



Essential Services Commission of South Australia

Ports Price Review: Progress Report

Flinders Ports Response

July 2003

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## **EXECUTIVE SUMMARY**

### **Background**

This submission responds to ESCOSA’s Progress Report on its review of price regulation of proclaimed ports. The submission comments on ESCOSA’s conclusions to date and discusses the issues ESCOSA has raised and on which it has requested inputs.

### **Progress Report Conclusions**

The Progress Report sets out an interpretation of the services that are included in the statutory definition of Essential Maritime Services. They number 12 in all, some provided by means of infrastructure facilities and some not. The services actually provided by Flinders Ports to its customers combine most or all of these 12 elements.

This immediately raises the issue of how the services should be charged for. Structuring charges efficiently across a range of services where there are large fixed and common costs is difficult. It is also constrained by historical practice and customer preferences. Flinders Ports needs flexibility in recovering its total costs across ports, cargoes and services. It needs to be able to respond in commercial terms to proposals from its customers and to negotiate price/volume/service packages that meet the needs of both parties.

Regulation that impacts on the structure of charging would seriously impede the flexibility that is a hallmark of competitive markets.

A key conclusion from the Progress Report is that port costs are such a small part of the value chain that the costs of regulation would be likely to exceed any conceivable benefits. This is reinforced by the lack of evidence of misuse of market power and the fact that market analysis provides only weak suggestions of the potential existence of market power.

### **Issues of Market Power**

There is evidence that new ports can be built and existing ports can be expanded, just as the existing Port Stanvac can be closed, presumably because its operator believes that costs can be minimised by doing so and using services provided by Flinders Ports instead.

Flinders Ports has an incentive to maximise demand for its services and use of its infrastructure. It does not compete against its customers and hence has none of the incentives justifying regulation of access prices in some other industries.

Even where Flinders Ports appears superficially most likely to have market power – e.g. in Eyre Peninsula ports and in a cargo such as gypsum – it faces market pressures, indirect competition, and countervailing power.

In grains, Flinders Ports faces highly variable volumes and accepts a high degree of revenue risk through its current charging structure. The relatively large number of grain ports raises port costs (due to the lower average volumes of trade throughput compared to other States), but this is offset by correspondingly lower gate-to-port transport costs.

Charges vis-à-vis other bulk cargoes need to be assessed in the light of overall contributions to Flinders Ports’ costs. Fixed and common costs should be recovered wherever best possible. The economic theory of effectively competitive markets involving multi-product firms provides no justification for charging uniformly across cargoes or based on narrow concepts of costs.

Charges for container and motor vehicle cargoes are clearly set in a highly competitive environment.

Where certain cargoes are specific to certain ports, commercial negotiation provides satisfactory outcomes taking into account port capabilities.

When analysed correctly it is clear that Flinders Ports practises no cross-subsidisation across cargoes or ports. Each service recovers at least its incremental costs.

Mooring is a contestable service in a manner similar to stevedoring.

## **Forms of Price Regulation**

Price caps are not a low-cost form of regulation. To be implemented properly they require a large amount of information on the part of the regulator, much of which in the case of Flinders Ports is difficult to obtain or necessarily subject to great uncertainty. In particular, volume forecasts for highly variable cargoes are unavoidably uncertain. In any case, price capping should not be applied except where there is strong evidence of the existence and likely misuse of substantial market power.

Pricing principles-based regulation is unlikely to be worthwhile unless backed by strong price setting powers such as arbitration. But that, too, is only justified where there is strong market power.

Benchmarking is a means of obtaining information rather than a form of regulation in itself. It could be used in conjunction with price monitoring, but monitoring would need first to be justified in terms of its costs and benefits.

## **Conclusions**

The economic costs of price regulation in the circumstances of South Australian ports are likely to be high. Given that the benefits are likely to be low, regulation should not be continued.

To the extent that there is any case for price regulation of South Australian ports, regulation faces a dilemma. Clearly the case does not extend across the whole of Flinders Ports' provision of essential Maritime Services to include containers, motor vehicles, etc. If, contrary to Flinders Ports' arguments, ESCOSA considers that some services should continue to be regulated, the question arises how that should be done.

Flinders Ports submits that regulating some subset of its services is likely to inefficiently constrain its pricing elsewhere. All pricing is interlinked and fixed and common costs cannot be efficiently recovered across the whole range of services if commercial flexibility is removed from some areas.

It would be highly paradoxical if the conclusion were drawn that, because of these interdependencies the whole range of services should continue to be regulated. Flinders Ports considers that the only reasonable and safe conclusion is that none of the services should be regulated, even if there were some concerns in some areas. (This conclusion would not hold if there were substantial market power and the likelihood of its abuse, but Flinders Ports is unaware of any party advancing that position in relation to any of its activities.) In fact, Flinders Ports believes that there is no area in which even residual concerns can validly be held and that regulation can cease with complete confidence.

If circumstances were to change and market power were to come into play and be misused, regulation could at that point be reimposed. This is the approach that has been taken by the Commonwealth Government in the case of airports, where even the Productivity Commission and the Commonwealth Government conceded that market power did exist and where there are constant complaints about its being misused.

## **1. INTRODUCTION**

### **1.1 Background**

Flinders Ports Pty Ltd is the owner-operator of the seven commercial ports of South Australia<sup>1</sup> that were privatised in November 2001.

The Essential Services Commission of South Australia (ESCOSA) has completed the first stage of its review of price regulation of proclaimed ports, i.e. of six of these ports (excluding Klein Point) and of Ardrossan, which is operated by AusBulk Ltd. ESCOSA's May 2003 Progress Report called for written submissions from interested parties in relation to the issues raised in the paper. This submission is in response to that invitation.

In its Progress Report ESCOSA has reached conclusions about what services price regulation applies to under the relevant legislation (i.e. whether certain services are Essential Maritime Services in the terms of the Maritime Services (Access) Act); and about the likelihood that SA ports can misuse market power, which could justify the continuation of price regulation. ESCOSA concludes that "there may be sufficient grounds to consider the continuation of price regulation of Essential Maritime Services in some areas." ESCOSA goes on to raise the question of what forms of price regulation should be considered, and associated issues such as price-service trade-offs.

### **1.2 Structure of this Submission**

Section 2 of this submission provides comments on the Progress Report's conclusions regarding coverage and potential for the misuse of market power.

Section 3 then deals with the key question of whether – and where – Flinders Ports has actual market power, and the consequential impacts on customers. In doing so it responds to ESCOSA's specific concerns about, for example, grain cargoes (including in the light of AusBulk's announced intention to upgrade Ardrossan), Eyre Peninsula, and uniform pricing; discusses the outlook for petroleum in the light of Mobil's recent announcements relating to Port Stanvac; and responds to questions about the contestability of mooring.

The various forms of price regulation and their appropriateness to SA ports are analysed in Section 4. This includes comments about consistency of regulation across jurisdictions.

Section 5 deals with the questions of price-service trade-offs and transitional arrangements.

Conclusions are provided in Section 6.

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<sup>1</sup>Port Adelaide, Port Giles, Wallaroo, Port Pirie, Port Lincoln, Thevenard and Klein Point.

## 2. PROGRESS REPORT CONCLUSIONS

### 2.1 Coverage

The three categories of Essential Maritime Services set out in Section 4 of the MSA Act are:

- 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.

ESCOSA concludes in its Progress Report that these categories should be interpreted to include the services provided by:

- navigational aids;
- harbour control (but not pilotage or towage);
- channels;
- berths;
- wharves;
- cargo loading and unloading (marshalling) areas (but not loading or unloading themselves);
- jetties;
- berth pockets;
- fenders;
- mooring structures;
- mooring and unmooring; and
- provisioning connections (but not provisioning).

Mooring is discussed in Section 3 of this submission.

Storage, as opposed to marshalling, is not included in Essential Maritime Services.

The above list highlights the fact that Essential Maritime Services comprise a large number of interrelated services, some involving the use of infrastructure facilities and some (such as harbour control) of a different nature. Some are shipping-related and some cargo-related, but the distinction is not a clean one. As the port operator, Flinders Ports cannot charge for each of the component services individually but must recover its total costs, including a return on capital, through a simplified set of charges. In effect, its services to varying degrees constitute a ‘joint product’ of some or all of these elements. A high proportion of costs is fixed, so that profitability is sensitive to volume, which is subject to considerable uncertainty.

Structuring charges to recover the costs of Essential Maritime Services efficiently is inherently difficult, and is heavily constrained by tradition and the expectations of customers in the light of practices elsewhere around the world.

These constraints are reflected in the structure of the three existing charges:

- the Navigation Services Charge;
- the Harbour Services & Mooring Charge; and
- the Cargo Services Charge

which have wide acceptability amongst customers. Previous reviews have not generated any generally acceptable and clearly better charging structure, and radical changes – such as regarding the ship as the customer to the exclusion of the cargo – have in other places led to confusion and dissatisfaction.

Different types of customers are sensitive to different charges and have varying inclinations and abilities to respond to changes in those charges.

For example, where a shipper charters a ship, the ship operator is generally responsible for all port charges. Thus the ship operator is directly sensitive to these charges while the shipper is less so. Where, on the other hand, a shipper pays some element of the charges directly, e.g. a Cargo Services Charge, it will be sensitive to that charge (and the ship operator may not be). This is despite the fact that in each case these users are provided with a bundle of services largely deriving from a common set of infrastructure facilities, the costs of which are ultimately recovered by a bundle of charges that are shared between the shipper and the ship operator (and, ultimately, passed to their customers).

Whether charges apply to a ship or a cargo, and whoever pays the charge, the costs associated with providing the total bundle of services depend on the total bundle. Parts of the costs cannot be made to disappear by shifting the initial incidence of the charge.

Flinders Ports has given consideration to possible restructuring of its charges. Any such restructuring would alter the distribution of total costs incurred between ship operators and shippers, giving rise to complaints from one or other party. For example, it is sometimes proposed that all charges should be levied on the ship and none on the cargo. Flinders Ports takes the view that South Australia's ports have been established over the years to service cargoes, not ships. The ports would not exist – and ships would not call at them – in the absence of cargoes to be imported or exported.

Alternatively, some shippers argue that they should be relieved of some part of the Cargo Services Charge because of the characteristics of their specific cargo.

These proposals are, of course, made with a view to reducing the costs of a particular party and are part of the normal discourse of commercial negotiation. If they are agreed to and they lead to ad hoc departures from the existing structure of charges, however, they run the risk of undermining the ability of Flinders Ports to recover its full costs.

Such proposals typically assume that charges should be structured so as to be tied tightly to specific elements of infrastructure, ignoring the impracticability and inefficiency of such an approach. In fact, in competitive markets the structure of charges does not necessarily follow cost causation at all. For example, a supermarket recovers all its costs from sales of goods, rather than also charging an entrance fee, despite the fact that some of its costs are closely related to the presence of customers, regardless of how much, if anything, they purchase. Similarly, real estate agents charge a proportion of sales value, which is completely unrelated to their costs.

The structure of efficient charging by multi-product firms in competitive and dynamic markets is highly complex and impossible to reduce to simple rules. The firms themselves ‘feel’ their way towards structures and, for that matter, levels of pricing that are sustainable in terms of attracting customers and recovering costs. Price regulation can only make this process more difficult and, no matter how carefully designed, is likely to detract from efficiency except in the special case where a dominant firm’s unconstrained pricing would be even more inefficient. As explained in the remainder of this submission, this is not the situation in relation to ports in South Australia.

Flinders Ports will continue to consider and respond to proposals put to it by customers for differently structured charges. It welcomes new and first-time approaches, e.g. from the grain industry.

## 2.2 Potential for Misuse of Market Power

ESCOSA approached the question of market power in a series of steps. Its conclusions, together with Flinders Ports’ comments, are as follows

- The structure of the market for Essential Services provides some suggestion that market power could exist.
- There are indications that market power exists in Essential Maritime Services.
- There is some possible potential for the misuse of market power, but the indications are not uniform across commodities.
- Some port customers have economically feasible alternatives, although this is not uniform.
- Entry into Maritime Services is not impossible but the scope is very limited.

**Comment:** Flinders Ports does not consider that market power necessarily exists where the price elasticity of demand is low – even if other prerequisites of market power are present. A low elasticity could make the exercise of market power less obvious, but not increase the probability that it exists in the first place<sup>2</sup>. The key point is that low price elasticity of demand, in any event, is simply a description of *market demand* sensitivity: it implies nothing whatsoever about *market supply* conditions.

For example, market power may well be more likely to exist in respect of the gypsum trade, because of the relative cost-inefficiency of alternatives for the shipper, than in respect of grains. This is despite the fact that port costs are a higher proportion of the value of gypsum than of grain. (The absence of complaints about market power in respect of gypsum is therefore especially noteworthy.)

As ESCOSA recognises, the key issue is whether market power is being misused, or would be in the absence of the present system of price regulation. The likelihood of market power existing is taken up further in Section 3. Whether market power is being abused can only be determined by reference to the experience of customers. The fact that none has adduced any evidence of misuse of market power speaks volumes.

Whether this absence of evidence of the misuse of market power is because market power is being constrained by the existing price regulation regime is also an empirical matter. It can at least be said that where price caps do not ‘bite’, i.e. where Flinders Ports is charging less than would be permitted by the regulatory scheme, then the absence of misuse of market power must be due to the fact that market power

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<sup>2</sup> Thus, for example, most businesses may be relatively insensitive to their expenditures on stationery, but that does not give stationery suppliers market power.

does not exist or because Flinders Ports is subject to such competitive tensions and other influences – such as countervailing power – that it cannot be exercised.

The availability of alternatives and barriers to entry are discussed in Section 3, where individual cargoes are analysed, as is the particular case of mooring services.

## 2.3 Materiality of Impacts

ESCOSA's conclusions are as follows:

- ❑ Essential Maritime Services are a small but significant part of the South Australian economy, affecting in a minor but crucial way the import and export of billions of dollars worth of cargoes annually.
- ❑ The small proportion that Essential Maritime Services make up in supply chain activities raises questions as to the benefit of their being subject to price regulation. This will be taken up in the second stage of the Ports Price Review.

**Comment:** In the view of Flinders Ports, Essential Maritime Services – as implied by the term ‘essential’ – are a crucial, and not a minor, element in the operation of the SA economy. Whatever their value added in terms of supply chain analysis, they have ‘gateway’ significance. The ports must, and do, meet the needs of importers and exporters effectively. The fact remains that port costs are a minor element of industry costs, whichever part of the cost chain is examined. Thus the major policy concern should be with whether port services are provided effectively and reliably. For example, the potential costs to shippers and cargo industries resulting from delays could vastly outweigh the costs charged for port services. The quality of port services is thus far more material to the economic well-being of port customers and the wider economy than are the prices of port services.

In this respect, it is relevant that Flinders Ports has a strong incentive to maximise throughput and keep its customers happy. It does not have an incentive to ration its capacity or hinder access in any way. In this it is different from infrastructure owners who compete with their customers, as would be the case if Flinders Ports had shipping or shipper interests.

Flinders Ports agrees that the fact that the cost of port services is a very low proportion of the value of goods makes it less likely that the costs of regulation will be outweighed by any benefits.

### **3. DOES FLINDERS PORTS HAVE MARKET POWER?**

Ports in South Australia are not, as appears to be commonly believed, in a state of permanent stability. New entry is always a possibility, as is expansion of existing facilities, as are closures. It is quite remarkable that such major developments as the building of a new port at Myponie Point, the expansion of Ardrossan and the mothballing of Port Stanvac should all be mooted in a short space of time. The possibility of even one new port in a State like South Australia should be interpreted as evidence that major change in the competitive environment is possible.

In addition, continued improvement in road and rail services places increasing competitive pressure on Flinders Ports, potentially altering the relative market position of ports within South Australia and vis-à-vis ports in other States.

#### **3.1 Geographical Variations**

The location of particular ports may be relevant to the existence, or not, of market power, and the likelihood of its misuse.

As ESCOSA has identified, key issues are the choices available to consumers of Essential Maritime Services and barriers to new entry. Both of these issues are part of, and are influenced by, consideration of the relevant market. It is possible that port customers may have more or fewer opportunities to use alternative services to the services provided by a particular port depending on where the port is located. Similarly, the location of a port may make it more or less difficult for a competitor to enter the market and provide Essential Maritime Services.

ESCOSA has suggested that, in terms of geographical variation, Eyre Peninsula ports are subject to greater market power concerns.

Flinders Ports agrees that Eyre Peninsula port users have limited alternatives, due to the cost of other transport options. Moreover, the construction of alternative infrastructure in the form of another port on Eyre Peninsula is unlikely. Nevertheless, the prices charged at the Eyre Peninsula ports must necessarily be constrained by the fact that other transport options do exist. Road and rail services have an impact, as do other services, actual or potential, such as existing barging and mooted freight ferries across Spencer Gulf.

Moreover, were Flinders Ports misusing market power at Port Lincoln or Thevenard, and under a scenario where there was no price regulation, two things would be likely to happen. In the first place, there would be a political outcry and pressure for upgrading of other transport links. But, most obviously, price regulation could be reimposed.

It should not, in any case, be assumed that price regulation would result in lower prices for Essential Maritime Services. Suppose, for the sake of example, that price regulation were imposed on Eyre Peninsula ports but not all ports, because those other ports were found not to have significant market power and/or the costs of regulation were considered to be greater than the benefits. An assessment of the Eyre Peninsula ports in isolation might find that higher charges were warranted in terms of their costs of operation and the high variability in their volumes due to the seasonality of cargoes, e.g. through drought.

#### **3.2 Differences across Cargoes**

ESCOSA has also expressed the view that greater market power concerns arise in respect of bulk cargoes, especially grain.

### 3.2.1 Grains

It is not entirely clear to Flinders Ports why ESCOSA sees a potential problem with grains, particularly compared to other bulk cargoes. The concern appears to be linked with the observations that:

- ❑ Grain is less valuable than container cargoes. Moreover, road or rail transport of containers from South Australia to Melbourne is economically feasible and potentially attractive. Consequently, South Australian ports certainly compete more directly with Melbourne in the container trades than in grain.
- ❑ The Cargo Services Charge for grain is higher than for other bulk export commodities.
- ❑ Generally speaking, contractual arrangements such as volume rebates have not applied to grains as they have to other bulk commodities.

Flinders Ports concedes that it faces a lower level of direct competition in grain compared to containers. However, the above observations should be considered in the light of the following additional points:

- ❑ AWB Ltd and ABB Grain have considerable countervailing power. They also have the financial resources to explore and, if thought economic, invest in alternative transport options, including a new or expanded port. Even a relatively small diversion of grain to Melbourne could have a major impact on Flinders Ports' profitability, as did the diversion of grain to the eastern States this year because of the drought there.
- ❑ The grain traders' major concerns are with grain handling costs and thus with AusBulk rather than with Flinders Ports. In fact, no substantive issues related to Flinders Ports have been raised by them in submissions.
- ❑ Flinders Ports has not previously been approached to enter into contractual arrangements for grains and nor have volume rebates been sought until a very recent approach by ABB Grain (following the recent ship based price rise and drawing on the fact that the issue had been raised in ESCOSA's Progress Report).
- ❑ Rebates would effectively amount to a restructuring of charges. But restructuring grain charges could well involve recovering a higher proportion of port costs from a first tranche of grain, with lower charges for excess grain. In a low harvest year, this would mean higher average costs for grain farmers. That is, it would represent a transfer to farmers of risk that is currently accepted by Flinders Ports. Flinders Ports similarly accepts, and must cover, risks associated with lower exports due to heightened competition in grain (e.g. higher US subsidies) or market disruption (e.g. war in the Middle East).
- ❑ With relatively low grain throughput per port compared to other States, obviously South Australian ports need higher average charges per tonne to recover costs. These are offset by lower gate-to-port transport costs and reflect the fact that South Australian ports were established to service cargoes, including grains, near the sources of the cargoes.
- ❑ Flinders Ports faces very large fluctuations in income due to the variability in the size of the grain harvest. The ability of the South Australian ports to handle even a bumper harvest rapidly, thus ensuring the maintenance of overseas markets, comes at a cost that is borne in the first instance by Flinders Ports. Charges need to recover these costs.

- ❑ There is no basis for linking charges tightly to costs, e.g. where the marginal costs of two services are approximately equal (as they may be for grain and gypsum). The application of higher charges to higher value cargoes (e.g. grains compared to gypsum and salt) is likely to enhance the overall efficiency of port charges and may be required for common costs to be recovered. The port operator's focus is not only on charges but on revenue from each cargo in the light of a port's basic economic justification and cargo handling capabilities.
- ❑ More generally, prices in a competitive market respond to both supply and demand. Thus, at any point in time they are not determined by costs alone but also by the varying levels of demand. It is only in long run equilibrium, which is a concept rather than an observed state in actual markets, where prices for the same service will be determined by long run marginal cost and therefore be equal.
- ❑ It would be a curious result if Flinders Ports were criticised simultaneously for pricing across ports in too uniform a manner and for differential pricing across cargoes.

In the light of these considerations – and especially the absence of complaints about Flinders Ports or evidence of the misuse of market power - Flinders Ports submits that price regulation of charges in respect of grain cargoes would be counter-productive. Proposals have recently been put to Flinders Ports for the first time to negotiate charges for grain. Flinders Ports welcomes this development and considers commercial agreement is a more effective way of adjusting prices than regulation.

As argued elsewhere in this submission, Flinders Ports believes that price regulation of isolated elements of its overall services, e.g. grain, would be likely to be distortionary. This is largely because it could severely constrain Flinders Ports' commercial flexibility in allocating common costs. It is generally accepted by regulatory economists that price regulation is likely to be least distortionary if it applies to a broad bundle of services (see discussion in Section 4 below).

### 3.2.2 Other Bulk and Break Bulk Cargoes

Where the network of ports is used, the issues raised by these cargoes are largely the same as those for grain, viz. the importance of recovering costs across total volumes.

Where specific cargoes use specific ports, charges have been successfully resolved by negotiation in a volume/price/service framework. In either case, no necessity for regulation has arisen.

### 3.2.3 Containers

As ESCOSA has noted, port handling of containers is inherently highly competitive.

In fact, the competition operates at the level of explicit bundled pricing for land transport plus Melbourne port services versus Port Adelaide charges. From the perspective of the end-users (the shipper and the consignee), the only relevant cost is the total.

As a consequence, it is difficult to argue that port charges in relation to containers should be subject to any price regulation in South Australia.

### 3.2.4 Motor Vehicles

Motor vehicles are high value unitised cargoes similar in nature to containers. In addition, their manufacturers are large multinationals well able to look after their own shipping interests without the help of regulated port prices.

Charges are negotiated on the basis of a volume/price/service package.

### **3.3 Potential Changes in Petroleum Product Imports**

Port Adelaide's 'M' Berth has historically had a fairly low petroleum throughput and charges have been negotiated reflecting that fact together with the strong bargaining power of the oil companies and the competition posed by Port Stanvac. Mobil's recent announcements regarding Port Stanvac is likely to result in a large increase in volume at 'M' Berth, which at first blush could give rise to concerns about the potential existence of market power.

However, in the submission of Flinders Ports, the countervailing power of the oil companies far outweighs any ability of Flinders Ports to extract unfair or inefficient levels of charges. New pricing arrangements are being negotiated in the light of the expected volume increase, as usual in a high fixed cost business. Mobil would not close Port Stanvac unless it expected to reduce its overall costs. This is consequently an issue that can confidently be left to commercial arrangements without regulatory intervention.

The option of bringing Port Stanvac back into operation acts as an ongoing threat to Flinders Ports.

More generally, the closure of Port Stanvac needs to be seen as demonstrating the dynamics of the port operating and competitive environment in the context of other potential developments, including with respect to Myponie Point and Ardrossan.

### **3.4 Mooring**

Flinders Ports agrees that mooring services are contestable. One possibility is that the service could be tendered for on a regular basis, similar to the way in which competition can be instilled in a natural monopoly service such as harbour towage.

However, mooring is not a natural monopoly in the same way. Although only one mooring service can be in operation in respect of the mooring of any one ship at any one time, it is not necessary for a port to be restricted to one mooring service provider for a period, e.g. of several years, as may be appropriate for harbour towage. Rather, there is no reason why mooring should not operate in a manner analogous to stevedoring, with a ship able to call upon a mooring crew of its choice each time it berths.

Flinders Ports view is that the provision of mooring services by a third party should be done so under an appropriate licence arrangement. This licence would be structured to clearly outline the operational and safety standards required from the service provider. In addition as the service is provided utilising Flinders Ports facilities and could impact on the effective operation of the port (ie in the event of an incident) then the licence would also require that the service provider had adequate insurance covers in place. Apart from this requirement and ensuring that the industrial issues were addressed (so as not to impact on the operation of the port as a whole) then Flinders Ports cannot see any other "barrier to entry" related to this service.

### **3.5 Degree of Uniform Pricing**

ESCOSA has noted that several submissions in response to its Discussion Paper No. 1, including those from ABB Grain, AWB Ltd and AusBulk, argued variously against mandatory uniform pricing as it removed incentives for optimising port selection and was not cost reflective of each port. ESCOSA itself noted that while uniform pricing "could be used to lock in cross-subsidy arrangements, it can also be characteristic of an efficiently simplified price structure."

ESCOSA went on say that the issue of uniform pricing will be taken up in the second stage of the review, as necessary, but is not a significant consideration at this first stage. Nevertheless, Flinders Ports believes it would be helpful to offer comments before the second stage of the review is reached.

Price caps could not in principle make prices uniform, as they are, as ESCOSA states, maximums only. In practice prices are not uniform.

However, it is true that, to a large degree, prices for the same service and the same cargo are the same across ports. It is incorrect to say that this degree of uniformity removes incentives for optimising port selection. A shipper chooses a port by comparing the total cost, including cargo storage, cargo handling and land transport, of moving a cargo. For this calculation, the port prices must be treated as a given (except to the extent the shipper can negotiate a better price).

It is, of course, true that any variation in prices would alter the calculation of the optimal port selection. This would be the case whatever the cause of the variation in price. It is also true that if prices at each port were set strictly on the basis of cost, they would be different from their present levels. Whether this would reduce the total costs of a shipper using a number of ports (such as a grain trader) is another matter. That would only be the case if average port prices were reduced, e.g. through regulatory action in the light of a decision that Flinders Ports was misusing market power.

But as ESCOSA points out, the uniformity of pricing (so far as it exists) is not in itself evidence one way or the other that market power exists or is being misused. In intensely competitive areas of retailing it is common to see prices that are uniform across store locations, despite large variations in underlying costs.

No issue of cross-subsidy arises unless a firm prices a service or a group of services at more than the stand-alone cost of production (i.e. the cost that would be incurred in producing the service(s) if the firm were not also supplying other services) or, equivalently, if it prices its other services at less than the incremental cost of production (i.e. the additional cost of producing the service or group of services in question over and above the cost of producing the remaining services<sup>3</sup>).

Within these wide limits – which should only be of interest if it has previously been determined that the firm has monopoly power – the firm should be free to price (and allocate its common costs) as it chooses. Indeed, one of the risks of price regulation is that, through miscalculation, the regulator may inadvertently mandate, or perpetuate, cross-subsidisation. Flinders Ports is not charging less than the incremental costs for any of its services. It is therefore not possible that Flinders Ports is cross-subsidising one cargo at the expense of another.

In any case, it is necessary to review the questions of when and why cross-subsidisation is a regulatory concern. The reason is that cross-subsidisation can be used to reduce the price of a service below the competitive level so as to target a competitor (who typically is unable to match the predatory price because it produces a smaller range of services and is thus unable to recover its common costs elsewhere). But this concern is not relevant to the services provided by Flinders Ports, where none of the Essential Maritime Services is supplied in direct competition with another supplier in a port operated by Flinders Ports. (Any concern that Flinders Ports could cross subsidise to fund predation against another port would be fanciful, given the competitive forces at work. In any case, as already stated, Flinders Ports does not price below incremental costs for any service.)

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<sup>3</sup> Gerald R Faulhaber, “Cross-Subsidization: Pricing in Public Enterprises,” *American Economic Review*, **65**(5), December 1975, pp 966-977. The two tests are equivalent when the revenues of the regulated firm just cover its total economic costs.

In the case of South Australian ports, the real risk arises that price regulation applied in a particular location or to a particular type of cargo could jeopardise the overall viability of Flinders Ports' operations. It could happen that regulation raised some prices to a degree that extinguished demand and rendered a port uneconomic, hence requiring its closure.

### **3.6 Summary**

Flinders Ports does not have a significant degree of market power in its provision of the totality of Essential Maritime Services across its proclaimed ports. If there are small parts of its operations where it may have a degree of market power – and Flinders Ports does not concede this – then that market power is not sustainable over the long term, Flinders Ports has little incentive or ability to misuse any market power it may have, and there have been no instances of such misuse.

The fact that Flinders Ports does not compete with its customers is also relevant.

In these circumstances, comprehensive price regulation such as applies through the current price capping regime is unjustified.

## 4. FORMS OF PRICE REGULATION

### 4.1 Overview

Flinders Ports has adopted the way in which ESCOSA has categorised the possible forms of price regulation:

- price or price movement control;
- revenue controls on prices;
- pricing principles – based regulation;
- benchmark regulation;
- price notification; and
- price monitoring

although there are, of course, overlaps in any approach.

Most of the literature deals with the heavier-handed, more intrusive forms of regulation at the top of the above list. No doubt that is largely because it is easier to analyse the economic impacts of more precisely specified forms of regulation, as well as because the costs of regulation – and especially the costs and likelihood of getting regulation wrong – are higher in these cases.

Consequently, much of the discussion below is directed towards regulation that involves the actual setting of prices (or revenues), rather than the observation of them, as is involved in monitoring or notification. This Overview sets out the economic objectives commonly ascribed to regulation, assesses their relevance to South Australian ports, and contrasts the cases for price and revenue regulation. Comments about the risks of regulatory mistakes and the difficulties of obtaining accurate information and using it appropriately should therefore not be interpreted as criticisms of ESCOSA. They relate mainly to the pitfalls of price regulation of a scale not seriously proposed in respect of ports. Nevertheless, they are unavoidable in any overall discussion of forms of regulation.

Regulation is generally applied to meet efficiency and/or equity goals.

In the case of firms with substantial economies of scale and scope, these goals are usually the avoidance of market failure through the exercise of market power and, when the firm has previously been subject to substantial public control or oversight, the preservation of cross-subsidies for equity or political purposes.

The potential for market failure through abuse of market power is a *prima facie* case for regulation but, in the absence of good information about the firm and its markets, there is a countervailing risk of generating equally inefficient outcomes through regulatory failure. This may mean creating or perpetuating inefficient prices or, at worst, causing the firm to fail if its revenues are too severely constrained.

Information, or the lack of it, is the key problem facing regulators. While the regulated firm has a natural incentive to know its own costs and understand its markets, the regulator must gather and process this information in order to assess the need for regulation and, where warranted, set appropriate limits on the behaviour of the firm. If the regulator had perfect information and could analyse it costlessly, the task of assessing the behaviour of monopoly firms would be trivial. Of course, the necessary information is not costless, and often is only available from the regulated firm, which has obvious incentives to keep that information private. Even with the cooperation from a monopoly firm, a regulator can never be entirely sure

when the firm is pricing appropriately, when it is exercising market power or whether it is adhering to regulatory controls. The social costs of attempting to gather and process the information needed to reduce this uncertainty must be balanced against the (equally uncertain) risk that the firm is engaged in behaviour that is causing economic costs.

The risk of regulatory failure is greater, the greater is the lack of information and the greater the extent of the regulator's intervention. While this risk does not necessarily rule out regulatory intervention where there is a strong *prima facie* case of abuse of market power, the absence of good information about the regulated firm and its markets should signal to the regulator to proceed with caution. This would imply oversight rather than direct control and a preference for setting broad and possibly undemanding limits on prices or revenues while the regulator gathers more information about the costs and behaviour of the firm and about its markets.

This preference for oversight rather than direct control is all the greater when concerns about market power are muted or uncertain, as in the case of South Australian ports.

#### 4.1.1 Objectives

Price regulation is usually intended to:

- increase allocative efficiency, or the allocation of resources to their most valued uses, thereby improving the performance of the economy;
- increase productive efficiency, by ensuring the most cost-effective technology is used to produce outputs;
- increase dynamic efficiency, ensuring that mechanisms adjust rapidly to ensure imbalances only exist for short periods and delays are avoided; and
- improve distributional equity, thereby making economic outcomes fairer and more acceptable to the community.

Allocative efficiency is obtained by maximising total surplus, generally defined as the difference between the value of the output of the firm to consumers and the minimum cost of producing that output, in terms of other production forgone<sup>4</sup>. It requires both that the firm minimises the cost of producing any combination of outputs and that outputs go to the consumers who value them most highly. A firm that has the lowest possible costs of production could still be allocatively inefficient if it produced the wrong mix of outputs. Conversely, a firm that produces the optimal output mix cannot be allocatively efficient unless it minimises the cost of production.

The total surplus measure treats the welfare of all consumers equally, regardless of their income, location or any other characteristic which may be a basis for redistribution or special treatment. It also makes no distinction between surplus accruing to consumers and surplus enjoyed by firms as profit. Maximisation of total surplus, therefore, is a special case of the more general pursuit of goals for the size and distribution of consumer and producer surplus.

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<sup>4</sup> Total surplus, therefore, is equivalent to the sum of consumers' surplus (the difference between consumers' willingness to pay for the output of the firm and their expenditure on it) and the profits of the firm (the difference between the revenue raised from consumers and the minimum cost of producing the firm's output, including the cost of shareholders' capital).

Firms that abuse market power generally increase their share of total surplus (profits, or ‘padded’ costs) at the expense of consumers' surplus, and of the total. While this may create distributional justification for regulation of monopoly power, controls are generally applied to correct the allocative inefficiencies.

The regulation of monopolies, especially those publicly owned or protected by statute, is also often intended to serve purposes other than the maximisation of unweighted total surplus, such as general macroeconomic price and wage restraint, limits on overseas borrowing or investment targets, regional development objectives or the redistribution of wealth or income. These goals are not in general compatible with allocative, productive and dynamic efficiency.

Although economic analysis can help identify the costs of pursuing particular equity goals through regulation, ultimately any set of regulated prices can be justified by an appropriate choice of relative social values. Once regulation is primarily motivated by political or redistributive motives, economic efficiency becomes a poor guide to alternative policies. Often the regulation (such as setting particular prices) becomes a political goal in itself.

The discussion below abstracts from these issues and concentrates on how regulation can achieve an efficient allocation of resources assuming a neutral position on distributional equity. This approach nevertheless provides a basis for examining distributional concerns.

Natural monopoly firms operating with economies of scale and scope enjoy some measure of market power. This is often also reinforced by statutory barriers to entry and ownership or control of unique inputs. At least across some of their outputs, firms with market power are price setters rather than price takers (the situation for firms in competitive industries). Unfettered profit maximisation in natural monopoly industries will result in monopoly profits, generally to the disadvantage of consumers. Except in special circumstances<sup>5</sup>, output will be less and prices higher than would be required for maximisation of total surplus.

In some circumstances (public ownership or profit-regulated private firms), profit maximisation may be replaced by the maximisation of revenue, management remuneration, employee numbers, turnover, capital stocks, technological standards or any combination of these objectives. These diverse objectives can be characterised as cost-padding, in which factors of production are paid more than is needed to attract them from other uses, and possibly in a form which is valued less than the costs to provide them. The productive inefficiency associated with cost-padding then creates losses in addition to those generated by raising pure monopoly profits.

Provided any tendency to abuse market power can be controlled, privatisation is one approach to eliminating the efficiency costs of cost-padding by publicly owned firms. Compared with governments, the owners of private monopolies are usually presumed to have greater incentives to monitor their managers' decisions and to extract the rents of the monopoly as supernormal returns on shareholder funds. Private owners tend to align management remuneration with profitability to give the correct incentive signals. In practice, all profit-controlled natural monopolies, whether publicly or privately owned, will still exhibit some elements of cost padding.

Consequently, there will be efficiency gains if the regulator is able to lower the firm's prices and profit, and further gains if the regulator is able, for any level of prices and output, to have the firm take its rents as pure profits instead of padded costs.

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<sup>5</sup> The special circumstances require the monopolist to be able to practise perfect price discrimination. In this case, pricing is efficient, but social concerns may remain about the distribution of the surplus between the producer and consumers.

The regulation of monopolies is often directed by political imperatives related to, or sometimes disguised as, equity or social goals. However, there is no way to distinguish benevolent from self-interested intervention in practice. The cost of political interference in the pricing and investment decisions of regulated firms manifests itself as inefficient pricing structures, tolerance of padded costs, absence of innovation and sluggish response to changing circumstances. Recognition of these problems has been one of the reasons for the trend world-wide towards increased commercial freedom and arm's length supervision of government business enterprises and, where effective regulation is thought possible, privatisation.

The discussion above makes the conventional assumption that a firm is regulated because it has exercised monopoly power in the past, and has prices, and possibly costs, which are too high as a consequence. It is also possible, however, and not uncommon that the firm is regulated to preserve inefficient pricing and methods of production for distributional reasons, and that it will earn only normal, or even below normal, returns with the prices and costs allowed by regulation. The financial viability of a private firm may also be jeopardised if regulatory controls do not adapt appropriately to changing circumstances.

Conflicting equity and efficiency objectives and controls based on imperfect information can then lead to 'regulatory failure'. That is, while the imposition of regulatory controls may be able to improve on uncontrolled monopoly pricing and production in principle, the practical outcome may be worse than the situation the regulation is designed to avoid. This can occur through the costs imposed on firms by exposure to 'regulatory risk', where management decisions have to be framed to meet, or possibly avoid assessment against, conditions specified by regulators, or where the returns on an investment hinge on uncertain regulatory decisions. Sensible regulatory design will therefore take account of the difficulties and risks associated with attempting to correct market failure, and balance these against the likely damage of not regulating a firm, or of setting less ambitious regulatory goals.

#### 4.1.2 Application of Objectives to Proclaimed Ports

It can be seen that the above discussion has little application to ports in South Australia. None of the accepted factors suggesting that ports should be regulated is in place.

No-one accuses Flinders Ports of cost-padding. No evidence has been adduced of allocative, productive or dynamic inefficiency caused by the manner of Flinders Ports' operations or pricing. No distributional or equity objectives have been suggested as justifying regulation of Flinders Ports' pricing.

And most significantly, no evidence has been given that Flinders Ports has misused market power.

#### 4.1.3 Setting Prices vs. Setting Revenues

In a world of perfect information, regulators could set target prices or revenues interchangeably. Once demands were known with certainty, target prices would translate directly into revenue targets. As discussed above, the regulator's problem derives entirely from the absence of detailed information about the costs and demands that the firm faces, so the choice between regulating prices or revenues is not trivial. Nevertheless, without perfect information, both approaches are necessarily open to the errors associated with forecasting both demands<sup>6</sup> and, to a lesser extent, the costs of the regulated firm.

The key issue will be the incentives that each form of regulation confers on, or denies to, the regulated firm.

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<sup>6</sup> Note that this is not merely a problem of the regulator obtaining accurate information from the regulated firm. The nature of demand is unavoidably knowable only imprecisely, even by the firm. Thus, the difficulty facing the regulator – and the likelihood of imposing costs through the use of wrong assumptions – is inherent in the uncertainty of markets.

The possibility arises that the firm is able to influence the level of demand it faces at given levels of prices. That is, because demand is driven by factors such as product or service quality and marketing, the firm may be able to subvert a price control that focuses too narrowly on price. By the same token, regulation of revenue may make the firm undesirably unresponsive to demand opportunities.

For instance, as long as a regulated price is above marginal cost (as would be necessary if the firm had economies of scale and set a single-part price), increases in demand will allow revenue to increase in excess of the additional costs of production. The firm will increase its profits as long as the margin earned on the increased demand was enough to cover the cost of the marketing or other activity necessary to obtain the increase in demand. The problem then lies with determining whether regulation creates incentives to set quality or marketing effort inefficiently high or low.

Regulators often attempt to set targets for both price and the level of the quality and other dimensions of the output of the regulated firm, despite having even less information about whether the initial level was appropriate or efficient than about the efficiency of prices. These other dimensions of output will be determined by market processes in much the same way as prices and, unless there is clear evidence that the firm has been inefficient in the past, poorly informed regulation can, again, lead to a less desirable outcome than if the firm had been left uncontrolled. Even when the regulator does not target quality or other non-price factors, they can be influenced by the imposition and choice of form of regulation. Price-service tradeoffs are discussed further below.

For a regulated firm with economies of scale, a revenue cap creates an incentive to reduce its demand. If prices are initially set to meet the regulated revenue cap and demand can be reduced, it is relatively easy to show that the reduction in quantity demanded will allow an increase in average prices that will maintain revenue while total costs fall. The firm would then be able to create or increase the profits associated with the revenue cap. Moreover, to the extent that the firm had incurred other (non-production) costs to maintain the original level of demand, those costs would be saved and would add to the profits from lower demand.

These potential problems may be minor in the case of electricity transmission and/or distribution where the regulated firm has little or no influence on aspects of the volume of the service it provides (e.g. the amount of power flow) and where it has already been determined that relatively intrusive regulation is desirable (because of the existence of strong market power). However, they may be serious concerns where the case for regulation is unclear in the first place and where it is highly desirable that the firm not be passive as to whether its services are utilised efficiently or not. Such is the case with ports.

Conversely, a price cap creates an incentive for the firm to increase demand, although the expense needed to generate that increase will, at least partially, offset the increase in profits that might be generated. Similarly, although a loss (reduced profit) would arise if demand decreased (since the firm would lose the margin of price over marginal cost for the lower level of quantity), the firm may still gain if the original level of demand had been sustained by the firm incurring some sufficiently high marketing costs.

The choice between revenue and price caps may therefore hinge on the regulator's assessment of whether the firm is able to, and has, initially set product and service quality and marketing expenditures appropriately. The choice of whether to regulate at all must also be tempered by the expectation that, if the firm had already made appropriate choices, the imposition of either form of regulation is likely to create incentives for the firm to move away from that optimum.

Independently of the form of current or future regulation, the current levels of excess capacity at many of its ports means Flinders Ports already has incentives to invest in increasing the shipping and cargo flows through those ports. The returns on those marketing investments are naturally lumpy, in the sense that several months (in some cases years) of work may be rewarded with the signing of a single additional conference – leading to significantly higher demand for transit of container cargo as new destinations are

made available to exporters or made significantly cheaper to reach through the port. Consequently, more care needs to be taken when assessing the appropriateness of Flinders Ports' current levels of marketing and negotiation costs than with a firm for which these expenditures lead to more direct and immediate impacts on demand.

Although there is no strong evidence to suggest that Flinders Ports is currently over- or under-investing in marketing activities, it is likely to be inefficient to constrain Flinders Ports' attempts to increase demand while its ports continue to carry excess capacity. Whatever form of regulation is eventually chosen, the discussion above suggests that it would be inappropriate to focus on revenue.

## **4.2 Degree of Control over Prices and/or Price Changes**

If the regulator chooses to regulate prices, there is a further choice between dealing with the prices of all goods or services individually, or setting limits on prescribed averages of bundles of outputs. Again, the detail of information available to the regulator is critical. In most cases the absence of detailed information leads the regulator to be able to set only broad limits on bundles of prices, because it is not possible to predict the efficient path of individual prices with any confidence. This is another case where the firm, too, does not necessarily know what the optimum combination of prices is, given a range of options over, for example, the allocation of common costs.

In those circumstances, limits on specific prices tend to be set for political reasons, related more to the public sensitivity of particular services (local telephone calls, for instance) than the presence of sufficient information to support the limit. A similar phenomenon may have been at work in respect of grain when the First Pricing Determination was made.

### **4.2.1 Setting Prices**

The notion that regulators can efficiently set the actual levels of all of the prices of a regulated firm has been substantially discredited by economic theory and historical experience. Allowing the regulator to determine all of the prices of a regulated firm would amount to nationalisation of an important dimension of the firm's management. In the case of recently privatised firms, this would defeat the efficiency goals that motivated the sale in the first place. Although there are still instances where social concerns or strong evidence of abuse of market power may warrant heavy-handed intervention, it is now widely accepted that, even with detailed information about the firm and its costs and markets, regulators can, at best, only set broad limits on prices and cannot do a better job than the regulated firm of setting individual prices without the risk of creating substantial economic costs.

The economic costs of fixing actual prices for Essential Maritime Services would outweigh any conceivable benefits.

### **4.2.2 Setting a Price Cap**

Price cap (CPI-X) regulation avoids some of the problems associated with prescriptive regulatory price-fixing by giving the firm some freedom to set prices within aggregate limits. It can allow the firm a 'glide-path' to lower average prices over time (through the 'X' factor) where the regulator has evidence that prices in aggregate have been set too high, but where rapid adjustment would jeopardise the short-term viability of the firm and it needs time to adjust to a smaller revenue stream. Even if prices are believed to be currently appropriate, a CPI-X price cap can ensure that expected future cost savings are passed through to customers. Applied to a bundle of prices, it also allows the firm to rebalance prices where they have been set inefficiently in the past or where substantial changes in the nature of costs or demands will require changes in the way in which fixed costs are efficiently recovered in the future.

Only if ESCOSA were to conclude that Flinders Ports had such a degree of market power in some elements of its operations (such as Eyre Peninsula ports or Port Adelaide’s ‘M’ berth) – and was likely to misuse it – could continuation of price caps be appropriate. Under this hypothetical scenario it could be necessary to recognise that the prospect of substantially increased petroleum volumes through Port Adelaide may provide good reason to adjust the levels and distribution of common costs (such as channel maintenance and navigational aids) efficiently across the maritime charges on users of these and other Port Adelaide berths. A suitably set price cap would allow adjustments of that sort while giving shippers comfort that Flinders Ports was not able to increase the weighted average of charges beyond the level warranted by costs.

CPI-X regulation, when correctly implemented in ideal circumstances allows relatively light handed control of the level of profits; encourages cost minimisation; and allows rebalancing and introduction of efficient price structures. It could be suited to guarding consumer welfare when a previously tightly controlled firm is given the flexibility to adopt more efficient pricing and cost structures, and to ensuring that, although consumers share in the gains from efficiency improvements, the firm still has an incentive to implement them.

However, Flinders Ports has passed that stage. In the passage from public ownership it has been subject to price caps that are now being reviewed. They should not be retained merely out of an abundance of caution.

CPI-X regulation is not costless or foolproof. It is susceptible to dynamic manipulation; is not easily designed to allow pricing innovation and may preserve structural price imbalances. There are substantial problems with obtaining all the information needed to set an X factor appropriate to future circumstances. The efficiency of CPI-X controls is heavily reliant on the accuracy of demand forecasts, which in the case of Flinders Ports, where the grain trade is important and highly volatile, may be particularly uncertain.

The X factor also needs to be periodically reviewed and at that point price cap regulation shares the weaknesses, such as informational intensity and the potential to create distortionary incentives, that are normally associated with rate-of-return regulation.

Although originally conceived as a form of regulation that would substantially reduce the information required by the regulator to set appropriate limits, price cap regulation has proved almost as demanding as other forms of regulation. The great stumbling block has been the need to form a view about the efficiency of the starting level of prices, to which a CPI-X price path would apply. Without detailed information about the current and future costs and demands faced by the firm, a regulator can easily set an X factor that is excessively stringent or lax, effectively defeating the purpose of attempting to control prices. Thus, setting a CPI-X price cap has, in Australia at least, usually been attended by an information intensive process involving a building blocks approach to determining an appropriate initial price. (The alternative of benchmarking prices is discussed below.)

Nevertheless, price caps have the advantage that the regulator can design a cap that removes the need to set various prices individually, while still having some assurance that the regulated firm has appropriate incentives to efficiently set the structure of prices within the overall limits allowed by the cap.

It may be possible to devise a less formal method of limiting the rate of price increase than has so far typically been imposed through price-capping in Australia. This could be in the form of guidelines associated with price notification or monitoring.

#### 4.2.3 Pricing Principles – Based Regulation

In practice, if a regulator is to determine the price charged by a firm, it needs to form a view about the pricing principles to apply. This tends to be the case even where the regulator sets only the rate of price increase, e.g. through a price cap, because of the need or desire on the part of the regulator to examine the

current or initial prices of the firm. For example, the use of the familiar building blocks approach is based on a view that cost-based pricing is the appropriate principle.

Most such approaches start from the view that the regulated price should emulate in some way what would be found in a more competitive market.

Setting aside actual price determination by the regulator, already discussed, publishing pricing principles is sometimes used to influence and constrain negotiations between parties, e.g. in access negotiations. As such, this approach has been applied to telecommunications access pricing in Australia. The idea is that negotiations, usually between a powerful access provider and a less powerful access seeker, will be facilitated – and a more efficient and fair outcome be likely to be achieved – if the basis on which an agreed price is to be arrived at can be determined.

However, the approach has not been particularly successful. If there is a wide disparity in market power (or more generally in bargaining power, e.g. because of a large difference in size and financial resources), establishing pricing principles will not redress the underlying problem. That problem is likely to be structural, consequent upon the nature of the particular market. Thus, pricing principles may reduce the scope for deliberate delay and obfuscation, but do not make it easier to actually reach agreement on an efficient price.

Alternatively, if there is no major concern about market power, then the external imposition of constraints on bargaining is likely to cause inefficiencies. For example, parties often wish to bring new and separate issues into the bargaining process, trading away what is of less value to get something of more value, where the parties value different terms and conditions differently. Pricing principles can be particularly unhelpful and difficult to apply in such cases, as they are most readily devised in response to a specific set of circumstances (such as access to infrastructure where the infrastructure owner has an incentive to deny access because it competes against access seekers in downstream markets).

Because of issues such as these, the development of pricing principles in Australia tends to be backed by regulatory price-setting power. For example, where the regulator requires pricing principles to be applied in negotiation between parties on telecommunications access, the regulator retains a power of arbitration. The principles then guide the regulator.

Ports do not appear to be a fruitful area for the use of pricing principles. The absence of strong market power or of any incentive to hinder access, together with a history of fruitful negotiation between parties, do not provide the circumstances where establishing pricing principles is likely to be useful, especially as, by itself, the practice does not seem to have any track record of success elsewhere.

#### 4.2.4 Benchmark Regulation

Although, as noted above, regulators are unlikely to be able to set individual prices more efficiently than a suitably constrained firm, the regulator still has the option of using the information available to it to estimate benchmark efficient prices as the basis for commercial negotiations between the regulated firm and its customers. The regulator can draw on information about the regulated markets, or call on information about similar markets (not necessarily in exactly the same type of business) in other jurisdictions (overseas or inter-State). This approach helps fill the gap in the regulator's knowledge about the regulated firm, albeit at the cost of possibly glossing over important local and institutional factors.

As Flinders Ports sees it, the use of benchmarks is less a form of regulation than a means of compiling information and reaching views about the efficiency of prices. That is, benchmarks can be a means of deciding upon an appropriate initial price or a rate of price increase, just as the building blocks approach or estimation of future technological efficiencies can provide bases for decision. On the other hand, benchmarking could provide the basis for looser, less heavy-handed regulation.

The benchmark prices do not necessarily have to impose any binding obligations on the regulated firm to have an effect. This is the idea behind the recent direction from the Commonwealth Government for the ACCC to estimate indicative prices for telecommunications interconnection so as to facilitate negotiations between Telstra and other carriers and to guide Telstra in its provision of voluntary undertakings. In this case, the indicative prices can influence private negotiations because they are understood to be a guide to the potential outcome of ACCC arbitration if those negotiations fail, or assessment of undertakings, should they be provided.

The comments above about pricing principles are apposite here. In the absence of the regulator's strong price-setting powers, the provision of indicative prices to the parties would be likely to have little impact. The underlying incentives of the parties are unaffected. Why should the parties reach agreement if, for one party, there is benefit to delay and, for the other, a better outcome is likely to be achieved through the regulator? In the absence of strong market power, the use of indicative pricing based on benchmarks would not be appropriate for Flinders Ports.

Benchmarking prices or costs provide the regulator with an estimate against which the regulated firm can be required to defend its prices. This is in the realm of price monitoring, which is discussed further below. This use of benchmarking has the advantage that the regulator can make serious mistakes in its estimates without necessarily imposing those prices on the regulated firm and, simultaneously, it can start a process that will increase the amount of information available to it to more accurately estimate, and therefore oversee, the prices set by the regulated firm. The process will work best where, although the firm may not be subject to formal price controls, it is still required to report relevant price, revenue and cost data to the regulator. This will itself still impose substantial administrative and compliance costs on the firm (and the regulator), particularly if the regulator and firm are unable to reach a consensus about the level of the benchmark prices.

Benchmarking port costs and prices is known to be difficult in practice because of differences in charging by various entities – e.g. the port and the channel authority – from one port to another, and varying towage requirements.

Thus, benchmarking should not be seen as a low-cost exercise for the regulator or the regulated firm. It is only a means to an end where the need for regulation is already indicated by factors such as the misuse of market power.

#### 4.2.5 Monitoring

Monitoring requires the firm to report prices (and possibly revenues and costs) without formal restrictions on its decisions. Although it generally connotes a light-handed form of price regulation, whether that is the case depends on the nature of sanctions against the firm, if any. In the past, sanctions have generally been in the form of potential shaming and adverse publicity, which depends largely on the mode of operation of the regulator and possibly the government, and also on market circumstances. Usually there is no direct control over prices, and monitoring is accompanied by periodic assessment of the level of prices and the possibility that formal controls could be applied. The firm is therefore not completely free to set prices as it wishes and may still be subject to political pressure to limit the rate of rebalancing or of increases in prices, even where these increases are warranted by increases in costs.

As mentioned above, monitoring may be reinforced by guidelines as to acceptable pricing practices, e.g. an allowable rate of price increase. The regulator could use available information to set threshold limits on the rate of growth of prices (either individually or for bundles of outputs). While being subject to reporting requirements, the firm would not be as tightly constrained as under a formal price cap limit. The firm could unilaterally raise prices (remembering always that its ability to do so would be constrained by market conditions), and may not even be required to notify the regulator of changes until a set regular reporting date. Moreover, the guidelines could be able to be challenged in the light of prevailing circumstances.

This approach would be appropriate where there is strong evidence that market power does exist and, although the regulator is confident that the firm is not exercising that power, there is a possibility that the firm may try to raise prices inappropriately quickly. It represents a slightly less formal version of price capping, but has the advantage that the rate of allowed increase of prices might be set less restrictively (that is, would not be expected to be binding on the firm). The firm would still bear the administrative and compliance costs of ensuring price changes stayed within the prescribed limits, but would otherwise have substantial freedom to set them in a commercial manner. The regulator would not need to engage in detailed compliance activities, although setting the initial allowable rates of price increases would still require it to marshal all the available information about the current level of firm profitability and likely future influences on prices.

There is still a risk of regulatory failure if the allowed rates of price increase are too far from the efficient levels, but the intention would be to allow the firm and its customers more time and opportunity to argue a case for revised limits if circumstances changed.

As can be seen, price monitoring could easily verge on what is merely a less formal regime of price-capping. Even in the light-handed case, mistakes by the regulator could be costly.

#### 4.2.6 Notification

Notification loosens the regulator's oversight further, by only requiring changes in prices to be advised without formal reporting requirements on costs and other information. It could, however, be accompanied by the threat of periodic formal price reviews.

While it may be a light-handed approach suitable where there are only weak concerns about the misuse of market power, the question should be asked whether any regulatory process is justified. If the firm does misuse its market power, its customers will be the first to notice and complain. Formal notification requirements are likely to be of cosmetic value only, designed to suggest that the regulatory yoke has not been entirely removed. It would not have been; but whether to any purpose is problematic.

### 4.3 Methodologies

Where a case exists for the regulator to determine a firm's pricing, the regulator needs to make two decisions about how to approach the firm's prices. First, what initial price(s) should be allowed or is considered appropriate and, secondly, how that price will be allowed to change over time, given expectations about changes in market conditions. Those changes will be in both costs that are, at least partly, under the firm's control and in the level of demands that are outside the firm's control (and subject to a huge range of influences, many unforeseeable).

#### 4.3.1 Setting the Initial Price

How the regulator sets initial prices will depend on the strength of available evidence that current prices are set inefficiently or at the wrong level. Two approaches are widely practiced:

- a building blocks approach that tries to determine an efficient price based on an estimate of the efficient cost of production; and
- a comparison of the firm's costs and prices against benchmarks derived from other firms in comparable circumstances.

In view of the weakness of the case for this type of price regulation of ports in South Australia, this submission does not go into detail regarding the two approaches. ESCOSA is in any case well versed in them.

In brief, under the **building blocks** approach the regulator draws on available cost information (not normally just the costs of the regulated firm) to build up to an efficient average price or allowable revenue for the regulated services. While this approach can in principle give a good estimate of the aggregate level of revenues that would be warranted by the costs of an efficient firm, the regulator rarely has enough information to assess how that revenue should be earned from particular markets (that is, the particular prices that would efficiently cover the estimated costs).

However, as explained above, in most cases there are compelling reasons for regulating the firm's prices rather than its revenues. This dilemma is difficult to break out of.

In practice, applying the building blocks approach requires fairly heroic assumptions to determine some of the blocks, notably the return on capital. Typically, a theoretical treatment using the Capital Asset Pricing Model is used, and it is hard to find robust alternatives, even though this construct is subject to quite diverse criticism in the literature.

As noted above, a **benchmarking** approach compares the prices and revenues of the regulated firm with other similar firms to make some assessment of their current levels. Considerable judgement must be exercised to adjust for market- and firm-specific factors.

Assessing the benefits of changes in the structure of prices is a more difficult proposition, not least because there is unlikely to be any recent history of responses to alternative structures on which to base that assessment.

Benchmarking has the advantage over the building blocks approach that it can incorporate comparisons of the distribution of common costs across market segments, and therefore can provide more guidance as to whether the regulated firm is selectively exercising market power in niche markets where it faces less competition. In the case of ports however the use of benchmarking needs to be also considered in the light of the different pricing structures adopted and the varying core objectives of ports, particularly given the level of influence that Governments have on ports and their role in state development related initiatives.

#### 4.3.2 Setting a Price Path

Many of the issues involved in setting a regulated price path have already been mentioned in this submission. The usual approach is embodied in so-called incentive regulation, which attempts to deal with the problems of traditional rate-of-return regulation. Incentive regulation accepts that, if a firm is to seek to achieve cost savings, it must be allowed to keep some of the benefits. Much debate then surrounds questions of how much of the benefits it should retain and for how long.

This becomes rather complex, involving separate consideration of the incentives relating to operating and capital expenditure. Again, ESCOSA has had to face decisions about these matters in its other responsibilities and Flinders Ports does not propose to canvass all the issues here.

If, however, ESCOSA were to decide to impose a more controlling form of price regulation than appears to be foreshadowed in its Progress Report – in which case, as it has indicated, a new stage in the review would need to consider how to go about it – Flinders Ports would wish to make further submissions.

## 4.4 Conclusions regarding Ports

In the absence of (actual or potential) regulatory incentives to pad costs, the private owners of South Australia's ports can be expected to attempt to minimise their costs of operation. The task of the regulator is then to ensure that the charges for using port facilities, i.e. Essential Maritime Services, are structured as efficiently as possible. To the extent that higher charges are less efficient, they should be restrained.

However, setting a range of efficient prices for different types of services facing different demands, and requiring the allocation of common costs, is beyond the capabilities of regulatory economics to achieve in real-life markets.

If this regulatory task risks creating adverse incentives, or itself imposes significant additional costs, this risk needs to be carefully balanced against the expected gains from regulatory intervention. There being no strong case – at least of which Flinders Ports is so far aware – demonstrating the inefficiency of current port pricing and operation, and given that there are likely to be significant direct and potential costs of specific controls, it would not be an unreasonable regulatory judgement to decide that no ongoing regulatory intervention is needed.

This is particularly the case because, if there are shown to be valid concerns about market power, they can only be in limited parts of Flinders Ports' overall operations. On the one hand, it would be inappropriate to regulate the provision of any service where market power is not an issue. On the other hand, regulating a subset of Flinders Ports' total services would inevitably have impacts on the unregulated services and could have perverse consequences for the regulated services.

If any regulation is to continue, Flinders Ports submits that price notification or monitoring is the most that could be justified. This conclusion follows from consideration of the smallness of the efficiency concerns to be addressed by regulation, the consequential smallness of the potential benefits of regulation, and the balance of risks. A light-handed approach would also help to minimise the problems mentioned in the preceding paragraph.

It should be remembered that any decision to remove regulation will not be irrevocable. Flinders Ports is well aware that, in the absence of regulation, its conduct will inevitably be potentially subject to scrutiny. Should it in any way abuse its freedom from regulation, it would face the likelihood that regulation would be reimposed.

This threat of re-regulation has been considered sufficient by the Productivity Commission and the Commonwealth Government in the case of airports, where there is arguably far greater concern about the misuse of market power, including existing complaints by customers.

## 5. OTHER ISSUES

### 5.1 Standards of Service

ESCOSA has expressed a concern that, under a price regulation regime, the port operator could meet regulated price levels by reducing standards.

It needs to be stated at the outset that in all markets, including highly competitive markets, the producer supplies a price/quality bundle where the quality dimension may have a range of aspects. In the case of a service these aspects of quality may include matters such as convenience, timeliness and safety. Even in highly competitive markets the various dimensions of the service bundle can be traded off amongst each other, often so as to tailor a service to different customers.

Similarly, even a monopoly would face a reduction in quantity demanded if it increased its price while leaving service quality unchanged, or reduced its service quality while leaving price unchanged.

A concern that a regulated firm could meet regulated price levels by reducing standards arises where it can be assumed that the firm would, left to its own devices, charge a higher price than the regulated level. Assuming that the regulated price was set at the ‘right’ level, i.e. covering the efficient costs of production including an appropriate return on capital, the firm could increase its profit by reducing its level of services to the extent that this tactic reduced its costs by more than the reduction in revenue due to reduced demand.

Thus, if a price cap was not currently constraining actual prices charged, reduced service quality should not be a concern.

In addition Flinders Ports has in place specific Port Operating Agreements for each of its ports. Amongst other requirements these agreements require that the port operator (ie Flinders Ports) must during the term of the agreement (ie 99 years) control, manage and maintain the Port and Port Facilities for the safety of life, property and the environment in the Port and in all other respects in accordance with (in priority order) the Act (ie the Harbors and Navigation Act), the Port Operating Agreement, appropriate International Conventions and accepted port management practices in Australia. Flinders Ports must also comply with the Navigable Standard for each port as outlined in the agreements.

Therefore independent of the outcome of the review on price regulation Flinders Ports is required, under binding agreements, to maintain an appropriate level of port service provision.

### 5.2 Transitional Arrangements

ESCOSA has identified the possibility of transitional concern if moving away from the present form of price regulation gives rise to:

- price shocks, i.e. sudden prices increases;
- additional regulatory costs; and
- impacts on long-term contracts.

To address these concerns, a shift in form of regulation (including to no regulation) could be staged over time gradually or in steps; reviews could be undertaken before further steps were taken; and lead times could be provided.

It is difficult to provide specific comments on these issues prior to a decision, in principle at least, about what the future form of regulation will take. In the case of price monitoring, for example, review is probably implicitly part of the regulatory scheme, since there is little point in monitoring unless some action is possible in response to observed price changes.

If Flinders Ports' submission is accepted that no price regulation is required, i.e. not even price monitoring or notification, a review mechanism could be appropriate. This could take the form of a statement by ESCOSA that it stands ready to investigate substantive complaints and recommend to government the reimposition of regulation should evidence of misuse of market power be found.

An approach of this kind has been applied by the Commonwealth Government in the case of airport pricing.

Certainly, if a heavy-handed form of regulation were to be introduced, Flinders Ports would wish to be able to make a submission to ESCOSA regarding costs likely to be imposed on it and how the impact could be mitigated, e.g. through provision of a significant lead time.

## 6. CONCLUSIONS

In the light of a careful reading of ESCOSA's Progress Report, Flinders Ports adheres to its view that price regulation of essential Maritime Services is unnecessary:

- Flinders Ports does not have market power, i.e. the ability to operate independently of market constraints, in any part of its activities.
- To the contrary, Flinders Ports faces, at the least, competitive tensions, indirect competition and countervailing power and, in some areas, strong direct competition.
- Putting the market power concern at its highest, the circumstances may arise in some parts of Flinders Ports' operations for the potential for market power to exist. However, the nature of its customers and of other market conditions ensures that the potential does not become reality.
- Flinders Ports' pricing practices – and willingness to enter into pricing negotiations in areas (such as grains) where until now customers have never sought to negotiate charges – ensure satisfactory commercial outcomes without the need for regulation.
- No evidence of abuse of market power has been presented; nor of economic costs arising from the existence of market power.
- Regulation would be likely to impede the efficient recovery of fixed and common costs.
- The benefits of continued regulation could not be expected to outweigh the costs.

The option always remains open to ESCOSA and the Government to propose renewed regulation should evidence arise that it is needed. Continued regulation in current circumstances, even of a light-handed nature, should not be regarded as a safe and costless approach.

However, if price regulation is to continue:

- It should be confined to some degree of oversight of charges for services provided by means of bottleneck infrastructure facilities.
- Primary emphasis should be on commercial negotiation of charges.
- Flexibility should be provided for common costs to be recovered by whatever means prove to be convenient and effective.
- Scope should be provided for charges to be rebalanced and if desirable restructured over time.