

# 2017-18 Port of Melbourne tariff compliance statement

Interim commentary

9 November 2017



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## About this paper

### About the Port of Melbourne

The Port of Melbourne is Australia's largest container, automotive and general cargo port. In 2016, the Victorian Parliament passed legislation enabling the port's commercial operations to be leased to a private operator for 50 years. The port licence holder commenced operations on 1 November 2016.

A number of services provided by the port are 'prescribed services' for the purposes of the *Port Management Act 1995.* These include the provision of shipping channels, berthing facilities and other services defined in section 49 of the Port Management Act.

In setting its prices for prescribed services, the port is required to comply with requirements in the pricing order – a regulatory instrument made by the Governor in Council under section 49A of the Port Management Act.

The pricing order places the onus on the port to demonstrate that in setting prescribed service tariffs it is compliant with the pricing order provisions. Demonstrating compliance is facilitated by the submission of annual tariff compliance statements.

On 31 May 2017, the port submitted its 2017-18 tariff compliance statement, which is available on our website.

### Our role

The Essential Services Commission is responsible for assessing and reporting on the Port of Melbourne's compliance with the pricing order.

We must, at five-yearly intervals, conduct an inquiry and report to the ESC Minister:

- as to whether the port licence holder has complied with the pricing order during the five year review period; and
- if there was non-compliance with the pricing order, whether that non-compliance was, in our view, non-compliant in a 'significant and sustained manner'.<sup>1</sup>

Summary of observations

<sup>&</sup>lt;sup>1</sup> Port Management Act 1995, s.49I(1)

Our five yearly inquiry must be conducted in accordance with Part 5 of the Essential Services Commission Act (except for sections 40 and 46), which sets out general provisions relating to inquiries and reports.

### Why we are providing this commentary

While the pricing order requires the port to submit annual tariff compliance statements to the commission, to promote transparency and predictability in our approach, we have chosen to provide interim feedback on aspects of the port's tariff compliance statement by publishing commentary during the five year review periods. This will benefit the formal five-yearly review process by providing opportunities for stakeholders, including the port, to be aware of key issues or concerns in advance of formal inquiries. This will also allow the port to refine the information it provides over time to assist the port to demonstrate compliance ahead of our inquiry.

The purpose of this commentary is neither to provide an exhaustive compliance assessment, nor to make findings as to whether any non-compliance has occurred or is 'significant and sustained'. Instead, our feedback will ensure that the port has an opportunity to understand, given our current state of knowledge what we will be considering when we are assessing the port's compliance.

The scope of issues considered in this interim commentary has been guided by interim views informed during our assessment of the port's tariff compliance statement. The scope of issues we consider in future commentaries will therefore not necessarily be limited to issues we have raised in this commentary. Likewise, this commentary does not limit the scope of issues we may consider in our five-yearly inquiries.

# Summary of observations

Reviewing the port's 2017-18 tariff compliance statement, we observed the following:

### The estimation of the weighted average cost of capital (WACC)

The port submitted a pre-tax, nominal WACC of 11.54 per cent for 2016-17 and 2017-18. The WACC is a significant driver of the port's aggregate revenue requirement which will determine the prices paid by port users when the tariffs adjustment limit ceases to apply.

The port's approach to estimating the WACC appears to differ from established regulatory approaches and has resulted in a relatively higher WACC estimate than seen in comparable industries.

### The impact of longer regulatory periods

The port has adopted a one year regulatory period for 2017-18 (the present regulatory period) and for 2016-17 (the prior regulatory period). The port has yet to decide on the length of its future regulatory period(s) but has signalled a period as long as the remaining lease term of 48 years.

The port's choice of regulatory period will have implications for port users through the tariffs they pay and on the service level outcomes they receive. The longer a regulatory period the higher the risk of divergence between the prices charged for the provision of prescribed port services, and the port's costs of providing those services.

We expect the port would consult with us and port users on the practicalities and implications of a longer regulatory period.

### **Treatment of deferred depreciation**

Depreciation accounts for a large share of the port's aggregate revenue requirement. The port has deferred recovery of its depreciation costs but has not specified how or when it will recover those costs.

Port users could potentially face higher prices when the port begins recovering these deferred costs in the future. We will give consideration to how the port decides to smooth the impact of deferred depreciation on tariffs when undertaking our five-yearly inquiries into the port's compliance with the pricing order.

We would expect the port to provide further information on how it will recover deferred depreciation in future tariff compliance statements.

# Estimating the weighted average cost of capital

The port has submitted a weighted average cost of capital (WACC) estimate of 11.54 per cent. The port's WACC estimate may impact the prices paid by port users in the future when the tariff adjustment limit ceases to apply (sometime in the next 20 years).

The port's approach to estimating the WACC differs from established regulatory approaches and results in a relatively higher WACC than most comparable regulated industries.

We expect the port to provide further explanation in future tariff compliance statements on its approach to estimating the WACC and demonstrate how it says its approach meets the requirements of the pricing order and the Port Management Act including the requirement to utilise 'well accepted approaches'.

### The estimation of WACC is based on two forms of capital

The WACC is the minimum rate of return on capital that a regulated business would need to offer investors to attract necessary capital to fund the business. The port must determine its rate of return on capital through the use of 'one or a combination of well accepted approaches that distinguish the cost of equity and debt, and so derive a weighted average cost of capital'<sup>2</sup>. The port's allowance for a rate of return on capital must also be financed at a rate commensurate with that which would be required by a 'benchmark efficient entity providing services with a similar degree of risk'<sup>3</sup>.



The pricing order requires the port to estimate the WACC. It is one of the most significant drivers of the port's aggregate revenue requirement (along with depreciation) and may impact on the tariffs paid by port users when the tariffs adjustment limit ceases to apply.

<sup>2</sup> Pricing Order, clause 4.3

<sup>&</sup>lt;sup>3</sup> Pricing Order, clause 4.1.1(a)

### The port's WACC estimate

The port engaged Synergies Economic Consulting (Synergies) to derive a WACC estimate. The port submitted a pre-tax, nominal WACC of 11.54 per cent for 2016-17 and 2017-18. In reaching this figure Synergies considered a range of issues including the meaning of 'well accepted approaches' and the 'benchmark efficient entity' and other WACC parameters in the context of the pricing order.

### Well accepted approaches

In our consultation paper, we outlined our initial interpretation that 'well accepted' approaches to WACC estimation are those commonly used in Australian regulatory practice'<sup>4</sup>.

Synergies outlined its interpretation of the phrase 'well accepted' within the pricing order, to extend 'beyond the approaches used by regulators (both Australian and international), to encompass the approaches used by the finance community and academia'<sup>5</sup>. For example, in estimating the return on equity, Synergies used a combination of approaches, which included some that have been utilised in an Australian regulatory context (for example, the Sharpe-Lintner Capital Asset Pricing Model) and others that are utilised by the finance community or in academia (for example, the Fama-French Three Factor model).

### The benchmark efficient entity

In our consultation paper we outlined some relevant risk characteristics of the port's prescribed services. In particular, any comparator firms used in the estimation of inputs to the WACC should ideally<sup>6</sup>:

- provide primarily wharfage and channel access services
- predominantly derive revenue from container cargo services, with a smaller share of bulk and non-bulk cargo services
- be publicly-listed
- be a port in Australia.

We recognised that there are no publicly-listed ports in Australia and that the port would need to determine its comparator set by:

- considering other characteristics of its prescribed services
- making trade-offs between elements of comparability.

Estimating the weighted average cost of capital

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<sup>&</sup>lt;sup>4</sup> Essential Services Commission 2017, Regulatory Approach to the Pricing Order – a consultation paper, May p.41

<sup>&</sup>lt;sup>5</sup> Port of Melbourne, 2017-18 Tariff Compliance Statement – Appendix C, Synergies WACC submission, p. 29

<sup>&</sup>lt;sup>6</sup> Consultation paper, p. 40

Synergies recognised that in practice there are no domestic or comparable listed port entities that provide comparable services, which led it to identify transport entities outside of the Australian port sector.<sup>7</sup> Synergies comparator set included<sup>8</sup>:

- international ports, stevedores and terminal operators
- Australian and airports overseas
- railroads overseas.

### Specific parameters in the WACC estimate

The parameters used by Synergies that form the basis of the Port of Melbourne's WACC estimate are outlined in Table 1.

<sup>&</sup>lt;sup>7</sup> Synergies WACC submission, p. 24

<sup>&</sup>lt;sup>8</sup> Synergies WACC submission, pp. 33-35

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### Table 1 WACC estimate for the Port of Melbourne (Synergies' estimates)

Parameter / return	Estimate		
Input parameters			
Risk free rate	2.81%		
Gearing	30.00%		
Debt risk premium	2.54%		
Debt raising costs	0.10%		
Credit rating	BBB		
Market risk premium	7.77%		
Asset beta	0.70		
Equity beta	1.00		
Gamma	0.25		
Corporate tax rate	30.00%		
Post-tax return on equity estimates			
Sharpe-Lintner Capital Asset Pricing Model	10.58% <sup>9</sup>		
Black Capital Asset Pricing Model	10.58% <sup>10</sup>		
Fama-French Three Factor Model	11.72% <sup>11</sup>		
Pre-tax return estimates			
Return on equity	14.15% <sup>12</sup>		
Return on debt	5.45% <sup>13</sup>		
Pre-tax nominal WACC	11.54% <sup>14</sup>		

<sup>&</sup>lt;sup>9</sup> Calculated as 2.81% + 1.00 x 7.77%, where 2.81% is the risk-free rate, 1.00 is the equity beta, and 7.77% is the market risk premium.

 $<sup>^{10}</sup>$  Calculated as 2.81% + 3.34% + 1.00 x (7.77% – 3.34%), where 3.34% is the zero-beta premium. The Black CAPM gives the same result as the Sharpe-Lintner CAPM because an equity beta of 1.00 is used.

<sup>&</sup>lt;sup>11</sup> Calculated as  $2.81\% + (0.89 \times 7.77\%) + (0.29 \times 6.05\%) + (0.16 \times 1.77\%)$ , where 0.89, 0.29 and 0.16 are the estimated betas for the market risk, high minus low and small minus big premia used in the Fama-French three factor model, and 7.77\%, 6.05% and 1.77% are the size of those premia.

<sup>&</sup>lt;sup>12</sup> Calculated as the average of the post-tax return on equity estimates converted to a pre-tax value, as: (10.58% + 10.58% + 11.72%) / 3 / (1 - 30% x (1 - 25%)), where 30% is the corporate tax rate and 25% is the value of imputation credits (or gamma).

 $<sup>^{13}</sup>$  Calculated as 2.81% + 2.54%, where 2.54% is the debt risk premium.

<sup>&</sup>lt;sup>14</sup> Calculated as  $14.15\% \times (1 - 30\%) + 5.45\% \times 30\%$ , where 30% is the assumed gearing.

### **Observations on the port's WACC estimate**

### Synergies' approach differs from regulatory precedent in a number of areas

We observe that the following regulators have considered regulated revenues for transport infrastructure and undertaken a detailed analysis of comparability:

- the Australian Competition and Consumer Commission (ACCC) for the Australian Rail Track Corporation's (ARTC) interstate rail network
- the ACCC and the Independent Pricing and Regulatory Tribunal (IPART) for ARTC's Hunter Valley Coal Rail Network
- the Economic Regulation Authority of Western Australia (ERA) for passenger and freight rail networks in Western Australia
- the Queensland Competition Authority (QCA) for rail and a coal port terminal.

We have observed a number of areas where Synergies parameter estimates differ from regulatory precedent set by these regulators. Synergies parameter estimates lead to an overall WACC estimate of 11.54 per cent, which is higher than most allowed recently by these regulators.

Synergies argued that some of these regulated services are not relevant comparisons for prescribed services supplied by the Port of Melbourne because of the use of take-or-pay contracts and differences in regulatory regimes.<sup>15</sup> Synergies only considered rail freight networks as relevant comparators to the port.

Our initial view is that further consideration will likely be required of these matters. For example, we will consider whether the Port of Melbourne's prescribed services are likely to face greater risks than the regulated services referred to above. In addition, we will consider the reasons why different businesses to the port (for example, terminal and cargo handling service providers) are included in Synergies comparator analysis as businesses with similar risks.

To observe the scale of difference between the port's WACC estimate and those of other regulators for transport infrastructure, we summarise the WACC and key parameters from regulatory decisions in Table 2.

<sup>&</sup>lt;sup>15</sup> Synergies WACC submission, p. 58

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# Table 2Comparison of recent Australian regulatory decisions on WACC and the<br/>port's WACC

Parameter	Port of Melbourne	QCA (Queensland)		ERA (Western Australia)			ACCC (Federal)	
	Port of Melbourne (2017)	Dalrymple Bay Coal Terminal (2016)	Aurizon Network bulk freight (2016)	Passenger rail (2016)	Brookfield rail freight (2016)	Pilbara railways bulk freight (2016)	Hunter Valley bulk freight (2017)	ARTC interstate freight (2008)
Risk free rate	2.81%	1.82%	3.21%	2.22%	2.22%	2.22%	2.12%	6.39%
Market risk premium	7.77%	6.50%	6.50%	7.40%	7.40%	7.40%	6.00%	6.00%
Equity beta	1.00	0.87	0.80	0.60	0.90	1.30	0.947	1.292
Gearing	30.00%	60.00%	55.00%	50.00%	25.00%	20.00%	52.50%	50.00%
Corporate tax rate	30.00%	30.00%	30.00%	30.00%	30.00%	30.00%	30.00%	30.00%
Gamma	0.25	0.47	0.47	0.40	0.40	0.40	0.40	0.50
Pre-tax return on equity	14.15%	8.89%	10.00%	8.12%	11.13%	14.55%	9.52%	16.64%
Pre-tax return on debt	5.45%	4.72%	6.15%	4.46%	4.80%	5.92%	4.94%	9.37%
Pre-tax nominal WACC	11.54%	6.39%	7.88%	6.29%	9.55%	12.83%	7.11%	13.00%
Pre-tax nominal WACC: same risk free rate used for all	11.54%	7.45%	7.45%	6.94%	10.23%	13.52%	7.88%	9.11%

Source:

Analysis of regulatory decisions and Synergies WACC submission for the Port of Melbourne

We note that the estimates of the risk-free rate all differ from the port's estimate due to the different time periods used and different term-to-maturity assumptions.<sup>16</sup> The final row substitutes the port's estimate of the risk-free rate into the calculations for each regulated transport entity, which results in nominal pre-tax WACCs of between 6.94 per cent and 13.52 per cent. All but the highest figure (Pilbara railways) are lower than the nominal pre-tax WACC used by the port in its 2017-18 tariff compliance statement.

The key parameters driving the port's higher WACC can be attributed to Synergies estimates of:

- the return on equity
- gearing and equity beta
- gamma.

### **Return on equity**

Synergies estimated the return on equity for the benchmark efficient entity by taking an average of the results of three models:

- Sharpe-Lintner Capital Asset Pricing Model (CAPM)
- Black CAPM
- Fama-French Three Factor model.<sup>17</sup>

By comparison, other regulators have only used the Sharpe-Lintner CAPM in their decisions.

As the Fama-French model results in a higher estimate than the Sharpe-Lintner CAPM and the Black CAPM (as demonstrated in Table 1), Synergies use of this model increases the port's return on equity estimate. We note that the Fama-French model is not commonly used by regulators and has not been used by any regulator in Australia.

### **Gearing level**<sup>18</sup>

The estimate of gearing determines the ratio of debt to equity in the WACC calculation. The higher the level of gearing, the more weight is given to the cost of debt in the WACC calculation. Gearing also influences the equity beta value within the Capital Asset Pricing Model, with higher gearing levels resulting in a higher equity beta and vice versa.

Synergies estimated the port's gearing by assessing the gearing of its selected comparators (used to approximate the risk profile of the benchmark efficient entity). The gearing levels for Synergies'

<sup>&</sup>lt;sup>16</sup> The Dalrymple Bay Coal Terminal decision used a five-year term assumption and the Aurizon decision used a four-year term assumption. By contrast, Synergies used a 10-year term assumption for the Port of Melbourne.

<sup>&</sup>lt;sup>17</sup> Synergies WACC submission, pp. 47-49

<sup>&</sup>lt;sup>18</sup> Synergies WACC submission, p. 39

comparator set ranged from 22 per cent to 42 per cent. Synergies adopted an initial gearing level of 30 per cent, close to the mid-point of the sample range.<sup>19</sup> By comparison, the majority of the regulatory decisions outlined in Table 2 assume a benchmark gearing level of between 50 and 60 per cent.

### Equity beta<sup>20</sup>

Synergies estimated an asset beta of 0.70, which translates to an equity beta of 1.0 (when combined with gearing of 30 per cent). These parameters measure the non-diversifiable or systematic risk associated with the particular investment and is measured with reference to a set of comparator firms with similar risk characteristics. An equity beta of 1.0 implies that the port has the same risk as the average firm in the market. Regulators have tended to use lower asset betas in combination with higher levels of gearing than that used by Synergies.

Synergies considered that the port's main differentiator of systematic risk to the average of the sample is the prospect of competition from a second Victorian container port, which would increase the port's exposure to trade flows. Synergies noted that adopting an asset beta of 0.70 would be consistent with the 2016 review of a similar Australian freight business, conducted by the ERA for the freight network (Brookfield Rail) in Western Australia.

### Gamma<sup>21</sup>

The estimate of gamma measures the value of imputation credits to equity investors. Imputation credits enable shareholders to offset tax liabilities. This tax benefit means that most shareholders would be willing to accept a lower rate of return for an investment with imputation credits attached. Synergies used a combination of three approaches, which were drawn from academia and regulatory precedent (including market and non-market approaches), resulting in a gamma value of 0.25.

This compares with the AER's recent decisions to set gamma at 0.4. Two recent decisions by the Australian Competition Tribunal found no error in the AER's decision to adopt a gamma estimate of 0.4.<sup>22</sup> Further, the Full Federal Court found error in a decision by a differently-constituted Australian Competition Tribunal to substitute the AER's gamma estimate of 0.4 with an estimate of 0.25.<sup>23</sup>

<sup>&</sup>lt;sup>19</sup> Synergies WACC submission, p. 39

<sup>&</sup>lt;sup>20</sup> Synergies WACC submission, p. 58

<sup>&</sup>lt;sup>21</sup> Synergies WACC submission, pp. 96-98

<sup>&</sup>lt;sup>22</sup> These Australian Competition Tribunal decisions related to limited merits review appeals brought by regulated energy networks in South Australia and Victoria.

<sup>&</sup>lt;sup>23</sup> This Australian Competition Tribunal decision related to limited merits review appeals brought by regulated energy networks in New South Wales and the Australian Capital Territory.

# The length of the regulatory period

The port has adopted a one year regulatory period for 2017-18 (the present regulatory period) and for 2016-17 (the prior regulatory period). The port has yet to decide on the length of its future regulatory period(s) but has signalled it may use a period as long as the remaining lease term.

The port's choice of regulatory period will have implications for tariffs that port users pay and the level of service they will receive. The longer a regulatory period the higher the risk of divergence between the prices charged for the provision of prescribed port services, and the port's costs of providing those services.

We expect the port would consult with us and port users on the practicalities and implications of a longer regulatory period.

For future tariff compliance statements the port should explain how it assessed and decided on the length of its regulatory period and how it has considered port users' views and how the port says its decision is consistent with the Pricing Order and the Port Management Act.

### **Pricing order requirements**

The regulatory period sets the time period over which the aggregate revenue requirement is forecast and consequently the control period for setting prices.

The pricing order provides that the port 'may determine the period of time over which to apply the Pricing Principles and Cost Allocation Principles (regulatory period)'<sup>24</sup>. The port may also adopt regulatory periods of different lengths over the term of the lease.<sup>25</sup>

In our consultation paper, we considered that it is in the best interest of port users and Victorian consumers to:<sup>26</sup>

- clearly understand the basis for the port's choice of the length of regulatory period
- encourage a consistent and principled approach to determining the length of future regulatory periods.

The length of regulatory period

<sup>&</sup>lt;sup>24</sup> Pricing order, clause 13.1.1

<sup>&</sup>lt;sup>25</sup> Pricing order, clause 13.1.1

<sup>&</sup>lt;sup>26</sup> Consultation paper, p. 48

We also suggested that the port provide in its tariff compliance statement:<sup>27</sup>

- the factors that the port has considered in determining the length of the forthcoming regulatory period and proposes to consider for determining future regulatory periods
- the process by which the port has effectively consulted and considered the comments provided by port users
- the nominated length of the current regulatory period and the next regulatory period.<sup>28</sup>

### One year regulatory periods for 2016-17 and 2017-18

The port has adopted a one year regulatory period for 2017-18 (the present regulatory period) and for 2016-17 (the prior regulatory period).<sup>29</sup> The port advised us that it considered this to be appropriate because it needs reasonable time to consider and adjust to the new regulatory framework.

We recognise that a one year regulatory period for 2017-18 is reasonable to allow the new port leaseholder time to adjust to the new regulatory regime and understand the requirements of the pricing order.

### Length of future regulatory periods

The port has yet to decide on the length of its future regulatory period(s) but has signalled that it may choose a period as long as the remaining lease term.<sup>30</sup>

The port plans to discuss with the commission and consult with port users on a number of matters, in order to consider the benefits of a longer regulatory period.<sup>31</sup>

### A 48 year regulatory period creates challenges and has a number of implications

It is important that the consequences of a 48 year regulatory period are explained to and understood by stakeholders. The building block regulatory regimes of the kind established through the pricing order usually reset revenue allowances to actual levels of cost at the beginning of each regulatory period. To adopt a 48 year regulatory period means that a regulatory reset only occurs at the end of the lease period meaning no reset will occur.

<sup>29</sup> Port submission, p. 6

<sup>31</sup> Port submission, p. 6

The length of regulatory period

<sup>&</sup>lt;sup>27</sup> Consultation paper, p. 49

<sup>&</sup>lt;sup>28</sup> Next regulatory period where the current regulatory period will cease before the next tariff compliance statement is submitted.

<sup>&</sup>lt;sup>30</sup> Port submission, p. 6

We acknowledge that in theory, a longer regulatory period has benefits such as reduced administrative costs from applying the regulatory regime, and may have greater incentives for cost out-performance or greater penalties for under-performance. However, there are also challenges when the divergence between the revenue requirement and prices becomes material.

If the port considers implementing a 48 year regulatory period, we are interested in understanding how the port would:

- set the building block allowances and appropriately balance the allocation of risk in forecast error between itself and port users
- ensure that its forecasts are efficient and robust
- ensure that all service level outcomes to be delivered are identified at the beginning of the regulatory period and adhered to over the period
- deal with the uncertainty of major unforeseen events that may affect its annual revenue requirement
- ensure its proposal was consistent with the requirements of the pricing order and the Port Management Act.

### Consideration of port users' views

The port's choice of regulatory period will have implications on the tariffs that port users pay and the level of service they will receive. We encourage the port to engage with port users to talk about the practicalities and implications of implementing a longer (or shorter) regulatory period. We would expect the port to explain in its future tariff compliance statements how it has considered port users' views on this topic.

### Consideration of other lengths for the regulatory period

We encourage the port to also consider the comparative benefits of other lengths for the regulatory period. We observe that for port access regimes in South Australia and Queensland, the length of the regulatory period used is five years. The same length of regulatory period has been preferred generally in the Victorian water sector pricing regime and Australia's electricity and gas pricing regimes.<sup>32</sup>

A five year period also aligns to our five-yearly compliance inquiries to decide whether there is any 'significant and sustained' non-compliance. These inquiries will consider how actual costs differ from forecast costs over a regulatory period.

<sup>&</sup>lt;sup>32</sup> For the Victorian water sector pricing regime, regulatory period must be no less than five years. If a water business wants a longer regulatory period it must sufficiently justify its proposed regulatory period in its Water Plan.

# Deferral of regulatory depreciation

Depreciation accounts for a large share of the port's aggregate revenue requirement. The port has deferred recovery of its depreciation costs but has not specified how or when it will recover those costs.

Port users could face price rises when the port begins recovering these deferred costs in the future.

We would expect the port to inform port users about how it intends to recover deferred depreciation and the impact on future tariffs. We also expect the port to explain in its future tariff compliance statements how it has considered port users' views on its proposed recovery method and how its approach is consistent with the pricing order and the Port Management Act.

### Depreciation is a large part of the port's regulated revenues

Depreciation accounts for a large share of the port's aggregate revenue requirement. For the first 16 to 21 years of the port lease, the port must not increase its tariffs at a rate higher than the change in the consumer price index.<sup>33</sup> This limit is known as the Tariffs Adjustment Limit (TAL). In circumstances where the TAL keeps revenues below the revenue requirement, some of the port's costs may be deferred for later recovery. The port can only do this by deferring depreciation.<sup>34</sup> This helps the port to minimise the gap between its TAL revenues and its revenue requirement.

### The port's approach to depreciation

The port has used an alternative depreciation method to minimise the difference between its TAL revenues and its revenue requirement. In this method the port calculates an interim depreciation value, using straight-line depreciation, to determine an interim annual revenue requirement.<sup>35</sup>

When the interim annual revenue requirement is greater than forecast revenues, depreciation is set to zero, and a final revenue requirement is calculated with no allowance for depreciation. The depreciation forgone is deferred to the next year where it is added to straight-line depreciation for that year.

### Deferral of regulatory depreciation

<sup>&</sup>lt;sup>33</sup> Pricing order, clause 3.1.1

<sup>&</sup>lt;sup>34</sup> Pricing order clause 4.4.3.

<sup>&</sup>lt;sup>35</sup> Port of Melbourne, Tariff Compliance Statement 2017-2018 – Appendix B, Section 1.05.

Figure 1 shows the port's interim depreciation is \$512<sup>36</sup> million in 2017-18. This is calculated by adding \$298 million in forgone depreciation from the prior year (2016-17) to the \$214 million straight-line depreciation in 2017-18. Summing the return on capital, interim depreciation and operating expenditure and subtracting indexation produces an interim revenue requirement of \$1027 million. This is above the forecast TAL revenue of \$341 million in 2017-18.

As the interim revenue requirement is greater than the TAL revenue, the interim depreciation of \$512 million will be deferred to 2018-19. Deducting the interim depreciation reduces the revenue requirement to \$515 million, which is \$174 million above the port's forecast revenue in 2017-18.



### Figure 1 The port's forecast building block revenues for 2017-18 (\$m nominal)

Source: Port of Melbourne 2017 Tariff Compliance Statement - Appendix B: Port of Melbourne Regulatory Model Section 1.5

If the port continues to use the alternative approach, it will defer depreciation until the TAL ceases to apply or the difference between the TAL revenue and revenue requirement is less than interim depreciation.<sup>37</sup> When the TAL ceases to apply, the port may need to consider tariff options to recover deferred depreciation and over what timeframe.

### Deferral of regulatory depreciation

<sup>&</sup>lt;sup>36</sup> Numbers have been rounded for explanatory purposes.

<sup>&</sup>lt;sup>37</sup> Port of Melbourne, Tariff Compliance Statement 2017-2018 – Appendix B, Section 1.05.

### The importance of deferred depreciation for future reviews

Depending on the recovery method used, tariffs could increase if depreciation is deferred until the TAL ceases to apply.

Given the potential increase in prescribed service tariffs, we would expect future tariff compliance statements to include an explanation of what considerations the port will take into account when choosing its recovery method for deferred depreciation.

The port should also consider providing depreciation schedules for regulated assets over the lease period. This way customers and the port could monitor the materiality of deferred depreciation and understand the potential impact on prescribed service tariffs when the TAL ceases. This would help the port and port users to explore options to smooth the impact of potential tariff increases.

Providing depreciation schedules for regulated assets over the lease period would also assist our five-yearly inquiry of compliance by demonstrating that assets will only be depreciated once. This would help show that the port recovers no more than the starting value of its assets in accordance with clause 4.4.1(c) of the pricing order.