



## **FINAL REPORT**

# **Exclusive Licensing of Harbour Towage Services in Australian Ports: An Analysis of the Potential Costs**

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## 1. INTRODUCTION

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Charles River Associates (Asia Pacific) Pty Ltd (“CRA”) has been retained by Adsteam Marine Limited (“Adsteam”) to provide research and analysis in support of its response to the recommendations and findings contained in the Productivity Commission’s (“PC”) Position Paper on the Economic Regulation of Harbour Towage and Related Services. In particular, CRA has been engaged to address the costs of adopting an exclusive licensing regime for the supply of harbour towage services at Australian ports.

CRA is an economics, finance and business consulting firm with extensive experience in providing litigation and regulatory support in areas such as competition law, finance and intellectual property. CRA was founded in Boston in 1965 and established its Asia Pacific practice in late 2000, with offices in Melbourne and Wellington.

Throughout its history, CRA has been a leader and innovator in the application of economic tools and concepts to the solution of complex transportation problems. CRA’s work has touched all transport modes, and clients have included shippers, equipment manufacturers, operators, regulators, law firms involved in transportation-related disputes, and government agencies. CRA has a specialist transportation group located in its Boston office.

Locally, CRA has considerable experience in analysing the economics of the ports industry, including the provision of harbour towage services. CRA recently completed a detailed study analysing the level of competition in the New Zealand ports industry, on behalf of the New Zealand Ministries of Transport and Economic Development.<sup>1</sup>

As noted above, the PC recently released a Position Paper that makes a number of preliminary findings and recommendations as to the appropriate economic regulation of harbour towage services at Australian ports. One of the key recommendations proposes to grant port authorities the discretion to license towage operators on an exclusive basis.

CRA has been asked to identify and categorise the costs associated with establishing an exclusive licensing regime for the provision of harbour towage services at Australian ports, including the costs that will be incurred at the individual port level in implementing and managing an exclusive licensing process. The costs identified in this report are those ‘additional’ costs that are likely to be imposed under an exclusive licensing regime, that is, those costs that

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<sup>1</sup> CRA (2002) *Port Companies and Market Power – A Qualitative Analysis*, Report prepared for the Ministry of Transport and the Ministry for Economic Development, 29 April, Wellington.

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would not, by and large, be incurred if existing market-based regimes were to continue at Australian ports.

The CRA report is structured as follows:

- Section 2 of the report first outlines the preliminary findings and recommendations of the PC in relation to the exclusive licensing of harbour towage services. We then note that the policy task of the PC (as with any Federal agency proposing regulatory or legislative change) is to take into account and weigh-up the potential costs imposed by the proposed policy change in order to show that there is a net public benefit. Finally, we consider a theoretical framework that can be applied to examine the welfare effects of the exclusive licensing regime proposed by the PC.
- Section 3 discusses the costs involved in implementing the new regime at the Federal and State/Territory levels.
- Section 4 analyses the on-going costs imposed at the individual port level in implementing and managing an exclusive licensing regime. We focus, in particular, on the principal-agent problems associated with relying on port authorities to tender for towage services on behalf of the ultimate customers.
- Brief conclusions are then provided in Section 5.

## 2. BACKGROUND AND CONCEPTUAL ISSUES

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### 2.1. INTRODUCTION

Before proceeding to consider the potential costs associated with the establishment and operation of an exclusive licensing regime for harbour towage services at Australian ports, we briefly consider some background and conceptual issues.

### 2.2. THE PRODUCTIVITY COMMISSION INQUIRY

In February 2002, the PC was asked by the Commonwealth Government to conduct a public inquiry into the economic regulation of harbour towage services. Specifically, the PC's brief was to report on whether harbour towage should continue to be a declared service under the *Prices Surveillance Act 1983* and to consider any other measures that could be taken to increase the level of competition in harbour towage and related services, where desirable.

The PC released a Position Paper on 6 June 2002 which makes a number of preliminary findings and recommendations in relation to the economic regulation of harbour towage at Australian ports.<sup>2</sup> The PC has asked for submissions in response to the Position Paper and intends to finalise its report to Government following this current round of consultation.

In its Position Paper, the PC makes a preliminary finding (*Preliminary Finding 8.7*) that:

*Exclusive licenses for the provision of towage services have the potential to generate greater benefits for towage users than non-exclusive licenses.*<sup>3</sup>

Following on from this finding, the PC goes on to propose that governments give port authorities the discretion to license towage operators on an exclusive or non-exclusive basis. Specifically, at *Preliminary Recommendation 2* it is proposed that:

*Where port authorities currently do not have explicit discretion to license towage operators (on an exclusive or non-exclusive basis), the relevant jurisdiction should grant them that discretion.*

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<sup>2</sup> Productivity Commission (2002) *Economic Regulation of Harbour Towage and Related Services*, Position Paper, June.

<sup>3</sup> *Ibid*, p. 148.

*This should be accompanied by procedures to ensure that a port authority, if and when exercising its discretion to licence towage providers:*

- *demonstrates the net benefits of proposed licensing arrangements;*
- *formally consults with towage users in a transparent manner prior to changing existing arrangements and the conditions that attach to any licences; and*
- *implements ‘arm’s length’, transparent competitive-tendering processes.*<sup>4</sup>

It is in the context of *Preliminary Recommendation 2* that CRA has been asked to identify and analyse the potential costs involved in establishing an exclusive licensing regime for the provision of harbour towage services in Australian ports.

### 2.3. THE PORT OF BUNBURY CASE

The issue of exclusive licensing of harbour towage services was at issue in the 2000 Federal Court Case of *Stirling Harbour Services Pty Ltd v Bunbury Port Authority*.<sup>5</sup> In that case, the port authority at the Port of Bunbury had proposed to implement an exclusive licensing regime for the provision of harbour towage services. The owner of the incumbent provider, Stirling Marine Services, alleged that the introduction of an exclusive licensing regime was in contravention of sections 45, 46 and 47 of the *Trade Practices Act 1974* (“TPA”) and contrary to the National Competition Policy.

The key issue in the case was whether the exclusive arrangement had the purpose, or was likely to have the effect, of substantially lessening competition (“SLC”) in the market for the provision of harbour towage services at the Port of Bunbury. The Court examined the state of competition in the market for the provision of harbour towage services in the Port of Bunbury with and without the introduction of the exclusive licensing regime. In the first instance (and supported on appeal) the Court found that the introduction of an exclusive license would not be likely to have the effect of SLC.

The Court in *Stirling* was constrained to a very narrow consideration of the social cost-benefit issues surrounding exclusive licensing. That is, it was confined to assessing the competitive effects under Part IV of the TPA (i.e. to consider the effect on competition with and without the arrangement in question) without having regard to whether the policy would deliver a net social benefit or whether other feasible, less costly, policy alternatives were available.

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<sup>4</sup> *Ibid*, p. 155.

<sup>5</sup> [2000] FCA 1381 (29 September 2000).



The metric to be applied to a proposed change in public policy along the lines recommended by the PC (e.g. for changes to State and Territory laws and to establish a new regime for port authorities to conduct exclusive tenders) is very different. It should encompass a broad consideration of all of the costs and benefits to society from moving from the present situation to the changed regulatory landscape, including consideration of other feasible policy alternatives.

The competitive impact in the relevant market(s) is just one sub-set of the social cost-benefit calculus that would need to be performed before the PC's proposed policy changes are finalised, accepted and implemented.

## 2.4. THE POLICY TASK OF THE PRODUCTIVITY COMMISSION

The PC's task in evaluating the most appropriate regulatory structure to apply to the provision of harbour towage services in Australian ports differs substantially from that of the court in *Stirling*. Generally speaking, in making recommendations as part of a public inquiry into regulatory arrangements, the PC is charged with making a comprehensive cost-benefit assessment of the various policy alternatives. If there is a less restrictive regulatory alternative, imposing lesser costs, which is likely to achieve a greater net benefit on a society-wide basis, this is to be preferred.

CRA's analysis of the costs involved in implementing an exclusive licensing regime is designed to assist the PC in assessing the costs and benefits associated with its preliminary policy recommendation. The Office of Regulation Review ("ORR"), an autonomous unit within the PC, is the Commonwealth Government's "watchdog" on regulatory reform. It is responsible for vetting and reviewing regulatory proposals from Federal agencies and Commonwealth-State bodies where they are likely to affect business or restrict competition. The ORR has formulated a series of guidelines on best practice regulation that sets out a structured process of policy review for the purposes of determining whether a proposed regulatory or legislative change meets the "dual goals of **effectiveness** and **efficiency**".<sup>6</sup>

Under this process, Commonwealth departments and agencies are required to consider alternative ways of achieving regulatory objectives (including no action), and to attempt to quantify the relevant costs and benefits of each policy alternative to ensure that recommended policy maximises the net benefits to society. A structured cost-benefit analysis of the policy options, where the potential benefits of the policy are weighed against the potential costs, is to be undertaken. The ORR guidelines state that in conducting reviews of existing regulation the cost-benefit framework should be incorporated at an early stage.

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<sup>6</sup> See the Office of Regulation Review (1998) *A Guide to Regulation (Second Edition)*, AGPS, December.

These cost-benefit considerations take the form of a Regulatory Impact Statement (“RIS”) that is to be submitted to the ORR in order to assess the appropriateness of the policy proposal before consideration by Government.<sup>7</sup> In addition to the preparation of a formal RIS, the analytical cost-benefit framework should be used “throughout the policy development process.”

The ORR stress the need to take a broad rather than narrow view of the potential costs associated with policy action, particularly the potential impact on competition, recognising that “restrictions on competition can impose substantial costs through higher prices, reduced choice and impediments to innovation and efficiency.”<sup>8</sup>

The approach of the ORR is consistent with the broader view taken by economists in examining the impact of regulation on dynamic as well as static efficiency. These concepts are discussed immediately below.

In relation to exclusive licensing for harbour towage provision there are a number of costs that are potentially imposed both at the individual port level and at the government policy level. It is the purpose of this report to identify and analyse these costs. In finalising its recommendations to Government, the PC may need to further consider these costs against any perceived policy benefits, in accordance with the RIS process.

## 2.5. ECONOMIC EFFICIENCY

Economists usually distinguish between three types of efficiency:

- **Allocative efficiency** – refers to the efficient allocation of scarce resources among competing uses in society. An allocation is efficient where incentive signals ensure that resources flow to their highest value use.
- **Productive efficiency** – concerns the efficiency with which firms in the economy produce goods and services. Firms will be productively efficient when they produce goods and services at the lowest cost, minimising the scarce resources consumed in production.

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<sup>7</sup> While the RIS process applies to Federal agencies and departments, a similar discipline is imposed for regulatory change pursued through Commonwealth-State mechanisms (e.g. COAG or Ministerial Councils) with the ORR having the task of ensuring compliance with the relevant principles. See Council of Australian Governments (1997) *Principles and Guidelines for National Standard Setting and Regulatory Action by Ministerial Councils and Standard-Setting Bodies*, Amended Version, November. As discussed below, the exclusive licensing regime proposed by the PC may require consideration by the relevant Ministerial Council or COAG itself, bringing these guidelines into play.

<sup>8</sup> Office of Regulation Review (1998), p. B3.

- **Dynamic efficiency** – is where firms have the appropriate incentives to invest, innovate, improve the range and quality of services, increase productivity and lower costs through time.

Allocative and productive efficiency are “static” concepts. They concern the allocation of resources amongst competing uses and the use of resources in production at a single point in time. Dynamic efficiency is a “process” rather than an outcome at any given point in time. It is concerned with the incentives impacting on the decisions of firms to take risks, undertake research and development, innovate, and improve their production processes, and how these maximise social welfare over time.

Traditional approaches to competition analysis have tended to focus on static concepts, such as price (or quantity) rivalry within a market with a view to achieving allocatively efficient markets. Increasingly, industrial organisation theorists and antitrust economists are regarding dynamic aspects of competition and efficiency as more important welfare-enhancing forces. These gains are pervasive and impact both the demand side (e.g. quality improvements, new products, etc.) and supply-side of markets (e.g. new production technology, labour productivity growth, etc.).

The PC inquiry is concerned with the regulation of harbour towage services to promote competition. The primary focus of their Position Paper appears to be with the effect of pricing decisions on allocative efficiency. To the extent that harbour towage providers can raise price above efficient levels (i.e. above marginal cost plus an appropriate attribution of fixed costs) and reduce output, then allocative efficiency will be reduced by an amount known as the deadweight loss (“DWL”). If the welfare of consumers (i.e. shipping companies, exporters, etc.) is weighted equally with that of producers and shareholders, then any transfers between these groups should be ignored in assessing the overall impact of the changes on social welfare (i.e. by applying a “total welfare” rather than a “consumer surplus” standard).

The PC has proposed allowing exclusive licenses as a way of engendering more competitive outcomes and thereby reducing any existing DWL in the markets for harbour towage. This appears to be the key item on the benefits side of the PC’s equation for change, but it is very much a static analysis. If the costs of change are significant, especially in terms of reducing dynamic efficiency, then the total impact on social welfare could be negative.<sup>9</sup>

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<sup>9</sup> The PC itself appears to consider that the potential benefits to be gained are not large. In *Preliminary Finding 6.5*, the PC concludes that “[a]vailable evidence indicates that towage prices in some Australian ports have been above efficient levels but the margin has not been large”. See Productivity Commission (2002), p. 100.

This could take place in three key ways:

- **Reduced productive efficiency** – if the tendering process and the risks associated with it actually generate additional costs for towage providers (and for port authorities) then towage services will now be provided to port users at a higher resource cost, and be less productively efficient than previously.
- **Reduced allocative efficiency** – this is most likely to occur where the competitive (static price/quantity) outcomes expected from exclusive licensing are in fact inferior to those applying under existing open entry systems (i.e. the expected benefits of change are not forthcoming). Alternatively, if higher production costs flow through to market outcomes as cost curves shift up, then some losses in allocative efficiency could occur even if markets are made more competitive.
- **Reduced dynamic efficiency** – if the imposition of exclusive contracts inhibits improved productivity, innovation and technological change in the towage industry, then dynamic efficiency will be harmed. By removing the discipline of potential entry on towage providers and the competitive pressure to pass on productivity gains to customers (for a period), it is possible that exclusive licenses may have deleterious effects on dynamic efficiency.

The above is not intended to be a comprehensive cost-benefit treatment of all of the welfare effects of the changes proposed by the PC, rather it is intended to set the conceptual scene for the consideration of cost issues that follow.

## 2.6. CONCLUSION

The key message to emerge from this section is that in proposing changes to public policy with potentially anti-competitive consequences or detrimental impacts on business, it is incumbent upon agencies to show that there is a net public benefit, and that this benefit cannot be delivered through less restrictive means.

In making an accurate cost-benefit assessment it is important that all of the costs are accounted for.

In this case, even if benefits from change can be identified by the PC in terms of improved static outcomes in the markets for harbour towage, it is not clear that these will outweigh all of the costs of change, especially where dynamic efficiency has the potential to be impacted negatively.

### 3. COSTS IMPOSED IN IMPLEMENTING THE NEW REGIME

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#### 3.1. INTRODUCTION

As a first step, establishing a new regime for exclusive licensing of harbour towage services along the lines suggested by the PC could require changes to State and Territory legislation and/or to policy stances adopted by these governments. Put simply, where ports lack the explicit, appropriate powers, legislative/policy changes would need to be made to:

- give port authorities the power to licence towage providers; and/or
- enable licensing or tendering by port authorities to be exclusive; and/or
- remove uncertainty regarding licensing powers and exclusivity.

For example, the PC notes that Queensland has legislation that permits particular ports to license towage services but it is unclear whether this legislation provides explicit authority at other Queensland ports. In Western Australia, while ports can tender for the provision of towage services, the relevant minister can apply a “public interest” test to the result of any port tender and disallow the result.<sup>10</sup>

As a second step, the PC’s proposal requires the establishment of “procedures” for ports to demonstrate a net public benefit from exclusive licensing, formal consultation with stakeholders, and for the tendering process to be “arms length”, transparent and competitive.

All of the above may require coordination through Commonwealth-State mechanisms and input from Federal departments and agencies.

#### 3.2. ESTABLISHMENT COSTS

To the extent that legislative and policy change is required, it is government that will bear the (once-off) costs for setting-up the new regime.<sup>11</sup> While other groups such as port authorities, towage providers and port users will confront (on-going) costs as exclusive licensing regimes are adopted at the individual port level (discussed below), it is policy makers and public sector agencies that will be impacted in the first instance.

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<sup>10</sup> *Ibid*, pp. 145-146.

<sup>11</sup> There may also be on-going costs imposed on government once new legislation has been put in place. For example, periodic reviews of the effectiveness of statutes may be undertaken as part of State or Territory legislative review schedules or as part of NCP review of legislation that inhibits competition.

The costs imposed in implementing the PC's proposed regime could include the following:

- **Policy development and stakeholder consultation**

Where legislative or policy change is required, governments in each jurisdiction will need to carefully consider their stance on the appropriate powers and regulation of port authorities before proceeding. Relevant policy departments would be asked by government to form a view on this, with a cost-benefit analysis being undertaken and stakeholders consulted before the merits of change are established.

Consultation would be likely to encompass harbour towage providers, key customers (e.g. shipping companies and exporters), other transport providers interfacing with ports (e.g. rail and trucking companies), suppliers of labour (e.g. unions) and providers of other services to ports (e.g. stevedores and pilots). Careful policy analysis could take the form of a comprehensive cost-benefit assessment of the welfare effects of the proposed changes. This is not a straightforward, back-of-the-envelope calculation, especially where other policy parameters are impacted by the changes and the effects are both pervasive and long-lasting.

All of these are potential costs to government in the State and Territory jurisdictions where legislative/policy changes are required to give effect to the PC's recommendation.

Changes to the licensing/tendering powers of ports may be complicated by links to other transport and economic policy issues, especially where ports have recently been corporatised or privatised, as in South Australia. Ministerial discretion or limits on the powers of ports to impose exclusive arrangements may have been seen as a check against the commercial power of newly corporatised or privatised ports in dealing with both customers and suppliers of services. In this situation the net benefit from change is less clear and the political sensitivity of change is magnified.

- **Legislative change**

If State and Territory governments decide to proceed with the necessary legislative changes, then legislative amendments will need to be drafted, scheduled for tabling in the relevant legislature, passed and implemented.

The public sector resources deployed for developing and drafting legislation and the displacement of other legislation in parliamentary schedules can have considerable opportunity costs associated with them.

- **Coordination and consistency**

Federal encouragement of State and Territory governments may be needed for them to adopt the changes recommended by the PC. It would also be desirable that the changes are implemented in a consistent way. In its submission to the

inquiry, the Australian Competition and Consumer Commission (“ACCC”) claimed that under an exclusive licensing regime, “[t]he overall economic regulatory framework may become fragmented and inconsistent, and result in higher regulatory costs for the towage incumbents in dealing with a multitude of State-based or locally based regulators (the port authorities).”<sup>12</sup>

Significant political goodwill and inter-jurisdictional coordination would be required to harmonise or mutually recognise the new laws. This would be most likely to occur either through the relevant Commonwealth-State Ministerial Council or more formally through the Council of Australian Governments (COAG) process itself. However, should the requisite degree of coordination and consistency not be achieved, industry players are likely to face higher regulatory costs on an on-going basis.

In either case, political and bureaucratic input at the Commonwealth level will also be required, all of which impose costs on the public purse.

- **Compliance with NCP and the TPA**

To the extent that the legislative changes proposed by the PC have anti-competitive implications, then issues could arise with regard to their compliance with National Competition Policy (NCP) principles.<sup>13</sup>

Exclusive licensing necessarily requires competitors to be excluded, a barrier to entry erected and a monopoly supplier established (for a period). NCP requires that all legislation that restricts competition be reviewed and reformed unless it can be demonstrated that the legislation delivers a net public benefit. The onus would be on each jurisdiction to show a net public benefit (as opposed to net private benefit to the port authority) arose from legislative changes designed to give effect to exclusive licensing.

NCP also requires that government business enterprises compete on an equal footing with private sector operators in the same market (i.e. competitive neutrality). Where ports are partially or wholly-owned by State or local governments, competitive neutrality issues could arise under NCP with the proposed exclusive licensing regime, especially where ports or related corporate entities are putting in “in-house” bids for towage services as part of the tender process.

NCP reviews impose costs on jurisdictions; consequently ensuring compliance with NCP principles would impose a cost at the State and Territory level.

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<sup>12</sup> Australian Competition and Consumer Commission (2002) *ACCC Submission to the Productivity Commission on Economic Regulation of Harbour Towage and Related Services*, May, p. ii.

<sup>13</sup> NCP is underpinned by three Commonwealth-State agreements signed in 1995. For more detail on the NCP agreements (i.e. the Competition Principles Agreement, Conduct Code Agreement, and Agreement to Implement the National Competition Policy and Related Reforms) see the National Competition Council (1998) *Compendium of National Competition Policy Agreements*, Second Edition, June.



For State and Territory governments, failure to comply with NCP principles can also have serious fiscal consequences. The National Competition Council (“NCC”) is the body charged with assessing the compliance of each jurisdiction with NCP principles on an on-going basis and reporting this to the Federal Treasurer. The Federal Treasurer can withhold competition payments to jurisdictions that fail to comply. Jurisdictions would need to convince the NCC that the new exclusive licensing regime was either competitively benign or of net public benefit.

Legislation designed to enable or facilitate exclusive licensing by ports may also raise issues under Part IV of the TPA, in particular sections 45, 46 and 47. As noted above, these issues were raised in the *Stirling* case concerning the use of exclusive licenses by the Port of Bunbury in Western Australia. The issues are complex and would need to be examined on a case-by-case basis. In addition, access issues may arise under Part IIIA of the TPA, or equivalent State legislation.<sup>14</sup>

Legal clarification may be sought by State governments/agencies and input/advice sought from the ACCC. Removing this uncertainty would impose further costs on State governments and/or the ACCC.

- **Procedures for demonstrating net public benefit, consultation and transparency**

In addition to removing uncertainty regarding the discretion of ports to issue exclusive licenses, the PC’s recommendation also requires that “procedures” are put in place (presumably by governments at the State and Territory level) to:

*ensure that a port authority, if and when exercising its discretion to licence towage providers:*

- *demonstrates the net benefits of proposed licensing arrangements;*
- *formally consults with towage users in a transparent manner prior to changing existing arrangements and the conditions that attach to any licences; and*
- *implements ‘arm’s length’, transparent competitive-tendering processes.*<sup>15</sup>

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<sup>14</sup> See Adsteam Marine Limited (2002) *Submission to the Productivity Commission Inquiry into the Economic Regulation of Harbour Towing and Related Services*, Part A – Main Submission, April, p. 62. TPA issues are also noted by the Productivity Commission (2002), see p. 156 & p. 171.

<sup>15</sup> *Ibid*, p. 155.



It is unclear how such a system would be established (e.g. through legislation, regulation, or with oversight of regulators) or how comprehensive it would be. In any event, this requirement may amount to a “quasi-regulatory regime” with input or oversight by a State-level regulator (e.g. the ESC in Victoria or QCA in Queensland) or the relevant State policy department. The procedure may also require review and appeal mechanisms, although it is unclear how these would interface with existing laws and regulatory regimes.

Setting-up this procedure could impose considerable costs on government.

Set-up costs imposed on government are quite apart from the on-going costs confronted by port authorities in complying with the procedure and carrying out the net public benefit analysis. These are also exclusive of the on-going costs confronted by harbour towage providers and others from challenges made to particular port authority tendering decisions under the process. Such challenges can be expected to take place regarding the adequacy and appropriateness of the net benefit analysis, arms-length transparency and the consultation process undertaken by the port authorities.

### **3.3. CONCLUSION**

To the extent that legislative and policy change is required to give effect to an exclusive licensing regime for harbour towage, costs will be imposed on State and Territory governments and possibly at the Federal level as well. Setting-up a procedure for ensuring a net public benefit, consultation and transparency by port authorities will also impose costs on government.

While the list of possible costs presented above casts a rather wide net, and less onerous ways may be found to achieve the regime envisaged by the PC, it seems reasonable to conclude that the once-off costs imposed on policy makers and public sector agencies would still be significant and non-trivial.

## **4. COSTS IMPOSED AT THE INDIVIDUAL PORT LEVEL**

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### **4.1. INTRODUCTION**

This section considers the costs involved at the individual port level in imposing an exclusive licensing regime for the provision of harbour towage services.<sup>16</sup> The various costs have been divided according to the party that bears the specific cost in the first instance. We have identified three parties that will bear these costs – the port authority, the potential providers (and successful bidder) of towage services, and the users of those services (e.g. the shipping lines, exporters, etc.).

It should be noted, however, that the question of which party ultimately bears these costs will depend on the extent to which costs can be passed on to port users and other parties. As discussed below, there is a potential for the increased costs of the exclusive licensing process to be ultimately borne by port users, either partially or fully, depending on the specific demand and supply conditions at the port. This issue is addressed more fully below in considering the costs imposed on port users.

### **4.2. COSTS INCURRED BY THE PORT AUTHORITY**

#### **4.2.1. Introduction**

Under an exclusive licensing regime, some party must be responsible for the periodic administration and management of the tender process and for the on-going monitoring of the performance of the towage provider during the term of the exclusive contract. We have assumed for the purposes of this analysis that the local port authority will undertake these responsibilities.

It is possible that the port authority may choose to contract out the administration process to an independent third party. This decision would not change the nature or magnitude of the costs identified below, but would merely involve a transfer of the costs to another party; ultimately these will be borne by the port authority and/or other industry players.

Each of the costs associated with running the tender process and monitoring the performance of the licensee outlined in this section will be incurred directly by the port authority in the first instance. The usual method adopted for recouping such expenses is to impose a license fee on the successful tendering party. The potential providers in compiling their bids would be expected to incorporate the

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<sup>16</sup> This section draws in part on the costs identified in Adsteam Marine Limited's initial submission to the PC inquiry and on the costs identified by the PC in its Position Paper. See Adsteam Marine Limited (2002), pp. 61-62 and Productivity Commission (2002), chapter 8.

license fee into their cost and pricing calculations, thereby raising the prices for towage users in the port. An alternative is for the port authority to recoup the expenses directly from all port users, perhaps by increasing the fees for infrastructure use or other port services if the port has market power in these markets. The extent to which the port authority will be able to pass on these costs to other parties (including port users) is discussed more fully under section 4.4 below.

There are two main classes of costs imposed on the port authority under an exclusive licensing regime – costs associated with the administration of the periodic tender process and the costs associated with on-going monitoring of licensee performance. In addition, there may also be some transition costs in switching harbour towage providers towards the end of a contract period. We consider each of the three types of costs in turn below.

#### **4.2.2. Periodic costs of running the tender process**

The port authority will incur substantial costs in running the tender process each time the current license comes up for expiry. The frequency of these costs will depend upon the length of the exclusive contract, and will be one of the factors that goes to determining the optimal exclusive contract length (which may be zero). The normal process for recovery of these types of expenses by the port authority is the imposition of a license fee on the successful tenderer, which may be payable as a lump sum at the commencement of the contract or on a periodic basis.

- **Specification of selection criteria for potential providers**

The port authority will need to determine an appropriate set of criteria to be used in evaluating competing bids and the respective weightings to be assigned to each selection factor. For example, when the Port of Bunbury proposed to issue an exclusive license for towage services, the following selection criteria were specified (with the respective weightings in brackets): amount of license fee payable to the port authority (10%), prices charged for harbour towage services (50%), provision of substitute tug (5%), and qualitative services (35%).<sup>17</sup> In respect of qualitative services (35%) each bidder was assessed on the basis of relevant experience and corporation capacity (5%), continuity of towage services (20%), and the provision of towage services 24 hours per day 365 days per year (10%).<sup>18</sup>

As can be seen from the Bunbury selection criteria, the license fee payable by the successful bidder to the port authority was attributed a significant 10% weighting

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<sup>17</sup> *Stirling Harbour Services Pty Ltd v Bunbury Port Authority* [2000] FCA 38 (28 January 2000), paragraph 19.

<sup>18</sup> *Ibid*, paragraph 20.

in the overall selection criteria, while the prices charged for towage services (presumably a key focus of the exclusive licensing regime) were attributed a 50% weighting. In a relative sense, the significant weighting attached to the license fee ostensibly reflects the fact that the port authority incurs significant costs in administering the exclusive licensing regime. While a license fee can shift costs from the port authority to the successful bidder, as we note below in our discussion of the principal-agent problem these costs may ultimately be shifted to the users of harbour towage services, depending on competitive conditions at the port and the objectives of the port authority itself.

- **Contract specification**

In order to ensure that the licensee maintains an appropriate level of service, the port authority will need to determine a set of key performance indicators (KPIs) against which towage performance can be measured. For example, at the Port of Bunbury, the factors specified by the port authority included: demonstrated continuity of towage services, reduction in the level of costs to port users, number of verified complaints, improving and enhancing the existing quality standard, and compliance with operational and safety requirements.<sup>19</sup>

While the broad level of KPIs is relatively easy to determine, it is the specific detail associated with adequately specifying each of these criterion that poses considerable complexity. For example, how will the port authority be able to determine where it is reasonable for the provider to reduce towage charges during the term of the license? The port authority does not possess full information about the costs facing the towage provider and how these may change with, for example, density of ship calls and changes in technology and labour practices. Consequently, it is not in a position to be able to assess whether it is reasonable for the price of services to be reduced at a particular point in time. Such issues add another layer of complexity that would usually be dealt with by market forces in the absence of an exclusive contract.

An alternative option for the port authority is to place the burden of determining the relevant KPIs and specific details of service provision on the tendering parties. In its request for tenders in late 2000, the Fremantle Port Authority conducted a more open-ended process, leaving it open for bidders to specify the nature and extent of towage services that would be provided and to set out the various guarantees that would apply in relation to those services (KPI-like objectives).<sup>20</sup> For example, the bidders were asked to propose methods for review of charges and the proposed frequency of those reviews, the guarantees they would provide

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<sup>19</sup> *Ibid*, paragraph 23.

<sup>20</sup> See Fremantle Port Authority (2000) *Request for Proposals for the Supply of Towage Services in Fremantle Inner and Outer Harbours*, Closing Date 2.00 PM WST Thursday 1 February 2001 (Proposal Number 101C00).

for the availability and continuity of services, and to set out quality assurance standards.

This approach shifts the costs of tender specification from the port authority to the tendering parties. It has the benefit of allowing more qualified industry players to set out service and quality standards with which they are more familiar than the port authority. However, it duplicates the cost of specification across each of the tendering parties, rather than the cost being incurred solely by the port authority. It also potentially increases the costs to the port authority in evaluating the bids, as it will be required to compare proposals that specify differing criteria and competing KPIs for service provision at different prices. Where the port authority is more prescriptive, the proposals of prospective bidders are more easily comparable, reducing the costs associated with the evaluation process.

- **Consultation with port users**

It is likely that the diverse range of port users will have different and sometimes competing preferences as to the desired quality and pricing of harbour towage services. For example, a particular user may be prepared to pay higher charges for a higher quality service (e.g. the service may involve less waiting time or use a more modern tug fleet). It will be the task of the port authority to consult extensively with each port user in order to determine the most representative set of KPI criteria, and to determine the weighting to be attributed to various selection criteria used to evaluate potential providers.

Where port users have quite different preferences and requirements, it will not be possible to formulate a set of criteria and weightings that exactly satisfy each individual user. The port authority, acting as the agent representing the collective pool of users, will be responsible for determining an “average set of price/service criteria” for the port which minimises the detriment imposed upon port users through losing their right to bargain individual terms and conditions with their chosen harbour towage provider.

This has the potential to be a very complex, resource-intensive exercise for the port authority, and one which, depending on how representative are the set of KPIs, can directly affect the surplus derived by individual port users. Choice is reduced by a “one size fits all” solution imposed on customers, meaning that some customers will be facing a lower level and quality of service than they would be prepared to pay for in a market-based system, potentially reducing their welfare.

- **Preparation of tender document and license agreement**

Following the determination of the appropriate KPIs and selection criteria, the port authority will need to prepare the tender document and a towage license agreement to be entered into between the successful bidder and the port authority. It is most likely that the port authority will not have the appropriate expertise to undertake this task itself and will have to engage the assistance of independent consultants (e.g. legal and accounting advice).

- **Advertising the tender**

Given the increasingly “international” nature of the harbour towage industry, the request for tender will need to advertise locally and internationally to ensure that the pool of potential bidders is maximised.

- **Managing the tender process**

The port authority will need to manage the overall tender process after releasing the relevant documents in terms of handling enquiries from prospective bidders, providing information about the port and its business, and generally administering the entire process. This requires staff with the appropriate expertise in running a tender process to ensure that the process is fair and potential interest is maximised.

- **Evaluating the bids**

The port authority will need to determine the successful bidder against the set criteria determined to evaluate the respective bids. This will involve weighing up each of the competing criteria and will usually involve meeting with prospective providers to further discuss and negotiate their bids.

- **Resolving disputes over the tender process**

The port authority will need to set out and follow a procedure for dealing with potential disputes that may arise during the tender process.

#### **4.2.3. On-going costs of monitoring and compliance**

In addition to the periodic costs of administering the tender process, the port authority will incur on-going costs in relation to monitoring the performance of the licensee.

Under a market-based regime where firms are free to enter and exit from the provision of towage services at a particular port, market forces act to discipline the price and service quality of incumbent firms. Where a firm attempts to raise its price or reduce its level of service, actual and potential competitors can seize the opportunity to take business away from the firm, constraining its ability to earn monopoly rents.

Under an exclusive licensing regime, new entrants are excluded, insulating the incumbent from competitive pressures and market discipline. Although the level of service and pricing is specified and agreed on a “once-off” basis under the license agreement, market forces cannot operate to discipline the firm on an “on-going” basis. Under these conditions, the port authority must attempt to substitute for market forces by closely monitoring compliance with the contract and swiftly taking enforcement action where a firm becomes non-compliant.

- **Monitoring compliance with the contract**

The port authority will be expected to conduct formal operational audits on a periodic basis (e.g. every 6 to 12 months), which will involve liaising closely with port users, in order to ensure that the level of service being provided is compliant with that specified in the exclusive contract.

The port authority will also generally be expected to maintain a watching brief on the performance of the towage provider on an on-going basis. Service records maintained by the towage provider may need to be audited on a periodic basis by the port authority and/or an independent auditor.

- **Non-compliance and enforcement costs**

The port authority will also need to establish a formal complaints process for port users to make complaints about the provision of towage services and for these to be resolved. In some cases it will be straightforward to determine that the provider has or is not complying with a particular KPI or contractual clause. In other cases, it may not be entirely clear and may become the subject of dispute between port users, the port authority and the towage provider. Here the customer cannot discipline or take action against the towage provider directly, and so is relying on the port authority to adequately address the issue.

A dispute resolution procedure may be required to formally determine whether or not an actual breach has occurred, including a formal process for investigating complaints, proper reporting, and a proper mechanism for resolution.

Where a towage provider is not complying with the contract KPIs or other contractual clauses, the port authority will need to take action to ensure compliance. This may involve simply informing the provider of non-compliance, but may become more costly and involve taking legal action to compel the operator to comply.

#### **4.2.4. Transition costs**

The transition period between the selection of a new towage service provider and the end of the incumbent's contract can pose risks and potential costs for the port authority.

- **Possibility of threat of withdrawal of service**

There is the possibility under a periodic competitive tendering regime that the incumbent provider of towage services may threaten to withdraw service if it is unsuccessful in securing an additional license term. This is likely to occur where the current licensee perceives that its assets would be more profitably deployed elsewhere.



Such conduct would impose costs upon the port authority in terms of enforcing the existing agreement, or alternatively, finding a temporary provider.

- **Reduction in performance**

Another potential transition issue occurs where the incumbent towage provider reduces the level of effort it puts into servicing the port's customers upon finding that it has been unsuccessful in securing an additional license term.

This would require the port authority to incur costs in disciplining performance and imposes costs upon users as they receive a lower quality towage service for the remainder of the licensee's term.

#### **4.2.5. Summary**

There are two main classes of costs imposed on the port authority under an exclusive licensing regime – costs associated with the periodic tender process and those costs associated with on-going monitoring of licensee performance.

The port authority will incur substantial costs in administering the periodic tender process. Although there may be learning benefits that mean that some of these costs decline with subsequent rounds of tendering (e.g. preparation of the tender document and licensing agreement), the changing preferences of port users and changes in the harbour towage industry itself could mean that the costs associated with tasks such as specifying the selection criteria and KPIs and consulting with port users will stay relatively constant rather than declining over time. Administrative-type costs of managing the tender process and advertising and evaluating the bids will involve substantial costs recurring on a periodic basis.<sup>21</sup>

The process of monitoring compliance imposes significant on-going costs upon the port authority as it attempts to substitute for “open market” competitive forces. The magnitude of monitoring and enforcement costs will, in part, be dependent upon the actual performance of the towage provider during the term of the contract and whether the port authority has been successful in creating the appropriate incentives under the license contract.

Monitoring and enforcement costs may be particularly pronounced during the transition phase from one towage provider to another, where the incumbent has reduced incentives to comply with the contract and may threaten to withdraw services.

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<sup>21</sup> These costs will be compounded to the extent that the port authority also has to repeat the cost-benefit assessment (and formal consultation) periodically to establish whether there is still a net benefit in applying an exclusive licensing regime. Periodic review of potentially anti-competitive arrangements to ensure they continue to deliver a net benefit is consistent with regulatory best practice (e.g. the granting of authorisation by the ACCC under Part VII of the TPA is now typically only for a limited time period).



### **4.3. HARBOUR TOWAGE PROVIDERS (ACTUAL AND POTENTIAL)**

#### **4.3.1. Introduction**

Prospective and actual providers of harbour towage services face a range of costs from the imposition of an exclusive licensing process. There are periodic costs involved in participating in the tender process, on-going costs during the life of the contract and potential transition costs. The fact that the prospective provider must lock-in to a long-term service contract imposes a high degree of rigidity that can have negative consequences for the towage provider and port users.

#### **4.3.2. Periodic costs of participating in the tender process**

Successful and unsuccessful tenderers face a number of costs in participating in the tender process. These include:

- investigation of the business opportunity;
- evaluation of the tender documents and license agreement;
- preparation of a bid document (proposal); and
- participation in the negotiation process.

Potential providers will incur transactions costs through their participation in the tender process regardless of whether they are the successful bidder. These costs include the costs involved in evaluating tender documents, thoroughly investigating the business opportunity (which is done at the bidder's own risk), preparing the bid document itself, and participating in the negotiating process with the port authority.

Where the port authority decides to shift the burden of determining the appropriate service and quality (e.g. KPI) specifications to the potential providers, this will add to the costs of responding to the tender and preparing the bid document. Potential providers may need to consult with individual port users in order to determine which factors are most important in towage service provision, which varies according to the particular port in question.<sup>22</sup>

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<sup>22</sup> Accurate specification and weighting of performance criteria is particularly crucial to avoiding litigation at a later stage (e.g. for misleading or deceptive conduct under section 52 of the TPA). Addressing this risk (through constructing, and committing to, realistic performance criteria) imposes a further cost burden on harbour towage providers in responding to a tender of this type.

#### **4.3.3. Costs of uncertainty and lock-in**

- **Price premium allowing for uncertainty during the term of contract**

Each firm participating in the tender process will face a degree of uncertainty in relation to issues such as the future level of demand for its services and the price of inputs over the term of the contract.

The towage provider assumes these risks under a fixed licensing contract. For example, the price of insurance cover or fuel may rise during the term of the contract, reducing profit margins. As a result, each bidder would be expected to factor a risk premium into its prices to allow for such contingencies. The size of this risk premium will be positively correlated with the length of contract term. During the term of the contract, the users of towage services will face this risk premium whether or not the contingency ultimately arises.

Similarly, it is unlikely that users will derive any benefit from any unforeseeable cost reductions during the term of the contract (e.g. fall in input prices, increased productivity, unanticipated increase in demand which results in falling average cost, etc.). Even where a KPI is specified that the provider should achieve a reduction in cost to port users over the term of the contract, it is difficult for the port authority to monitor changes in the provider's real costs to determine the appropriate magnitude for such a price reduction.

- **Costs of locking into a fixed term contract**

In an open market, a provider of goods or services is free to enter and exit markets, responding to relative rates of returns in other product and geographic markets. For example, a towage operator may perceive a higher return could be achieved in an alternative port. In that case, it is optimal that the operator shifts its productive resources to the more attractive business opportunity. This process ensures that resources flow to their highest value use, achieving allocatively efficient outcomes.

Where producers are locked into fixed contracts for service under an exclusive licensing regime, resources are not able to flow freely to their higher value uses. Exclusive contracting creates a "barrier to exit", distorting the efficient allocation of resources. Whilst it is open to an exclusive licensee to breach its contract, this raises the costs of transferring resources to more productive uses (e.g. in terms of legal action, damages, damage to reputation, etc.). These barriers to exit can ultimately impose costs on the users of other ports that may have benefited from new entry.

#### **4.3.4. On-going compliance costs for successful bidder**

The successful bidder will be required to record its compliance with set KPIs and may be required to have these audited by an independent party on a periodic basis.

#### 4.3.5. Transition costs

- **Entry costs**

The successful bidder will incur transactions costs in mobilising its capital and labour to commence operations at a new port. This process will be repeated each time the incumbent operator is displaced as part of the periodic competitive tendering process.

- **Exit costs**

Similarly, an incumbent firm that is unsuccessful in winning another term as the exclusive provider may incur costs in terms of labour redundancies and the re-deployment of tugs. Although an active second-hand market exists for the sale of tugboats, which will reduce the costs involved in dealing with these assets, and the incumbent may decide to enter other “open” markets, the incumbent will still incur transactions costs in redeploying assets.

Over time towage operators will also factor these transition costs into bid prices.

It could be argued that the costs of entry and exit are not costs specific to an exclusive licensing regime as they are also incurred under an open market regime (i.e. where there is competition in the market as opposed to competition for the market). However, these costs are potentially higher under an exclusive licensing regime as firms are forced to incur these costs at times specified by the port authority rather than on their own terms and in the course of implementing their own business strategy.

#### 4.3.6. Summary

Prospective harbour towage providers incur significant costs in assessing the business opportunity and preparing a tender response. The successful bidder also faces risks associated with locking-in to a fixed contract, and it will attempt to shift these to port users by imposing a risk premium on the price tendered. Compliance costs and transition costs are also faced by harbour towage providers under an exclusive regime.

Lock-in can also have a negative impact on other ports as productive resources are tied to a given port for a fixed period of time, potentially reducing competitive tension in other ports and reducing the efficient allocation of productive resources in the towage industry taken as a whole.

## 4.4. USERS OF HARBOUR TOWAGE SERVICES

### 4.4.1. Introduction

The use of an exclusive licensing regime for harbour towage services has the potential to impose increased costs on the ultimate users of towage services. Each of the costs incurred by the port authority and prospective towage providers identified above may potentially be passed on to users in some form, including by being factored into the tendered price for towage services. Our discussion of the principal-agent problem below seeks to identify those circumstances where ports and towage providers are most likely to pass on these costs to port users.

A legally enforced monopoly can also have negative consequences on the desired quality of port services and can disadvantage port users in removing their ability to exert countervailing power. Finally, exclusive contracting removes the competitive influence of new industry participants or participants that are not strategically positioned to enter the market at the time of tender.

### 4.4.2. The principal-agent problem

The increased costs faced by port users through the imposition of an exclusive licensing regime are most profound where the port authority, in its role as “agent” for the port customers, is able to pass through or inflate the costs of towage services to these customers. This can occur where the interests of the port authority are not properly aligned with those of the port users.

The introduction of an exclusive licensing regime removes the individual right of port users (e.g. the shipping lines, exporters, etc.) to directly engage a towage provider upon their chosen terms and conditions. The private commercial transaction between the towage provider and user is made more complex by the imposition of an intermediary who assumes the responsibility for engaging towage services on behalf of all port users.

The principal-agent problem occurs where the interests of an agent (e.g. the port authority) diverge from that of the principal (e.g. the users of towage services). While one could expect that a corporatised, profit-maximising port authority facing significant inter-port competition would face the appropriate commercial incentives to act in the best interests of port users, this may not always be the case.

The ACCC in its submission to the inquiry, raises the principal-agent problem as a key factor in assessing the desirability of exclusive licensing regimes, stating:

*Foremost is that the port authorities themselves need to have sufficient incentive to implement a tender process that will provide users of harbour towage services, such as shipping lines, with a product of an efficient price*

*and quality. That is, the port authority may be only an indirect beneficiary of a tendering process.*<sup>23</sup>

The Productivity Commission also recognised the adverse outcomes that can be caused by the principal-agent problem in its Position Paper, concluding that, “[i]f port owners do not act in the interests of ship owners, then tendering by the port authority is unlikely to be the most appropriate method of choosing the towage firm to supply the market at a particular port.”<sup>24</sup>

There are certain conditions under which the interests of the port authority may diverge from those of port users, potentially leading to increased costs for port users under an exclusive licensing regime. There are two main scenarios where this is most likely to occur:

- where the port authority is in a position to exercise some degree of market power; and/or
- where the port faces several competing commercial and non-commercial business objectives (e.g. community service obligations or social objectives such as promoting regional employment or facilitating regional development).

#### *Where a port authority holds market power*

A port is more likely to be in a position to exercise market power where it faces a relatively low level of inter-port competition and where segments of port users possess a low level of countervailing power. Where specific customer segments of the port do not have an economically viable alternative to using that particular port, the port operator may enjoy some market power and consequently, may not face strong incentives to minimise port charges, as it does not face a significant loss of business if towage services are priced above the competitive level.<sup>25</sup> Under these conditions, the port authority does not necessarily face the appropriate incentives to ensure that towage services are provided at least cost for a given level of service.

An alternative scenario occurs where the port, in recognition of the market power it possesses, has the incentive to ensure that towage prices are set at least cost, but does not pass the cost savings through to port users, thereby extracting a rent. There are several ways in which a port with market power may extract monopoly

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<sup>23</sup> ACCC (2002), p. 23.

<sup>24</sup> Productivity Commission (2002), p. 142.

<sup>25</sup> This may occur for a number of reasons, for example the “capture” of certain customer segments due to geographic, asset-specific, or point-to-point factors. For a detailed discussion of different types of captured port customers in New Zealand, see CRA (2002), chapter 6.

rents from users. For example, the port authority may impose a higher license fee on the successful bidder over and above the costs it faces in running the tendering process and monitoring the performance of the towage operator during the term of the contract. Alternatively, the port, having priced towage services at least cost, may impose a higher price for the use of other port services such as port infrastructure, raising costs for all port users.

### *Port objectives*

The principal-agent problem may also occur where the port authority has several competing commercial and non-commercial objectives. Under these circumstances, it may not be in the interests of the port to minimise the cost of towage provision.

Under a fully privatised regime of port ownership, it could be assumed that the port authority will act in the best interests of users (in the absence of market power), having an interest in attracting users to its port in order to maximise profit. However, under the current arrangements in Australian ports, a number of ports face competing, non-commercial obligations that have the potential to raise the prices of towage services under an exclusive licensing regime.

In its Position Paper, the PC found that “[n]on-privatised ports may also be subject to conflicting or unclear objectives and scope for government intervention, which may weaken incentives to act in a commercial manner.”<sup>26</sup> For example, a port authority may be interested in selecting the towage provider that maximises employment at the port, or may have a preference for a local rather than international provider, regardless of the fact that these alternatives may be more costly for users.

There are certain governance conditions or objectives under which port operators may not face the appropriate incentives to act in the best interests of port users in minimising the cost of towage services. This will vary on a case-by-case basis. The different configurations of port ownership and governance in Australia leave open the question of whether the interests of port authorities are properly aligned with port users in many cases. In ports where these interests are not aligned, port users could face increased costs for the use of towage services and other port services.

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<sup>26</sup> Productivity Commission (2002), p. 143. The PC notes the existence of varying mission statements applying across non-privatised ports in Australia. For example, in Queensland port authorities are required to fulfil certain community service obligations under the *Government Owned Corporations Act*. In Victoria, the Government has the power to direct the Melbourne Port Corporation to “perform non-commercial functions in the public interest”.

#### 4.4.3. Impact on quality and innovation

- **Competing preferences of users on price/service levels**

Even in circumstances where a port currently has only one provider of towage services, users are able to exercise a degree of choice in terms of the price and conditions they negotiate on an individual basis with the incumbent provider, particularly where the user possesses some degree of countervailing power. Under an exclusive licensing regime, users are no longer free to negotiate individual terms and conditions with the towage provider. The port authority becomes their agent, determining the price and quality of towage services on behalf of the collective pool of port users.

Accordingly, the quality and price of towage services must be specified to a one-size-fits-all “average” level of service specification. It is likely that individual users of port services will hold different preferences in relation to the price/quality spectrum. For example, there may be some users who are prepared to pay a higher price for a higher quality level of service (e.g. less waiting time or the use of a more modern tug fleet).

There is a welfare loss to port users associated with not being able to bargain individual terms and conditions with towage providers under an exclusive contracting regime. The port users, who are compelled to use towage services, are forced to acquire a service from a particular provider that may not meet their specific needs. Additionally, the preferences of new port users who enter the port during the term of the towage contract are not fully taken into account.

- **Potential negative impact on technical innovation**

The introduction of an exclusive licensing regime may have a negative impact on technical innovation and dynamic efficiency.

The very nature of a long-term contract is to lock-in arrangements for a set period, imposing rigidity that does not exist in an open market. The standard of service required, the conditions under which the services will be performed, and the specific KPIs that must be complied with under the exclusive contract impose a great degree of rigidity into an otherwise flexible market. This may have the effect of reducing the level of innovation as the incumbent’s sole incentive is to achieve the designated KPIs at least cost to maximise its profit under the contract. It is possible for the port authority to incorporate innovative improvements into the level of service as part of the selection process or as part of the KPIs, but this means that the port authority adopts the role of weighing up what type of innovations are worthwhile, rather than the market.<sup>27</sup> Additionally, it is difficult

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<sup>27</sup> For example, in the Fremantle Port Authority (2000) one of the selection criteria was “the preparedness and ability of the respondent to expand, improve and innovate on its services to cater for future growth and expansion of the Port of Fremantle.”



for firms to make undertakings as to future innovative behaviour, as this is dependent upon market changes, developments in technology and the overall rate of innovation in the ports and shipping industry.

As discussed above, the competitive tendering process tends to focus on static efficiency improvements, driving price towards the marginal cost of production, subject to allowing for a reasonable level of fixed costs. Such conditions may not be conducive to promoting dynamic efficiency and technical innovation. As economic profits are squeezed towards zero, a firm's incentive to upgrade its capital stock, innovate and differentiate its product is diminished.

#### **4.4.4. Loss of alternative welfare-enhancing competitive arrangements**

- **Loss of user countervailing power**

In the absence of exclusive licensing arrangements, the users of towage services may pursue a variety of different arrangements in order to exert some degree of countervailing power on port services providers to ensure that prices and quality converge on the efficient level. Among the many arrangements that port users may choose to adopt include:

- Vertical integration into the provision of towage services, or sponsoring the entry of a new towage provider;<sup>28</sup>
- The exercise of individual countervailing power for larger port users, or the formation of a buying group consisting of a subset of port users using their combined buying strength to bargain with towage provider(s) on price and service levels; and
- The use of multi-port towage contracts whereby a port user agrees to use a particular towage provider in several ports in return for a discount on price.

Under an exclusive licensing regime, port users are denied the ability to institute such arrangements that typically have the effect of driving prices towards the efficient level. Just as the constraining influence of actual and potential entrants is lost under an exclusive licensing regime, so is the countervailing power and influence of port users on the pricing and quality decisions of the towage provider.

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<sup>28</sup> Sponsored entry refers to the situation where a firm at one functional level (e.g. a shipping line) induces a firm at another functional level to enter into the provision of port services (e.g. towage services) by making conditions more conducive to entry.



- **Loss of competitive influence of new industry participants**

Not all harbour towage firms will necessarily be in a position to tender for the exclusive contract according to the timing set down by the port authority. Some firms strategically may not be in a position to bid, for example, due to deployment of assets or labour under other contracts. Similarly, new entrants during the term of the exclusive contract will be excluded from entering and contesting the market for towage services under the exclusive licensing regime. Such firms will only be allowed to contest the market intermittently.

A related issue is the degree of coordination required in the case that several Australian ports chose to implement exclusive licensing regimes. Should these contracts come up for tender at different times, firms would be unable to compare the different business opportunities at the same point in time and may already be committed to other contracts. Some type of regulatory coordination is likely to be unworkable as different ports may impose license periods of differing lengths.

#### **4.4.5. Summary**

An exclusive licensing regime has the potential to impose substantial costs upon port users in terms of both the pricing and quality of harbour towage services. In addition to the potential for costs incurred by the port authority and prospective towage providers to be passed on to users, there are costs that fall more directly on port users.

In relation to the quality of harbour towage services, port users are denied choice in terms of the desired quality of services and the ability to pursue alternative competitive arrangements. The choice of users is replaced with the agency of the port authority whose interests, under certain conditions, may not be aligned with those of port users. Exclusive contracts also have the potential to reduce the level of innovation as the licensee seeks to minimise costs over the term of the contract rather than over time.

## 5. CONCLUSION

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The purpose of this report has been to identify and categorise all of the potential costs associated with implementing an exclusive licensing regime for harbour towage services at Australian ports along the lines proposed by the PC. These are costs that, by and large, do not presently apply under the market-based approach to harbour towage provision now in place at Australia's key ports. We have not considered the benefits, if any, that may arise from the proposed PC changes in this report.

To establish the social desirability of the proposed policy change, all of the relevant costs would need to be qualitatively and quantitatively measured and set against the benefits, if any, that are expected to accrue from an exclusive licensing regime. In recommending such a change, it is incumbent upon the PC to perform this social cost-benefit calculation to ensure that changes to policy and/or legislation have a net public benefit, and that their policy goals cannot be achieved through less onerous means. The RIS process employed by the PC's own ORR provides a template for this and is a mandatory requirement for Federal agencies proposing regulatory changes.

Our analysis suggests that there are many costs that would need to be considered, some of which are quite pervasive, especially those impacting on the dynamic aspects of the harbour towage industry (e.g. in terms of customer choice, innovation and productive efficiency). Risks accompany any regime that encumbers the ongoing process of competition in markets, is in place for long periods of time, and is potentially harmful to dynamic efficiency.

A comprehensive analysis of all of the costs and benefits associated with the PC's proposal would be a complex exercise. What the above suggests is that the expected benefits (e.g. the static efficiency gains) would probably need to be large in order to justify the risks and potential costs incurred. If not, there is a danger of moving to a worse state of the world, where large (static and dynamic) costs have been incurred to achieve small or non-existent (static) gains.