring framework would not be needed.

In summary, the PSA contains a scheduled review after five years to assess whether the price monitoring framework has achieved the objectives of the ESC Act and the PSA. As with the present Review, the Commission will make recommendations to Government as to whether the prescribed services should remain as prescribed services, and if so the form of regulation that would most effectively meet the objectives in the PSA and the ESC Act. If there are declared channels, then there is also a requirement in the PSA for the Commission to periodically review whether they remain significant infrastructure facilities.

Scheduled reviews under section 53 of the PSA do not explicitly require consideration of clauses 4.1 and 4.2 of the CIRA, however, they are relevant matters and therefore ought to be taken into consideration by the Commission.

The Commission's conclusion is that the ability to undertake reviews within the regulatory term should be retained, but only under Part 5 of the ESC Act – i.e. at the initiation of, or consultation with, the Government – and the Commission would not be able to introduce more heavy handed regulation without the approval of the Minister administering the PSA.¹⁶⁵

9.4 Shared Channels

The market power analysis in chapter 7 has highlighted that the nature of the regulatory problem with respect to the Shared Channels differs from that with respect to the relatively non-contestable container and motor vehicle cargoes in which PoMC has market power. The issues most likely to arise with respect to the Shared Channels will relate also, and indeed most significantly, to the cargoes that are contestable between PoMC and GeelongPort.

¹⁶⁵ Section 15(4) of the Grain Handling and Storage Act 1995 provides an example of the type of provision that can be included in the PSA to give effect to this recommendation. In addition section 7 of the PMD would be removed.

The CPA establishes a framework whereby regulatory obligations may be imposed on a facility owner or operator to provide access to the facility by third parties. This form of regulation is intended to be applied only in circumstances where the services are provided by natural monopolies, and where access to those services is essential to enable competition in upstream and/or downstream markets. By facilitating competition which could otherwise be stifled, this form of regulation is intended to aid economic efficiency and benefit consumers.

9.4.1 The negotiate/arbitrate framework

Clause 2 of the CIRA contains certain general principles relating to access regimes. Clause 2.3 indicates that price monitoring is compatible with access regulation. The CIRA also states that in the first instance the terms and conditions of access should be agreed between access providers and users. The NCC has highlighted that effective access regimes should contain enforceable dispute resolution mechanisms. These principles would all be attained by retaining price monitoring of Shared Channel services, while at the same time supplementing that framework with a negotiate-arbitrate access regime applying only to the Shared Channels.

The CIRA also includes an agreement that all state-based access regimes must be submitted for certification in accordance with the TPA and the CPA by 2010.¹⁶⁶ Therefore if the Channel Access Regime is to be retained and the Shared Channels declared, then the Commission also needs to consider whether the existing Channel Access Regime would meet the requirements for an effective state-based access regime, and if not, what changes would be required for certification. The requirements of an effective state-based access regime are established in clause 6 of the CPA, which is reproduced in Appendix B.

The NCC has published guidelines on the matters it will consider when making recommendations on the effectiveness of access regimes.¹⁶⁷ The following requirements are particularly relevant to the access regime for port channels:

- the negotiation and dispute resolution frameworks must be well specified, and dispute resolution should be by an independent arbitrator
- regulatory accounts should be maintained for the services under the access regime that are separate from other services that are not subject to the access regime. This requires appropriate cost allocation principles.
- where vertical integration issues arise, appropriate competitive neutrality provisions should apply, such as the "prohibition of anti-competitive price discrimination between affiliated users and third party access seekers operating in the same market."¹⁶⁸

¹⁶⁶ Clause 2.9

¹⁶⁷ NCC, February 2003, 'The National Access Regime: A Guide to Part IIIA of the TPA Part C: Certification of Access Regime '.

¹⁶⁸ NCC, Ibid, p.71

- the framework should appropriately address market power asymmetries that could reduce the effectiveness of a pure negotiate/arbitrate framework. In particular, price outcomes should “ultimately fall within an efficient range and are structured to eliminate opportunities for excessive profits, overcapitalisation and inefficient operating practices.”¹⁶⁹ To achieve this, the negotiate/arbitrate framework may need to be supplemented by price regulation in situations where there would be a substantial imbalance in negotiating positions of the access provider and access seeker.
- any price regulation should be by an independent regulator.
- the negotiate/arbitrate framework and any price regulation arrangements should facilitate efficient price discrimination between users.
- there must be credible enforcement mechanisms.

Appendix C sets out the Commission’s findings on whether the elements of the Channel Access Regime are likely to be considered by the NCC as an effective state-based access regime.

The Victorian Channels Access Regime facilitates a negotiate/arbitrate framework, the elements of which have been described in section 2.3 of this report.

In summary, the access provider has obligations to respond to applications for access and use all reasonable endeavours to meet the requirements of the access seeker and the terms and conditions of access must be fair and reasonable. The access provider, or any party using the prescribed channel, must not at any time engage in conduct which has the purpose of hindering a party exercising a reasonable right of access to the prescribed services.

Where a dispute arises between an access seeker and an access provider in relation to access to prescribed services, the access seeker can apply to the Commission to resolve the dispute (section 60).

The Commission resolves an access dispute by making a determination in relation to the matters in dispute. Certain procedural requirements, powers and overarching matters that the Commission must have regard to when determining a dispute are set out in sections 60, 63, 63AA and 63AB of the PSA.

The Commission can issue Guidelines with respect to its dispute resolution role to inform parties of the processes and approach that the Commission expects to adopt in resolving a dispute.

9.4.2 Combining price monitoring with access regulation

If the Channel Access Regime is applied to the Shared Channels, the question arises whether the price monitoring regime should apply to channels services.

Having both forms of regulation applying to channels services concurrently could be regarded as unnecessary and not in line with the aim of simplicity as stated in the CIRA. However, clause 2.3 of the CIRA states that:

¹⁶⁹ NCC, Ibid, p.58

The introduction of price monitoring for services provided by means of significant infrastructure facilities should be considered, where this would improve the level of price transparency, as a first step where price regulation may be required, or when scaling back from more intrusive regulation.

This implies, under the first criteria, that price monitoring should be considered in conjunction with access regulation where it would improve the level of price transparency.

There is no requirement under the channel access regime to publish reference tariffs for channel access services. Given the potential for PoMC to misuse its market power in channel access services, maintaining the price monitoring regime for channel access services would provide for transparency not afforded by the channel access regime.

Furthermore, since the channel access regime is intended to provide for dispute resolution of last resort, the transparency provided by the price monitoring regime acts as a deterrent for the misuse of market power and reduces the likelihood that disputes requiring resolution will arise.

As such, the Commission believes that the shared channels should be subject to the channel access regime complemented by price monitoring, consistent with clause 2.3 of the CIRA.

The price monitoring framework supplements the channel access framework by imposing the following additional requirements, all essential to its effectiveness:

- the requirement for PoMC to publish its standard terms and conditions of access to the Shared Channels on its website
- the requirement to maintain and report separate financial records to the Commission in relation to the Shared Channels. (While section 56 of the PSA requires an access provider to keep financial records for shipping channels separate from the financial records for other prescribed services and separate from other aspects of its business, it does not make this a separate requirement for prescribed channels).
- the pricing principles specific to the Shared Channels, which effectively prohibit anti-competitive price discrimination between users of the port of Melbourne and users of the port of Geelong operating in the same market.

In summary, the regulatory framework that would apply to the Shared Channels would include:

- the price monitoring framework including the requirement to publish reference tariffs, reporting regulatory accounting information to the Commission with respect to the Shared Channels, and the pricing principles applying to the Shared Channels
- a negotiate/arbitrate access regime would replace the existing ability of the Commission to undertake inquiries and investigations associated with the threat of imposing a more heavy handed form of regulation during the regulatory term.

The Commission's recommendation is that the regulatory framework that should apply to the Shared Channels should include both the price monitoring framework

and the negotiate/arbitrate access regime, and these would apply with respect to the channels access services provided to all cargo ships accessing the Shared Channels.

9.5 PoMC's Commercial Charter

Clause 4.2(c) of the CIRA requires that the commercial charters of port authorities should include guidance to seek a commercial return while not exploiting monopoly powers. This section considers whether Victoria is compliant with this CIRA requirement.

The following discussion considers whether the PoMC's commercial charter complies with the relevant CIRA requirements concerning access charges. Attention has been confined to the port of Melbourne because the port of Melbourne is the only port in Victoria listed as a significant port for the purposes of the CIRA.¹⁷⁰ PoMC can be considered as a port authority because it is defined as such in section 3 of the PSA.

PoMC's commercial charter is partly provided for in Part 2, Division 1 of the PSA which establishes the PoMC and sets out its objectives, functions and powers under the Act.¹⁷¹ The objectives of the PoMC are:

- to manage and develop the port of Melbourne in an economically, socially and environmentally sustainable manner
- to ensure that essential port services of the port of Melbourne are available and cost effective
- to ensure, in co-operation with other relevant responsible bodies, that the port of Melbourne is effectively integrated with other systems of infrastructure in the State
- to facilitate, in co-operation with other relevant responsible bodies, the sustainable growth of trade through the port of Melbourne, and
- to establish and manage channels in port of Melbourne waters for use on a fair and reasonable basis.

Under section 13 of the PSA, the PoMC must carry out its functions in a manner that is, among other things, effective and efficient and commercially sound. The PSA does not explicitly prescribe how PoMC should set access charges, nor does it include any reference to the appropriate rate of return PoMC should be allowed.

In addition, the PoMC's commercial charter is also in effect provided for in the Commission's Price Monitoring Determination (**PMD**) which establishes pricing

¹⁷⁰ COAG (2007) 'COAG National Reform Agenda: Competition Reform April 2007', p.44

¹⁷¹ The term 'commercial charter' is not defined in the CIRA. In the WA context, the Allen Consulting Group effectively regarded the Port Authorities Act 1999 (WA) as establishing the commercial charter of port authorities: Allen Consulting Group (November 2008) 'Council of Australian Governments Review of Western Australian Ports: Draft Report', p.54.

principles relevant to achieving a commercial return while not misusing market power.

In particular, the pricing principles state that PoMC's prescribed prices:

- should generate expected revenue that is sufficient to meet the expected efficient long-run costs of providing the prescribed services, including a return on assets (appropriately defined and valued) commensurate with the risks involved;¹⁷²
- should not provide a sustained level of revenue that is significantly above that which would be or would have been sufficient to meet the efficient long-run costs of providing the prescribed services, including a return on assets (appropriately defined and valued) commensurate with the risks involved;
- should not be structured to advantage the operations of PoMC over those of a competitor in a related market, except on the basis of costs of supply;
- should not discriminate between users of equivalent ("like for like") services where those users compete in a related market, other than on the basis of differences in the costs of supply;
- may reflect efficient forms of price discrimination as follows:
 - multi-part pricing and price discrimination should be employed when these will promote efficient outcomes; and
 - the expected revenue raised from the prices applying to a particular service should be no lower than the forward-looking avoidable cost of providing that service and no higher than that required to support the provision of that service on a stand-alone basis.

It is important to note that the PMD is itself an aspect of the regulatory framework that is under review, but as contemplated by section 9.3.3 above, it is the Commission's finding that the pricing principles in the PMD should continue to apply to the PoMC which should remain subject to the requirement to produce a PPS.

The PoMC's Response to the ESC Ports Regulation Review Issues Paper considered the CIRA requirements, and compliance with those provisions, concluding:

Currently under the PSA, PoMC is required to manage and develop the port of Melbourne in an economically, socially and environmentally sustainable manner which is consistent with the CIRA principles.

That is, the PoMC considered that the statutory objectives set out in the PSA are adequate for the purposes of satisfying the requirements set out in the CIRA.

This was re-iterated by Dr. Smith in her attachment to the PoMC submission to the Draft Report. Dr. Smith argued that section 13 of the PSA provides a deterrent against the PoMC from reducing the efficiency of their operations, or exerting

¹⁷² This principle is consistent with clause 2.4(b) of the CIRA.

market power. Further, Dr. Smith states that a number of amendments to the PSA would further inhibit the PoMC from behaving in an anti-competitive manner.

The Commission is not satisfied that in itself this statutory objective is sufficient to guide the PoMC towards setting access charges in such a way that seeks a commercial return only while not exploiting any monopoly powers.

When assessing the effectiveness of the statutory obligation in constraining the behaviour of the PoMC it is instructive to consider the credibility of the process for enforcement and so sanctions as the basis for the deterrent. In other words, a simple obligation in the absence of enforcement mechanisms is unlikely to provide an effective constraint on the behaviour of the PoMC.

Dr Smith notes that section 13 of the PSA obliges the PoMC to promote and market the port of Melbourne, which she suggests means that the PoMC is required to operate efficiently. Regardless of whether such a meaning can be inferred from the section 13 obligation, it is not clear how such an obligation could be enforced in the absence of a monitoring and performance framework.

Similarly it is not apparent how other amendments to the PSA could constrain the PoMC from exerting market power, if the PoMC was found to have market power. For example, the two amendments cited by Dr. Smith refer to the benefits of competition and promoting the development of the port. However, given that the focus of the Review is in relation to non-contestable services, objectives that refer to competition and developing business are largely irrelevant.

In summary, in our opinion the PSA does not provide any effective constraint on the PoMC using its market power.

However, the Commission considers that all of the PoMC's statutory objectives and functions, taken together with the price monitoring framework and in particular the pricing principles within the PMD, do give effect to clause 4.2(c) of the CIRA.

9.6 Part IIIA of the TPA

Dr. Smith argued that the scope for declaration of port services in accordance with the requirements of Part IIIA of the TPA provides sufficient restraint on the behaviour of the PoMC, such that no other form of regulatory oversight is needed.

When assessing alternative regulatory regimes it is necessary to consider the relative costs and benefits resulting from each regime. In general, where market power exists heavier handed forms of regulatory intervention (and so greater regulatory costs) are justified because of the potentially larger efficiency loss costs if such a regime was not in place.

To assess whether Part IIIA of the TPA provides sufficient protection as compared to an alternative price monitoring regime it would be necessary to consider the potential efficiency loss costs that could result from each regime. This will be influenced by an assessment of the strength of the market power present and the likelihood that third party access is required.

In these circumstances, relying on Part IIIA of the TPA is not justified because:

- PoMC likely has market power in a number of sub-markets, eg, containerised cargo
- third party access to port infrastructure is necessary to land cargo, and
- third party users would be required to incur significant costs to seek declaration of the infrastructure if negotiation is not otherwise successful.

The TPA regime is therefore likely to be more costly compared to the alternative price monitoring regime and so relying purely on the threat of declaration under the TPA would not be effective in constraining the behaviour of the PoMC in the future.

9.7 Conclusions

The form of regulation that has been outlined by the Commission as its recommendations includes price monitoring of the following services:

- the provision of channels serving the port of Melbourne and for use by shipping, including the shared channels used by ships bound for either the port of Melbourne or the port of Geelong,
- the provision of berths, buoys or dolphins in connection with the berthing of vessels carrying container or motor vehicle cargoes in the ports of Melbourne or Hastings, and
- the provision of short term storage or cargo marshalling facilities in connection with the loading or unloading of vessels carrying container or motor vehicle cargoes at berths, buoys or dolphins in the ports of Melbourne or Hastings.

Recommended price monitoring framework

The recommended price monitoring framework is similar to the present framework, with the key proposed difference being the removal of the Commission's powers to initiate reviews and intervene by imposing heavy handed regulation within the regulatory period. However, the provisions of Part 5 of the ESC Act would remain in place to allow the Commission to bring concerns to the attention of the Government, and for the Government to direct the Commission to undertake a review if it considered it to be appropriate to do so.

Other elements of the framework would remain the same including the following requirements of PoMC:

- to maintain a published set of reference tariffs in relation to the monitored services
- to comply with the established pricing principles
- to publish a PPS, although with greater flexibility with respect to changing this from time to time, if necessary, and subject to the required consultation with users and the Commission
- to provide information to the Commission to support its monitoring role
- a credible threat of the application of more prescriptive regulation if market power is misused, albeit confined to scheduled reviews or to references to the Commission from the Government

- a complaint handling process designed to ensure that ports have the opportunity in the first instance to address the matters raised, and only as a last resort, and if there are *prima facie* concerns about significant market power misuse, would the Commission investigate

Recommended channel access framework

The access regime to apply to the Shared Channels should rely on a commercially driven approach that relies of parties resolve matters through commercial negotiation where possible. Some of the elements of this negotiate-arbitrate framework that are designed to facilitate commercial negotiation and to ensure that arbitrated dispute resolution is only used as a last resort are outlined in the Commission’s 2005 “Channel Access Guideline”, and remain relevant:

- the Commission can use its powers of direction under section 63AB of the PSA to encourage the parties to a dispute to explore reasonable avenues of negotiation or mediation where it is appropriate for it to do so
- the Commission may also use its powers under section 63AB for the purposes of “determining a dispute”
- section 60(8)(b) provides that the Commission is not required to make a determination in circumstances where it is satisfied that
 - the Channel Operator has complied with statutory obligations with regard to offering fair and reasonable terms and conditions, or
 - the terms and conditions of access being offered by the Channel Operator do not constitute a taking advantage of a substantial degree of market power in the provision of the prescribed channel services, or
 - it is appropriate for the Commission to refuse to make a determination, having regard to the objectives of the Commission in relation to the ports industry under section 48 of the PSA, under its general objectives under section 8 of the ESC Act and to any other matter that the Commission considers relevant.

The Guideline provides some examples of circumstances where the latter discretion would be employed, including:

- In a dispute about whether prices offered by a Channel Operator are fair and reasonable, the Commission will consider whether the Channel Operator has complied with the applicable pricing principles. If the Channel Operator has complied with the appropriate pricing principles the Commission would not normally proceed to determine a dispute over those proposed charges.
- If an access dispute primarily concerns such a direction of a harbour master at a prescribed channel, and the harbour master has carried out its functions in a manner consistent with the requirements of subsection 26(2) of the MA, the Commission would not normally proceed to determine the dispute.

PoMC’s statutory charter

The price monitoring framework, and in particular the pricing principles, provide PoMC with appropriate guidance in relation to the setting of prescribed prices

consistent with seeking a commercial return while not exploiting monopoly powers, as required by clause 4.2(c) of the CIRA.

10 ASSET VALUATION & ECONOMIC RATE OF RETURN

In the Issues Paper the Commission noted that in PoMC's 2007-08 financial accounts the carrying value of its fixed assets has substantially increased in accordance with the applicable accounting policies and principles outlined in its Annual Report.

10.1 Background

Accounting Standard AASB 116 "Property Plant and Equipment" requires assets to be valued either at cost or fair value. Fair value is the amount for which an asset could be exchanged between knowledgeable, willing parties in an arm's length transaction.¹⁷³ If there is no market-based evidence of fair value because of the specialised nature of the item of property, plant and equipment and the item is rarely sold, except as part of a continuing business, its fair value may be estimated using a depreciated replacement cost approach, or alternatively by the discounted sum of expected future earnings.¹⁷⁴

PoMC has indicated that its asset valuation methodologies used in June 2008 were as follows:

- Building and Infrastructure at Depreciated Replacement Cost
- Land at market value as determined by an external valuer
- Channels at Original Cost
- Plant and Equipment, Motor Vehicles and Work in Progress are carried at cost.

It is notable that notwithstanding that the asset valuation adjustments made in June 2008 represented an increase in Property, Plant and Equipment asset values of approximately 40 per cent, the methodologies for valuing assets described above do not appear to have changed from earlier Annual Reports. This highlights the potential significant changes associated with periodic asset revaluations.

In its 2007-09 Annual Report, PoMC indicated that it has not restated its financial accounts for earlier years because it would be "impractical and onerous to implement" and "would rely overly on assumption and estimates".¹⁷⁵

¹⁷³ AASB 116, s6

¹⁷⁴ AASB 116, s33

¹⁷⁵ PoMC Annual Report, p.96

In the Issues Paper the Commission identified the issue as to whether, within the context of the price monitoring framework, asset revaluations would represent a legitimate basis for raising prices, and if so what asset valuation principles should be considered for pricing purposes.

The price monitoring framework, as it applies to PoMC, established certain pricing principles. Section 5.2.1 of the PMD states that prices should be set so as to generate an expected revenue that it is sufficient to meet the efficient long-run costs of providing the prescribed services, including a return on assets (appropriately defined and valued) commensurate with the risks involved.¹⁷⁶ The Commission also noted in the PMD with respect to this principle that in 1996 the Victorian government set the value of the Port Phillip shipping channel assets existing at that time as zero (for regulatory purposes).¹⁷⁷

The principle stated in the PMD, noted above, is consistent with the principle in clause 4.2(c) of the CIRA indicating that port authorities should “seek a commercial return while not exploiting monopoly powers”.

PoMC’s 2007-08 Annual Report indicates that in June 2008 it had a temporary exemption from applying fair value to shipping channels. If the Victorian government decides to withdraw that temporary exemption a revaluation of shipping channel assets may be necessary.

10.2 Stakeholder views

PoPL maintained that asset revaluations are a legitimate basis for raising prices especially when based on increases in the replacement cost of port assets.

In its submission to the Draft Report, SAL stated that it “fully agrees with [the Commission’s] conclusion” that asset valuation based on future earnings would introduce circularity into the asset valuation process, and that market power could allow a firm to use asset values to capitalise monopoly rents. SAL stated that it “supports the approach which is recommended in [the Draft Report] to be adopted by the Commission determining a ‘commercial rate of return’.”

10.3 Asset valuation in regulatory frameworks

10.3.1 Economic principles

The regulatory role of formally determining an asset valuation arises primarily in the context of price cap regulation, which is generally reserved for monopoly markets where market participants have substantial market power.

¹⁷⁶ Section 8 of the PMD also establishes certain principles for the purpose of determining how the Commission would go about re-determining a regulatory asset base in the event that price controls were reintroduced. These were designed to provide certainty to PoMC, rather than being prescriptive in relation to PoMC’s pricing during the price monitoring period.

¹⁷⁷ As at June 2008 these pre-1996 channel assets represented approximately \$37 million of PoMC’s reported Property Plant and Equipment of \$1,524 million.

Regulation is designed to ensure that prices:

- Encourage outcomes which are efficient in that they involve the lowest possible costs to society. This involves a number of considerations, including signalling the cost of services to users to encourage appropriate usage and investment, appropriate management of risk, incentives for improving performance and (in the regulation of access prices) efficient entry into and exit from up-stream or downstream activities.
- Encourage outcomes that are judged as fair, and
- Use pricing rules that are simple, transparent and avoid excessive regulatory burdens.

Baumol and Willig¹⁷⁸ identified the following key principles of efficient pricing in utility industries in the presence of economies of scale or scope, equivalent to the constraints placed on firms by contestable markets:

- No price, or set of prices, should exceed the stand-alone costs of providing the service or services, where stand-alone costs are determined as the costs that an efficient competitor would incur in providing just that service or group of services.
- No price, or set of prices, should be less than the incremental (or avoidable) costs of providing the service or services, where incremental costs are the additional costs incurred by the monopolist in providing just that service or group of services. That is, the costs that would be avoided if the service was not provided.

These principles have been widely adopted in Australia within the context of access to monopoly infrastructure services. The definition of the ceiling is also widely used as a benchmark against which monopoly profits can be assessed. If revenues exceed stand alone costs the infrastructure provider could theoretically be by-passed, with the entire market being captured by a lower-priced competitor.

The building block approach to setting the required revenue for a utility supplier is also well established in Australia as a means of identifying stand-alone or ceiling costs for use in establishing price or revenue caps and one of the difficult issues in applying the building block approach concerns the valuation of assets for the purpose of identifying the appropriate return on and of capital.

Two broad approaches to asset valuation (or a combination of them) have been used by regulators within Australia. These are the Depreciated Optimised Replacement Cost valuation method (**DORC**) and an approach sometimes referred to as the “Line-in-the-Sand” approach.

10.3.2 DORC

A DORC asset value provides a measure of the cost of reproducing an asset with the same service potential, and is therefore a measure of the efficient investment costs that an efficient competitor would incur in providing that service or group of

¹⁷⁸ William J. Baumol, John C. Panzar, & Robert D. Willig (1982) ‘Contestable Markets and the Theory of Industry Structure’

services. It is therefore consistent with the stand alone cost concept described above.

Under one approach, at each price review the DORC valuation is reassessed. Consistent with a contestable market, the benefits of technological improvements are passed through into prices to customers through their impact on the optimised replacement cost of the assets. Likewise assets which become stranded by changes in demand are removed from the asset base as part of the optimisation process. In practice, of course, utility infrastructure services are not generally contestable. Nonetheless, DORC provides a useful theoretical benchmark for regulators in assessing reasonable returns.

A DORC valuation can be subject to considerable judgement as a result of the optimisation process. For this reason, some regulators have used net (or gross) replacement cost instead of the DORC. A replacement cost approach will pass through technological changes into prices, but will retain stranded assets in the pricing base.

10.3.3 Line-in-the-Sand

For some infrastructure industries however, a DORC valuation can imply prices far above those actually achieved by the service supplier. In industries such as rail, this can be because the price ceiling above which the incumbent faces by-pass is in fact defined by an alternative technology (e.g. road). In industries such as water, it may be that the decision to build was based on considerations other than economic use, rendering the benchmark of a potential new entrant irrelevant.

As a consequence regulators have often used an alternative basis of asset valuation, one that is intended to reflect economic value rather than replacement cost. Sometimes termed a “line-in-the sand”, it sets a pragmatic opening value on the assets for price regulation purposes. The regulatory asset base (**RAB**) is then “rolled forward” over time by adding capital expenditure, deducting regulatory depreciation and adjusting for inflation.

This method is most appropriate where past expenditures are sunk and are largely irrelevant for efficient decisions regarding usage and future investment. Accordingly, the value attributed to the existing businesses is in essence a cost allocation process driven by questions of equity and acceptability to the stakeholders involved rather than efficiency *per se*.

The roll forward rules are designed to provide appropriate incentives for investment. They are intended to ensure that all new investment is fully remunerated at the appropriate cost of capital. However the initial value is typically “set in stone” to avoid moral hazard and circularity problems. Prices may be more closely related to marginal costs (i.e. the floor of the efficient price range mentioned above) if the “line-in-the-sand” asset valuation is low relative to DORC.

10.3.4 Rolled forward DORC

In recent years the ACCC has expressed a preference for combining the two approaches above, namely to set regulatory asset value equal to DORC initially,

and then roll DORC forward by adding capital expenditure less depreciation and disposals and adjusting for inflation.

The ACCC originally committed itself to undertaking DORC valuations in a consistent manner, with assets periodically revalued¹⁷⁹. However, following its 2003 decision on the access arrangement for the Moomba to Sydney Pipeline System, the ACCC reversed its view that the RAB should be periodically revalued on a DORC basis.¹⁸⁰ The ACCC considered that periodic revaluation of the RAB could lead to significant variations in the value of sunk assets due to differences between asset replacement costs and historic costs. In these circumstances, the ACCC expressed concern that revaluations could lead to unpredictable revenues and prices, and the prospect of windfall gains or losses.

The ACCC's decision was subsequently appealed to the Australian Competition Tribunal¹⁸¹ and then the Full Court of the Federal Court¹⁸², which found that the ACCC had erred in setting aside DORC valuations. Nonetheless, the ACCC has repeated its view that revaluation should not normally be allowed under a DORC framework in the context of its final decision on ARTC's Access Undertaking for the Interstate Rail Network¹⁸³:

The ACCC strongly believes that revaluation should not normally be allowed under a DORC framework because periodic revaluation:

- o *may not be necessary for the regulated firm to be fairly compensated over the life of its assets;*
- o *may create unnecessary uncertainty for regulated firms and the users of regulated services;*
- o *may encourage gaming of the regulator on revaluation estimates; and*
- o *increases ongoing regulatory costs.*

10.3.5 Relationship between accounts and regulatory values

Under existing regulatory practice, there is not necessarily a direct relationship between asset valuations recorded in the annual accounts and regulatory asset values, although there is often a degree of consistency in the concepts involved. Thus under Accounting Standard AASB 116, the fair value used to record asset value in the accounts may comprise depreciated replacement cost - but not

¹⁷⁹ ACCC, Draft Statement of Principles for the Regulation of Transmission Revenues, 1999.

¹⁸⁰ ACCC, Statement of principles for the regulation of electricity transmission revenues – background paper, 2004, p.vii.

¹⁸¹ Application by East Australian Pipeline Limited [2004] ACompT 8.

¹⁸² *East Australian Pipeline Pty Limited v Australian Competition and Consumer Commission* [2007] HCA 44.

¹⁸³ ACCC, July 2008, Final Decision, Australian Rail Track Corporation Access Undertaking – Interstate Rail Network, p143

necessarily optimised depreciated replacement cost. Where assets are “impaired” such that the discounted sum of expected future earnings are significantly less than replacement cost, then Accounting Standard AASB 136 requires that the assets should be written down to a recoverable amount value. The valuation of assets based on the recoverable amount from continued operation of the assets should approximate the regulatory asset value, provided that the assumption used to forecast future revenues and operating costs for price setting purposes are reasonably accurate.

In a number of regulated industries, regulatory accounts may be required which dictate the basis of valuation to be used. However, these need not correspond the asset valuation used in the building block revenue requirement to set prices. For example, the Regulatory Accounting Guideline 1 issued by OFWAT for the UK water industry requires that assets in the regulatory accounts be recorded at depreciated Modern Equivalent Asset (MEA) values – which are analogous to DORC. MEA values are significantly above the regulatory asset value on which a return on capital is allowed, and the regulatory asset value is recorded separately in a note to the accounts.

10.3.6 Asset valuation within a price monitoring regime – airport services

The PC has considered issues related to the valuation of assets within the context of price monitoring regimes in its most recent (2006) review of the price regulation of airport services. The context of the PC’s consideration was the principle that prices for airport services “should allow a return on appropriately defined and valued) assets (including land) commensurate with the regulatory and commercial risks involved”. A similar principle applies to PoMC.

The PC noted that in privatising its airport holdings the Government did not put an explicit value on the assets, which were sold as a package. Some of the airports were privatised with a price cap regime in force, with others subject to a monitoring regime at that time.

Following privatisation, Melbourne Airport revalued its land and physical assets, and most other airports followed suit. The question addressed by the PC was whether higher aeronautical charges should be based on these asset revaluations.

The PC came out strongly against using asset revaluations as a justification for higher airport charges on an ongoing basis. It contended that, from an efficiency perspective, the case for sanctioning higher charges based on changes in the DORC of above ground assets, or the value of land in alternative uses, was weak. The PC argued that the efficiency benefits ensuing from asset revaluations with a flow through to aeronautical charges will generally be small, and made the following observations:

- Airport assets are effectively sunk and, under the terms of the leases, land cannot be redeployed into higher value uses outside of the airport precincts. This means that continued provision of services is unlikely to be put at risk if higher charges based on asset revaluations are not sanctioned.

- Future investment at the airports is also unlikely to be discouraged — provided it is clear that, for monitoring purposes, new investments will be incorporated into the monitored asset base at their “acquisition” values.

The PC noted that:

A redistribution of income from airlines and air travellers to airports resulting from asset revaluations and sanctioned flow through to charges would not be helpful in engendering public confidence in a light handed regulatory approach¹⁸⁴

In order to determine asset valuations for the purpose of price monitoring, the PC concluded an element of pragmatism was required. The PC adopted the “line-in-the-sand” approach, and recommended that for price monitoring purposes the initial asset values should be the value of tangible (non-current) aeronautical assets reported to the ACCC as at 30 June 2005. These initial values were to be rolled forward for by adding capital expenditure and deducting depreciation and disposals for the purpose of reporting regulatory returns to the ACCC. The PC found that rates of return at Australian airports were generally lower than the ACCC’s benchmark. While the “booked” revaluations would have served to depress recorded returns, the PC recognised that returns would increase as capacity utilisation improved.¹⁸⁵

10.4 Concept of profit

The Commission’s monitoring role involves assessing whether there has been exercise of substantial market power, using the key criteria of commercial rate of return. Therefore it is necessary to define the appropriate concept of profit used to define the rate of return.

As discussed, the DORC asset valuation approach and the building block revenue requirement define the ceiling revenues (and profit) which an infrastructure provider would be able to earn in a hypothetical perfectly competitive market.

As articulated in the Byatt Report, competitors would not enter a market in which technical progress was expected to reduce the real cost of capital goods unless they expected to be able to earn a normal profit after maintaining their real financial capital¹⁸⁶. Thus returns comprise not only revenue and profits but also the (unrealised) gains and losses from holding long-lived assets.

Financial Capital Maintenance (**FCM**) seeks to maintain the real capital of a business in terms of the purchasing power of the original investment. It corresponds to the real terms system of accounting advocated in some of the

¹⁸⁴ PC 2006, p.72

¹⁸⁵ PC, 2006, p.20

¹⁸⁶ HM Treasury (1986) “Accounting for Economic Costs and Changing Prices, a report for HM Treasury by an advisory group”, London HMSO, p21

academic accounting literature¹⁸⁷, and recognises the effect of general and specific price changes. Profit is determined only after the gains or losses from holding the company's assets and liabilities have been recognised (whether these are monetary or non-monetary, realised or unrealised). FCM profit taken relative to assets (measured in terms of the value to the business) is then comparable to the cost of capital.

The FCM concept of profit underpins most price regulation approaches within Australia. For example, electricity price regulation as undertaken by the Australian Energy Regulator uses the ACCC's Post Tax Revenue Model. The model incorporates economic depreciation, whereby increases in asset values are offset against depreciation for the purpose of determining the revenue requirement and hence allowed prices.

A similar approach¹⁸⁸ was taken by the Steering Committee on National Performance Monitoring of Government Trading Enterprises¹⁸⁹:

A market based return includes all income of relevance to the providers of the capital. ... the Steering Committee has adopted a measure of financial performance, the Economic Rate of Return (ERR), which better informs about value, as it makes provision for both cash and capital returns. ... The ERR formula given in this paper provides a first cut measure of economic performance by reconstructing information taken from a GTE's financial statements
....

$$ERR = \frac{(EBIT + Da + NIBL + FL + CSO) + (A_c - A_b - NI)}{A_b + (NI/2)}$$

where *EBIT* = earnings after abnormals and extraordinaries, but before interest and tax;

Da = accounting depreciation and amortisation;

NIBL = an adjustment for the implicit interest cost of non-interest bearing liabilities;

FL = an adjustment for interest cost of assets under financial leases (only made if not already included in EBIT);

¹⁸⁷ See for example, G Whittington (1983) "Inflation Accounting: An Introduction to the Debate", Cambridge University Press.

¹⁸⁸ The approach recommended by the Steering Committee on National Performance Monitoring of Government Trading Enterprises, and outlined here, is expressed in nominal terms, whereas the Byatt report cited above expresses similar principles but all in real terms.

¹⁸⁹ Steering Committee on National Performance Monitoring of Government Trading Enterprises (July 1996) 'An Economic Framework for Assessing the Financial Performance of GTEs', pp xvii-xviii

CSO = an adjustment made for the net economic cost of CSOs (if applicable);

A_e = the end of period value of total assets;

A_b = the beginning of period value of total assets;

NI = value of net investments throughout the year.

The concepts of FCM profit and Economic Rate of Return differ from the requirements of the accounting standards with respect to the recognition of gains arising from asset revaluation in the profit and loss account. AASB 116 (sections 39-40) states:

If an asset's carrying amount is increased as a result of a revaluation, the increase shall be credited directly to equity under the heading of revaluation reserve. However, the increase shall be recognised in profit or loss to the extent that it reverses a revaluation decrease of the same asset previously recognised in profit or loss. If an asset's carrying amount is decreased as a result of a revaluation, the decrease shall be recognised in profit or loss. However, the decrease shall be debited directly to equity under the heading of revaluation reserve to the extent of any credit balance existing in the revaluation reserve in respect of that asset.

Thus under the accounting standards, profits from holding gains are recognised only once they are realised. Under FCM accounting, such holding gains are recognised whether or not they are realised – provided the change in asset value flows through into prices.

In the context of nationalised industries, the Byatt Report endorsed valuation principles consistent with the regulatory principles outlined above. Thus the Byatt Report stated¹⁹⁰:

The value of assets to a business means what potential competitors would find it worth paying for them, even if the competition is hypothetical. This will be the net replacement cost of a Modern Equivalent Asset if the asset would be worth replacing, or the recoverable amount if it would not.

Further, in connection with sunk costs the Byatt Report argued that¹⁹¹:

Sunk costs are costs recoverable only by continued use. Special problems are posed by immobile specialised assets, especially those with long lives. Examples are gas, electricity and water distribution and sewerage systems, railway tunnels and permanent way. There are almost never secondhand markets in these assets.

¹⁹⁰ HM Treasury (1986) "Accounting for Economic Costs and Changing Prices, a report for HM Treasury by an advisory group", London HMSO, p6

¹⁹¹ HM Treasury (1986) "Accounting for Economic Costs and Changing Prices, a report for HM Treasury by an advisory group", London HMSO, p27

Because of the difficulty of realising the value of these assets by sale, they also constitute barriers to entry by potential competitors. Nevertheless, in general, assets which represent sunk costs should be valued at their value to the business as if a competitive market existed, ie their net modern equivalent replacement cost, if they are worth replacing, or the recoverable amount if they are not (Section V above).

10.6 Implications for the valuation of port authority assets

The above discussion suggests that the appropriate approach to valuing assets for price monitoring purposes is a matter of judgement, involving equity and efficiency assessments.

Within a regulatory framework for infrastructure businesses possessing substantial market power, the use of methods of asset valuation based on discounted future earnings would introduce circularity into the asset valuation process. Unlike a competitive market, in which market prices are effectively exogenous, a firm with market power has the ability to determine prices, and hence the asset values in such circumstances may be used to capitalise monopoly rents. Therefore the Commission's conclusion is that discounted future earnings should not be used for the purposes of determining asset values in the accounts that will be used by the Commission for monitoring port prices. Where PoMC uses this method of valuation in its statutory accounts, the Commission will require an alternative valuation method to be used for regulatory accounts, on which it will undertake its monitoring of port prices. For example, for post-1996 channel assets the Depreciated Replacement Cost.

The efficiency implications of recognising or not recognising current replacement costs within prices are of key importance. To the extent that assets are sunk, and there are no effectively competitive markets, the efficiency implications are small. The distribution of returns between the infrastructure provider and customers is then a matter of equity. On the other hand, to the extent that there is workable competition, failure to price on the basis of the replacement cost of assets could distort competition and give rise to allocative inefficiencies.

One example of sunk assets is the pre-1996 shipping channel assets. The Victorian government previously determined that for pricing purposes the value of these assets should be set at zero.

The Chief Executive Officer of SAL, Mr Llew Russell, commented in the Commission's public forum:

One issue we didn't raise in our submission ... was the issue of valuation of channels. That's a very old debate. Again, it's very hard to value a channel, certainly, in cost accounting terms, when it can last forever. In fact, once you build a channel you may maintain it but unless you build a new one, in fact, you've got a very difficult issue of having to value it. And

*that's something that people have been struggling with in this country for at least 25 years.*¹⁹²

The comments by SAL echo the views previously expressed by the Industry Commission:

*Methods of valuing specialised port authority fixed assets such as channels and breakwaters are contentious. Because they have very long lives, their replacement cost is likely to be significantly higher than their historic cost.*¹⁹³

In the Commission's view, with respect to the pre-1996 shipping channel assets, it would not now be of practical benefit to reinstate values for pricing purposes, and the "line in the sand" approach to valuation of shipping channel assets for pricing purposes is the most relevant and practical approach under the circumstances. Otherwise, a windfall gain would be generated, but with little practical benefit in terms of cost-effectiveness or competitiveness of PoMC's port infrastructure services. These reasons are similar to those previously quoted from the PC with respect to airports.

In considering the PC's conclusions in relation to airport asset valuation, there are some important practical differences between airports and ports which arguably limits the scope of the application of the PC's observations to ports. Unlike airports, PoMC is a landlord rather than a tenant, however, like the airports there are restrictions through planning schemes which prevent the land being redeployed to any other purpose than port uses.

Considerations of allocative efficiency would also dictate that resources should generally be allocated towards their highest valued use amongst competing purposes. This requires that prices reflect the efficient cost of providing services. If assets will need to be replaced, then there is an argument for recognising revaluations which reflect replacement costs. Otherwise there will be price shocks when long-lived assets are replaced or expanded, as has recently happened in the case of channel deepening. By contrast, if an asset would not be replaced (and the associated service discontinued once the asset has worn out) then there is no such imperative to recognise asset revaluations.

PoMC also stated that where it is required to use the discounted cash-flow method for accounting purpose, it concurs that for valuing channel assets for pricing purposes the "line in the sand" approach is required to avoid the circularity involved. However, PoMC went on to argue that the Commission:

is inconsistent in recommending the "line in the sand" approach for channels and at the same time amending this for the "old" channels (pre 1996) and requiring these be set at zero value. No rationale has been provided to support this.

¹⁹² ESC Hearing, Public Forum – Port Review, Tuesday 3 March 2009, Transcript of Proceedings, p.17.

¹⁹³ Industry Commission 1993, *Port Authority Services and Activities*, Report No. 31, May 1993, AGPS, Canberra, p.128.

However, the Commission does not regard this as an accurate characterisation of its proposed approach. The Commission has not proposed a line-in-the-sand approach to post-1996 channel assets. It has indicated that those assets should not be valued on a discounted cash flow basis for pricing purposes (leaving open the application of the depreciated replacement cost method for those assets). In regard to the pre-1996 channel assets the Commission has proposed a line-in-the-sand method. The line-in-the-sand is their present valuation of zero. The rationale for this approach has been presented above.

Moreover, the Commission believes that a proper application of DCF principles would retain the value of the pre-1996 channel assets at zero. This is because channel access pricing is currently based on those channels having zero value.

PoMC also stated:

from the completion of the CDP in late 2009, PoMC will have a channel that is no longer distinguishable as the old channel and the new channel; they will be the same enhanced asset. To continue to treat the old asset and the new asset separately for pricing purposes will contradict with the treatment of the channels for accounting purposes and for physical asset maintenance purposes.

The Commission understands that valuing the pre-1996 channel assets on a depreciated replacement cost basis may be problematic given the likely insufficient information on the original underwater land conditions before dredging originally began, and on the timing and scope of works in the distant past. On the other hand the underwater ground conditions in 1996 (including the then-existing channels) are well known. The proposed line in the sand implies that the pre-1996 assets be excluded from any replacement cost valuations, which should simplify future depreciated replacement cost valuations given this lack of information.

10.7 Conclusions

PoMC's approach to valuing its assets is broadly similar to the DORC approach often used by Australian regulators, albeit the period revaluation of sunk assets is not always used by regulators, for example the ACCC.

If asset revaluations are to be reflected in the asset base then it is appropriate for the Commission to also have regard to these gains as part of income for the purposes of making its assessments in regard to whether there has been any exercise of substantial market power. That is, to use the concepts of financial capital maintenance and the economic rate of return, which include capital gains and losses. These concepts of income are considered to be the most appropriate basis for comparison against the opportunity cost of capital or WACC.

Approaches to valuing assets based on discounted future cash flows should not be used for the purpose of assessing rates of return for entities with market power due to the circularity involved. Where PoMC uses this method of valuation in its statutory accounts, the Commission will require an alternative valuation method to be used for regulatory accounts, on which it will undertake its monitoring of port prices.

The Commission's recommendation is the "line in the sand" method should be used for valuing the pre-1996 shipping channel assets, and that the value of those assets should remain equal to zero for pricing purposes. Whilst PoMC has argued that this is inconsistent with the approach adopted for valuing other assets, the Commission maintains its view that to do otherwise would generate a windfall gain for PoMC without any practical benefit in terms of cost-effectiveness or competitiveness of PoMC's port infrastructure services.

PoMC should set its prices to ensure that they are smoothed over time, and not excessively disturbed by factors which may have influence over the valuation of certain assets in the short-term, such as exchange rate or interest rate movements

PoMC's PPS should adequately address how it proposes to deal with returns over time from long-lived assets such as the CDP, which may have low returns in the early phases of the asset life and higher returns further in the future.

11 | COMPLIANCE OF RECOMMENDED FRAMEWORK WITH THE CIRA

The CIRA imposes several obligations upon Victoria in relation to the provision of port infrastructure facilities and related services under clause 2 (simpler and consistent regulation of significant infrastructure) and clause 4 (port competition and regulation). The purpose of this chapter is to briefly assess the proposed regulatory framework against the principles of the CIRA.

11.1 Simpler and nationally consistent access framework

Clause 2 of the CIRA requires third party access regimes to conform to certain principles with the aim of promoting greater simplicity and national consistency. Price monitoring should be considered, where this would improve the level of price transparency, as a first step where price regulation may be required, or when scaling back from more intrusive regulation. In the first instance and 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 commercially agreed between the operator of the facility and the person seeking access.

The Commission undertook a review of ports regulation in 2004 which recommended replacing price caps with lighter handed price monitoring of Victorian ports, with the additional requirement that the PoMC be required to prepare a PPS.¹⁹⁴ This recommendation was accepted by the Victorian Government, consistent with clause 2.3 of the CIRA.

The recommendation that the Channel Access Regime should apply to the Shared Channels is consistent with the CIRA principles. Further the form of the Channel Access Regime, ie, negotiate/arbitrate framework, combined with the continued application of the price monitoring framework to those channels alongside the access regime, is consistent with these CIRA principles.

11.2 When economic regulation can be applied to ports

Clause 4.1(a) of the CIRA indicates that ports should only be subject to economic regulation where a clear need exists to prevent the misuse of market power or to promote competition in upstream or downstream markets.

¹⁹⁴ As previously discussed, the PPS is a public document that specifies the economic rationale and principles associated with a port operator's pricing strategy and approach.

The Commission's 2003 report *Inquiry into Port Channel Access in Victoria – Final Report* and 2004 review of port regulation satisfied Victoria's obligation under clause 4.1(a) of the CIRA.¹⁹⁵

The current Review also fulfils Victoria's obligation under clause 4.1(a) of the CIRA. Section 53 of the PSA requires that the continued application of price regulation to port services must be reviewed every five years. Section 62 of the PSA requires that the continued application of the Channel Access Regime to shipping channels that have been declared to be significant infrastructure facilities should also be reviewed every five years. These legislative provisions ensure that the application of economic regulation to port services will be periodically reviewed to determine whether a clear need for it continues to exist. This is all in conformity with CIRA principle 4.1(a).

In carrying out this Review, the Commission has given primacy to the principle that economic regulation should only apply to those ports and to those sub-markets of port infrastructure services where the case for economic regulation (ie, to promote competition in related markets or preventing the misuse of market power) has been clearly established. This is consistent with the Commission's understanding of CIRA principle 4.1(a).

PoMC in its submission argues that the Commission has not properly taken into consideration the requirements of CIRA and in particular the underlying intent of clause 4.1(a). The basis for PoMC's statement is that because port prices are a small component of total costs they will not materially affect up and downstream competition.

The Commission disagrees with PoMC's reasoning. Clause 4.1(a) of CIRA states that:

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;

Given that the Commission has demonstrated that PoMC has substantial market power in a number of sub-markets, it is appropriate to subject PoMC to economic regulation to prevent the misuse of market power.

While port prices only represent a small component of total costs, this does not suggest that regulation is unnecessary and would run counter to the intent of clause 4.1(a). In fact clause 4.1(b) recognises that regulatory oversight of prices may be warranted (and this would be despite the fact that port prices are only a small component of total costs) and recommends that the introduction of price monitoring should be considered.

It is therefore apparent that the Commission is adhering to the CIRA commitments and the intent of clause 4.1(a).

¹⁹⁵ Port Planning Review 2007, terms of reference

11.3 Facilitation of commercial negotiation and competition

Victoria's compliance under clauses 4.1(b)(i) and 4.1(b)(ii) has been supported by the Commission's price monitoring framework. Specifically this framework has sought to facilitate commercial negotiation and competition by:

- ensuring that port users have adequate information for the purpose of negotiating access to prescribed services by imposing the obligation on port operators to publish reference tariffs, and in the case of PoMC, its PPS, as well as the Commission's monitoring reports;
- not constraining regulated ports from negotiating terms and conditions with users that differ from the reference tariff schedule;
- providing port industry participants with information about the regulatory framework; and
- wherever relevant and practicable, encouraging port users and port operators to seek to resolve matters of dispute through commercial negotiation. For example, the complaint handling process gives primacy to this principle.

Victoria's obligations under clauses 4.1(b)(i) and 4.1(b)(ii) have also been supported by the PoMC's PPS. Under the PPS, PoMC has committed itself to the following: PoMC will seek to provide its services, including Prescribed Services [in the PSA], under negotiated commercial agreements. In doing so, PoMC will meet with its customers on a continuing basis to discuss opportunities for mutually beneficial service supply arrangements. Terms and conditions for the supply of services under such contracts will be confidential and will be reported to the Commission, in support of its price monitoring function, on that basis.¹⁹⁶

11.4 Independent economic regulation

Clause 4.1(b)(iii) of the CIRA requires that where regulatory oversight of prices is warranted, it should be undertaken by an independent body which publishes relevant information. Victoria is compliant with this requirement because Part 3 of the PSA provides for independent economic regulation of prices for, or in connection with, Victorian ports services by the Commission. The Commission regulates the ports industry in accordance with the ESC Act, the PSA, and the Commission's *Charter of Consultation and Regulatory Practice*.

11.5 Certification of access regimes

In relation to clause 4.1(b)(iv) Victoria has committed itself to applying to the NCC for certification of its shipping Channel Access Regime as an effective state-based access regime by 2010, and has indicated an intention to do so in 2009, if needed.¹⁹⁷ The retention of the existing Channel Access Regime is a key issue

¹⁹⁶ Port of Melbourne Corporation: Pricing Policy Statement, 31 May 2005, p.10

¹⁹⁷ 'COAG National Reform Agenda: Competition Reform April 2007', p.43

being considered in this Review. The Commission has examined whether this regime would be considered an effective state-based access regime – as set out in Appendix C.

11.6 Competition in port services

Clause 4.2 of the CIRA states that the parties agree to allow competition in port services unless a transparent public review indicates the benefits of restricting competition outweigh the costs. Clause 4.2(a) of the CIRA also states that port planning should facilitate competition.

These requirements of the CIRA have been met as follows:

- this Review has addressed some issues with respect to competition in port services. The most significant of these has been with respect to access to the Shared Channels to facilitate competition between the port services provided by the port of Geelong and substitute services provided at the port of Melbourne. Other competition issues addressed in this Review relevant to this principle include the provision of pilotage services and access to common user terminals.
- this Review has based its findings in relation to both the application and the form of economic regulation to port services on the principles that competition should be facilitated; market solutions are to be preferred wherever it is effective to do so; economic regulation should be proportionate to the market power issues it seeks to address; and short and long term interests of users need to be balanced.
- matters related to port planning were examined by the Commission's 2007 report *Review of Port Planning: Final Report*. This report identified potential entry constraints in planning frameworks, but concluded they were immaterial. The report also recommended certain statutory amendments to clarify port operators' responsibilities with respect to facilitating competition in port services. A number of recommendations of that review were accepted by the Victorian Government in its *Freight Futures* policy.
- issues relating to competition between port service providers at the land-side interface of the port were also addressed as part of the 2007 *Review of Port Planning*.

11.7 Competitive neutrality of access

Competitive neutrality of port access (clause 4.2(b) of the CIRA) is addressed by two elements of the PMD:

- the pricing principles applying to the PoMC which require that the PoMC should not discriminate between users of equivalent ("like for like") services where those users compete in a related market, other than on the basis of costs of supply; and
- services provided by means of the Shared Channels must conform to specific pricing principles relevant to competitive neutrality, including:

- (c) *the cost of improvements to a Shared Channel that can be demonstrated to benefit only the users of one port should be borne by users of that port*
- (d) *except insofar as the application of paragraph (c) requires, charges for use of a Shared Channel should not discriminate between users on the basis of port or berth that will be used by the vessel, except on the basis of cost.*

These principles are also reproduced in PoMC's PPS which commits PoMC to applying the principles of competitive neutrality in its pricing arrangements.

Part 3A of the ESC Act also contains pricing principles, consistent with the general pricing principles applying to PoMC. The Commission will also be required to have regard to the pricing principles in Part 3A of the ESC Act if it is called upon to resolve a channel access dispute.

11.8 Commercial charters of government owned port corporations

Clause 4.2(c) of the CIRA requires that commercial charters for port authorities should include guidance to seek a commercial return while not exploiting monopoly powers. This issue has been addressed in this Review with respect to PoMC and VRCA, and recommendations have been made to clarify the application of this principle in the charters of the port corporations.

The pricing principles in the PMD are consistent with this principle, as they require that PoMC's prices:

- (a) *should generate expected revenue that is sufficient to meet the expected efficient long-run costs of providing the Prescribed Services, including a return on assets (appropriately defined and valued) commensurate with the risks involved;*
- (b) *should not provide a sustained level of revenue that is significantly above that which would be or would have been sufficient to meet the efficient long-run costs of providing the Prescribed Services, including a return on assets (appropriately defined and valued) commensurate with the risks involved.¹⁹⁸*

The channel-specific pricing principles also include the principle that:

charges for use of a Shared Channel should generate expected revenue equal to the specific costs of providing the Shared

¹⁹⁸Ibid., p.13

*Channel and a reasonable allocation of Common Costs (including an appropriate return on capital).*¹⁹⁹

11.9 Conflicts of interest as a result of vertically integrated structures

Clause 4.2(d) of the CIRA requires that any conflicts of interest between port owners, operators or service providers as a result of vertically integrated structures should be addressed on a case by case basis with a view to facilitating competition.

In regards to the market for port services in Victoria, the principal conflict of interest associated with a vertically integrated ownership structure is PoMC's ownership and operation of the Shared Channels at the entrance to Port Phillip Bay²⁰⁰ which must also be used by ships using the port of Geelong.

The Commission's recommendations in this Review with respect to applying the Channel Access Regime in the PSA to these shipping channels, and continuing price monitoring, are designed to satisfactorily address this conflict of interest and ensure competition between the ports of Melbourne and Geelong is facilitated.

¹⁹⁹ Ibid., p.13

²⁰⁰ As previously discussed, the port of Geelong is only accessible via the Shared Channels.

This chapter summarises the Commission's recommendations under each of the main questions the Review must address.

12.1 Section 53 requirements

Section 53 of the PSA requires the Commission to undertake a review every five years and make recommendations as to whether or not the prescribed services should continue to be subject to price regulation, and if so, the form of that price regulation.

12.1.1 Whether or not prescribed services are to be subject to price regulation

The Commission's recommendation is that prescribed services should be limited to:

- *the provision of channels for use by shipping in the port of Melbourne waters, including the Shared Channels used by ships bound either for the port of Melbourne or for the port of Geelong*
- *the provision of channels for use by shipping in the port of Hastings waters, only in respect of vessels carrying container or motor vehicle cargoes*
- *the provision of berths, buoys or dolphins in connection with the berthing of vessels carrying container or motor vehicle cargoes in the ports of Melbourne or Hastings, and*
- *the provision of short term storage or cargo marshalling facilities in connection with the loading or unloading of vessels carrying container or motor vehicle cargoes at berths, buoys or dolphins in the ports of Melbourne or Hastings.*

The effect of this recommendation is to deregulate the provision of berth services for non-containerised and non-motor vehicle cargoes.

However, the Commission recommends that the next review of ports regulation under section 53 of the PSA should also include consideration of whether regulation is required for non-containerised and non-motor vehicle cargoes.

12.1.2 The form of price regulation

The Commission's recommendation is that the form of price regulation be price monitoring.

The recommended price monitoring framework is similar to the present framework, with the key proposed difference being the removal of the Commission's powers to initiate reviews and intervene by imposing heavy handed regulation within the regulatory period currently in section 7 of the Price Monitoring Determination. The Commission's ability to bring concerns to the attention of the Government, and for the Commission to undertake a review under Part 5 of the ESC Act, would remain.

Amendments to the Port Services Act should ensure that the Commission cannot introduce more heavy handed regulation without the approval of the Minister administering the PSA.

The main elements would be as follows:

- to maintain a published set of reference tariffs in relation to the monitored services
- to comply with the established pricing principles
- to publish a PPS, although with greater flexibility with respect to changing this from time to time, if necessary, and subject to the required consultation with users and the Commission
- to provide information to the Commission to support its monitoring role
- a credible threat of the application of more prescriptive regulation if market power is misused, albeit confined to scheduled reviews or to references to the Commission from the Government
- a complaint handling process designed to ensure that ports have the opportunity in the first instance to address the matters raised, and only as a last resort, and if there are *prima facie* concerns about significant market power misuse, would the Commission investigate

Form of regulation – asset valuation & concept of profit

If asset revaluations are to be reflected in PoMC's asset base then the Commission's recommendations are that:

- ***it is appropriate for the Commission to also have regard to gains from revaluation as part of income for the purposes of making its assessments in regard to whether there has been any exercise of substantial market power. That is, to use the concepts of financial capital maintenance and the economic rate of return, which include capital gains and losses. These concepts of income are considered to be the most appropriate basis for comparison against the opportunity cost of capital or WACC.***
- ***approaches to valuing assets based on discounted future cash flows should not be used for the purpose of assessing rates of return for entities with market power due to the circularity involved. Where PoMC uses this method of valuation in its statutory accounts, the Commission will require an alternative valuation method to be used for regulatory accounts, on which it will undertake its monitoring of port prices.***
- ***the line in the sand method be used for valuing the pre-1996 shipping channel assets, and that the value of those assets should remain equal to zero for pricing purposes.***

- ***PoMC should set its prices to ensure that they are smoothed over time, and not excessively disturbed by factors which may have influence over the valuation of certain assets in the short-term, such as exchange rate or interest rate movements.***
- ***PoMC's PPS should adequately address how it proposes to deal with returns over time from long-lived assets such as the CDP, which may have low returns in the early phases of the asset life and higher returns further in the future.***

12.2 Victorian Channels Access Regime

The Commission is to assess whether the Victorian Channels Access Regime is necessary in order to ensure competition or competitive tension in upstream and/or downstream markets. If it considers there is a net benefit from continuing the Victorian Channels Access Regime, the Commission should assess whether the regime in its current form is able to be certified by the National Competition Council, or if not, assess what changes would render it able to be certified.

12.2.1 Whether the Victorian Channels Access Regime is necessary

The Commission's recommendation is that the Victorian Channels Access Regime with application to the shared channels used by ships visiting both the ports of Geelong and Melbourne is necessary in order to ensure competition or competitive tension in upstream and/or downstream markets. The Commission's recommendation is that the shared channels be declared.

The Commission's recommendation is that the Shared Channels also be subject to the price monitoring framework in order to aid transparency through the requirement to publish prices and to provide greater regulatory certainty with respect to the shared channel pricing principles.

12.2.2 Whether the Victorian Channels Access Regime is effective

The Commission is of the view that the channels are significant infrastructure facilities, and so the clause 6(3) requirement is satisfied.

The Commission's assessment is that the Victorian Channels Access Regime likely satisfies all of the requirements of the CPA and so is capable of certification as a state-based access regime in its current form.

12.3 Other matters relating to clauses 4.1 & 4.2 of the CIRA

The Commission must have regard to the principles outlined in clauses 4.1 and 4.2 of the CIRA. The price monitoring framework, and in particular the pricing principles, provide PoMC with appropriate guidance in relation to the setting of prescribed prices consistent with seeking a commercial return while not exploiting monopoly powers, as required by clause 4.2(c) of the CIRA.

APPENDIX A | TERMS OF REFERENCE

SECTION 53 OF THE PORT SERVICES ACT 1995

- (2) The Commission must conduct a further inquiry under the *Essential Services Commission Act 2001* before the expiry of each subsequent period of 5 years commencing from the date that the last inquiry [i.e. in this case the 2004 inquiry] commenced to make a recommendation to the Minister administering the *Essential Services Commission Act 2001* as to whether or not prescribed services are to be subject to price regulation and the form of that price regulation.
- (3) Subsection (2) does not apply to a prescribed service that, as a result of a previous inquiry under this section, has ceased to be subject to price regulation.
- (4) The final report on an inquiry must report on transitional issues in relation to any change in the recommended form of price regulation.
- (5) An inquiry under this section must be conducted in accordance with Part 5 of the *Essential Services Commission Act 2001* but section 40 does not apply in respect of that inquiry.

STATUTORY REVIEW OF PORT PRICING REGULATION: ADDITIONAL MATTERS

Under Section 53 of the Port Services Act 1995, the Commission is required to inquire into the regulation of pricing at Victorian ports every five years. The next report is due in June 2009. In addition to the matters set out in Section 53 of that Act, under the powers vested in me by Section 41 of the *Essential Services Commission Act 2001* (the Act), I am referring related matters to the Commission for inclusion in that enquiry.

As required under Section 41 (1A) of the Act, I have consulted with the Minister of Roads and Ports on this matter.

In addition to the statutory requirement to report on whether or not prescribed port services should be subject to price regulation and, if so, the form of that regulation, there are some obligations arising from the Council of Australia Governments (CoAG) Agreements that should be considered in the context of this Review.

As part of Victoria's obligations arising from the Competition and Infrastructure Reform Agreement (CIRA), signed at the CoAG meeting of the 10 February 2006, Victoria agreed to review the economic and planning regulation of significant ports to ensure the regulation is consistent with the principles agreed in the CIRA. I would like to remind the Commission of the statement of principles relating to port

regulation as agreed in clauses 4.1 and 4.2 of the CIRA. I have attached a copy of these clauses for your information.

Clause 2.9 of the CIRA requires that all parties to the CIRA submit their state-based third party access regimes to the National Competition Council (NCC) for certification by the end of 2010. Victoria indicated it intended to submit the Victorian Channels Access Regime to the NCC in 2009. Each regime will need to be reviewed prior to submission to the NCC.

It would be preferable for the Commission to review the Victorian Channels Access Regime at the same time as it undertakes the ports pricing review.

Therefore, in addition to inquiring into the matters outlined in Section 53 of the Port Services Act, I am referring the following additional matters to the Commission:

- in making recommendations about the regulation of Victorian ports, including pricing and access regulation the Commission should have regard to the principles outlined in clauses 4.1 and 4.2 of the CIRA
- the Commission is to assess whether the Victorian Channels Access Regime is necessary in order to ensure competition or competitive tension in upstream and/or downstream markets
- if it considers there is a net benefit from continuing the Victorian Channels Access Regime, the Commission should assess whether the regime in its current form is able to be certified by the NCC, or if not, assess what changes would render it able to be certified, and
- the Commission should take particular note of recent amendments to the Essential Services Commission Act, in particular, the insertion of Part 3A and the implications of this for the design and assessment of access regimes.

TIM HOLDING MP

Minister for Finance, WorkCover
and the Transport Accident Commission

COMPETITION AND INFRASTRUCTURE REFORM AGREEMENT

Port competition and regulation

4.1 The Parties agree that:

- a. 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; and
- b. where a Party decides that economic regulation of significant ports is warranted, it should conform to a consistent national approach based on the following principles:
 - i. 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 of the facility and the person seeking access;

- ii. where possible, commercial outcomes should be promoted by establishing competitive market frameworks that allow competition in and entry to port and related infrastructure services, including stevedoring, in preference to economic regulation;
 - iii. where regulatory oversight of prices is warranted pursuant to clause 2.3, this should be undertaken by an independent body which publishes relevant information; and
 - iv. 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.
- 4.2 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, including through the implementation of the following:
- a. port planning should, consistent with the efficient use of port infrastructure, facilitate the entry of new suppliers of port and related infrastructure services;
 - b. where third party access to port facilities is provided, that access should be provided on a competitively neutral basis;
 - c. Commercial charters for port authorities should include guidance to seek a commercial return while not exploiting monopoly powers; and
 - d. 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.

- 6.(1) Subject to subclause (2), the Commonwealth will put forward legislation to establish a regime for third party access to services provided by means of significant infrastructure facilities where:
- (a) it would not be economically feasible to duplicate the facility;
 - (b) access to the service is necessary in order to permit effective competition in a downstream or upstream market;
 - (c) the facility is of national significance having regard to the size of the facility, its importance to constitutional trade or commerce or its importance to the national economy; and
 - (d) the safe use of the facility by the person seeking access can be ensured at an economically feasible cost and, if there is a safety requirement, appropriate regulatory arrangements exist.
- (2) The regime to be established by Commonwealth legislation is not intended to cover a service provided by means of a facility where the State or Territory Party in whose jurisdiction the facility is situated has in place an access regime which covers the facility and conforms to the principles set out in this clause unless:
- (a) the Council determines that the regime is ineffective having regard to the influence of the facility beyond the jurisdictional boundary of the State or Territory; or
 - (b) substantial difficulties arise from the facility being situated in more than one jurisdiction.
- (3) For a State or Territory access regime to conform to the principles set out in this clause, it should:
- (a) apply to services provided by means of significant infrastructure facilities where:
 - (i) it would not be economically feasible to duplicate the facility;
 - (ii) access to the service is necessary in order to permit effective competition in a downstream or upstream market; and
 - (iii) the safe use of the facility by the person seeking access can be ensured at an economically feasible cost and, if there is a safety requirement, appropriate regulatory arrangements exist; and
 - (b) reasonably incorporate each of the principles referred to in subclause (4) and (except for an access regime for: electricity or gas that is

developed in accordance with the Australian Energy Market Agreement; or the Tarcoola to Darwin railway) subclause (5).

There may be a range of approaches available to a State or Territory Party to incorporate each principle. Provided the approach adopted in a State or Territory access regime represents a reasonable approach to the incorporation of a principle in subclause (4) or (5), the regime can be taken to have reasonably incorporated that principle for the purposes of paragraph (b).

- (3A) In assessing whether a State or Territory access regime is an effective access regime under the Trade Practices Act 1974, the assessing body:
- (a) should, as required by the Trade Practices Act 1974, and subject to section 44DA, not consider any matters other than the relevant principles in this Agreement. Matters which should not be considered include the outcome of any arbitration, or any decision, made under the access regime; and
 - (b) should recognise that, as provided by subsection 44DA(2) of the Trade Practices Act 1974, an access regime may contain other matters that are not inconsistent with the relevant principles in this Agreement.
- (4) A State or Territory access regime should incorporate the following principles:
- (a) Wherever possible third party access to a service provided by means of a facility should be on the basis of terms and conditions agreed between the owner of the facility and the person seeking access.
 - (b) Where such agreement cannot be reached, Governments should establish a right for persons to negotiate access to a service provided by means of a facility.
 - (c) Any right to negotiate access should provide for an enforcement process.
 - (d) Any right to negotiate access should include a date after which the right would lapse unless reviewed and subsequently extended; however, existing contractual rights and obligations should not be automatically revoked.
 - (e) The owner of a facility that is used to provide a service should use all reasonable endeavours to accommodate the requirements of persons seeking access.
 - (f) Access to a service for persons seeking access need not be on exactly the same terms and conditions.
 - (g) Where the owner and a person seeking access cannot agree on terms and conditions for access to the service, they should be required to appoint and fund an independent body to resolve the dispute, if they have not already done so.

- (h) The decisions of the dispute resolution body should bind the parties; however, rights of appeal under existing legislative provisions should be preserved.
- (i) In deciding on the terms and conditions for access, the dispute resolution body should take into account:
 - (i) the owner's legitimate business interests and investment in the facility;
 - (ii) the costs to the owner of providing access, including any costs of extending the facility but not costs associated with losses arising from increased competition in upstream or downstream markets;
 - (iii) the economic value to the owner of any additional investment that the person seeking access or the owner has agreed to undertake;
 - (iv) the interests of all persons holding contracts for use of the facility;
 - (v) firm and binding contractual obligations of the owner or other persons (or both) already using the facility;
 - (vi) the operational and technical requirements necessary for the safe and reliable operation of the facility;
 - (vii) the economically efficient operation of the facility; and
 - (viii) the benefit to the public from having competitive markets.
- (j) The owner may be required to extend, or to permit extension of, the facility that is used to provide a service if necessary but this would be subject to:
 - (i) such extension being technically and economically feasible and consistent with the safe and reliable operation of the facility;
 - (ii) the owner's legitimate business interests in the facility being protected; and
 - (iii) the terms of access for the third party taking into account the costs borne by the parties for the extension and the economic benefits to the parties resulting from the extension.
- (k) If there has been a material change in circumstances, the parties should be able to apply for a revocation or modification of the access arrangement which was made at the conclusion of the dispute resolution process.
- (l) The dispute resolution body should only impede the existing right of a person to use a facility where the dispute resolution body has considered whether there is a case for compensation of that person and, if appropriate, determined such compensation.
- (m) The owner or user of a service shall not engage in conduct for the purpose of hindering access to that service by another person.

- (n) Separate accounting arrangements should be required for the elements of a business which are covered by the access regime.
 - (o) The dispute resolution body, or relevant authority where provided for under specific legislation, should have access to financial statements and other accounting information pertaining to a service.
 - (p) Where more than one State or Territory access regime applies to a service, those regimes should be consistent and, by means of vested jurisdiction or other cooperative legislative scheme, provide for a single process for persons to seek access to the service, a single body to resolve disputes about any aspect of access and a single forum for enforcement of access arrangements.
- (5) A State, Territory or Commonwealth access regime (except for an access regime for: electricity or gas that is developed in accordance with the Australian Energy Market Agreement; or the Tarcoola to Darwin railway) should incorporate the following principles:
- (a) Objects clauses that promote the economically efficient use of, operation and investment in, significant infrastructure thereby promoting effective competition in upstream or downstream markets.
 - (b) Regulated access prices should be set so as to:
 - (i) generate expected revenue for a regulated service or services that is at least sufficient to meet the efficient costs of providing access to the regulated service or services and include a return on investment commensurate with the regulatory and commercial risks involved;
 - (ii) allow multi-part pricing and price discrimination when it aids efficiency;
 - (iii) not allow a vertically integrated access provider to set terms and conditions that discriminate in favour of its downstream operations, except to the extent that the cost of providing access to other operators is higher; and
 - (iv) provide incentives to reduce costs or otherwise improve productivity.
 - (c) Where merits review of decisions is provided, the review will be limited to the information submitted to the original decision-maker except that the review body:
 - (i) may request new information where it considers that it would be assisted by the introduction of such information;
 - (ii) may allow new information where it considers that it could not have reasonably been made available to the original decision-maker; and

- (iii) should have regard to the policies and guidelines of the original decision-maker (if any) that are relevant to the decision under review.

Victoria has committed itself to applying to the National Competition Council (**NCC**) for certification of its shipping Channel Access Regime as an effective state-based access regime by 2010, and has indicated an intention to do so in 2009, if needed. For this to occur, the arrangements for the Channel Access Regime must satisfy the criteria for certification as an effective access regime contained within the *Trade Practices Act 1974* (**TPA**).

The certification process is as follows:

- the Victorian government must apply to the NCC seeking certification of the Channel Access Regime. Section 44M(4) of Part IIIA of the TPA requires the NCC to decide whether clauses 6(2) to 6(4) of the Competition Principles Agreement (**CPA**) are satisfied; and
- the NCC makes its recommendation for certification to the relevant Commonwealth Minister who must decide whether to certify the regime as effective. The Minister must specify the period for which the regime is to be considered certified, in accordance with section 44N of the TPA.

If the regime is certified, access seekers would then be required to use the regime to obtain access, and would be unable to seek declaration of those facilities in accordance with the provisions of the TPA. The benefit that arises from certification is the certainty created for both access seekers and infrastructure providers alike surrounding the rules for determining the terms and conditions for the services offered. This in turn is likely to create appropriate incentives for ongoing efficient investment in, and use of, that essential infrastructure.

This appendix considers whether the Channel Access Regime is capable of certification under the CPA in its present form.

The Channel Access Regime

Under paragraph 49(c)(i) of the *Port Services Act 1995* (**PSA**), the provision of channels for use by shipping is a prescribed service, and therefore the prices charged for the provision of, or in connection with, these services are prescribed prices, and subject to regulation by the Commission in accordance with the powers conferred by Part 3 of the ESC Act.

Part 3 of the PSA sets out the regulatory framework that applies to the Victorian ports industry. The access regime for prescribed channels is commonly referred to as the Channel Access Regime. It applies in respect of channels that have been declared by the Governor in Council by Order to be prescribed channels, under section 58 of the PSA. To date no channels have been declared, so the Victorian Channels Access Regime is not operational.

In addition, the Commission has published the Channel Access Guideline (the Guideline) to clarify the obligations and rights of market participants, and the Commission, under the Channel Access Regime. The requirements set out in the Guideline are enforceable through a number of legal instruments, as set out in section 1.4 of the Guideline and so form part of the Channel Access Regime.

In summary, the Channel Access Regime established in Part 3, Division 4 of the PSA has the following elements.

Section 59 requires that the Channel Operator:

- provide access on fair and reasonable terms and conditions³
- use all reasonable endeavours to meet the requirements of an Access Seeker, and
- make a formal proposal of terms and conditions within 30 business days of receiving a request for access, or within such reasonable lesser period as fixed by the Commission.

Sections 60 and 61 of the PSA grant the Commission express powers to determine access disputes in circumstances where:

- the Access Seeker cannot agree to the terms and conditions of access offered by the Channel Operator, or the Channel Operator has not made a formal offer to the Access Seeker as required under paragraph 59(2)(b) of the PSA and Part 3 of the Guideline, or
- an Access User's reasonable right of access to a prescribed channel has been hindered by the Channel Operator or another party.

Section 62 sets out the requirements on the Commission to make a recommendation to the Minister administering the Essential Services Commission Act 2001, whether or not a channel that is declared to be a significant infrastructure facility has ceased to be such a facility.

Under section 63 of the PSA, a Channel Operator can apply to the Commission for the making of a general determination governing channel access to one or more prescribed channels.

Certification Process

The NCC has indicated its approach to interpreting the CPA requirements will be consistent with the objective of the TPA, namely:

The object of this Act is to enhance the welfare of Australians through the promotion of competition and fair trading and provision for consumer protection.

The CPA principles, combined with the TPA objective, have been characterised by the NCC as reflecting the efficiency goals of access regulation, including efficient use of and investment in natural monopoly infrastructure, in addition to promoting competition in markets that rely on the infrastructure. In assessing these broad efficiency goals the NCC has indicated it favours a holistic approach, namely:

In the certification process, the Council's broad focus is on whether an access regime establishes an appropriate framework for these goals to be achieved.

It is therefore relevant in assessing the consistency of the Channel Access Regime against the CPA requirements to consider the statutory objectives of the Essential Services Commission (ESC). The objectives of the ESC in regulating the port services industry are contained within section 48 of the PSA, and are:

- (a) to promote competition in the regulated industry;
- (b) to protect the interests of users of prescribed services by ensuring that prescribed prices are fair and reasonable whilst having regard to the level of competition in, and efficiency of, the regulated industry;
- (c) for the purposes of Division 4 (Access), to ensure users have fair and reasonable access to prescribed channels whilst having regard to the level of competition in, and efficiency of, the regulated industry.

The ESC must also have regard to its overarching general regulatory objectives that are set out in section 8 of the ESC Act, provided it does so in a manner that it considers best achieves the objectives specified in the Channel Access Regime, namely:

- (1) *In performing its functions and exercising its powers, the objective of the Commission is to promote the long term interests of Victorian consumers.*
- (2) *Without derogating from subsection (1), in performing its functions and exercising its powers in relation to essential services, the Commission must in seeking to achieve the objective specified in subsection (1) have regard to the price, quality and reliability of essential services.*

Section 8A of the ESC Act states that in seeking to achieve these general objectives, the Commission must have regard to the following matters to the extent that they are relevant in any particular case:

- (a) *efficiency in the industry and incentives for long term investment;*
- (b) *the financial viability of the industry;*
- (c) *the degree of, and scope for, competition within the industry, including countervailing market power and information asymmetries;*
- (d) *the relevant health, safety, environmental and social legislation applying to the industry;*
- (e) *the benefits and costs of regulation (including externalities and the gains from competition and efficiency) for –*
 - (i) *consumers and users of products or services (including low income and vulnerable consumers);*

- (ii) *regulated entities;*
- (f) *consistency in regulation between States and on a national basis;*
- (g) *any matters specified in the empowering instrument.*

Finally, the recent insertion of Part 3A into the ESC Act provides additional specific criteria to be applied by the ESC in regulated industries in which there is an access regime. Section 35A states that:

The object of this Part is to promote the economically efficient operation of, use of, and investment in, the infrastructure by means of which services are provided, thereby promoting effective competition in upstream and downstream markets.

This broad suite of objectives appears to be broadly consistent with the approach applied by the NCC in assessing access regimes against the requirements of the CPA. In seeking to achieve these objectives, the access regime must satisfy the requirements of clause 6(i) of the CPA, which requires access outcomes to balance the legitimate commercial interests of facility owners and other parties, the efficient operation of the facility, and benefits to the public from having competitive markets. In this regard, the Channel Access Regime must result in terms and conditions of access that balance these interests.

Finally, in relation to the objective of clauses 6(4)(a) to (c) of the CPA, the NCC has indicated that:

[T]he underlying objective of the clauses 6(4)(a)-(c) model of commercial negotiation, supported by appropriate regulatory guidance, is to deliver outcomes that mirror, as closely as possible, those that would be derived if the infrastructure service market was effectively competitive – that is, outcomes that can generally be expected to lie within an efficient range.

Taken as a whole, these comments suggest the regulatory regime should result in outcomes that can generally be considered efficient. We note that given the Channel Access Regime is designed to achieve similar objectives as set out in the PSA and the ESC Act one might expect it to satisfy this requirement. However, as indicated above, the NCC is required to assess the access regime against the specific requirements contained within clauses 6(2) to 6(5) of the CPA.

To assist applications for certification of access regimes, the NCC has provided a useful guide to its approach to assessing regimes against the requirements in the CPA. In so doing, it groups the requirements into a number of broad categories. However, subsequent to the production of the NCC Guide, the CPA was amended to include clause 6(5), which states that an access regime should incorporate the following:

- objects clauses that promote the economically efficient use of, operation and investment in, significant infrastructure thereby promoting effective competition in upstream or downstream markets (clause 6(5)(a))

- appropriate pricing principles such that regulated access prices generate sufficient revenue to meet efficient costs, encourage efficient price discrimination, discourage anti-competitive price and non-price discrimination and provide incentives to reduce costs or otherwise improve productivity (clause 6(5)(b))
- where merits review is provided, that review be limited to the information submitted to the original decision maker except in certain circumstances (clause 6(5)(c)).

The NCC has not updated its guide to incorporate these additional principles into the broad categories it has specified. Consequently, we have sought to do so below by highlighting the new applicable clauses in blue. It is worth noting that whilst this taxonomy assists the subsequent analysis, the categories do not exist in watertight compartments. Indeed, there is considerable overlap between them, eg, one cannot have an effective dispute resolution framework absent an enforceable right of access, and vice versa. The categories are:

- coverage of services: requires that the access regime specify the services subject to it – clauses 6(3) and 6(4)(d)
- negotiation framework: requirement that the access regime provide an access framework that is effective for those covered services including:
 - appropriately defined services – clauses 6(4)(a)-(c); and
 - an enforceable right to access those services – clauses 6(4)(a)-(c), (e), (f), (g)-(i), (m), (n) and (o), and clauses 6(5)(b) and (c);
- dispute resolution: requirement that the access regime provide an effective dispute resolution framework to resolve issues of contention between service providers and access seekers – clauses 6(4)(a)-(c), (g), (h), (i), (j), (k), (l) and (o), and clauses 6(5)(b) and (c);
- treatment of interstate issues: the access regime must ensure there are no impediments to interstate access arising from state based regime differences, preferably through the provision of a single process for access – clauses 6(2) and 6(4)(p); and
- appropriate terms and conditions of access: the regime must result in appropriate terms and conditions of access – clauses 6(4)(a)-(c), (e), (f), (i), (k) and (n), and clauses 6(5)(a)-(c).

Each of these requirements is examined in turn below, as they apply to those elements of the access framework. Because of the significant interdependence between the categories, in the following sections we have sought where possible to avoid repeatedly analysing the same clauses. For example, as the taxonomy above illustrates, clause 6(4)(a) is relevant to three categories. However, in this instance, consideration of this clause has been limited to the appropriateness of the negotiation framework, since this analysis is equally applicable to the subsequent remaining categories.

Coverage of Services

For an access regime to be considered effective it must facilitate access to significant infrastructure facilities that cannot be economically duplicated. The relevant CPA requirements relating to the coverage of the access regime are in clauses 6(3) and 6(4)(d). These are reproduced for reference below:

- 6(3) *For a State or Territory access regime to conform to the principles set out in this clause, it should:*
- (a) *apply to services provided by means of significant infrastructure facilities where:*
- (i) *it would not be economically feasible to duplicate the facility;*
 - (ii) *access to the service is necessary in order to permit effective competition in a downstream or upstream market; and*
 - (iii) *the safe use of the facility by the person seeking access can be ensured at an economically feasible cost and, if there is a safety requirements, appropriate arrangements exist; and*
- (b) *incorporate the principles referred to in subclause (4).*
- ...
- 6(4)(d) *Any right to negotiate access should include a date after which the right would lapse unless reviewed and subsequently extended; however, existing contractual rights and obligations should not be automatically revoked.*

In assessing the Channel Access Regime against the requirements in these two clauses, two principal issues arise. First, what elements of the Channel Access Regime would form the access regime to be certified? Second, does the regime define services in a manner consistent with the requirements of clauses 6(3) and (4)(d) of the CPA? We consider these issues below.

What Comprises the Access Regime?

The NCC has indicated that the CPA criteria require an effective access regime to clearly define the services to be covered. It suggests that this requirement necessitates the defining of a generic service, followed by particular services that are covered for access.

Section 49 of the PSA defines the provision of channels for use by shipping as a prescribed service. Section 58 of the PSA defines the channels to be covered by the Channel Access Framework, namely:

This Division applies to a channel declared by the Governor in Council by Order published in the Government Gazette to be a significant infrastructure facility.

Consequently, presently the Channel Access Regime does clearly define the services to be covered.

Are the Clause 6(3) and (4)(d) Criteria Met?

The services covered by the access regime must also exhibit certain characteristics to be eligible for certification. Clause 6(3) limits the application of the access regime to significant infrastructure that is not economically feasible to duplicate. It further requires that access be necessary to allow effective competition in upstream and downstream markets. Clause 6(3)(a)(iii), however, allows for access to be limited to maintain the safe use of the facility at an economic cost. The NCC has stated that:

“In essence, the clause 6 principles refer primarily to significant infrastructure services provided by ‘bottleneck’ facilities – that is, facilities that exhibit natural monopoly characteristics and that occupy a strategic position in the service delivery chain whereby access is essential for effective competition in a dependent market or markets.”

The Commission has considered the Victorian shipping channels in the context of these characteristics and concluded that shared channel services are significant infrastructure services provided by bottleneck facilities. This means that clause 6(3) is met.

Finally, clause 6(4)(d) requires an access regime to provide scope for review of the application of access rights. The Channel Access Regime meets this requirement through section 62 of the PSA, which requires the ESC periodically (at least once every five years) to undertake an inquiry under the ESC Act to make assess whether or not a channel that is declared to be a significant infrastructure facility has ceased to be such a facility. Clause 62(4) defines a channel in port waters as a significant infrastructure facility if:

- (a) it would not be economically feasible to develop another channel providing access to the same port waters; and
- (b) access to the channel would promote competition in at least one market (whether or not in Australia) other than a market for using the channel; and
- (c) safe access to the channel can be ensured at an economically feasible cost.

Summary

The Commission is of the view that the channels are significant infrastructure facilities, and so the clause 6(3) requirement is satisfied. Further, the mechanism contained within section 62 of the PSA, which requires the ESC periodically to undertake an inquiry to determine whether the facilities continue to be significant infrastructure facilities within the meaning of the CPA, is likely to satisfy clause 6(4)(d) of the CPA.

Appropriate Form of Regulation

The access framework must specify appropriate forms of regulation for the prescribed services covered by the regime. Clause 6(4)(a) of the CPA establishes

commercial negotiation as a cornerstone in determining access outcomes, with formal arbitration as the principal mechanism to resolve disputes. This includes negotiation on price and other non-price matters such as safety and service standards. It states:

Wherever possible third party access to a service provided by means of a facility should be on the basis of terms and conditions agreed between the owner of the facility and the persons seeking access.

However, markets characterised by certain structural features or dynamics may be poorly suited to the negotiate/arbitrate model of facilitating access. In particular, where countervailing bargaining strength is lacking or significant information asymmetries exist, more intrusive forms of regulation than the negotiate/arbitrate model of access may more closely replicate the outcome of a competitive market. Employing a negotiate/arbitrate framework in inappropriate circumstances risks creating protracted and costly disputes and inefficient access prices, as the NCC has acknowledged:

For industries where access seekers have relatively poor information on which to base negotiations and/or where many access disputes are likely, a negotiate/arbitrate model may not ensure efficient outcomes.

Accordingly, clauses 6(4)(b) and (c) complement clause 6(4)(a) by recognising the need for underpinning regulatory measures where an access provider possesses substantial market power. Specifically, the NCC has expressed that a proper consideration of clauses 6(4)(a)-(c) must include:

[A]n assessment of whether regulatory arrangements establish an environment in which third parties can enter effective access negotiations. In particular, the regulatory framework should appropriately guide market participants to address information and market power asymmetries.

Striking an appropriate balance

In conjunction, clauses 6(4)(a)-(c) require an appropriate balance between commercial negotiations and more intrusive regulatory intervention to facilitate access. The Channel Access Regime is considered to meet these criteria through section 59 of the PSA, which imposes obligations on the channel operator to provide access to prescribed channels on fair and reasonable terms and conditions, and use all reasonable endeavours to meet the requirements of a person seeking access to prescribed channels.

Are the Clause 6(4)(i) Criteria Met?

Clause 6(4)(i) of the CPA sets out a series of considerations that must be applied when the form of regulation seeks to restrict the role of the arbitrator and/or regulator in determining disputes or providing guidance on the terms and conditions of access.

In deciding on the terms and conditions for access, the dispute resolution body should take into account:

- (i) the owner's legitimate business interests and investment in the facility;*
- (ii) the costs to the owner of providing access, including any costs of extending the facility but not costs associated with losses arising from increased competition in upstream or downstream markets;*
- (iii) the economic value to the owner of any additional investment that the person seeking access or the owner has agreed to undertake;*
- (iv) the interests of all persons holding contracts for use of the facility;*
- (v) firm and binding contractual obligations of the owner or other persons (or both) already using the facility;*
- (vi) the operational and technical requirements necessary for the safe and reliable operation of the facility;*
- (vii) the economically efficient operation of the facility; and*
- (viii) the benefit to the public from having competitive markets.*

The Channel Access Regime does satisfy this clause since section 60(5) of the PSA requires the Commission to have regard to clauses 6(4)(i) and (j) of the CPA when making a determination in the event of a channel access dispute. The application of these clauses require that when making a section 60 determination the Commission must have regard to a range of considerations, among them:

- the Channel Operator's legitimate business interests and investment in the channel;
- the costs of the Channel Operator in providing access; and
- the Channel Operator's contractual obligations to other channel users.

Are the Clause 6(5)(a) and (b) Criteria Met?

Clause 6(5)(a) requires that an access regime incorporate objects clauses that promote the economically efficient use of, operation and investment in, significant infrastructure thereby promoting effective competition in upstream or downstream markets. In addition, clause 6(5)(b) requires the incorporation of appropriate pricing principles such that regulated access prices generate sufficient revenue to meet efficient costs, encourage efficient price discrimination, discourage anti-competitive price and non-price discrimination and provide incentives to reduce costs or otherwise improve productivity.

It is clear that the Channel Access Regime satisfies the requirements of clause 6(5)(a) due to the requirement in section 35A of Part 3A of the ESC Act, which states:

The object of this Part is to promote the economically efficient operation of, use of and investment in, the infrastructure by means of which services are provided, thereby promoting effective competition in upstream and downstream markets.

Section 35B goes on to provide that Part 3A of the ESC Act (including section 35A) applies to all regulated industries with have an access regime.

Section 35C of the ESC Act provides that the relevant pricing principles for the price of access to a service are identical to the requirements of clause 6(5)(b) of the CPA. This is likely to be sufficient in order to satisfy clause 6(5)(b) of the CPA.

Summary

The Channel Access Regime does appear to apply an appropriate form of regulation to prescribed channel services given the degree of market power and other information asymmetries, which means that the specific requirement contained in clause 6(4)(a) is satisfied. In addition, the Channel Access Regime is likely to meet the criteria contained within clauses 6(5)(a) and (b) and strike an appropriate balance under clause 6(4)(i).

Enforceable Right to Access

To obtain certification an access framework must not only appropriately define the respective services within its ambit, but it must also provide an enforceable right to access to those services.

The relevant requirements are contained in clauses 6(4)(b) and (c) of the CPA. Clause 6(4)(b) requires an access regime to establish a legal right for parties to negotiate access and clause 6(4)(c) requires a credible enforcement process to support this right. Below we consider whether the Channel Access Regime creates an enforceable right of access.

Assessment Against the Clause 6(4)(b) and (c) Criteria

The Channel Access Regime does provide for an enforceable right of access, by virtue of sections 60, 61 and 63 of the PSA, specifically:

- Section 60:
 - (1) *If a channel operator has not made a formal proposal in accordance with section 59(2)(b), the person seeking access to a prescribed channel may apply in writing to the Commission for the making of a determination in accordance with the Essential Services Commission Act 2001.*
 - (2) *If a channel operator and a person seeking access cannot agree on the terms and conditions on which access is to be provided, the channel operator or the person seeking access may apply in writing to the Commission for the making of a determination in accordance with the Essential Services Commission Act 2001 specifying the terms and conditions on which access is to be provided. ...*
 - (4) *The Commission must not make a determination if the Commission considers that the making of a determination would substantially impede the existing right of access of another person unless that person has been given an*

opportunity to make a submission to the Commission in respect of the application.

- Section 61:

- (1) A channel operator or any person having access to a prescribed channel must not engage in any conduct having the purpose of hindering access to a prescribed channel by any other person in the reasonable exercise of a right of access.*
- (2) A person who considers that his or her right of access to a prescribed channel has been hindered in contravention of subsection (1) may apply in writing to the Commission for the making of a determination in accordance with the Essential Services Commission Act 2001.*
- (3) If the Commission determines that there has been a contravention of subsection (1), the Commission may make a determination that the person is entitled to access on such terms and conditions as are specified in the determination.*

- Section 63:

- (1) A channel operator of a prescribed channel may apply in writing to the Commission for the making of a determination under Part 3 of the Essential Services Commission Act 2001 approving the terms and conditions on which access to the channel is to be provided for the period specified in the determination.*

In this context, where agreement between parties cannot be reached the Channel Access regime does provide a right for persons to negotiate access to a service provided by means of a facility, and an accompanying enforcement process.

Dispute resolution

To be effective, an access regime must incorporate appropriate dispute resolution mechanisms to resolve issues of contention between service providers and access seekers.

CPA requirements

The relevant requirements are contained in clauses 6(4)(b), (c), (g), (h), (i), (j), (k), (l) and (o), and clause 6(5) of the CPA. In summary, these clauses of the CPA require the dispute resolution process to:

- provide for an enforceable right to access covered services (clauses 6(4)(b) and (c)); and
- promote confidence among the parties by producing credible and reasonably consistent outcomes – to this end a dispute resolution body must consider and balance all of the requirements in clause 6(4)(i).

Clause 6(4)(i) introduces a series of considerations that a dispute resolution body must apply when determining terms and conditions of access. The NCC's interpretation of the respective criterion in clause 6(4)(i) can be summarised as follows:

- criterion (i) requires the actual price paid and invested in a facility by a facility owner to be taken into account in determining the terms and conditions of access, provided such acquisition or investment took place in a legitimate manner;
- criterion (iv) requires regimes to consider the interests of all persons holding contracts for the use of a facility, and for those varying interests to be balanced against the remaining clause 6(4)(i) criteria and the overall objectives of access regulation; and
- criterion (v) requires that the actual value of firm and binding contractual obligations of the owner or other persons (or both) already using a facility be taken into account, even if they include monopoly returns.

Together, criteria (i), (iv) and (v), account for the interests of the facility owner and existing facility users.

- criterion (ii) requires that the costs to the provider of providing access be taken into account, with the exception of losses associated with increased competition in upstream or downstream markets, costs incurred by over-capitalisation, those unnecessarily incurred to provide access or an inappropriate attribution of common costs;
- criterion (iii) requires that the economic value to the owner of "any additional investments that the person seeking access or the owner has agreed to undertake" be considered, with the exception of costs incurred by over-capitalisation, those unnecessarily incurred to provide access or an inappropriate attribution of common costs; and
- criterion (vi) requires that the operational and technical requirements necessary for the safe and reliable operation of the facility be taken into account, provided the expenditure was necessary and not reflective of "gold-plating".

Together, criteria (ii), (iii) and (vi) account for the costs of providing access. Such costs must be necessary and not reflect "gold-plating" or other unnecessary measures.

- criterion (vii) requires consideration of the operation of a facility in an economically efficient manner as the term is generally considered by economists – however, criterion (vii) may be inconsistent with, and may need to be balanced against, the legitimate business interests of the owner (criterion (i));
- criterion (viii) requires a consideration of the public benefit, ie, the efficiency gain, from having a workably competitive market (that is, one in which no firm has a substantial degree of market power in the longer-term).

Together, criteria (vii) and (viii) expressly account for efficiency objectives and the benefits arising from competitive markets.

An obvious difficulty that the NCC has recognised is that these grouped criteria are not mutually exclusive and may conflict. To this end, as noted above, in balancing the three groups of criteria to determine an appropriate range of outcomes the NCC has, in the past, been cognisant that the underlying objective of Part IIIA is to promote efficiency. On that basis, the NCC has indicated that provided a dispute resolution process acknowledges the respective criterion, and is likely to produce results that lie within a range of outcomes consistent with those likely to be achieved in an effectively competitive market, the clause 6(4)(i) requirement will be met.

In addition to the general requirements contained within clauses 6(4)(b), (c) and (i) of the CPA, to be considered effective, a dispute resolution framework must also:

- incorporate objects clauses that promote the economically efficient use of, operation and investment in, significant infrastructure thereby promoting effective competition in upstream or downstream markets (clause 6(5)(a));
- incorporate appropriate pricing principles such that regulated access prices generate sufficient revenue to meet efficient costs, encourage efficient price discrimination, discourage anti-competitive price and non-price discrimination and provide incentives to reduce costs or otherwise improve productivity (clause 6(5)(b));
- incorporate the principle that where the owner and a person seeking access cannot agree on terms and conditions for access, they should be required to appoint and fund an independent body to resolve the dispute, if they have not already done so (clause 6(4)(g));
- incorporate the principle that the decisions of the dispute resolution body should bind the parties; however, rights of appeal under existing legislative provisions should be preserved (clause 6(4)(h));
- require that where merits review is provided, that review be limited to the information submitted to the original decision maker except in certain circumstances (clause 6(5)(c));
- allow, in certain situations, for an arbitrator to require an extension to a facility when parties cannot reach agreement (clause 6(4)(j));
- allow parties to apply for a revocation or modification of the access arrangement if there has been a material change in circumstances (clause 6(4)(k));
- require that a dispute resolution body only impede the existing right of a person to use a facility where it has considered whether there is a case for compensation of that person, and, if appropriate, determined such compensation (clause 6(4)(l)); and
- include arrangements allowing regulatory bodies and arbitrators with the information required to undertake their responsibilities (clause 6(4)(o)).

We consider the extent to which the Channel Access Regime adheres to these criteria below.

Assessment

Where a dispute arises between an access seeker and an access provider in relation to access to prescribed services under the Channel Access Regime (ie, where a general access agreement is not in place), the access seeker can apply to the Commission to resolve the dispute (section 60(2) of the PSA).

The Commission must resolve an access dispute by making a determination in relation to the matters in dispute. Certain procedural requirements and overarching matters to which the Commission must have regard are set out in sections 60 to 63 of the Channel Access Regime and in Part 3A of the ESC Act. The Commission also sets out in more detail in its Channel Access Guidelines how it intends to exercise its dispute resolution role. This requirement likely satisfies the dispute resolution requirements set out in the CPA. Although the Commission has not had to arbitrate any access disputes (as no channels have been declared), the arrangements for dispute resolution contained within the Channel Access Regime and the Guideline appear to be consistent with clauses 6(4)(b),(c) and (i) of the CPA.

In sum, the Channel Access Regime is likely to be consistent with the dispute resolution framework criteria contained within the CPA because specific obligations/and rights are /bestowed upon the Commission as arbitrator, access providers and access seekers.

Other certification requirements

In addition to the requirements outlined in detail above, for an access regime to be considered effective, it must satisfy a number of additional requirements. Specifically, the CPA requires an access framework to also:

- ensure that there are no impediments to interstate access arising from state based regime differences (clauses 6(2) and 6(4)(p))
- require that service providers use all reasonable endeavours to accommodate access seekers' requirements (clause 6(4)(e))
- incorporate the principle that access to a service need not be on exactly the same terms and conditions for all persons seeking access (clause 6(4)(f))
- prohibit conduct for the purpose of hindering access (clause 6(4)(m))
- include appropriate ring fencing arrangements (clause 6(4)(n)).

The Channel Access Regime meets the criteria contained within clauses 6(2) and 6(4)(p) because it cannot result in more than one State or Territory regime applying to the prescribed services.

The Channel Access Regime appears to be consistent with the additional certification requirements contained in clauses 6(4)(e), (f), (m) and (n) of the CPA, namely:

- Clause 6(4)(e): Section 59(2)(a) of the PSA states that a provider must use all reasonable endeavours to meet the requirements of persons seeking access.

- Clause 6(4)(f): Section 59(3) of the PSA outlines that the terms and conditions of access may vary according to the actual and opportunity costs to the channel operator.
- Clause 6(4)(m): Section 61(1) of the PSA states that the provider or any person having access to a prescribed channel must not engage in conduct having the purpose of hindering access to a prescribed channel by any other person in the reasonable exercise of a right of access. Section 61(2) enables a person who considers his or her right of access to a prescribed channel has been hindered to apply in writing to the Commission for the making of a determination.
- Clause 6(4)(n): Section 56 of the PSA requires a provider to keep financial records for prescribed services that are separate from other aspects of its business.

In summary, the Channel Access Regime appears to meet all of the additional certification requirements contained within clauses 6(4)(e), (f), (m) and (n) of the CPA.

Conclusions

This appendix provides a brief assessment of the Channel Access Regime against the certification criteria set out in the CPA, to determine whether it is capable of certification in its current form. The Commission's view is that the Victorian Channels Access Regime, as described in this appendix, likely satisfies all of the requirements of the CPA and so is capable of certification as a state-based access regime in its current form.

This appendix estimates the productivity gains of Port of Melbourne Corporation (**PoMC**) using data for the period 2003-04 to 2007-08. Productivity refers to a ratio of output to input, and in the case of a multi-product firm, Total Factor Productivity (**TFP**) is the ratio of an index of all of a firm's outputs, against all the inputs used to produce those outputs. In a price monitoring context, TFP can be used to track trends in productivity over time and shed light on the reasons for changes in rates of profitability.

Deriving the output and output price indices

In this analysis three outputs have been used:

- the provision of shipping channel services (including the associated navigation aids and harbour control services)
- the provision of berth infrastructure services, and
- all other services.

The provision of shipping channel services is measured by the gross tonnage of vessels. Due to increasing average ship sizes, the number of ship visits could understate the growth in the provision of the service.

The provision of berth infrastructure services is measured by the movement of cargo through the port measured in revenue tonnes²⁰¹. The revenue from wharfage charges, as well as berth hire and facility hire charges, are related to this service.

All other services are treated as a single output. This includes the provision of chargeable services by the port operator, and any other sources of operating revenue. The output quantity is derived by deflating this revenue by the implicit deflator for gross domestic product (**GDP**).

The revenues and outputs for PoMC for the period 2003-04 to 2007-08 are set out in Table D.1, together with the implied prices for each of the outputs.

²⁰¹ 'Revenue tonnes' is a measure of freight being the greater of the weight of the freight in tonnes or its volume in cubic metres.

Table D.1 Operating revenue and output data – PoMC

<i>Year ending June</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>
<i>Operating revenue (\$'000)</i>					
Charges for provision of berths	48,875	62,844	71,951	79,490	99,730
Charges for channels	18,690	17,555	17,650	18,948	20,923
Charges for services & other operating revenue	2,232	3,552	3,517	2,971	4,275
Total	69,797	83,951	93,118	101,409	124,928
<i>Output statistics</i>					
Cargo ('000 revenue tonnes)	59,466	64,429	64,200	70,900	75,714
Ships ('000 Gross Tonnes)	76,300	79,315	82,682	87,304	92,249
Other services (2008 \$'000)	2,642	4,059	3,839	3,106	4,275
<i>Implied prices</i>					
Cargo-based (\$/RT)	0.82	0.98	1.12	1.12	1.32
Ships (\$/GT)	0.24	0.22	0.21	0.22	0.23
GDP implicit deflator	84.5	87.5	91.6	95.7	100.0

Source: PoMC, Melbourne Port Corporation (**MPC**) and Victorian Channel Authority (**VCA**) Annual Reports (for 2004 figures), PoMC regulatory accounts, Australian Bureau of Statistics (**ABS**).

Table D.2 shows the implied indices for total output and output prices using the Tornqvist index approach. Both the output and output price indices use the (moving average) revenue shares as weights. These indices have the attribute that, when multiplied together, they produce a revenue index which is identical to the revenue index derived from the raw revenue data.

Table D.2 Output and price indices – PoMC

<i>Year ending June</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>
Output index	100.0	108.7	109.0	118.2	127.0
Output price index	100.0	110.6	122.3	122.9	140.9
Revenue index	100.0	120.3	133.4	145.3	178.9

Deriving the input and input price indices

The approach taken in this analysis was to use two inputs, namely capital and non-capital inputs. Table D.3 shows the costs, implied prices (GDP implicit deflator) and input quantities for non-capital inputs.

Table D.3 **Non-capital inputs – PoMC**

<i>Year ending June</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>
Non-capital expenses	55,726	55,115	58,992	73,911	66,440
GDP implicit deflator	84.5	87.5	91.6	95.7	100.0
Non-capital inputs (2008 \$'000)	65,967	62,976	64.391	77.261	66,440

Source: PoMC, MPC and VCA Annual Reports, ABS

To calculate capital inputs it is necessary to first measure the real value of capital costs, which includes estimates of the capital stock, economic depreciation, and calculation of the annual user cost of capital.

The main assumptions used in this analysis are:

- it relies on the reported values of assets in PoMC's Annual Reports
- land has not been included
- the implicit price deflator for public fixed capital expenditure has been used for the purpose of deflating the asset base into real values, and
- the user cost of capital is calculated using a real pre-tax weighted average cost of capital (**WACC**), multiplied by the real asset base, and adding PoMC's reported depreciation.

The Melbourne Port Corporation, and subsequently PoMC, have to-date used a current cost method of stating asset values for the purpose of reporting the financial position of the business:

- buildings and improvements are re-valued at least every five years. Building assets are valued at the market value for similar assets or the written down replacement cost. Wharf assets are valued at the written down replacement cost. Buildings or improvements acquired or completed are carried at cost between revaluations. Over the current regulatory period, buildings and improvements carried at cost generally represent less than 5 per cent of total buildings and improvements
- plant and equipment are carried at cost. In 2003-04 plant and equipment represented 2.1 per cent of PoMC's total infrastructure, property, plant and equipment.

In this analysis port land has been excluded from the asset base, and similarly rental income and services have been excluded from revenue and output respectively. This is because the productivity associated with PoMC's pure landholding role would be difficult to measure alongside that of its infrastructure provision roles.

The average fixed assets in each year were calculated as the average of the values at the commencement and end of that year. As mentioned, these values are deflated using the implicit price deflator for public fixed capital expenditure to obtain real values at 2007-08 prices. This is shown in Table D.4.

Table D.4 **Capital stock – PoMC**

<i>Year ending June</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>
Average fixed assets (\$'000)	270,309	297,878	330,026	368,408	457,079
Asset base deflator	83.9	86.1	92.1	97.3	100.0
Average capital stock (2008 \$'000)	322,207	346,135	358,458	378,539	457,079

Source: PoMC, MPC and VCA Annual Reports, ABS.

The approach used to define the opportunity cost of capital is to apply the real pre-tax WACC to the real value of the asset base to calculate the required return on investment. Depreciation is then added to the required return on investment to obtain the total user cost of capital employed.

The assumptions adopted to calculate the WACC in this study are the same assumptions adopted by PoMC in its Pricing Policy Statement (**PPS**).

The real pre-tax WACC is defined in this study as:

$$WACC = (1 - g) \left(\frac{r_e}{1 - t(1 - \gamma)} \right) + g \cdot r_d$$

Where r_e is the real cost of equity for a firm, r_d is the real cost of debt, and g is the “gearing” i.e. the ratio of the value of debt (D), to the value of the company (V). The effective corporate tax rate is t , and γ represents the proportion of tax collected from the company that will ultimately be rebated against personal income tax (i.e. the value of tax imputation credits). In this study, g is assumed to be 40% and gamma 50%, while t is 30%.

The real cost of equity is defined as:

$$r_e = r_{rf} + \beta \cdot MRP$$

Here,

- r_{rf} is the real market rate of return on a riskless asset, assumed to be the yield on long-term Treasury Capital Indexed Bonds = 2.81;
- MRP is the market risk premium, assumed to be 6.0%; and
- β is the equity beta for the port of Melbourne assumed to be 0.89.

The estimated cost of borrowing is:

$$r_d = r_{rf} + DM$$

Where DM represents the debt margin – the margin over the riskless rate at which funds can be borrowed – which is assumed to be 101 basis points.

The approach used here to define the nominal and real and cost of capital is to use the nominal or real risk free rate of return respectively. This is consistent with the

fact that the expected rate of inflation is usually estimated from the relationship between the yields on 10-year Commonwealth bonds and long-dated CPI-indexed Commonwealth securities (using the Fisher transformation). Hence by definition of the expected rate of inflation, the transformation is applied only to the risk-free rate.

Table D.5 shows the total user cost of capital and the implied price for capital inputs. Table D.6 shows total input costs, input prices and input quantities.

Table D.5 User cost of capital – PoMC

<i>Year ending June</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>
WACC (%)	7.3	7.3	7.3	7.3	7.3
WACC x avg. assets (\$'000)	19,733	21,745	24,092	26,894	33,367
Depreciation (\$'000)	21,847	22,351	22,566	24,457	26,750
User cost of capital	41,580	44,096	46,658	51,351	60,117

Source: PoMC PPS and Annual Reports

Table D.6 reproduces the capital and non-capital cost and input data used in the index calculations.

Table D.6 Cost and input data – port of Melbourne

<i>Year ending June</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>
<i>Total economic cost</i>					
Cost of capital	41,580	44,096	46,658	51,351	60,117
Non-capital expenses	55,726	55,115	58,992	73,911	66,440
Total	97,306	99,211	105,650	125,262	126,557
<i>Input quantities</i>					
Capital stock (2008 \$'000)	322,207	346,135	358,458	378,539	457,079
Non-capital inputs (2008 \$'000)	65,967	62,976	64,391	77,261	66,440
<i>Implied input prices</i>					
Capital	0.129	0.127	0.130	0.136	0.132
Non-capital	84.5	87.5	91.6	95.7	100.0

Table D.7 shows the implied total input index and the index of input prices. Again these are derived using the Tornqvist approach, however cost shares were used as weights. The product of these two indices is the overall cost index.

Table D.7 Input and input price indices – port of Melbourne

<i>Year ending June</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>
Input index	100.0	100.5	103.3	117.4	117.4
Input price index	100.0	101.4	105.1	109.6	110.8
Cost index	100.0	102.0	108.6	128.7	130.1

Total Factor Productivity

The TFP index is the ratio of the output and input indices derived in Tables D.2 and D.7. Table D.8 reproduces those indices and shows the resulting TFP index.

Between 2003-04 and 2007-08, PoMC's TFP index increased at an average annual rate of 2.0 per cent per annum. The output index increased at an average rate of 6.2 per cent per annum between 2003-04 and 2007-08, while the input index increased on average at 4.1 per cent per year over this period.

By way of comparison, in its 1993 study of TFP at the port of Melbourne, the Industry Commission found that TFP had grown at an annual average rate of 2.6 per cent over the period from 1976-77 to 1991-92.

Table D.8 TFP index

<i>Year ending June</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>
Output index	100.0	108.7	109.0	118.2	127.0
Input index	100.0	100.5	103.3	117.4	117.4
TFP index	100.0	108.1	105.5	100.6	108.2

The "pricing performance" of the port is indicated by the ratio of the index of output prices to the index of input prices, which were presented in the previous sections and are reproduced in Table D.9.

The price ratio index (i.e. the ratio of the index of output prices to the index of input prices) increased at an annual average rate of 6.2 per cent per annum between 2003-04 and 2007-08. The output price index increased at 9.0 per cent per year, and the input price index increased at 2.6 per cent per year over the same period.

Table D.9 Price ratio index

<i>Year ending June</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>
Output price index	100.0	110.6	122.3	122.9	140.9
Input price index	100.0	101.4	105.1	109.6	110.8
Price ratio index	100.0	109.1	116.4	112.1	127.1

It is useful to compare the changes in the output and input price indices with the increase in the implicit GDP deflator, which was reproduced in Tables D.1 and D.3. The rate of increase in the GDP deflator over the same period was 4.3 per cent per

annum. By subtracting this rate of inflation from the average changes in PoMC's output and input prices, it is apparent that:

- PoMC's output prices increased by approximately 4.6 per cent per annum in real terms
- PoMC's input prices decreased by 1.7 per cent per annum in real terms
- PoMC's price ratio increased by 1.9 per cent per annum in real terms.

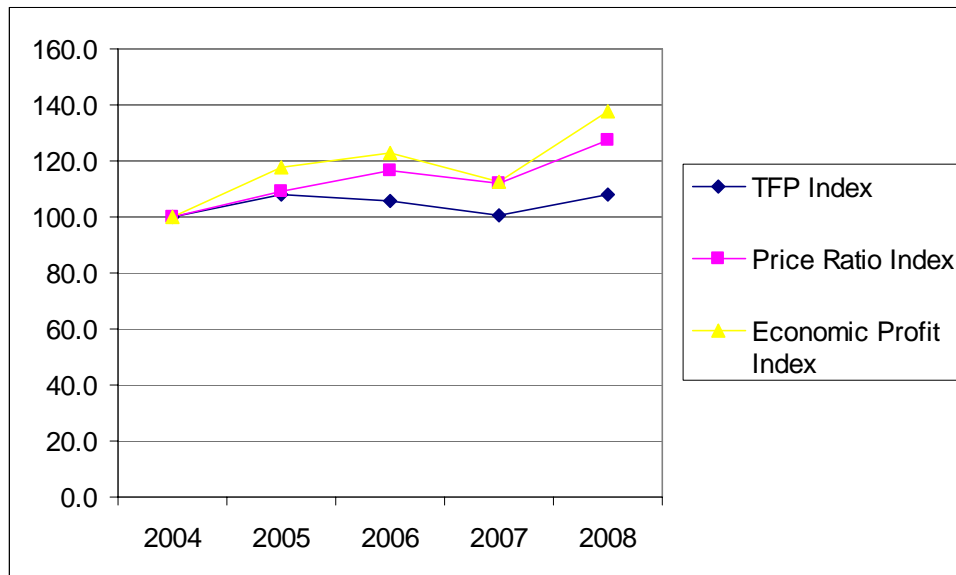
The Economic Profit Index is the product of the TFP index and the Price Ratio index. The results are presented in Table D.10, and in Figure D.1. The Economic Profit Index increased at an average rate of 8.3 per cent per annum over the period from 2003-04 and 2007-08.

The choice of base year for the index in this study was arbitrary. However, it is recommended that the index be based on a year that is considered to be representative of an adequate rate of return. This will facilitate the interpretation of movements in the Economic Profit index.

Table D.10 Profit composition analysis – PoMC

<i>Year ending June</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>
TFP index	100.0	108.1	105.5	100.6	108.2
Price ratio index	100.0	109.1	116.4	112.1	127.1
Economic profit index	100.0	117.9	122.8	112.8	137.6

Figure D.1 Profit composition analysis – PoMC



APPENDIX E | CIRA REVIEWS IN OTHER JURISDICTIONS

Clause 4.3 of the CIRA requires that each party to the agreement reviews the regulation of port and port authority, handling and storage facility operations at significant ports within its jurisdiction to ensure that they are consistent with clauses 4.1 and 4.2 of the CIRA. These clauses are reproduced in the terms of reference to this Review reproduced in Appendix A. In summary, the agreement includes:

- (a) to allow for competition in the provision of port and port-related infrastructure facility services unless a transparent public review indicates that the benefits of restricting competition outweigh the costs (4.2)
- (b) port planning should, where efficient, facilitate the entry of new suppliers of port and related infrastructure services (4.2.a)
- (c) 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)
- (d) if economic regulation is warranted it should conform to a consistent national approach based on principles set out in the CIRA (4.1.b, 4.2.b, 2.3)
- (e) any conflicts of interest between port owners, operators or service providers as a result of vertically integrated structures should be addressed on a case by case basis with a view to facilitating competition (4.3.d), and
- (f) commercial charters for port authorities should include guidance to seek a commercial return while not exploiting market powers (4.3.c).

In 2007 the Commission undertook a Review of Port Planning which addressed Victoria's requirements under items (a) and (b) above. The terms of reference to the current Review require the Commission to have regard to clauses 4.1 and 4.2 of the CIRA, which in this context will mean particularly items (c) to (f) listed above.

Most other Australian jurisdictions have recently undertaken CIRA reviews, and the Commission has had regard to those reviews.

The purpose of this section is to provide a summary of how other States and Territories have sought to achieve compliance with CIRA requirements. Most of those reviews have encompassed both the port planning and competition aspects of the CIRA (i.e. items (a) and (b) above) as well as the economic regulation aspects (i.e. items (c) through (f) above). Given the emphasis of the Commission's Review, the summary of CIRA reviews in other jurisdictions will be where possible, primarily focussed on the economic regulation aspects.

It should be noted that COAG has nominated the ports to be reviewed under clause 4.3 of the CIRA, and no ports were designated as significant in Tasmania.²⁰²

Several different approaches have been adopted to the price regulation of ports and related services across Australian jurisdictions. Essentially there are essentially three main approaches to price regulation currently in place:

- Ministerial approval of port charges
- the threat of an inquiry or declaration under Part IIIA of the *Trade Practices Act 1974 (TPA)* if there is any evidence of an abuse of market power
- price regulation of port charges such as price monitoring (in Victoria and South Australia) or access undertakings (such as Dalrymple Bay in Queensland).

In the Northern Territory and New South Wales Ministerial approval is required for port charges. In NT all fees and charges levied by the Port of Darwin must be approved by the relevant Minister.²⁰³ In NSW port charges are proposed, justified and calculated by the port authorities, with changes approved by the relevant Minister in consultation with Shareholding Ministers.²⁰⁴ For Western Australia, Ministerial approval of port charges is more indirect with power to impose port charges residing with the port authority but with the relevant Minister able to issue directions to a port authority. Under the existing legislative framework, there is no provision to enable port charges in WA and the NT to be subject to independent regulatory oversight.

Queensland has a generic price regulatory framework which allows for the investigation of the pricing practices of monopoly businesses considered to have substantial market power upon referral from the relevant Minister, and is only recommendatory in scope and does not contain any price control powers. No such referral has occurred. Queensland also has a generic access regime which can be applied upon declaration of facilities. Dalrymple Bay Coal Terminal (**DBCT**) is the only port facility in Queensland to be declared under this framework.

Victoria along with South Australia are the only jurisdictions to adopt a light handed form of price regulation through the price monitoring of port services. Under the price monitoring regimes, port authorities can set their own charges for certain prescribed services but do so in the knowledge that those prices will be monitored and scrutinised for potential abuse of market power and the threat of the introduction of more heavy-handed price control mechanisms when the regulatory regime is subject to periodic review.

Three jurisdictions currently have state-based third party access regimes which apply to the ports industry and which operate through a negotiate/arbitrate framework: Victoria, South Australia and Queensland. Victoria has a channel access regime which applies to channels declared by the Governor-in-Council.

²⁰² Council of Australian Governments 2007, *COAG National Reform Agenda: Competition Reform April 2007*, p. 44.

²⁰³ Northern Territory Government 2008, *Review of the Regulatory Framework for Port of Darwin: Discussion Draft Report*, March, p. 7.

²⁰⁴ PwC 2007, *Review of Port Competition and Regulation in NSW*, November, p. 51.

However, since no channels have been declared to date the Victorian Channels Access Regime is not operational. SA has an access regime that applies to ports channels as well as to a set of port services and facilities. The SA regime is currently operational and is scheduled to remain in effect until October 2010. As mentioned, Queensland has a third-party access regime that applies to the common-user facilities at DBCT and which was established through a draft access undertaking submitted by the infrastructure facility owner, DBCT Holdings Pty Ltd, and approved by the QCA under the QCA Act.

Third party access to port facilities in NSW, WA and NT operates through the following measures:

- Provisions contained in exclusive licence arrangements and long-term leases which in some cases require competitive access to be granted to a port facility or services, e.g. through common access provisions.
- Existing regulations in WA which facilitate access to bottleneck facilities, in particular through the *Western Australian Bulk Handling Act 1967*, *Wheat Export Marketing Act 2008* (Commonwealth) and the *Railway and Port (The Pilbara Infrastructure Pty Ltd) Agreement Act 2004*.

There is also scope in all jurisdictions for access for port infrastructure to be made available to third party users through an application for declaration of the facilities under Part IIIA of the TPA (where this is not superseded by existing effective port access regimes).

The following sections summarise the CIRA reviews undertaken in other jurisdictions. They are followed by some summary observations relevant to the present Review.

Queensland

In response to the obligations under clause 4.3 of the CIRA the Queensland Government undertook a review of current significant port operations and commercial business practices for consistency with the principles set out in clauses 4.1 and 4.2 of the CIRA. A discussion paper and addendum were released in September 2007 with the final report titled "Review of Current Port Competition and Regulation in Queensland" released in December 2007.²⁰⁵ The Queensland Government established a Port Competition Review Committee (**PRC**) comprising four senior representatives from Queensland Transport, Queensland Treasury and the Department of Premier and Cabinet. The PRC was responsible for overseeing the review and making recommendations to the Queensland Government in respect of any changes required in the current arrangements and practices, to ensure compliance with the CIRA principles.²⁰⁶

²⁰⁵ Queensland Transport 2007, *Review of Current Port Competition and Regulation in Queensland: Final Report*, December.

²⁰⁶ *Ibid.*, p.6.

The ports nominated by COAG as significant ports and requiring review in Queensland were the ports of Brisbane, Gladstone, Hay Point, Mackay, Abbot Point, Townsville and Weipa.

Overall, Queensland has 20 ports which are administered by six government-owned port authorities²⁰⁷ which principally operate under the provisions of the *Government Owned Corporations Act 1993*, the *Transport Infrastructure Act 1994* and the *Financial Administration and Audit Act 1977*.²⁰⁸ The port authorities are largely responsible for the construction of essential port infrastructure, administration, and the operation of some port facilities.

A Queensland port authority's business activities can potentially be subject to economic regulation by the QCA under the provisions of the *Queensland Competition Authority Act 1997 (QCA Act)*. In general, business activities of ports can be regulated under either the Monopoly Prices Oversight regime (Part 3) or the Third Party Access Regime (Part 5) in the QCA Act.

- The monopoly prices oversight regime is a recommendatory regime that provides for QCA, upon referral from the relevant Minister, to investigate and report on the pricing practices of monopoly businesses.
- The third party access regime is activated upon the declaration of a significant infrastructure facility by the Queensland Government, and then establishes a legal right for competing firms to obtain access to declared facility. Under s.70(1)(b) of the QCA Act, infrastructure which meets this criteria can include port infrastructure such as channels.

At present, the only Queensland port subject to economic regulation is the DBCT facility at the port of Hay Point, which is declared under the State's Third Party Access Regime. There are no significant ports in Queensland currently subject to economic regulation under Part 3 of the QCA Act.

Stakeholder input was largely supportive of the existing arrangements. There was no demonstrated need for further regulation of any ports in Queensland. The benefits of further regulation would not outweigh the potential costs. The threat of regulation limits the use of monopoly power, and if regulation is required in future it should initially be light-handed, such as price monitoring.²⁰⁹

The PRC found that the current regulatory framework facilitating third party access to port infrastructure was sufficient, with no changes required to be made. The implicit threat of regulation under the QCA Act provides sufficient discipline on the ports to ensure market power is not misused.²¹⁰

²⁰⁷ At the time of writing, these are: Cairns Ports Limited; Gladstone Ports Corporation Limited; Mackay Ports Limited; Port of Brisbane Corporation Limited; Ports Corporation of Queensland Limited; and Port of Townsville Limited.

²⁰⁸ Queensland Transport 2007, p.3

²⁰⁹ Queensland Transport 2007, p.10

²¹⁰ Ibid., p.12

Currently, most government-owned ports in Queensland adopt a set of pricing principles which govern commercial negotiations between port authorities and users. The PRC recommended changes to future Statement of Corporate Intent documents for port authorities to include a requirement that they are to earn a commercial rate of return while not misusing market power, and to incorporate pricing principles to be used in generating prices for the provisions of services and infrastructure.

While the PRC concluded that the pricing framework currently used by Queensland port authorities is transparent and stakeholders are satisfied with the conduct of contract negotiations, the PRC also suggested further consideration be given to the consistency of port planning activities and methods of reporting to ensure stakeholders are comfortable with the level of transparency and accountability of port authority operations.²¹¹

*A consistent theme from all stakeholders is the desire for the existing practices to become more transparent and hence understandable. This will ensure that stakeholders are better prepared when entering into commercial negotiations with port authorities for access to and pricing of infrastructure.*²¹²

With regard to vertical integration and resulting potential for conflicts of interest of port authorities, the PRC noted that all of the ports under review have been declared as significant businesses under the QCA Act for competitive neutrality purposes.²¹³ This enables the QCA to investigate complaints that ports have not been applying competitive neutrality. The only port authority in Queensland which has a fully vertically integrated structure is the Central Queensland Ports Authority (which also carries out all ship loading and unloading operations at the ports it manages). The submissions did not raise any concerns with the current port structure, and the PRC concluded that vertical integration is not resulting in any discriminatory behaviour in the Queensland ports.²¹⁴

New South Wales

In response to the obligations under clause 4.3 of the CIRA, the NSW Government engaged PricewaterhouseCoopers (**PwC**) to conduct a review of current significant port operations and business practices for consistency with the CIRA principles (clauses 4.1 and 4.2). An Issues Paper was released in August 2007²¹⁵ followed by a roundtable discussion with industry stakeholders. The final report entitled "Review of Port Competition and Regulation in NSW" was submitted to the Minister in November 2007, and publicly released in September 2008.

²¹¹ Ibid., p.15

²¹² Ibid., p.18

²¹³ Ibid., p.15

²¹⁴ Ibid., p.17

²¹⁵ NSW Maritime, *Review of Port Competition and Regulation in NSW*, http://www.waterways.nsw.gov.au/wh/issues_paper.html (accessed on 27 January 2009).

The NSW ports nominated by COAG as significant ports requiring review included: Sydney Harbour (Glebe Island, White Bay and Darling Harbour); Port Botany; the port of Newcastle; and Port Kembla.

These significant ports are managed by the government-owned Sydney, Newcastle and Port Kembla Port Corporations. Each port corporation has responsibility for managing the port precincts of their respective ports. The Maritime Authority of New South Wales (**NSW Maritime**) is responsible for the safety regulation of commercial boating and port operations. It is also responsible for the shipping channels in each of the significant ports, manages two small regional ports, and provides strategic advice on ports and maritime matters to the NSW Government.²¹⁶ The functions, roles and legislative framework for NSW Maritime and the port corporations²¹⁷ are defined in the *Ports and Maritime Administration Act 1995 (PMAA)*.

Under the current regulatory framework governing port pricing and access in the PMAA, port corporations may fix port charges such as navigation services charges, pilotage charges, site occupation and wharfage charges with the approval of the Minister. However, the port corporations can fix the berthing charge (applicable to small vessels) without Ministerial approval. A port corporation can negotiate different charges with a port user (PMAA s.67). The Minister determines the port cargo access charge, a levy for land-side port access.

PwC noted that most port facilities are leased to other service providers, and “in practice most key port facilities make their terms and conditions publicly available so that potential customers are able to assess and potentially negotiate changes.”²¹⁸ There are also a number of berths operated on a multi-user/open access basis, and the port corporations have terms and conditions for these multi-user berths.

With respect to independent economic regulation PwC observed that:

Prices for port corporation services in NSW are currently not subject to independent economic regulatory oversight ... If it was to occur, this would be likely be undertaken by the ACCC or the Independent Pricing and Review Tribunal (IPART). If it was to be IPART it would require relevant services to be declared under Section 4 of the IPART Act to be government monopoly services for which:

- *There are no other suppliers to provide competition in the part of the market concerned; and*

²¹⁶ NSW Maritime, *About NSW Maritime*, <http://www.maritime.nsw.gov.au/about/aboutus.html> (accessed on 27 January 2009).

²¹⁷ Which include: Newcastle Port Corporation, Sydney Port Corporation, and Port Kembla Port Corporation.

²¹⁸ p.19

- *For which there is no potential contestable market in the short term in that part of the market.*²¹⁹

NSW does not have a third party access regime with respect to port infrastructure or shipping channels. However, PwC found that the existing arrangements were conducive to competitively neutral outcomes, for example:

- the port corporations enter into a channel agreement with NSW Marine for non-exclusive use of the shipping channels servicing their ports for their tenants and users
- port corporations operate some common/multi user facilities for general cargoes. In addition, some long term lease agreements have common user provisions. An example of a leased common user terminal is the AAT terminal at Sydney Harbour, which provides common user access to stevedores as well as transport and logistics operators. Otherwise, at terminals under exclusive lease by stevedores, the stevedores have an obligation under the terms of their lease to make the facility available to all road, rail and ship operators on an equal and non-discriminatory basis.
- the port corporations also operate some common access facilities, such as the Vehicle Booking System for scheduling access to stevedore terminals allocates access to road operators on a “first-in, first-served” basis.

Stakeholders were generally of the view that there is little evidence of the port corporations exercising market power.²²⁰ While there were some concerns about whether prevailing prices were at competitive levels, and the ability of ports to make large adjustments to prices, PwC observed that the latter appeared to be directly related to infrastructure investments. PwC found there is no substantive evidence to suggest that NSW port prices reflect significant monopolistic behaviour.²²¹

PwC also concluded that on balance, the current system of commercially negotiated market outcomes is broadly consistent with the requirements for open access, although they noted several potential inconsistencies with the CIRA principles, including lack of an effective mediation or dispute resolution mechanism when agreement cannot be reached over terms and conditions.²²²

The review also considered whether the provision of access has been provided on a competitively neutral basis, as required by clause 4.2(b) of the CIRA. During the review, PwC found no evidence to indicate that access had not been provided on a competitively neutral basis.²²³ A regulated access regime was not expected to provide net benefits. However, PwC observed:

²¹⁹ PwC (2007), p.89

²²⁰ p.51

²²¹ p.59

²²² Ibid., p.70.

²²³ p.87

Given the importance of the terms and conditions of access to competition and the competitiveness of exports, it would be useful to have greater transparency in the policy making process that determines the circumstances under which common user provisions can be waived. Any differences in common user status between terminals providing a competing service could be subject to a transparent and publicly available net benefits test.²²⁴

In relation to the regulation of long-term leases, PwC recommended monitoring arrangements be left as they currently stand with a focus on achieving greater transparency on terms and conditions, including the pricing principles used to set key charges contained in the leases.²²⁵

Overall, PwC found that expanding the current levels of economic regulation of port corporation prices was not likely to deliver improved outcomes for competition.²²⁶ PwC did not expect prices charged by port corporations as a result of price regulation to significantly affect the degree of competition for the users of port infrastructure. This was due to port corporation prices comprising only a small component of port interface costs and the absence of evidence provided to PwC to show that prices were higher than they otherwise would be under some form of price regulation. Therefore, PwC recommended that the NSW Government keep abreast of the monitoring and reporting work of the ACCC and BITRE on stevedoring prices and productivity, and support the ACCC in its price oversight role of stevedoring behaviour.²²⁷

The following actions were considered necessary by PwC for NSW to satisfy its obligations under clause 4 of CIRA²²⁸:

- The existing oversight of port corporation charges, performed by the Minister, should continue, and port charges should be regularly and appropriately benchmarked against those in other Australian jurisdictions.²²⁹
- In order to improve transparency in how terms and conditions for long-term leases are determined, the State Government could develop principles or minimum requirements which can be made publicly available. Vertically integrated port service providers should be encouraged to improve the transparency of their pricing structures.
- The terms and conditions of long-term leases should be reviewed, and potentially modernised, to ensure they sufficiently reflect changes in Government policy.
- A consistent approach should be taken by the State Government with respect to setting the common user status of facilities on Government land, with any differential status subject to a transparent and publicly available net benefits test.

²²⁴ p.81

²²⁵ PwC 2007, op. cit., p.80.

²²⁶ Ibid., p.5

²²⁷ Ibid., p.6

²²⁸ Ibid., pp.2-6.

²²⁹ This is inconsistent with clause 4.1(b)(iii) of the CIRA.

NSW government response to PwC review

The NSW Government issued a formal response to the PwC review in September 2008²³⁰, and subsequently enacted changes to the PMAA through the *Ports and Maritime Administration Amendment (Port Competition and Co-ordination) Bill 2008*. In its response, the Government identified two key areas for reform: improving competitive outcomes at ports and the coordination of port related supply chain services.

In order to provide clear policy direction and improve the competitiveness of port operations, the NSW Government decided to modernise the statutory objectives of the port corporations²³¹ including objectives to²³²:

- foster competition and commercial behaviour in port operations; and
- advance productivity and efficiency in the port and the port-related supply chain.

The leasing practices of the port corporations would be changed to ensure future leases of major port facilities such as stevedoring terminals contain appropriate provisions to foster enhanced competition, investment and productivity.²³³ Where there is a need to balance competition and commercial outcomes, the relevant Minister could provide guidance to the port corporation through statutory directions.

Under the amended legislation the Minister can give directions to a port corporation related to the objectives of promoting and facilitating a competitive commercial environment in port operations, and improving productivity and efficiency in its ports and the port-related supply chain.

The NSW Government has recommended that ports corporations should be provided with a framework to allow them to act as a coordinator of port-related supply chain services.²³⁴ This framework will comprise, in addition to the new statutory objectives noted above, a new statutory function, namely to facilitate and coordinate landside port facilities and supply chain services so that these facilities and services meet performance standards set by the Minister. The Minister's powers of direction allow the Government to intervene if it is demonstrated that voluntary initiatives are not effective in improving the efficiency of port services and supply chains.²³⁵

South Australia

The South Australian Government engaged Essential Services Commission of South Australia (**ESCOSA**) to review the port access regime for consistency with

²³⁰ NSW Government 2008, *NSW Government Response to the Review of Port Competition and Regulation in NSW under the Council of Australian Governments' Competition and Infrastructure Reform Agreement*, September.

²³¹ Contained in the PMAA.

²³² NSW Government 2008, *op. cit.*, p.4.

²³³ *Ibid.*, pp.4-5.

²³⁴ *Ibid.*, p.5.

²³⁵ *Ibid.*, pp.5-6.

SA's obligations under clause 2 of the CIRA. This review coincided with the scheduled reviews of the price monitoring regime and the access regime required by the MSA and ESC Act 2002. ESCOSA's review commenced in February 2007 with the release of an Issues Paper and the Final Report entitled "2007 Ports Pricing and Access Review" was released in September 2007.

The SA Department for Transport Energy and Infrastructure (**SADTEI**) undertook a further review of significant ports in SA in 2008 consistent with SA's obligation under clause 4.3 of the CIRA.²³⁶ The only port nominated by COAG as significant and requiring review in SA was Port Adelaide. The review conducted by SADTEI considered other aspects of regulation and competition at Port Adelaide relevant to clause 4 of the CIRA, which were not covered by the ESCOSA review.

At present ESCOSA is the economic regulator for seven commercial ports in SA. The *Maritime Services (Access) Act 2000* (**MSA**) establishes the legislative framework providing for access to SA ports and maritime services and for price regulation of essential maritime services.

Under the MSA, economic regulation applies only to proclaimed ports, which includes: Port Adelaide, Port Giles, Wallaroo, Port Pirie, Port Lincoln, Thevenard, and Ardrossan. ESCOSA regulates three types of port services, established under the MSA and ESC Act 2002:

- Essential maritime services – subject to price regulation with price monitoring
- Regulated services – subject to the ports access regime
- Maritime services – a broader grouping of services subject to a range of review and notification processes, including:
 - notification (a form of price regulation) of changes to pilotage charges
 - development of service standards as appropriate
 - keeping maritime industries under review to determine whether regulation (or further regulation) is required.

In its review, ESCOSA adopted the following criteria for determining whether or not price regulation should continue.²³⁷

- Is there the potential for the port operator to exercise market power?
- Is there any evidence of misuse of market power by the port operator?
- Will regulation produce a net benefit?

ESCOSA concluded that the structure of the market for essential maritime services suggests that there is the potential for market power to be misused. The greatest potential for misuse of market power was found to exist in relation to the export of grain produced on the Eyre Peninsula.

²³⁶ Department for Transport Energy and Infrastructure 2008, *Review of Significant Ports in South Australia under the Competition and Infrastructure Reform Agreement*.

²³⁷ ESCOSA 2007, *Ports Pricing and Access Review: Final Report*, September, p.20.

However there was no evidence to suggest that market power had been misused. ESCOSA based this conclusion on:

- Profits were not excessive
- Price changes were broadly consistent with CPI movements
- Benchmarking indicated that while port charges in SA were at the high end of the range compared to other Australian ports, they had not increased more rapidly than other ports.

Based on these findings, ESCOSA concluded that there was no justification for introducing a more “heavy-handed” price regulation framework than what currently was in place. It argued that the major benefits from price monitoring were that it provided transparency to access seekers through the publication of its port charges. Although it was acknowledged that regulation imposes some compliance costs, ESCOSA found that these costs were outweighed by the benefits provided by price monitoring.

In examining whether the access regime should be retained, ESCOSA focused on the regulated services that are not essential maritime services, namely pilotage and access to land. Flinders Ports is, at present, the only supplier of pilotage services at every proclaimed port. Although there is the potential for competitive entry, market power existed on the basis that pilotage is compulsory and is provided solely by Flinders Ports. ESCOSA proposed the continuation of the previous “light-handed” negotiate-arbitrate form of access regulation which only imposes regulatory intervention in the event of a dispute.²³⁸ Since access to land is provided for under the MSA in order to provide adequate access to other regulated services, ESCOSA’s conclusions were that market power existed. However, it concluded that there was no evidence of the misuse of market power in providing access to land and again supported the continuation of the current negotiate-arbitrate access regime.²³⁹

In relation to the coverage of the access regime, ESCOSA firstly found that it was unnecessary for the regime to apply to the port of Ardrossan given that there is only one major port user with a long-term agreement with the port operator, AusBulk, and little potential for other port access in the future. ESCOSA recommended access and price regulation cease to apply to Ardrossan, but that the ability for it to be proclaimed in the future be retained.²⁴⁰ Secondly, it was considered appropriate to extend coverage of the regime to take in the new bulk loader in the Outer Harbour of Port Adelaide. ESCOSA also indicated that while a *prima facie* case for the extension of access regulation to on-port grain storage exists, this question should be left to a broader review, having regard to the entire grain supply chain.²⁴¹

²³⁸ Ibid., p.27.

²³⁹ Ibid.

²⁴⁰ Ibid., p.39.

²⁴¹ Ibid., p.40.

ESCOSA recommended continuance of the price monitoring and access regimes for at least another three years, but also recommended extension of the regulatory period from three years to five years, in order to provide greater regulatory certainty to port operators while reducing compliance costs.²⁴²

ESCOSA also identified some changes that should be made to Part 3 of the MSA to increase the effectiveness of the negotiate-arbitrate access dispute resolution framework, and to ensure it satisfied the principles outlined in clause 2 of the CIRA. ESCOA recommended that the SA Government consider commencing the certification process at the earliest opportunity following necessary amendments to the MSA Act.²⁴³

SADTEI relied upon the conclusions reached by ESCOA in assessing SA's compliance under clause 4.1(a), 4.1(b)(i) and 4.1(b)(iv) of the CIRA. In relation to SA's compliance with clause 4.2(b) of the CIRA, the review by SADTEI concluded that the ports access regime seeks to have access to regulated services occur on a fair commercial terms through a light-handed negotiate-arbitrate form of access regulation.²⁴⁴ It was concluded SA complies with clause 4(b)(ii) of the CIRA through the ports monitoring regime and the ports access regime overseen by ESCOSA.

In relation to conflicts of interest under clause 4.2(d) of the CIRA, the review by SADTEI commented that no such conflicts were identified during the course of the review.²⁴⁵

Actions to implement the findings

A new price determination²⁴⁶ was made by ESCOSA in October 2007 which revoked and replaced the previous ports pricing determination. The 2007 price determination establishes that:

- A regulated service provider must set and publish a comprehensive list of prices for the provision of essential maritime services.
- A regulated service provider cannot make or publish a price increase to recover the costs of construction or ongoing maintenance of an excluded asset.
- ESCOSA will undertake a price monitoring role with respect to the provision of essential maritime services by a regulated service provider.²⁴⁷
- A regulated service provider must inform ESCOSA of any changes to its published prices.

²⁴² Ibid.

²⁴³ Ibid., p.34.

²⁴⁴ Department for Transport Energy and Infrastructure, op cit., p.23.

²⁴⁵ Ibid., p.24.

²⁴⁶ ESCOSA 2007, *2007 Ports Price Determination: Final Price Determination*, October.

²⁴⁷ These essential maritime services consist of: providing or allowing for access of vessels to a proclaimed port; providing port facilities for loading or unloading vessels at a proclaimed port; and providing berths for vessels at a proclaimed port.

The SA government decided that the Port Access Regime would be extended for a further triennial period from 31 October 2007 up to and including 30 October 2010,²⁴⁸ and the Port of Ardrossan was declared to be a port capable of being subject to the access regime.²⁴⁹ So far, the SA Government has not submitted its ports access regime to the NCC for certification.

Western Australia

In response to the obligations under clause 4.3 of the CIRA, the WA Department of Planning and Infrastructure engaged the Allen Consulting Group (**ACG**) to undertake a review of current significant port operations and business practices for consistency with the CIRA principles set out in clauses 4.1 and 4.2. In July 2008, ACG released an Issues Paper inviting submissions from industry stakeholders, with seven stakeholders responding. Following the consideration of these responses, ACG released a Draft Report entitled "Council of Australian Governments Review of Western Australian Ports" in November 2008. ACG is currently considering stakeholder responses before it releases its Final Report to DPI in 2009. At the time of writing the Final Report was still not yet available.

The ports nominated by COAG as significant ports requiring review under clause 4.3 of the CIRA in NSW were: the Port of Fremantle (including Fremantle Port Inner Harbour, Fremantle Port Outer Harbour, including the proposed Outer Harbour developments but excluding the Kwinana Bulk Jetty and the Kwinana Bulk Terminal), the Port of Esperance; and the Port of Port Hedland (including the Fortescue Metals Group development but excluding the BHP Billiton outer harbour proposal).

Overall, eight port authorities have functions and powers established under the *Port Authorities Act 1999 (PAA)*, which is the principal legislative framework covering the port industry in WA. The Department of Planning and Infrastructure has oversight of commercial ports, discharging its role by formulating and implementing policies which aim to improve the efficiency and safety of port operations in WA.²⁵⁰

Each port in WA is operated by a commercialised government-owned port authority established under the PAA. Each port authority is also subject to accountability mechanisms established by the WA Government.²⁵¹ The PAA gives port authorities the power to levy fees for licences and approvals (provided for in regulations) and impose port charges as the port authority determines.²⁵² However, the PAA does not address access to ports or to infrastructure or infrastructure services owned or controlled by the port authority.

²⁴⁸ *Maritime Services (Access) Regulations 2001*, s.5. See also: The South Australian Government Gazette, 18 October 2007, p.3956.

²⁴⁹ *Maritime Services (Access) Regulations 2001*, s.4.

²⁵⁰ Allen Consulting Group 2008, *Council of Australian Governments Review of Western Australian Ports: Draft Report*

²⁵¹ ACG 2008, p.21.

²⁵² ACG 2008, p.23.

There is no port access regulation in WA (other than scope for declaration of facilities under Part IIIA of the TPA, although no ports in WA have been declared under the national access regime to date), except for some specific access legislation for grain-handling facilities.

Draft report findings and conclusions

In its Draft Report, ACG examined each aspect of the WA ports industry to assess whether economic regulation could be justified in terms of the promotion of competition in upstream and downstream markets and preventing the misuse of market power.²⁵³ In its examination, ACG considered that economic regulation may be effective in increasing competition in the market for port services where²⁵⁴:

- participants in the related market are dependent on access to the facility or service; and
- the provider of the facility or service has market or monopoly power that results from natural monopoly characteristics in the facility or service or barriers to entry to the market for the facility or service; and
- the provider of the facility is a vertically integrated business that will benefit from restricting access of other businesses to the facility or service.

This criterion was firstly used to assess whether economic regulation should be applied to any of the port facilities provided by the Fremantle Port Authority, the Esperance Port Authority or the Port Hedland Port Authority. The related markets or users of port facilities at these ports include shipping services, stevedoring services, pilot services, towage services, and line and mooring services. ACG's preliminary finding was that regulation is not needed to prevent the misuse of market power in the provision of port facilities or to increase competition in the downstream markets for port services.²⁵⁵ With respect to container shipping, ACG noted:

*Freight can be railed or trucked between the eastern states and Western Australia at rates that are competitive with transport by sea. It is estimated that approximately 20 per cent of the freight tonnage that is moved between Perth and the eastern states is carried by sea and the remainder of this interstate freight task is services by road and rail ... As such, providers of shipping services are not totally dependent upon the port facilities of any particular port.*²⁵⁶

Secondly, using the same criterion, ACG assessed whether providers of port services at each port authority should be subject to economic regulation in either preventing the misuse of market power or promoting competition in up or downstream markets. The port services included stevedoring services, pilot

²⁵³ ACG 2008, p.25

²⁵⁴ ACG 2008, p.26.

²⁵⁵ ACG 2008, p.28

²⁵⁶ ACG 2008, p.29

services, towage services, mooring services, grain bulk-terminal services, and iron ore bulk-terminal services. ACG concluded that there was no need for economic regulation to be imposed in relation to the provision of any service.

ACG also found no evidence to indicate that third party access to port facilities has been provided on anything other than a competitively neutral basis. With respect to potential for conflicts of interest:

- In relation to port authorities, ACG found conflicts of interest to exist with respect to the vertical integration of the Fremantle and Esperance port authorities. However, ACG concluded that there was no evidence of misuse of market power, and therefore economic regulation was not recommended.
- In relation to private sector providers of port services, ACG found that there are conflicts of interest for CBH in providing access to the grain handling facilities, arising from the vertical integration of CBH with grain transport and grain trading businesses. Although ACG concluded that the current legislative framework providing for access with respect to wheat facilities is appropriate²⁵⁷, it noted that the access provisions for other grains (such as barley and canola) may need further investigation to create consistency with the existing regulatory arrangements for wheat.²⁵⁸
- Potential conflicts of interest arising from vertical integration were also found to exist in the provision of stevedoring services and export iron ore handling services at the Port of Port Hedland. However, ACG concluded that these potential conflict of interests have either already been adequately addressed by existing regulation or are not considered to restrict competition.²⁵⁹

With respect to the commercial charters of port authorities in WA under the PAA, ACG identified one potential inconsistency with clause 4.2(c) of the CIRA, namely they do not provide guidance to port authorities not to exploit monopoly powers. However, ACG found that the commercial charters require ports to facilitate trade and commerce, which sufficiently constrains the exploitation of monopoly powers and therefore satisfies clause 4.2(c) of the CIRA.²⁶⁰

Northern Territory

In response to the obligations under clause 4.3 of the CIRA, the NT Government undertook a review of current significant port operations and business practices for consistency with the CIRA. The only port nominated by COAG as significant (and requiring review) in the NT was the Port of Darwin. A working group of officials comprising NT Treasury, Darwin Port Corporation (**DPC**) and the Departments of the Chief Minister; Business, Economic and Regional Development; and Planning and Infrastructure, was convened to undertake the review of the Port of Darwin. In March 2008, the NT Treasury released a discussion draft report in order to assist stakeholders in making submissions. The final report titled "Review of the

²⁵⁷ Outlined in the *Bulk Handling Act 1967* and the *Wheat Export Marketing Act 2008*

²⁵⁸ ACG 2008, p.56

²⁵⁹ ACG 2008, p.57

²⁶⁰ ACG 2008, p.55

Regulatory Framework for the Port of Darwin: Final Report” was released early in 2009.

The Port of Darwin is the only major commercial port serving the NT. In 2004-05, 88 per cent of throughput at the port was through facilities controlled by DPC.²⁶¹ The majority of the remaining throughput of the Port of Darwin was handled by the Perkins Shipping Company at its Frances Bay Wharf which was predominately container and general cargo.²⁶²

DPC is an NT Government business division established under the *Darwin Port Corporation Act*. DPC is responsible for the provision of operation of the port, including some wharves and all channel services, as well as controlling vessel movements, regulating stevedoring and provides pilotage services.²⁶³ DPC is subject to the directions of the Chief Minister who oversees the performance of the corporation, and who must approve all price structures, although individual price variations do not require the Minister’s approval.²⁶⁴

The report assessed whether economic regulation is justified in order to promote competition or limit the misuse of market power. This involved an assessment of potential market power for the Port of Darwin’s infrastructure services and related ancillary service markets, and hence the need for independent pricing oversight or a formal third party access regime under the TPA.

In relation to port infrastructure services (which includes the use of DPC terminals, channel and navigation infrastructure), the review found there was little market power because a large proportion of bulk and livestock products are transported from remote inland areas that have comparable distances to other port alternatives, and for containers there is competition within the port between DPC and Perkins.²⁶⁵ The port facilities of these two operators are nearing capacity, and hence barriers to entry are relatively low. There is no evidence to suggest that DPC has exercised market power, given its prices are only marginally above operational costs.²⁶⁶

There is no formal third party access regime in place for port infrastructure and services in the NT. Instead, access to port users (e.g. shipping lines) is provided through the use of common-user berth areas, handling equipment and storage areas at DPC wharves and the licensing of stevedores. Stevedores at the DPC’s wharves are licensed to operate on a common-user berth facility (with DPC charging the vessel owner directly for use of these facilities) and lease major infrastructure, such as container cranes, from DPC on a short-term basis. Smaller

²⁶¹ Northern Territory Government 2008, *Review of the Regulatory Framework for Port of Darwin: Discussion Draft Report*, March, p.5.

²⁶² Northern Territory Government 2008, *Review of the Regulatory Framework for Port of Darwin: Discussion Draft Report*, March, p.5

²⁶³ Northern Territory Government 2008, p.6.

²⁶⁴ Northern Territory Government 2008, p.10

²⁶⁵ Northern Territory Government 2008, p.13

²⁶⁶ Northern Territory Government 2008, p.14.

equipment requirements are provided by stevedores. This is in contrast to most Australian ports where stevedoring firms own the container-handling equipment and operate, generally, on a long-term lease. The review found that access to common user facilities appears to be allocated on a competitively neutral basis. However, the review found that the processes of determining use of wharfage infrastructure and allocating stevedoring licences lacked transparency because criteria are not publicly available and reasons for access are not disclosed.²⁶⁷ Therefore, it was recommended that the provision of access on a competitively neutral basis could be improved by improving the transparency of the process.

This should be achieved by formally establishing the criteria for determining access in the Port Handbook, a formal policy statement, and/or in DPC's Charter of Operations, and by requiring DPC to disclose its reasons for making access decisions to users.²⁶⁸ ...

An independent appeal process could be established by either utilising the current competitive neutrality complaints mechanism administered by Treasury or by expanding the functions of the Marine Appeals Tribunal.²⁶⁹

The review did not find economic regulation of port infrastructure services, either an independent pricing oversight or a formal third party access regime, as being justified and would only serve to significantly increase regulatory costs impede flexibility and operation of the port.

The potential barriers to entry into the market for the provision of towage services were found to be low and therefore competition is effective and there is no need for economic regulation of towage services²⁷⁰

Pilotage services at the Port of Darwin are provided exclusively by DPC under an informal exclusive licence arrangement.²⁷¹ This resulted in a regulatory barrier to entry as it could act as a disincentive against private companies entering the market.²⁷² The report recommended the adoption of a non-exclusive licensing framework.²⁷³

The review also noted that DPC's revenues have been below operating costs since 2004-05, leading to the need for pricing reforms. The review has recommended that pricing reforms be introduced in order to improve the profitability of DPC as well provide for the efficient pricing of port infrastructure services. The review recommended the building blocks approach, which allows for the recovery of

²⁶⁷ Ibid., p.24.

²⁶⁸ Northern Territory Government 2008, pp. 24-25

²⁶⁹ p.26

²⁷⁰ Ibid., p.19.

²⁷¹ Ibid., p.19.

²⁷² Ibid., p.20.

²⁷³ Ibid., p.21.

efficient operating costs and a return on capital, should be used by DPC for determining pricing.²⁷⁴

Comparison between Jurisdictions in compliance with the CIRA

Section 8A of the ESC Act states that the Commission must have regard to matters which are relevant to promoting consistency between states and on a national basis.

The CIRA imposed obligations on each State and Territory to undertake a review of significant port operations to ensure they are consistent with the principles set out in clauses 4.1 and 4.2 of the CIRA.

Overall there have been some differences in the approach to assessment of the market power of port authorities. Some reviews have heavily relied on the views of stakeholders in arriving at its conclusions in regard to market power, while others have undertaken detailed assessments of the markets. Some have given emphasis to whether there is evidence that market power has been misused in the past, while others have also given weight to the potential for market power to be exercised. Generally speaking, the reviews did not find conclusive evidence of any misuse of market power by ports. Some considered this to be associated with constraints or incentives applying to ports that are government owned.

With respect to whether some form of economic regulation is needed to reduce the risk that market power may be misused, or to facilitate competition in related markets, the overall balance of the outcomes of the reviews has been to reject changes to the prevailing oversight arrangements. Broadly speaking, clause 4.1(b)(iii) and clause 2 of the CIRA have not been applied consistently.

Overall, and with some important exceptions, the CIRA reviews have not resulted in substantial changes to the pre-existing arrangements. NSW and the NT are perhaps the jurisdictions in which changes have been most notable. The NT has adopted a non-exclusive licensing arrangement for pilotage and greater transparency and dispute resolution in relation to access for stevedores to common user facilities. NSW has adopted much stronger powers of Ministerial directions in relation to port operations, and future leases of major port facilities will contain provisions to foster enhanced competition, investment and productivity.

A nationally consistent approach to port regulation does not appear to have yet emerged from the CIRA review processes, or the state government responses to those reviews. However, a greater degree of consistency is feasible.

²⁷⁴ Ibid., p.3.