

# **Expert report on charging issues for container stevedoring**

Report prepared for Gilbert + Tobin

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# Key messages

Key messages of this report:

- Until recently, the container shipping market globally and in Australia has remained relatively stable and the commercial structures and pricing practices that have existed in container stevedoring have remained largely unchanged. These have typically involved recovery by stevedores of most, if not all, stevedoring revenue from shipping lines through stevedore tariffs.
- However, over the last 3-4 years, the global container shipping market and associated supply chain has undergone significant disruption. Competition has increased due to rapid consolidation of shipping lines, consortia and services, and pressures from a reduction in demand growth. Further, in Australia, competitive pressures have increased due to introduction of a third stevedore in most major ports.
- These factors appear to have led to market participants to revisit their traditional pricing practices, including through stevedores introducing or increasing landside surcharges payable by transport operators for access to their sites.
- These landside surcharges have proved controversial, and the ACCC has questioned whether regulatory intervention is necessary or justified.
- We view rebalancing of stevedore charges of the kind being undertaken by stevedores (as between landside transport operators and shipping lines) as consistent with what an economist would expect in a workably competitive market.
- We observe the following features of the container stevedoring market that demonstrate that it is workably competitive, as acknowledged by the ACCC: consolidation in the global shipping industry increasing the bargaining power of shipping lines; entry of new stevedore firms; and increased stevedore capacity.
- Operating margins and return on assets for the stevedoring industry have trended downwards over the past ten years which is clear evidence of increased competition.
- Shipping lines' demand for stevedore services is responsive to the level of stevedore charges they pay, whereas land transport operators demand for stevedore service (under current arrangements) is not responsive to the level of stevedore charges they pay (noting these charges can be passed on to shippers).
- Given competition between stevedores within a market to attract shipping lines to use their services, then there will be competitive pressure for all stevedores to rebalance their charges away from shipping lines and towards land transport operators.
- Rebalancing is consistent with a pricing strategy of price discrimination which will generally promote social welfare, except where it is associated with the misuse of market power. The ACCC has found no evidence of misuse of market power.
- Given the evidence of stevedore costs and revenues published by the ACCC, it does not appear that stevedores are engaging in excessive pricing.
- There are no barriers to the parties who exercise choice (which includes shipping lines, importers, exporters and freight forwarders) in adapting current commercial arrangements to place competitive pressure on all stevedoring charges, including in response to increased landside charges. There is evidence that this is already beginning to occur.
- In circumstances where pricing practices are in a state of transition in response to recent market changes and increased competition (both within stevedoring and in the wider container shipping supply chain) and the response of other port supply chain participants is still developing, we consider that there is not an economic justification for policy intervention.

- To the contrary, policy intervention in these circumstances risks introducing rigidity into the commercial arrangements within port supply chains that could reduce the ability of the supply chain to flexibly and efficiently adapt to recent market disruption. It may also impact upon and distort incentives of participants to invest in capital expansion of facilities to handle larger ships and improve landside access.

# 1. Introduction

Container stevedores (stevedores) are responsible for lifting containers on and off container ships at specialised ports. Container stevedores form part of a global container shipping supply chain that also involves large international shipping lines, importers, exporters, freight forwarders and a range of other participants such as rail and road transport operators, logistics operators and container parks.

The two largest container stevedores operating at the four major Australian ports recently rebalanced stevedore charges towards an increased proportion of revenue on infrastructure surcharges. The ACCC's most recent monitoring report<sup>1</sup> notes that this has been somewhat controversial. There have been questions raised publicly by the ACCC and transport operators whether the introduction of these new or increased landside charges requires regulatory intervention by state governments.<sup>2</sup>

This expert economic report has been prepared by Geoff Swier assisted by Robert McMillan at the request of Gilbert + Tobin. The report considers the various economic issues and policy implications arising from this rebalancing and whether any regulatory response is warranted or appropriate.<sup>3</sup>

The report is structured as follows:

- Section 2 sets out the relevant aspects of the container supply chain and the current market arrangements which affect the setting of stevedore charges; provides background on the recent rebalancing of stevedore charges; explains how stevedore charges are set; outlines financial indicators of increased stevedore competition; and discusses the recent increase in investment in landside access.
- Section 3 analyses the reasons for rebalancing of stevedore charges. It discusses economic and policy considerations relevant to rebalancing and insights from other industries. It then discusses the effect that recent increase in competition in Australian stevedoring markets has had on incentives to rebalance charges.
- Section 4 explores how current commercial arrangements could adapt in response to stevedores increasing their reliance on infrastructure surcharges.
- Section 5 discusses the policy implications of our analysis.
- Appendix A sets out biographies for Geoff Swier and Robert McMillan.

## 2. Stevedore charging in the current market and competitive context

**The traditional commercial arrangements for contracting and charging for stevedore services mean that - until recently - charges paid by shipping lines recovered virtually all stevedore revenues and were constrained by competition between stevedores to attract and retain shipping line customers and services.**

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<sup>1</sup> Section 2.4.5 Container stevedoring monitoring report 2016-17, ACCC, October 2017

<sup>2</sup> “At the end of the day state governments who regulate these ports can do something about [the increase in infrastructure surcharges] so I think that [the ACCC’s] monitoring does have power... We are already talking to state governments...state governments can [control prices] and state governments are watching.” Rod Sims, Chairman ACCC *Spotlight on stevedores over hikes in charges*, The Australian. 9 April 2018.

<sup>3</sup> A disclaimer is at the end of this report.

Over the last 3-4 years, the global container shipping market and associated supply chain has undergone significant disruption including through rapid consolidation of shipping lines, consortia and services, and reduction in demand growth. In Australia, competitive pressures have also increased due to introduction of a third stevedore in most major ports

Infrastructure surcharges introduced by stevedores and paid by land transport operators for access to stevedore facilities and associated rebalancing of stevedore charges were first introduced in 2010 but wide spread introduction of infrastructure charges is a reasonably recent development.

Stevedore charges are not set to recover a target revenue level but are set according to normal supply and demand dynamics expected in a workably competitive market. They appear more like a 'basket' of tariffs which are used by stevedores, in conjunction, to obtain an overall level of revenue consistent with their commercial objective of obtaining a return on investment commensurate with market conditions.

Operating cost margins and return on assets for the stevedoring industry have trended downwards over the past ten years.

This section sets out relevant information on the current market and competitive context and is structured as follows. Section 2.1 discusses the container supply chain and the current market arrangements. Section 2.2 discusses recent global and Australian market developments. Section 2.3 discusses investment in landside access. Section 2.4 discusses financial indicators showing increased competition in stevedore markets. Section 2.5 discusses how stevedore charges are set.

## 2.1 THE CONTAINER SUPPLY CHAIN AND THE CURRENT MARKET ARRANGEMENTS

The container supply chain in Australia forms part of a large, complex global shipping and container supply chain industry. The current commercial arrangements in the container supply chain within Australia are shown in Figure 1 below and the roles of each participant are described in further detail in Box 1.

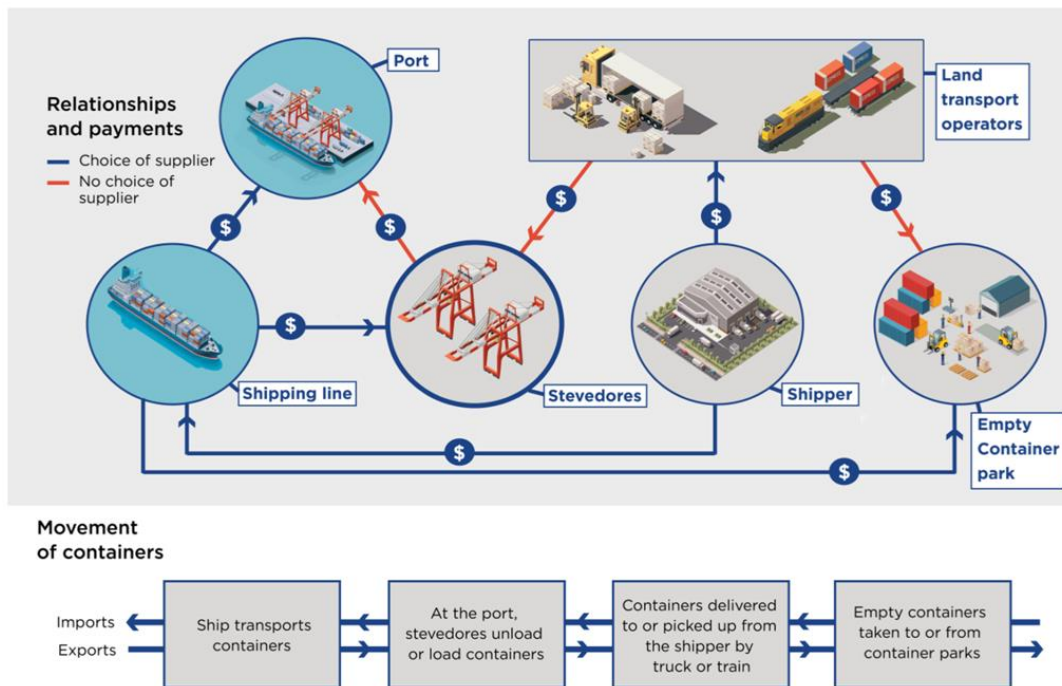
Key features of the historical commercial relationships are:

- A shipper contracts directly with shipping line and landside transport operators to move its cargo, or contracts through an intermediary to arrange for this to occur (a freight forwarder).
- The shipping line chooses a stevedore to load or unload the containers at each port and pays a charge to the stevedore which is passed on to the shipper by the shipping line, together with the shipping line's own charges for transport of the containers.
- The shipper does not currently play a direct role in choice of stevedore. (As shown in Figure 1 below, there is no line drawn between the shipper and the stevedores).
- The land transport operator is selected by a shipper and is tasked by the shipper to collect its container from a specified stevedore.

Shipping lines are subject to Part X of the Competition and Consumer Act (CCA) which allows them to enter into agreements among themselves in relation to the freight rates to be charged, and the quantity and kinds of cargo to be carried, on particular trade routes, and to register those agreements with the Registrar of Liner Shipping (not the ACCC).

Recent reviews, most recently the Harper competition review<sup>4</sup> have recommended that Part X should be repealed. The Harper review recommended that a block exemption granted by the ACCC should be available for liner shipping agreements that meet a minimum standard of pro-competitive features; and that other agreements that risk contravening the competition provisions of the CCA should be subject to individual authorisation, as needed, by the ACCC. This recommendation was justified on the grounds that no other industry enjoys legislative exemption from Australia’s competition laws and the if shipping lines wish to make agreements that would otherwise contravene the competition law, they should be required to seek approval from the ACCC.

**Figure 1. Container Supply Chain<sup>5</sup>**



<sup>4</sup> Pg 39. Competition Policy Review, March 2015

<sup>5</sup> Source: Figure 1.1 Container stevedoring monitoring report 2016-17, ACCC, October 2017

### **Box 1 Participants and commercial arrangements in the current Container Supply Chain**

**Shippers** comprise importing and exporting firms and are the ultimate customers for container shipping services within the global container shipping market, and for stevedore services at each Port.

Shippers contract directly with shipping lines and landside transport operators to move their cargo, or they may contract through freight forwarders that make arrangements with shipping lines on their behalf.

Shippers are the end users of all services along the entire container supply chain and in the long run bear all charges passed on by shipping lines (including stevedore tariffs) as well as any charges levied or passed on by land transport operators.

Shippers generally operate in competitive markets (often exporters compete in highly competitive global export markets) and therefore have incentives to ensure that their overall transport costs are efficient and service quality is acceptable.

**Shipping lines** contract with shippers to ship their containers (either for import or export). In order to facilitate this, shipping lines also contract with a stevedore at each port to load and unload the containers from their ship and to hold those containers until they are collected by the shipper's agent (usually a road or rail operator) for delivery to the shipper.

Shipping lines operate in the global container shipping market and have incentives to ensure that any charges they pay are minimised and that stevedore service quality (e.g. availability, unloading and loading times, etc.) are efficient. They may also have an interest in the wider efficiency of the container supply chain. (For example, bottlenecks in landside services that cause delays could adversely affect shipping lines' asset utilisation).

**Stevedores** carry out the following functions:

- For a full container being imported, the stevedore unloads the container from a ship, provides temporary storage, and provides access to, and loading services for, land transport operators to pick up the container and transport it to its next destination.
- For an empty or full container being exported, the stevedore provides access to land transport operators to drop off the container, provides temporary storage and loads the container on to a ship.

Stevedore services include:

- quayside services – which includes the loading and unloading of container ships as well as associated activities
- landside services – which enable land transport operators to pick up and drop off containers from the container terminal.

**Land transport operators** include truck or rail operators under contract with shippers to transport container goods from the stevedores' container terminals to the shippers and vice versa.

The land transport operator contracted by a shipper must deal with the stevedore selected by the shipping line and must pay any infrastructure surcharge levied by the stevedore.

**Freight forwarders** are intermediaries that manage the end to end transport and delivery of goods for a customer. The freight forwarder will typically contract with a shipping line, transport operators, warehousing, and other supply chain services.



## 2.2 RECENT MARKET DEVELOPMENTS

### 2.2.1 Trends in global container shipping markets

Over the past 3 or 4 years global shipping container markets have experienced disruptive changes that have substantially increasing competitive pressures on ports and container terminals. These include

- consolidation within the global shipping industry
- significant decline in growth rates
- increased competition between ports and container terminals
- challenges in investing to accommodate larger ships
- additional capacity in the market
- Port privatisation
- vertical integration in supply chain

#### *Consolidation within the global shipping industry*

An authoritative industry publication notes that: “for the past three years, the container shipping industry has been in the throes of the biggest upheaval it has ever experienced, and the shake-out is far from over”.<sup>6</sup>

Consolidation within the global shipping industry is increasing competitive pressures on stevedores. There are now 16 big competitors dominating the global shipping industry, down from 25 in 2011. DP World advises that it anticipates consolidation of shipping lines could continue to fall to as low as 12. Further, the number of major container shipping alliances has also been reduced from four to three. Already over 80% of Australia’s container trade will be handled by the top five shipping lines and 95% of the market will be handled by the top 10.<sup>7</sup>

The ACCC notes that as newly merged entities negotiate their new contracts, it is common for all shipping lines within the alliance group to receive what had previously been the lowest rate amongst them. This means that stevedores are losing some of their higher margin contracts with smaller shipping lines.

Further we note that the legislative exemption currently provided to shipping lines from Australia’s competition laws (Part X of the CCA) may potentially increase their relative bargaining power compared to a counterfactual of where they would be subject (for example) to block exemptions or be required to seek an ACCC authorisation of potentially anti-competitive arrangements. However, it is not possible to confirm this is the case or quantify this effect, as to our knowledge this question has not been subject to detailed study. The Harper review did not attempt to analyse or quantify the extent of increased market power under the current arrangements. We note that Professor Alan Fels, a former ACCC chairman argued in 2001 that:

*a move to apply the authorisation process to shipping is not intended to result in the dismantling of shipping conferences. Exemptions for most of the conduct prohibited by the competition law can be provided through authorisations when the conduct is likely to result in a benefit to the public which exceeds the associated*

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<sup>6</sup> Lloyds List, One Hundred Ports 2017, p. 8

<sup>7</sup> Advice from DP World

*detriment.....But...there is a real risk that arrangements will be allowed to exist which are against the interests of exporters and the Australian economy generally. <sup>8</sup>*

### **Decline in growth rates of global port throughput**

In recent years the global port and container terminal industries experienced annual growth rates in the order of 5%-6%. In the past couple of years however growth rates have fallen to around 1%-2%. This is fundamentally changing the focus of ports globally to focus more on competing for market share in a slow growing market rather than on investing for growth. (See Box 2 below).

#### **Box 2 The global container shipping industry is facing a decline in growth and increased competition between ports and container terminals.<sup>9</sup>**

*"If 2015 was a stark awakening for the container port industry that the golden years were coming to a close, then last year revealed tepid growth as the new reality. The days of 5%-6% annualised throughput gains are long gone, let alone the regular double-digit growth of the not-so distant past.*

*Following on from mere 1% increase the previous year, the 2017 edition of Lloyd's List's top 100 container ports shows that the elite box facilities achieved accumulative growth of just 2% in 2016.*

*Slower economic growth in China played its part, highlighting once more its intrinsic link to the wider fortunes of an industry dependent on its export trade.... Europe maintained its moderate growth, as one would expect from a mature market, while growth in North America, the Mediterranean and the Middle East was largely fragmented.*

*Throughput levels in southeast Asia fared rather better as new manufacturing bases drove outward trade, yet in Latin America the economic frailties of key trading nations put paid to port progress.*

*Significant growth opportunities were few and far between, although some ports did manage to improve markedly on their 2015 performance. However, more often than not this was to the detriment of a rival box facility, stealing business from elsewhere rather than capturing previously untapped markets.*

*Analysts forecasts of continued slower volume growth in the short to medium term suggests that this competitive environment will only increase.*

*In response, ports and terminals are starting to follow the same consolidation narrative as the liner operators. They too are looking to tie down customers and volumes long term.*

*Whether this means cosyng up with neighbouring terminals or offering joint ownership opportunities to carriers, will in many instances be seen as a necessity to safeguard future business.*

*Add to this the ongoing battle to accommodate bigger and bigger vessels, life is becoming ever more complicated for ports and terminals, accustomed to year upon year of healthy throughput advances and a relatively stable operating environment.*

*Adjusting to this new era will certainly be a challenge for ports, but acclimatise they must."*

### **2.2.2 Entry of new stevedores and increased capacity**

As noted by the ACCC,<sup>10</sup> competition has also increased in Australia over the past four years in certain ports as a third container terminal operator has entered the market.

<sup>8</sup> Australian liner shipping regulation, Professor Allan Fels, Address to Australian Shipper 2001, March 2001 <https://www.accc.gov.au/speech/australian-liner-shipping-regulation>

<sup>9</sup> Lloyds List, One Hundred Ports 2017, p.1

Hutchison commenced operations at Brisbane in January 2013 and at Sydney in November 2013. Victoria International Container Terminal commenced operations at the Port of Melbourne in 2016-17. There are now three competing stevedores at each of the three largest container ports in Australia. Shipping lines have benefitted through the ability to negotiate better pricing, new investment by the incumbents, and a wider choice of berthing windows at each port. The increased competition will help shipping lines negotiate better prices and potentially drive better service from the terminal operators through investment.

### 2.2.3 Competitive impact of stevedores winning or losing shipping line customers

Our inquiries highlighted that an important factor contributing to competition between stevedores is that where a stevedore loses (or wins) a customer then the revenue impacts are likely to be ‘lumpy’. For this reason, there can be significant incentives for the incumbent stevedore to retain a marginal shipping line customer; and for a challenger stevedore to win a marginal customer.

The implication of a reduced number of shipping lines and concurrent increase in the size of their individual demand is that shipping alliances are likely to have increased bargaining power when negotiating new stevedoring contracts, as stevedores compete for business from fewer players and the relative value of each contract increases.

## 2.3 INVESTMENT IN LANDSIDE ACCESS

The stevedores are undertaking significant investment to improve landside infrastructure. This is due to the increasing size of container ships calling at Australian ports, the need to increase capacity, and the need to increase productivity of operations.<sup>11</sup>

The largest driver of DP World’s capital investment program is the need to accommodate larger shipping vessels. DP World’s forecast expenditure of approximately \$256 million between 2017-19 includes substantial expenditure on large quay cranes. DP World is also undertaking investment to integrate its operations with rail infrastructure at Port Botany.<sup>12</sup>

## 2.4 FINANCIAL INDICATORS OF INCREASED STEVEDORING COMPETITION

Operating cost margins and return on assets for the stevedoring industry have trended downwards over the past ten years.

These trends are consistent with the expected effect of increased competitive pressure from consolidation of shipping lines, new stevedore entrants at each port, and increased stevedoring capacity:

- **Decline in operating cost margins<sup>13</sup>** | Operating profit margins for the stevedoring industry (ratio of EBITDA against real total revenue) have steadily declined from around 22% in 2007-08 to 17.1 % in 2016-17.

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<sup>10</sup> Section 2.2 ACCC 2016-17 Monitoring Report

<sup>11</sup> Section 2.5 ACCC 2016-17 Monitoring Report

<sup>12</sup> Advice from DP World

<sup>13</sup> Section 4.4.2 ACCC 2016-17 Monitoring Report

- **Decline in rate of return on assets<sup>14</sup>** | The stevedoring industry's return on assets has generally trended down, from around 25% in 2007-08 to 8% in 2016-17.

## 2.5 HOW STEVEDORING CHARGES ARE SET

Stevedores have two main contractual relationships under which they obtain revenue:

- (a) stevedore charges paid by shipping lines; and
- (b) infrastructure surcharges and other charges paid by transport operators (truck and rail operators) in order to enter the stevedore's site to collect or drop off containers.<sup>15</sup>

Historically, stevedores have recovered substantially all their revenue from stevedoring charges levied on shipping lines. Section 3.1 discusses in more detail the recent trend to rebalancing of stevedore charges.

Stevedore charges appear like a 'basket' of tariffs which are used by stevedores, in conjunction, to obtain an overall level of revenue consistent with their commercial objective of obtaining a return on investment commensurate with market conditions. Neither stevedore charges nor infrastructure surcharges appear to be set in isolation of the other or in order to recover a particular or target revenue level (as might be the case for regulated monopoly infrastructure). Charges are set according to normal supply and demand dynamics expected in a workably competitive market. Although some shipping lines have global relationships with the stevedore firms, the shipping lines can and do exercise substantial bargaining power in the setting of these charges.

## 3. Rebalancing of stevedore charges

**Competition between stevedores at each port to attract shipping line business has strengthened significantly. There has also been an increase in the countervailing power of shipping lines.**

**The rebalancing of stevedore charges is consistent with what would be expected in such a market which is becoming more competitive.**

**Shipping lines' demand for stevedore services is responsive to the level of stevedore charges they pay whereas land transport operators (under current arrangements) have no ability to respond to the level of stevedore charges they pay.**

**Given competition between stevedores within a market to attract shipping lines to use their services, then there will be competitive pressure for all stevedores to rebalance their charges away from shipping lines and towards land transport operators.**

**Rebalancing is consistent with a pricing strategy based on price discrimination which will generally promote social welfare, except where it is associated with the misuse of market power. The ACCC has found no evidence of misuse of market power by the stevedoring firms.**

**Given the evidence of stevedore costs and revenues published by the ACCC, it does not appear that stevedores are engaging in any form of excessive pricing.**

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<sup>14</sup> Section 4.4.2 ACCC 2016-17 Monitoring Report

<sup>15</sup> Infrastructure surcharges are applied on a per container basis (full containers only). We understand that the surcharge is typically levied and collected through the automated booking systems used by stevedores to manage access by transport operators to their sites. Access to a site is conditional on the surcharge being paid.

This section analyses the causes and implications of the recent rebalancing of charges. Section 3.1 discusses the tariff rebalancing that has occurred recently in stevedoring markets. Section 3.2 discusses relevant economic considerations including the definition of the market, the workable competition standard, and the effect of price discrimination. Section 3.3 sets out an economic assessment of rebalancing of stevedore charges based on these considerations. Section 3.4 discusses the impact of increased infrastructure charges on land transport operators.

### 3.1 BACKGROUND

Some modest infrastructure charges have been in place for all three stevedores at the Port of Brisbane since 2010. DP World and Patrick also had an infrastructure charge in place in Melbourne, albeit a relatively small amount. In 2017 Australia's two largest stevedores, DP World and Patrick, either introduced or substantially increased infrastructure charges at a number of container terminals. ACCC estimated that the infrastructure charges could earn DP World and Patrick a combined \$70 million in revenues, which would be equivalent to a 5-6 per cent increase in unit revenues.<sup>16</sup> Subsequent to the ACCC 2016-17 monitoring report, Victoria International Container Terminal and Flinders Adelaide Container Terminal have also introduced infrastructure charges.

As result there has recently been a 'rebalancing' of charges (meaning that there has been an increase in the proportion of revenues earned by stevedores recovered by way of infrastructure charges and a reduction in the proportion of revenues earned by way of charges to shipping lines).

As noted by the ACCC,<sup>17</sup> rebalancing of charges and revenues is not a new development – over the past decade stevedoring revenues declined by 25 per cent per TEU, while other revenues have increased by 15 per cent. The new infrastructure charges will amplify this trend.

As might be expected, the rebalancing of charges has received different responses. Transport operators have objected to the increase in landside charges. By contrast, shipping lines have welcomed rebalancing because they view this as producing a more equitable apportionment of stevedoring costs.<sup>18</sup>

Finally, it is noted that this form of tariff rebalancing by stevedores has very little impact on end consumers. The ACCC notes one estimate that the infrastructure levy in Melbourne equates to less than 2 per cent of the cost of moving a container from China to an Australian warehouse.<sup>19</sup>

### 3.2 ECONOMIC AND POLICY CONSIDERATIONS AND INSIGHTS FROM OTHER INDUSTRIES

**The rebalancing of stevedore charges is consistent with what an economist would expect in a workably competitive market with the current commercial arrangements, and this is consistent with insights from other industries.**

#### 3.2.1 Definition of the market

The first step in assessing competition in a market requires definition of that market. We consider that the appropriate definition of the market for analysing competition is the market for stevedoring services

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<sup>16</sup> The ACCC was unable to fully quantify the increase in revenues given that the charges have not been in place for the full year but will be able to fully examine them in the next monitoring report).

<sup>17</sup> Section 2.4.5 ACCC 2016-17 Monitoring Report

<sup>18</sup> Shipping Australia Limited, Annual Report, 4 December 2017

<sup>19</sup> Section 2.4.4 ACCC 2016-17 Monitoring Report

at each of the ports subject to monitoring by the ACCC. That is, there are six geographically defined stevedoring markets<sup>20</sup>: Adelaide, Brisbane, Burnie, Fremantle, Melbourne, and Sydney. At each port there are multiple competing stevedoring firms.

### 3.2.2 Workable competition

In assessing the impact of rebalancing of stevedoring charges and considering policy implications (section 4 below), we adopt the commonly used ‘workable competition’ standard - as opposed to the theoretical concept of perfect competition. Workable competition is a notion which arises from the observation that since perfect competition does not exist, theories based on it do not provide reliable guides for competition policy.

*The idea was first enunciated by economist J.M. Clark in 1940. He argued that the goal of policy should be to make competition "workable," not necessarily perfect. He proposed criteria for judging whether competition was workable, and this provoked a series of revisions and counter-proposals. No consensus has arisen over what might constitute workable competition but all bodies which administer competition policy in effect employ some version of it.<sup>21</sup>*

The Supreme Court of Western Australia in the Epic Energy case<sup>22</sup> commented that a workably competitive market, “. . . is not a fixed and immutable condition with any absolute or precise qualities, but a process which involves rivalrous behaviour . . .”; and that in it, “. . . forces will increase efficiency beyond that which could be achieved in a non-competitive market, although not achieving theoretically ideal efficiency.”

### 3.2.3 Price discrimination

In setting charges, one of the factors suggested by economic theory and observed in practice is that a supplier of a service will take account of the degree of responsiveness that different classes of customers have to the price of the service (the price elasticity of demand).

Suppliers in a competitive market will have incentives to:

- hold or reduce charges for a class of customers that are responsive to prices (i.e. have a higher price elasticity of demand); and
- increase charges on users who have lesser (or zero) responsiveness to prices (i.e. low or zero price elasticity of demand).

This type of pricing strategy is known as price discrimination, where similar or related services are transacted at different prices by the same provider to different types of customers.

There are numerous examples of where suppliers operating in competitive markets apply price discrimination. For example, airlines engage in price discrimination by charging high prices for customers with relatively inelastic demand (business travellers) and discount prices for tourists who have relatively elastic demand. Price discrimination in this example enhances economic welfare (compared to a rule preventing price discrimination) by expanding the provision of airline services for price sensitive customers.

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<sup>20</sup> We understand that there is limited scope for competition from other transport modes (e.g. inland rail and air transport) to transport goods to each city.

<sup>21</sup> OECD, Glossy of statistical terms.

<sup>22</sup> Re Dr Ken Michael AM; Ex Parte Epic Energy (WA) Nominees Pty Ltd & Anor [2002] WASCA 231



Price discrimination will generally promote social welfare, except where it is associated with the misuse of market power. This position is reflected in Australian competition law. When the *Trade Practices Act* (now *Competition and Consumer Act*) was originally introduced in 1974 it contained a prohibition on price discrimination in s 49 but this was repealed by the *Competition Policy Reform Act 1995*, (s 14). Price discrimination is only prohibited under s 46 of the Act which prohibits misuse of market power. The recent Dawson Report<sup>23</sup> commented on price discrimination as follows:

*Price discrimination may be anti-competitive or pro-competitive. Price discrimination will be anti-competitive when it is used to create a barrier to entry to the market or to force competitors from the market. On the other hand, price cutting, even if it is in favour of a large buyer and hence discriminatory, may be more pro-competitive than anti-competitive. It may engender competition from rival suppliers or in the market generally. ... it is price flexibility which is at the heart of competitive behaviour and a general prohibition against price discrimination would substantially limit price flexibility.*

### 3.3 ECONOMIC ASSESSMENT OF REBALANCING OF STEVEDORE CHARGING

#### 3.3.1 Rebalancing is consistent with a workably competitive market

Under the current commercial arrangements - where shippers do not play any direct role in choosing the stevedore - a shipping line delivering (or picking up) a container has a higher price elasticity of demand in response to the stevedoring charges it pays, than does a land transport operator that picks up (or delivers) that container.

A shipping line can exercise choice of stevedore and therefore, all things being equal, will be somewhat sensitive to the level of stevedore charges it must pay when exercising this choice.

As discussed above, in the current commercial arrangements the shipping line selects the stevedore and as result the land transport operator cannot exercise any influence on choice of stevedore. Therefore, its price elasticity of demand with respect to infrastructure surcharges is effectively zero.

To the extent that there is competition between stevedores within a market to attract shipping lines to use their services, then there will be competitive pressure for all stevedores to rebalance their charges away from shipping lines and towards land transport operators.

It is important to note that this conclusion applies only under the current commercial arrangements. Given that shippers in the long run bear all stevedore charges, the question arises as how these incentives may change if the commercial arrangements change so that shippers become more involved in the choice of stevedore. This is considered in section 4 below.

#### 3.3.2 Rebalancing is not anti-competitive

We note that the ACCC examined concerns that stevedores' behaviour may have been anti-competitive and in contravention of provisions of the *Competition and Consumer Act 2010*, such as misuse of market power, unconscionable conduct and unfair contract terms, and that it did not identify any such breaches of the Act.<sup>24</sup>

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<sup>23</sup> Chapter 4, Dawson Report (Independent review of the competition provisions of the Trade Practices Act 1974 and their administration) 2003.

<sup>24</sup> ACCC, Container stevedoring monitoring report 2016-17, October 2017, p.9.

### 3.3.3 Rebalancing does not reflect ‘excessive charging’

The ACCC noted that stakeholders had described the increases in infrastructure surcharges as “excessive” but noted that there are not provisions dealing with excessive pricing under Australia law.

We understand the reference to “excessive pricing” to be a reference to a form of conduct under European competition law, which is treated as an abuse of dominance where a price is set that “*has no reasonable relation to the economic value of the product supplied*”.<sup>25</sup> Typically, the economic test applied looks both at the relationship between any price and the costs actually incurred as well as testing whether the price is intrinsically unfair relative to other competing products.

While this form of legal restriction does not apply in Australia, we note that even as an economic proposition any assessment of whether an infrastructure surcharge is “excessive” could not be undertaken without taking into account the manner in which changes to landside surcharges are part of tariff rebalancing between customer groups (shipping lines and transport operators).

The evidence of steadily declining operating cost margins and rates of return on assets for Australian stevedores over the last decade (discussed in section 2.4) appears inconsistent with a conclusion that rebalancing has resulted in excessive margins for stevedores or revenues that are out of proportion to costs. To the contrary, given the evidence of stevedore costs and revenues published by the ACCC, it does not appear that stevedores are engaging in any form of excessive pricing.

## 3.4 IMPACT ON LAND TRANSPORT OPERATORS OF INCREASED INFRASTRUCTURE CHARGES

As noted in the ACCC monitoring report,<sup>26</sup> the transport industry has been vocal in its criticism of the new infrastructure charges. We have also noted that shipping lines have been supportive of rebalancing.

To assess concerns about the possible impact of increased infrastructure charges on the viability of transport operators we have considered economic theory, and available market data and trends.

Economic theory suggests that in the long run, efficient land transport operators can be expected to pass on some or all the infrastructure charges to shippers sufficient to earn at least a normal rate of return. It is clearly not feasible for efficient land transport operators to remain in business while making inadequate returns due to an inability to pass on unavoidable cost increases to shippers. This adjustment process is consistent with what is expected in a workably competitive market.

DP World provided data on the number of annual renewals of Carrier Access Agreements (CAA) for each DP World Container Terminal for the past two years and the current year (2018-19). This is shown in Figure 2 below together with details of increased infrastructure charges.

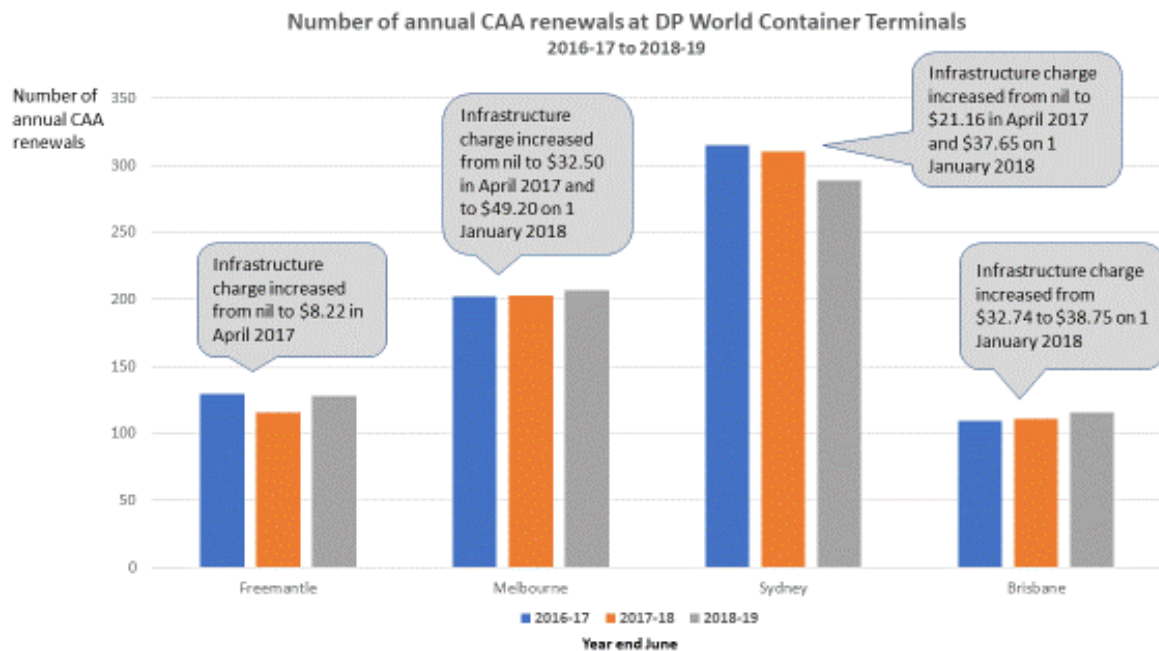
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<sup>25</sup> *United Brands*.

<sup>26</sup> ACCC, Container stevedoring monitoring report 2016-17, October 2017 Section 2.4.5



Figure 2 – Analysis of CAA renewals



Source: Data provide by DP World; farrierswier analysis.

Each land transport company must annually renew a CAA with a DP World Container Terminal. If there was a decline in the number of renewals this would indicate that land transport companies were exiting the market. Reasons for exit could be: financial distress of inefficient firms; activity shifting to other competing stevedores; or consolidation in the industry. None of these reasons should raise concerns with the levying of infrastructure charges. Another possible reason could be exit of efficient firms solely due to an inability to pass on infrastructure charges. If this was the case, it would call into question the market outcomes expected by economic theory.

We note that the number of CAA renewals for Freemantle, Melbourne and Brisbane have been stable or increasing. At Sydney there has been a modest decline of CAA renewals of around 8% between 2016-2017 and the current year. DP World advise that a current trend in the market is for large land transport operators (Toll and Qube) to buyout smaller operators.

We conclude that economic theory suggests that increased infrastructure charges should not affect the viability of efficient land transport operators in the long run. Analysis of market data and trends to date indicates that so far this assessment appears sound.

## 4. Assessment of commercial arrangements evolving in response to rebalancing by stevedores

While commercial arrangements have been relatively stable for a long time in the container supply chain, there are no barriers to those parties that exercise choice (shipping lines, shippers,

and freight forwarders) modifying the current arrangements to place competitive pressure on all stevedoring charges, including landside charges.

**Our analysis has not identified any barriers preventing current commercial arrangements changing in response to the rebalancing of stevedoring charges, and there is evidence this is starting to occur.**

As noted in the ACCC 2016-17 monitoring report, the controversy regarding the increase in infrastructure charges has arisen because, *“it is a clear departure from the traditional model where the container terminals seek to recover virtually all of their costs from the shipping line”*. This raises a question about the extent of market discipline on stevedores’ setting of infrastructure charges, given that currently, *“transport operators are less able to respond to stevedore prices than shipping lines”*.

This section explores how commercial arrangements could adapt in response to the stevedores’ rebalancing to increase reliance on landside charges.

First, we identify the features of revised commercial arrangements that would need to be true so that together they are capable of placing competitive pressure on all stevedoring charges, including landside charges. Second, we have assessed whether these features are likely to apply or whether there could be any barriers to them applying. This is discussed in section 4.1.

We note that in this analysis we are not advocating or predicting that the commercial arrangements will, or must, change. The benefits in changing the commercial arrangements depend on a number of things, all of which are unclear currently. These include:

- the extent that further rebalancing of stevedore charging occurs towards greater reliance on infrastructure surcharges;
- that any rebalancing leads to some material actual or potential harm to the interests of shippers; and
- that any harm is sufficiently material - compared to various other issues that shippers must address - that it warrants their attention.

Section 4.2 uses this analysis to comment on the ACCC’s discussion in its monitoring report of the potential for change in the commercial arrangements.

## 4.1 FEATURES OF CHANGED COMMERCIAL ARRANGEMENTS

It is self-evident that shippers (importers, exporters and freight forwarders) have an incentive to ensure that the costs of transporting their goods, including all stevedore charges are fair and reasonable (or efficient) and of an appropriate level of quality.

The strength of this incentive - or the degree to which a shipper will be sensitive to its transport costs - will vary depending, amongst other things, upon the nature of the shipper’s product, transport costs as a proportion of total product cost and the degree of competition in the relevant downstream market. For example, shippers that export high volume, low value products and that compete in highly competitive global export markets might be expected to be highly sensitive to transport costs and be incentivised to manage those costs closely.

Given this incentive, shippers will have the ability to place direct competitive pressure on stevedores in relation to all their charges, including landside surcharges, provided that the following exists:

1. Charging transparency - Shippers can understand the stevedore charges that they bear either indirectly or directly (i.e. through shipping lines).

2. There is exercise of bargaining power by shippers at the margin - At least some shippers can apply bargaining power either directly or indirectly (and individually or collectively through association) to influence the choice of stevedore having regard to the total level of stevedore charges and service quality.

Each feature is discussed below.

#### 4.1.1 Charging transparency

Clearly, there must be transparency in stevedore charges ultimately paid by shippers if they are to understand them and if appropriate, seek to exercise countervailing bargaining power.

Currently infrastructure charges are published by each of the stevedores.

As we understand it, stevedore charges to shipping lines are separately itemised in the shipping line charges levied on shippers.<sup>27</sup>

We understand from evidence provided by DP World that it has recently observed a desire from some shippers to take more direct control over the costs within the supply chain. This has included shippers increasingly expressing a desire to contract directly with stevedores and directly pay landside charges. This would be consistent with our observations above, that shippers ultimately have both an incentive and likely ability to manage transport costs, including all stevedore charges.

#### 4.1.2 Exercise of bargaining power

As noted above, decisions at the margin to shift shipping line business from one stevedoring business to another can have a significant financial impact on those businesses. Only some shippers need to become more involved in working with shipping lines to influence the choice of stevedore for this to have an impact on stevedoring competition and therefore the setting of charges, and to provide incentives on stevedores for cost efficiency in both quayside and landside charges.

We are not experts in understanding the practical development of commercial arrangements between shippers, shipping lines and stevedores. However, there are likely to be various ways that shippers can apply bargaining power either indirectly (or perhaps directly) to influence the choice of stevedore having regard to the total level of stevedore charges and service quality. For example, one measure might be for a shipper to include the total stevedore costs it incurs as a factor it considers in awarding its business to a shipping line. Rather than only considering stevedore costs passed on by the shipping line, it could make an adjustment in its evaluation to take account of the infrastructure charges levied by each stevedore (which as noted above are transparently published).

If competing stevedores believe that their total charges could be assessed in this way, they will have incentives to ensure their total costs (including investments, operating costs, and margins) and service quality are competitive.

We see no barrier to shippers making decisions in this way.

In support of this view we were provided with confidential information by DP World that indicates that some shippers are at the early stages of exploring alternative commercial arrangements that would better enable them to:

- align landside charges with their delivery terms

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<sup>27</sup> We understand that shipping lines typically include “Terminal Handling Charge” to refer to stevedore charges and “Port Service Charge” to refer to wharfage costs.

- control costs, including avoiding additional “administration fees” that appear to have been applied by land transport operators in addition to stevedore landside surcharges.

## 4.2 ACCC COMMENTS ON CHANGES IN COMMERCIAL ARRANGEMENTS

Table 1 below assesses the ACCC comments about the potential for change in the commercial arrangements considering the framework outlined above.

The ACCC commented as follows:

*Any loss of business [by a stevedore] would need to occur through transport companies encouraging their shipper customers to choose shipping lines that deal with stevedores that offer reduced infrastructure charges or no charge at all.*

*Even this type of response to the infrastructure charges is difficult given that:*

- *the shipping lines may be receiving subsidised services because of the higher infrastructure charge, which means they are less likely to want to agree to move to a stevedore with no (or a lower) infrastructure charge*
- *shipping lines typically operate in consortium and may use several stevedores based on decisions made by other members of the consortium and*
- *with both DP World and Patrick imposing the charge, there is limited or no scope for choosing a stevedore at a port that does not have an infrastructure charge.*

Table 1 Assessment of ACCC comments on potential change in commercial arrangements

ACCC Observation	Comment
<p>Any loss of business by stevedores would need to occur through transport companies encouraging their shipper customers to choose shipping lines that deal with stevedores that offer reduced infrastructure charges or no charge at all.</p>	<ul style="list-style-type: none"> <li>• There is nothing intrinsically beneficial about low / zero infrastructure charges, rather shippers' interests are primarily promoted by: <ul style="list-style-type: none"> <li>– the total level of stevedore charges being fair and reasonable / efficient; and possibly by charging structures providing incentives for efficiency</li> <li>– the ability of the stevedoring services to meet the service performance levels resulting from increased ship sizes.</li> </ul> </li> <li>• Shippers have an incentive to ensure total stevedore charges are fair and reasonable / efficient. It is not clear that the transport operators in the long run have an incentive to encourage shipper customers to choose stevedores that offer reduced or no infrastructure charge, as these charges will be treated as a cost pass through to shippers.</li> <li>• Shippers' objective is to be satisfied that total stevedore charges borne by the shipper in the long run are fair and reasonable / efficient. This is not consistent with focusing only on reduced or no infrastructure charge as suggested.</li> <li>• DP World has provided confidential evidence of shippers seeking to adapt commercial arrangements to include direct contracting with stevedores.</li> </ul>
<p>With both DP World and Patrick imposing the infrastructure charge, there is limited or no scope for choosing a stevedore at a port that does not have an infrastructure charge.</p>	<ul style="list-style-type: none"> <li>• To the extent that shippers become involved in the choice of stevedore, then shippers' assessments will be based primarily on comparing each stevedores' total charges.</li> </ul>
<p>Shipping lines may be receiving subsidised services because of the higher infrastructure charge, which means they are less likely to want to agree to move to a stevedore with no (or a lower) infrastructure charge</p>	<ul style="list-style-type: none"> <li>• Only some shippers need to become more involved with the shipping lines in the choice of stevedore for this to have an impact on stevedoring competition.</li> <li>• There are likely to be various ways that shippers can apply bargaining power either indirectly or perhaps directly to influence the choice of stevedore having regard to the total level of stevedore charges and service quality.</li> <li>• For example, one measure might be for some shippers to include the choice of stevedore as a factor they consider in awarding their business to a shipping line. Information they would consider in this decision would be the total level of stevedore charges and quality of stevedoring service.</li> </ul>

ACCC Observation	Comment
Shipping lines typically operate in consortium and may use several stevedores based on decisions made by other members of the consortium.	<ul style="list-style-type: none"> <li>• Decisions at the margin by a shipping line to shift business from one stevedoring business to another can have a significant financial impact on those stevedoring businesses.</li> <li>• This means that only some shippers and some shipping lines need to become more involved the choice of stevedore for this to have an impact on stevedoring competition.</li> </ul>

## 5. Policy implications

**The introduction and increase in landside surcharges appears to be a competitive response by stevedores to changing market conditions. Given there are no impediments to changes in market arrangements in response to rebalancing of stevedore charges there is no need for any policy action.**

**To the contrary, introducing regulation would be likely to lead to inefficiency and rigidity, and could potentially distort investment incentives for stevedores, shipping lines and other supply chain participants.**

**The appropriate standard for assessing policy implications of rebalancing of stevedoring charges is that of ‘workable competition’ in the relevant market.**

The trend to material rebalancing of stevedore charges has only occurred very recently. As discussed in section 4, we have not identified any barriers to the shipper(s) if they wish to change the commercial arrangements so that the total stevedore charges are considered in the choice of which stevedore provides the services needed by the shipper(s).

We note that competitive processes operate at the margin and therefore only some shippers need to become more involved in working with their contracted shipping lines to influence choice of stevedore for this to have an impact on the effectiveness of competition in a stevedoring market.

Finally, we note that there are indications that some shippers are at the early stages of exploring alternative commercial arrangements.

Therefore, we conclude that there is not a case for any policy action at this time to address concerns about the increased infrastructure charges paid by land transport operators not being subject to any countervailing power.

To the contrary, in circumstances where the global container shipping supply chain has been subject to recent and significant disruption and is in the process of evolving to respond, we consider it would be inappropriate to intervene in the stevedoring market to seek to specify how tariffs should be balanced (as between different users of stevedore services).

As noted by the Dawson report (see section 3.2.2 above) this form of intervention in a workably competitive market is likely to introduce inefficiency, rigidity and risks distorting investment incentives.

Further, as discussed above, ‘workable competition’ is the appropriate standard for assessing policy implications of rebalancing of stevedoring charges in the relevant market (being the market comprising parties that are potentially able to exercise some influence over the allocation of stevedoring business at each port).

This means, for example:

- there is no case for the commercial arrangement to change to pursue small gains in the level of stevedore charges; or
- that any changed commercial arrangements, if required, need to be defined in advance— any needed changes can be expected to emerge over time.

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## Disclaimer

This expert report has been prepared by Geoff Swier with the assistance of Robert McMillan of Farrier Swier Consulting Pty Ltd (farrierswier) for the sole use of Gilbert + Tobin (the “client”).

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# Appendix A Geoff Swier and Robert McMillan biographies

## A.1 GEOFF SWIER

Geoff Swier is a founding director of farrierswier. He is an economist and company director with over 25 years' experience in reform, policy development, regulation and operation in the electricity, gas, water and transport industries in Australia, New Zealand and Asia. Geoff has an in-depth knowledge of infrastructure sectors in Australia and internationally, and brings strong strategic insights to public policy, regulatory, and commercial issues. He is regularly appointed as a member of dispute resolution panels and provides expert testimony.

Currently he is a director of Trustpower (listed NZX), Tilt Renewables (listed NZX, ASX), Health Purchasing Victoria, and a member of the National Electricity Market Dispute Resolution Panel.

Previously he was a member of the Australian Energy Regulator (2005-08), an associate member of the Australian Competition and Consumer Commission, and an economic adviser to the New Zealand Minister of Finance (1984-87).

Other past roles include director of VENCORP (1999-2001); Victorian representative on the National Grid Management Council (1995); policy director for a board established by the New Zealand Government to oversee the reform of the New Zealand public hospital system (1992-93), and economic adviser to the New Zealand Minister of State Owned Enterprises (1990).

Geoff has provided policy and regulatory advice in the energy and water industries in most states of Australia, and in New Zealand. He has worked in energy sector regulation and reform in Singapore, Indonesia, Philippines and China and been appointed to government expert panels to provide policy

Recent relevant transport industry and pricing experience includes:

- Advice to the Victorian Essential Service Commission on undertaking its role as economic regulator of the Port of Melbourne (2016 – ongoing)
- Advice to the Commonwealth, through the Department of Infrastructure and Regional Development on establishing a Forward-Looking Cost Base to underpin Heavy Vehicle charging (2017)
- Advised the Victorian Essential Services Commission on its taxi fare determination for 2013-14
- Provided strategic advice on aspects of the Heavy Vehicle Investment and Charging project (2013)
- Advice to the COAG Road Reform Program on road pricing reform and institutional reform (2010-11) including advice on application of Public Utility Model to road funding
- Advised the National Transport Commission on aspects of road pricing (2007) and application of economic regulation concepts to road pricing reform (2006)
- Advice the Independent Pricing and Regulatory Tribunal (IPART) in NSW on regulation of Cityrail, including the models for incentivising service delivery and operating and capital efficiencies (2008).
- Advised the Department of Transport, Victoria on a scoping a review of the Victorian Transport Act (2006)



## A.2 ROBERT MCMILLAN

Robert McMillan is an experienced economist with expertise in regulatory policy and practice in the energy, water and transport sectors. He also advises clients on commercial strategy, stakeholder engagement, and competition matters.

In 2016, Robert rejoined farrierswier after a successful period in general manager roles in regulation and strategy for Jemena. He was accountable for regulation of Jemena's \$9 billion portfolio of Australian electricity, gas and water assets and for assessing new energy technologies and services.

Over the past 15 years Robert has applied his knowledge of policy, regulation and commercial strategy to advise clients across Australia and Asia. He is recognised for his considered approach to solving commercial and policy problems, adapting and applying regulatory regimes, and engaging customers and stakeholders in decisions.

Robert is expert in infrastructure access regulation, having designed rules, project managed price reviews, and advised on regulatory and tariff strategy. He brings deep commercial and policy understanding, which he combines with proven skill in managing multi-disciplinary teams. This makes him highly effective in delivering business decisions, regulatory submissions and stakeholder engagement programs.

Robert advised the Ministerial Council on Energy and the Australian Energy Market Commission through development of the national energy network pricing rules. More recently he has worked with businesses to develop commercial pricing strategies, and design and implement customer engagement programs to test, refine, and ultimately support regulatory approval of tariff strategies to facilitate sustainable energy grid transformation. Robert is skilled in both the commercial and compliance disciplines needed to successfully reform infrastructure tariffs.

Robert appreciates the context within which consumers, businesses and agencies make decisions, and the practical realities of implementing them. He draws on his broad combination of experience working in and for government, regulators and utilities. He has held roles at Jemena, farrierswier, NERA Economic Consulting, the Victorian Essential Services Commission and the Victorian Department of Treasury and Finance.

Robert has a Master of Regulatory Economics, Bachelor of Economics and Diploma of Management, and he is a member of the Australian Institute of Company Directors.

Recent relevant transport industry and pricing experience includes:

- Advice to the Victorian Essential Service Commission (ESCV) on undertaking its role as economic regulator of the Port of Melbourne (2016 – ongoing)
- Advice to Jemena gas pipelines on pricing unregulated gas transmission pipelines (2017 – ongoing)
- Advised Essential Energy on its first and second electricity distribution Tariff Structures Statements (TSS) setting out its plans for 2017-2019 and 2019-2024 to reform tariffs to in response to energy grid transformation (2016 - ongoing)
- Advised TasNetworks on its 2019-24 TSS, facilitated a pricing reform working group session of Tasmanian energy stakeholders for TasNetworks to explore pricing options for encouraging energy innovation and supporting customer equity in network tariff reform, and drafting its 2019-24 TSS (2017)
- Developed a principle based analytical and decision framework for the ESCV to establish an optimal regulatory framework for new customer connections in the Victorian water sector (2012)