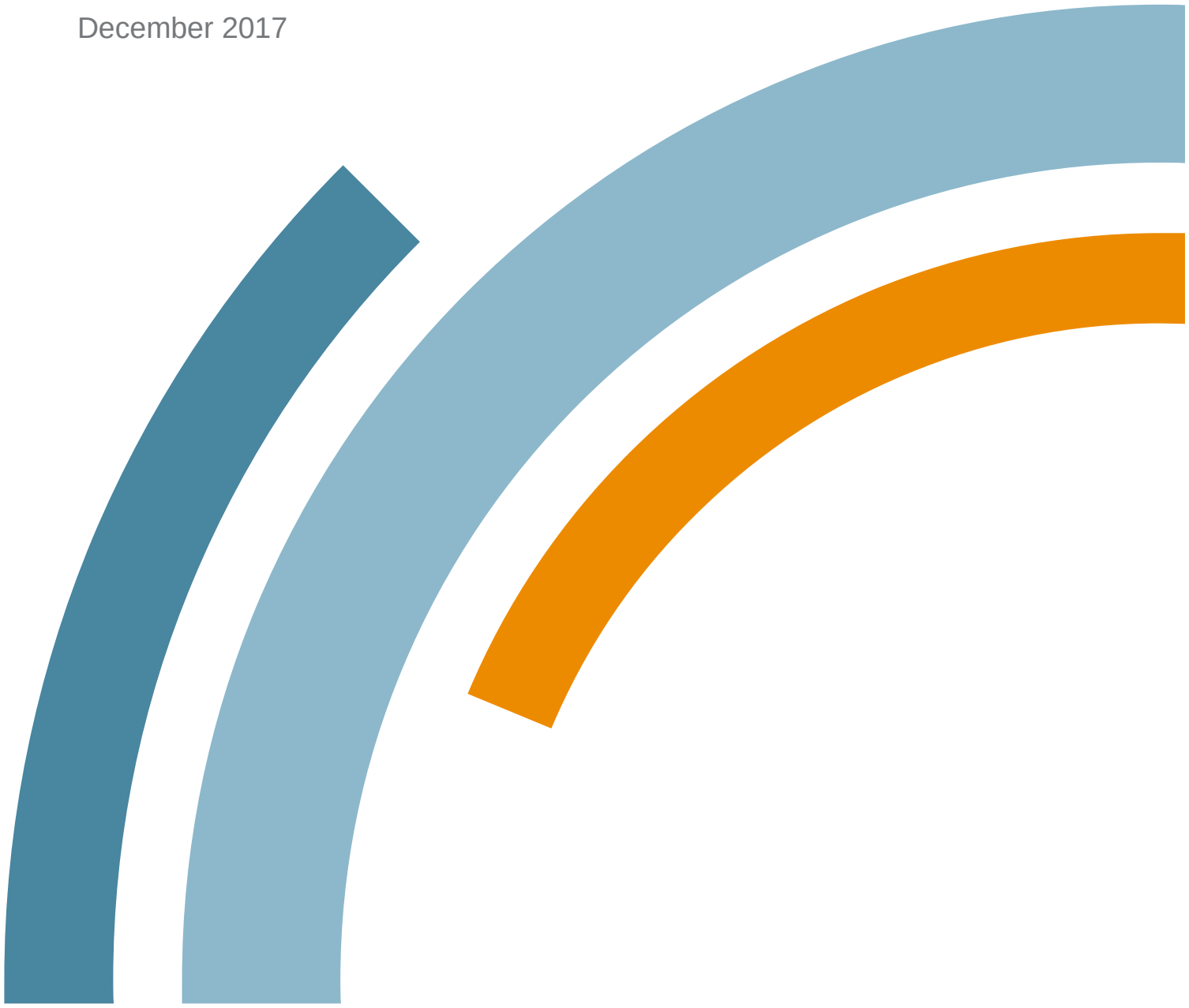
ESSENTIAL SERVICES COMMISSION

Feedback on consultation and other matters: Statement of Regulatory Approach version 1.0

Port of Melbourne pricing order

December 2017



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Contents

About this paper

This paper provides feedback on our consultation process and other matters raised during the development of our *Statement of regulatory approach – version 1.0* (statement of regulatory approach or guidance). Specifically, it provides background to the statement of regulatory approach and finalises the public consultation process we began in March 2017.

In developing the guidance outlined in the statement of regulatory approach, we considered:

- matters raised by the port in response to our consultation paper and ongoing engagement between ourselves and the port
- our experience in administering the regulatory regime, including our assessment of the port's first tariff compliance statement.

We consider that publishing this feedback alongside the statement of regulatory approach will allow stakeholders to better understand the consultation process we have undertaken and the key aspects of the pricing order we consider require interpretation.

Structure of this paper

This paper is structured as follows:

- Chapter 1 explains why we are providing guidance and the process we undertook to develop it, including our stakeholder consultation and experiences during the first year of the regulatory regime[1]

- Chapter 2 explains our roles related to the pricing order (such as our five-yearly inquiry) and the matters we took into consideration in developing our guidance in relation to these roles

- Chapter 3 explains the matters we took into consideration in developing our guidance in relation to key regulatory processes under the pricing order

- Chapter 4 explains the matters we took into consideration in developing our guidance relating to the pricing order accrual building block requirements

[1] Throughout this paper, 'regulatory regime' refers to the Port Management Act 1995 and the Essential Services Commission Act 2001.

- Chapter 5 explains the matters we took into consideration in developing our guidance relating to the return on capital provisions of the pricing order.

1. Why and how we developed guidance

In this chapter we explain why we are providing guidance in the form of a statement of regulatory approach and the process we undertook to develop this guidance.

1.1. Background

The Essential Services Commission (the commission) is responsible for assessing and reporting on the Port of Melbourne's (the port) compliance with the pricing order[2].

Our role includes conducting an inquiry at five-yearly intervals under section 49I of the *Port Management Act 1995*. We report to the ESC Minister:

- whether the port has complied with the pricing order during the five year period; and
- if there was non-compliance with the pricing order, whether that non-compliance was, in our view, non-compliance in a 'significant and sustained manner'.[3]

The pricing order also requires us to assess any tariff rebalancing applications submitted by the port in the first 16 to 21 years of the regime.

The *Essential Services Commission Act 2001* requires us to have regard to certain matters in performing our functions, including efficiency in the industry and the long term interests of Victorian consumers. Sections 11 and 13 of the Essential Services Commission Act enable us to:

- do all things necessary or convenient to be done in performing our functions so as to enable us to achieve the objectives[4] under the regulatory regime
- publish statements and guidelines relating to performing our functions and exercising our powers.

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[2] The pricing order is a regulatory instrument made under the Port Management Act that sets out the requirements the port must comply with in setting its prices for prescribed services. The pricing order was designed and developed by the Victorian Department of Treasury and Finance. The Victorian government stated that in proposing a more stringent and prescriptive economic regulatory regime compared to other privately operated Australian ports, it is seeking to ensure port users and Victorian consumers are safeguarded, and the Port of Melbourne continues to support the long-term competitiveness of the Victorian economy while providing regulatory certainty for the leaseholder – see Victorian Government submission to Port of Melbourne Select Committee Inquiry. P.8, September 2015.

[3] Port Management Act 1995, s. 49I(1)(b)

[4] The objectives of the legislation are in the Port Management Act 1995, s. 48 and Essential Services Commission Act 2001, s. 8. We provide a summary of the legislative framework in; Essential Services Commission 2017, *Overview of the Port of Melbourne and Essential Services Commission's Regulatory Roles*, March.

1.2. Why we are providing guidance

Section 49I of the Port Management Act requires us to report on whether the port has complied with the pricing order during any five year period. We have prepared the statement of regulatory approach to provide the port and port users with guidance about how we will administer key aspects of the pricing order. This paper provides feedback on our consultation process and other matters raised during the development of the statement of regulatory approach.

We consider there are benefits in foreshadowing how we will go about performing our regulatory functions so that all stakeholders have an opportunity to understand and engage in the process.

Providing up-front guidance supports a transparent and predictable application of the regime and assists with the achievement of the objectives of the regulatory regime.

Our statement of regulatory approach is our first guidance paper and has been informed by stakeholder consultation and our experience in administering the first year of the pricing order. We may review and update the statement of regulatory approach from time to time, including where new information arises or where other factors require revision to our approaches in order to continue to best support the objectives of the Port Management Act and Essential Services Commission Act.

1.3. Process for developing guidance

Since the port was leased and the port licence holder took control on 1 November 2016, we have engaged with the port and interested stakeholders on our new functions and our approach to administering these functions. Specifically, we have undertaken consultation and published three papers over this period. The papers are summarised below.

Overview paper

Our public consultation started in March 2017, when we released our *Overview of the Port of Melbourne and the Essential Services Commission's regulatory roles* (overview paper).[5] This paper sought to inform stakeholders by describing relevant aspects of the lease of the Port of Melbourne and our roles in the new regulatory regime. This overview paper:

- provided an introduction to the port and the leasing of its commercial operations

[5] Essential Services Commission 2017, Overview of the Port of Melbourne and Essential Services Commission's Regulatory Roles, March (overview paper)

- described the scope of the regulatory regime applying to the port, the objectives of the regime and our roles in administering the regime
- provided an overview of the regulation of prescribed services, outlining:
  - the requirements on how the port sets its prescribed service tariffs
  - our role in monitoring compliance
  - the provision for port users to make pricing complaints in relation to prescribed services
  - options for the regulation of service standards
- explained other regulatory arrangements, including the port's process for setting rents and how we review these periodically, and regulatory functions that can be triggered if a second international container port is built and commences operating in Port Phillip Bay or Western Port Bay.

Consultation paper

In May 2017 we released our *Regulatory approach to the pricing order – a consultation paper* (consultation paper)[6], seeking submissions on our approach to applying our pricing order functions. Specifically, we sought stakeholder feedback on nine questions about our proposed regulatory approach. We received one submission from the port, and also met with port user representatives to gain customer perspectives on matters raised in the paper. We have considered the port's response to our consultation paper and other feedback in developing this paper.

Interim commentary paper and first tariff compliance statement

Our guidance has also been informed through our experience in the first year of administering the pricing order, including assessing the port's first tariff compliance statement. The port submitted its first tariff compliance statement on 31 May, which is available on our website.

We met with the port in advance of it submitting its first tariff compliance statement, to explain our expectations regarding information provision and to understand how the port will engage with port users on the content of its tariff compliance statement. We also sent information requests to the port to inform our assessment of the ports tariff compliance statement.

[6] Essential Services Commission 2017, Regulatory approach to the Pricing Order – a consultation paper, May (consultation paper)

In November 2017 we published *Port of Melbourne tariff compliance statement 2017-18: interim commentary* (interim commentary)[7]. Our interim commentary provided feedback on aspects of the port's tariff compliance statement. The interim commentary aims to support the formal five-yearly inquiry process by providing opportunities for stakeholders, including the port, to be aware of key issues or concerns in advance of formal inquiries[8]. This gives the port an opportunity to ensure the information it provides in future tariff compliance statements assists us to assess compliance ahead of our inquiry.

[7] Essential Services Commission 2017, Port of Melbourne tariff compliance statement 2017-18: interim commentary, November (interim commentary)

[8] The formal inquiries are the inquiries that the commission is required to undertake pursuant to section 49I(1) of the Port Management Act 1995.

2. Our roles in administering the pricing order

In administering our roles in relation to the pricing order we aim, to the extent possible, to adopt a transparent and predictable approach. As this is a new regulatory regime, it is likely that unforeseen issues will arise. We must therefore balance our aim for predictability and transparency with the need to maintain flexibility (for example, the ability to respond to changes) in our compliance assessment roles.

In this chapter, we explain the considerations we took into account in developing our views and guidance regarding our key roles related to the pricing order, namely:

- receiving the port's annual tariff compliance statement and publishing our commentary on those statements
- undertaking our five-yearly inquiries of the port's compliance with the pricing order
- approving tariff rebalancing applications which may be submitted by the port
- determining the form and content of supporting information to be provided by the port.

2.1. Receiving tariff compliance statements

The port must provide us with a tariff compliance statement by 31 May each year[9] describing how its prescribed service tariffs for the coming financial year comply with the pricing order.

Our consultation paper sought feedback on our proposal to provide interim commentary within the five-year inquiry period on the port's annual tariff compliance statements.

2.1.1. Matters we considered in developing our position

In our consultation paper we indicated that interim commentary would promote transparency and predictability in our approach. In particular, the commentary could benefit the formal five-yearly inquiry process by providing opportunities for stakeholders, including the port, to be aware of key issues or concerns in advance of the formal inquiries.[10]

[9] Pricing order, clause 7.1.1

[10] Consultation paper, p. 18

The port supported the issuing of interim commentary subject to the commission raising any concerns about compliance with the port before publishing the commentary.[11] This would provide the port with an opportunity to address potential compliance issues as they arise.[12]

2.1.1. Our position on issuing interim commentary

We believe that making observations in the interim commentary on areas where we have potential concerns about compliance will assist the port and stakeholders to be aware of key issues or concerns in advance of our formal inquiries.

We also consider interim commentary will aid the regime in achieving its statutory objectives, by allowing the port to address any issues we may have raised when submitting evidence to support its tariff compliance statements over successive years. That is, we expect feedback from our interim commentary and information requests on a given tariff compliance statement to be reflected in the port's subsequent tariff compliance statement.

The port requested we raise any concerns with them about compliance before publishing our interim commentary. However, in the interests of transparency, we do not intend to create a compliance iteration process *between* the tariff compliance statement being submitted and our interim commentary being published. As a result, our proposed process for publishing interim commentary is as follows:

i) the port submits its annual tariff compliance statement

ii) we publish the port's annual tariff compliance statement on our website[13]

iii) the commission will issue information requests regarding the ports tariff compliance statement where it requires further information or clarification

iv) after we have received responses to our information requests, we will publish our interim commentary on the port's tariff compliance statement.

Figure 2.1 summarises this process. The figure shows that each year we may request information from the port regarding their tariff compliance statement submission and provide interim

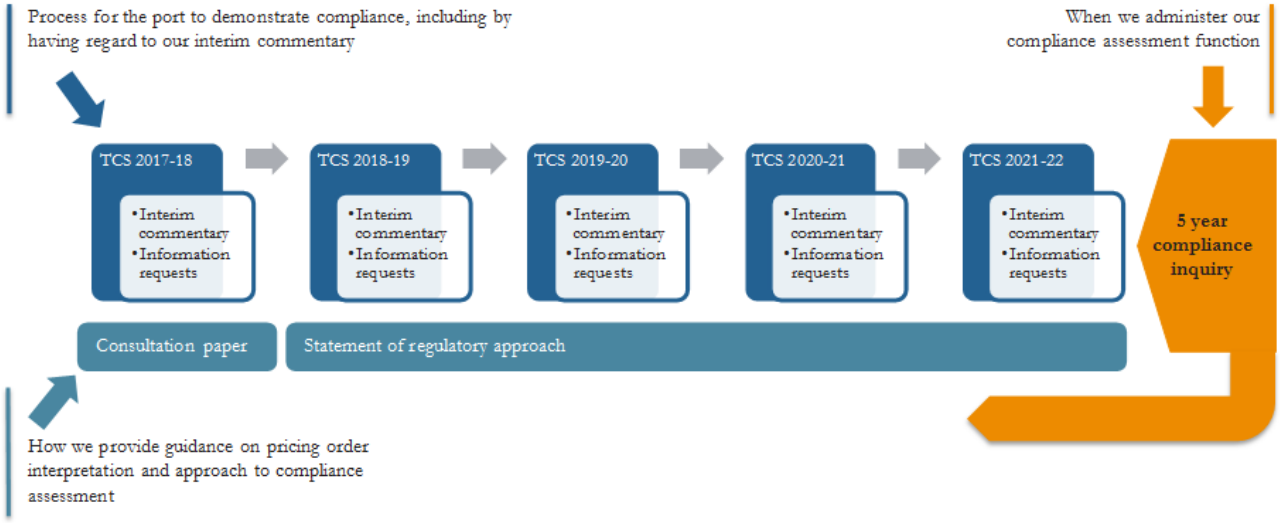
[11] Port of Melbourne 2017, *Response to Essential Services Commission's Regulatory Approach to the Pricing Order – A Consultation Paper*, July, pp.10-11 (Port submission)

[12] Port submission, p. 10

[13] Subject to consideration of any confidentiality claims.

commentary. It should be noted that the interim commentary is not an assessment of the port's compliance with the pricing order, nor will it provide findings on whether any non-compliance was significant and sustained. We will undertake our significant and sustained non-compliance assessment in our five-yearly compliance inquiry.

Figure 2.1 Process for compliance statement submission and our assessment



2.2. Conducting formal five-yearly compliance inquiries

Every five years, we must conduct and complete an inquiry and report to the ESC Minister on:[14]

- whether the port has complied with the pricing order during the five year period
- 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'.

2.2.1. Matters we considered in developing our position

To promote transparency and predictability, when assessing whether non-compliance is 'significant and sustained' during our formal inquiry, our consultation paper proposed seven factors we may take into account. [15]

The port did not agree that the commission should provide broad guidance on how it will assess 'significant and sustained' non-compliance.[16] The port submitted the high level drafting of the

[14] Port Management Act 1995, s. 49I(1)

[15] Consultation paper, pp. 19-21

pricing order is intended to give it the discretion to interpret, and demonstrate compliance with the pricing order in the first instance.[17] Specifically, the port considered that 'one size fits all' ex-ante guidance on the interpretation of 'significant and sustained' non-compliance would not be appropriate.[18]

The port noted that an assessment of 'significant and sustained' non-compliance should have regard to the relevant facts and circumstances specific to the event.[19] The port supported the commission providing ongoing feedback of its assessment of any instances of 'significant and sustained' non-compliance through the interim commentary.[20]

The port stated that the term 'sustained' has a dictionary definition of 'cause to continue for an extended period of time or without interruption'.[21] Given this definition, the port submitted that the commission's proposal to consider 'whether the harm can be reversed (at all or retrospectively)' would not be appropriate.[22] In particular, the port stated that the interpretation of 'sustained' non-compliance should focus on repeated action and failure to implement adequate processes to prevent recurrent non-compliance and adequacy and timeliness of the port's responses to any non-compliance. The port contended that if any non-compliance is one-off and subsequently remedied in a timely manner, then it is not 'sustained'.[23]

2.2.2. Our position on outlining our interpretation of 'significant and sustained' non-compliance

The term 'significant and sustained' is not defined in the Port Management Act. In coming to a view about what could constitute 'significant and sustained' non-compliance, we will need to consider the particular circumstances of the non-compliance. In some cases the nature of non-compliance may not be clearly foreseeable.

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[16] Port submission, p.11

[17] Port submission, p.11

[18] Port submission, p. 11

[19] Port submission, p. 11

[20] Port submission, p. 11

[21] By online English Oxford Dictionary

[22] Port submission, p. 11

[23] Port submission, p.11

Notwithstanding this, we consider it may aid the predictable and transparent functioning of the regulatory regime if we identify some of the factors we may have regard to when applying this aspect of our five-yearly compliance assessment.

The port disagreed with our proposal to consider whether the harm to port users and consumers from non-compliance could be reversed (at all or retrospectively). We reiterate that our assessment will depend on the circumstances of the non-compliance and will be assessed on a case-by-case basis. However, we generally consider that harm that is not reversed and continues to flow through to port users for an extended period could be considered to be 'significant and sustained' non-compliance.

As such, our statement of regulatory approach retains the illustrative factors previously identified in our consultation paper.

2.3. Assessing rebalancing applications

The pricing order requires the port to vary its tariffs by the same percentage adjustment each financial year, unless it submits a rebalancing application to us for approval.[24] The port must submit a rebalancing application prior to 1 January for tariffs to apply in the upcoming financial year.

2.3.1. Matters we considered in developing our position

In our consultation paper, we proposed that a tariff rebalancing strategy be submitted as part of the port's tariff rebalancing application.[25] We foreshadowed that the strategy would be aimed at providing information to allow the commission and port users to understand how tariffs would change over time and how the port's proposal in relation to rebalancing will comply with the pricing order pricing principles.

We also indicated that it may be beneficial for us to outline the form and content of the information we require to assess compliance with the rebalancing provisions through an information determination made pursuant to clause 9 of the pricing order.

The port submitted that it is too early in the regulatory regime for us to develop an information determination related to the port's stakeholder consultation around rebalancing applications.[26] It

[24] Pricing order, clause 3.2.1

[25] Consultation paper, pp. 24-25

[26] Port submission, p. 12

stated that the pricing order already requires the port to consult with port users and demonstrate how their rebalanced tariffs meet the pricing order's pricing principles.

2.3.2. Our position on the tariff rebalancing application process

We note the port's position that it may be too early to issue an information determination regarding rebalancing applications. We will not be requesting the port to develop a tariff rebalancing strategy at this stage. Rather, we expect the port to consult on and provide evidence to the commission of its consultation with port users to accompany any rebalancing application. We also expect port users to be able to inform the port and the commission of any concerns that rebalanced tariffs may result in non-compliance with the pricing order.

We are required to write to the port after completing a review and inform them of our final decision in relation to their rebalancing application. If we reject the port's rebalancing application we must provide our reasons for this decision.[27] We consider it is in the interest of port users to have access to the reasoning of these decisions and we intend to publish any final rebalancing application decision on our website.

2.4. Determining the form and content of supporting information

Under clause 9.1.1 of the pricing order, we may issue a determination of what constitutes sufficient supporting information in order for us to:

- be satisfied that the port's tariff compliance statement has complied with the pricing order[28]
- assess a rebalancing application and verify whether those tariffs comply with other clauses in the pricing order [29]
- assess an application for the cessation of clause 3, which includes the tariffs adjustment limit and price rebalancing provisions[30].

The pricing order requires the port to provide any information we specify in a 'sufficient supporting information' determination.

[27] Pricing order, clause 3.2.18 and 3.2.20

[28] Pricing order, clause, 7.1.2 (f)

[29] Pricing order, clause 3.2.7, which further refers to clauses 2, 3.1.1, 4 and 5

[30] Pricing order, clause 3.3.2

2.4.1. Matters we considered in developing our position

In the consultation paper, we stated that we intended to issue a sufficient supporting information determination for the port's tariff compliance statement submissions.[31]

The port considered that it is premature to consider information determinations because we have not yet demonstrated a need to issue them at this early stage of the regulatory regime.

The port encouraged us to only issue information determinations:

- after reviewing the 2017-18 tariff compliance statement and discussing any information gaps with the port
- once the port has submitted a tariff rebalancing application[32]
- after allowing a reasonable timeframe for the port to respond fully to the regime
- once the commission has established that there are specific issues that need to be addressed
- after engaging with the port and considering other available options.[33]

2.4.2. Our position on issuing information requirements

We do not intend to issue an information determination at this stage as we are satisfied that our consultation to date has covered key items about which we expect the port to provide information. Specifically:

- our consultation paper explained the information we expect for showing compliance
- we provided an early draft of our information requirements for the pricing order provisions to the port for informal feedback prior to publishing the consultation paper
- commission staff met with port staff and discussed information requirements on a number of occasions leading up to the port's submission of the 2017-18 tariff compliance statement
- we issued information requests to the port for areas of its first tariff compliance statement where further information was required
- commission staff met with port staff to discuss our information requests and the port's responses
- we published our interim commentary.

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[31] Consultation paper, pp. 14

[32] To the extent that the 'sufficient supporting information' relates to tariff rebalancing

[33] Port submission, p. 7

Notwithstanding the items above, we will consider exercising our power under clause 9 of the pricing order to specify the form and content of sufficient supporting information if it aids the demonstration of compliance or helps target our assessment of compliance.

There is no statutory time limit by which information determinations must be issued. The timing of this will depend on our experience in the early years of the regime as we assess and potentially identify gaps in the port's information provision.

3. Guidance on process requirements in the pricing order

In this chapter, we explain our approach to providing guidance on a range of matters relevant to administering certain processes required by the pricing order. These include:

- calculating weighted average tariff increases
- treatment of contract revenue
- consultation and customer engagement
- forecasting and information provision.

3.1. Calculating the weighted average tariff increase

The port is required to set its tariffs for prescribed services in line with the tariffs adjustment limit, which is a requirement that weighted average tariff changes do not exceed the percentage change in annual CPI.[34] The pricing order states that the calculation of the weighted average tariff increase will be based on audited historical revenue for each prescribed service tariff, where available.[35] In the circumstance that audited historical revenue is unavailable, we will determine the basis for an alternative estimate of revenue for the purpose of calculating weightings.

3.1.1. Matters we considered in developing our position

Through the first tariff compliance statement process we clarified with the port conventions for calculations and for presenting data. This included:

- for the purpose of annual tariff escalation we suggested the port round all tariffs to four decimal places
- expectations that the port provide us its models showing the compliance calculations in a format where all formulas are visible and data sources identified.

Our analysis of the pricing order also identified the interplay of tariff rebalancing with the tariffs adjustment limit as an area that requires clarification, given that audited historical revenue data for

[34] Pricing order, clause 3.1.1

[35] Pricing order, clause 14

any new tariffs will not be available at the time of calculating the next weighted average tariff increase.[36]

3.1.2. Our position on the weighted average tariff increase calculation

In our statement of regulatory approach, we provide guidance on the conventions for calculations and for presenting data as outlined above, in order to support consistent interpretation over time. We also provide guidance on how the port should demonstrate compliance with calculating the tariffs adjustment limit in circumstances where a tariff rebalancing application has been approved and existing customers have been moved to a new prescribed service tariff.

When a new prescribed service tariff has been introduced, there will not be any historical revenue data associated with this tariff for the purposes of calculating the weighted average tariff increase for the next financial year. We would expect the port to identify a reasonable estimate of demand associated with the new prescribed service tariff based on the customers it has moved to the new tariff. The port should justify the reasonableness of the demand forecast used to derive the revenue used in its weighted average tariff increase calculation and identify how this meets the pricing order and the objectives of the regulatory regime.

3.2. Assessing contract revenues

The pricing order sets out the conditions under which the port may enter into contracts to provide prescribed services on terms that differ from those in the port's reference tariff schedule.[37]

On this basis, the port can enter into a contract with a port user that funds expenditure to provide a dedicated asset or different standard of service requested by a port user. However, the port must first offer to provide prescribed services to that port user in accordance with the reference tariff schedule.[38] In addition, any contract entered into must reflect the efficient cost recovery principles in clause 2 of the pricing order.[39] We refer to this as the contract revenue mechanism.

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[36] This is due to audited data for the current financial year not being available at the time of the port's tariff compliance statement submission in May of each year. For example, if the port's tariff compliance statement in May 2018 introduced a new tariff to commence in 2018-19, the audited data for the 2018-19 financial year will not be available until the port's submission in May 2020 for tariffs to apply in 2020-21. In this instance, there would be no historical audited data for the port to use to account for the new tariff within the weighted average tariff increase in 2019-20.

[37] Pricing order, clause 6.2

[38] Pricing order, clause 6.2.1(c)

[39] Pricing order, clause 6.2.1(d)

3.2.1. Matters we considered in developing our position

The port submitted that where a port user requires infrastructure predominately for its own use (i.e. a dedicated asset) or requires a different standard of service, this can be facilitated by the port building the infrastructure on behalf of the port user, which in turn would fund the cost of the investment via contracted revenue. The port considered contract revenue would form part of the aggregate revenue requirement but should not be subject to the tariffs adjustment limit constraint.[40]

The port's approach was demonstrated in the 2017-18 tariff compliance statement where:

- revenue associated with contracts was included in the calculation of the aggregate revenue requirement in accordance with clause 2.1.1 of the pricing order, and
- the port did not include contract revenue in the weighted average tariff increase for the purpose of calculating prescribed service tariffs in the reference tariff schedule.

3.2.2. Our position on the treatment of contract revenue

Based on our consideration of the relevant pricing order clauses, our current view is that contract revenue should be excluded from the tariffs adjustment limit and weighted average tariff increase calculations. Clause 6.2.2(b) of the pricing order requires revenue derived from prescribed services under such contracts to be included in the port's calculation of its aggregate revenue requirement.

We expect the port to provide evidence of how it has consulted with port users when adopting the contract revenue mechanism. When demonstrating compliance with clause 6.2 of the pricing order we expect the tariff compliance statement to show:

- how the port offered to provide port users prescribed services in accordance with the port's reference tariff schedule as a first option before negotiating contracts
- how the contracted terms and conditions outlined in the contact comply with the prescribed service tariff pricing principles as required in clause 2 of the pricing order
- how the port has accounted for contract revenue.

[40] Pricing order, clause 7.1.2(d)

3.3. Customer consultation requirements

A key requirement for the port in preparing its tariff compliance statement is to set out the process it undertook to effectively consult port users and that is has had regard to their comments.[41]

3.3.1. Matters we considered in developing our position

In the consultation paper, we stated that we expect the port to provide the following information in its tariff compliance statement:[42]

- details of its consultation process with port users
- issues raised and feedback provided by port users
- whether, where, how and why outcomes of engagement have or have not been reflected in the tariff compliance statement.

The port submitted in its response to our consultation paper that it is committed to undertaking meaningful and comprehensive engagement with port users and other stakeholders. It considered best practice engagement an integral and ongoing part of its business. It outlined its consultation process for preparing the first tariff compliance statement, which included industry forums, business-as-usual discussions with stakeholders and general communications.[43]

3.3.2. Our position on the port's consultation process

Our experience of the port's first tariff compliance statement suggests that it is helpful to provide some guidance in our statement of regulatory approach on the areas where we expect to see engagement with port users.

Through its consultation process, the port should identify port users' preferences in terms of the provision of prescribed services and use these to inform its decisions in relation to the regulatory regime. We expect that the port's consultation process should afford port users the opportunity to be engaged on:

- the drivers and levels of the port's costs for providing prescribed services – including its proposed service level performance standards
- the port's proposed approach to setting prices

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[41] Pricing order, clause 7.1.2(d)

[42] Consultation paper, p.15

[43] Port submission, p. 12

- matters that affect the long term interests of port users, including their future prices
- the adequacy of its demonstration of compliance with those pricing order requirements that port users are most interested in.

3.4. Forecasts and information provision

The pricing order requires that information in the nature of an estimate or forecast must be supported by 'a statement of the basis of the forecast or estimate'.[44] A forecast or estimate must be arrived at on a reasonable basis and must represent the best forecast or estimate possible in the circumstances.[45] It also requires that information in the nature of an extrapolation or inference must be supported by the primary information on which the extrapolation or inference is based.[46]

3.4.1. Matters we considered in developing our position

The building block methodology requires the use of forecast estimates including expenditure data, demand projections and forward looking assumptions regarding the consumer price index. Through the first tariff compliance statement process, we identified areas where the port did not provide sufficient information explaining the basis for its forecasts and estimates associated to demand and the consumer price index.

In the consultation paper, we suggested that the port may provide director attestation that its capital and operating expenditure forecasts comply with the pricing order.[47] We noted that attestations are commonly required in other regulatory regimes, including our approach to water regulation.

3.4.2. Our position on forecasts and information provision

The port's forecasts or estimates should be transparent and replicable, and should be able to be traced back to primary information.

The port should explain its forecast methodology, assumptions underlying the methodology, why the assumptions are reasonable, and the data underlying the forecasts. If forecasts are based on consultant reports, these reports should be provided to us with any confidential information clearly identified. We expect the models and data underlying consultants' forecasts to be provided. We

[44] Pricing order, clause 8.2.1.

[45] Pricing order, clause 8.2.2.

[46] Pricing order, clause 8.3.1.

[47] Consultation paper, p. 36

encourage the port to provide attestations verifying that its submitted information is fit for purpose. We consider that submitted information supported by attestation can improve the efficacy of compliance monitoring by:

- ensuring the port's key decision makers (for example, the Board) are aware of the data underpinning the tariff compliance statement and have approved the information for submission
- ensuring that from the day a tariff compliance statement is received, both the commission staff and other stakeholders can start analysing the substance of the tariff compliance statement with less need to first verify the veracity of the data underpinning it.

4. Guidance on compliance with the accrual building block methodology

In this chapter, we explain the matters we considered when developing our approach to providing guidance on applying the accrual building block methodology as required in the pricing order.

4.1. Capital base roll forward

The port must calculate the value of the capital base on a 'roll forward basis' as specified in clause 4.2.1 of the pricing order. This ensures that the capital base, used to calculate the aggregate revenue requirement, is updated for: inflation, capital expenditure, contributions, disposals and depreciation.

4.1.1. Matters we considered in developing our position

Administering the roll forward

In our consultation paper we proposed to produce a roll forward model template for the port to complete as part of its tariff compliance statement. In its first tariff compliance statement the port provided most of the information required to check compliance with the pricing order in their regulatory model.

The statement of regulatory approach sets out our expectations for the port to demonstrate compliance through its regulatory model and data.

Capital contributions and asset disposals

In our consultation paper we observed that the pricing order does not expressly contemplate port user capital contributions or asset disposals.

Common regulatory practice in the capital base roll forward process involves deducting capital contributions and asset disposals from the capital base, where these are part of the commercial practices of the industry. The pricing order only considers public sector contributions and requires these to be deducted from the capital base.[48]

[48] Pricing order, clause 4.2.6

The port agreed to adopt the common regulatory practice and stated that it does not expect any disposals or port user capital contributions.[49]

Actual and forecast depreciation

In our consultation paper we observed that the pricing order does not specify whether the capital base roll forward should use forecast or actual depreciation, and explained the incentive properties of these two options. We noted that it was important that the chosen approach is nominated at the start of each regulatory period and applied consistently when rolling forward the capital base at the end of that period.

4.1.2. Our positions

Administering the roll forward

Having received the first tariff compliance statement, we requested further information to better understand the calculations provided. Having considered this information we do not propose, at this stage, to produce a roll forward model for the port to use.

To demonstrate compliance, the port should submit its roll forward model as part of its tariff compliance statement. We expect the port to provide us its models showing its roll forward calculations in a format where all sources are identified. The model should be unlocked and include all formulas underlying calculations.

We may review inputs underlying the calculations. For example, capital expenditure should reflect the prudent and efficient capital costs of the port, and depreciation should only recover the capital base costs once over the port lease term.

Capital contributions and asset disposals

Disposals and port user capital contributions should be excluded from the capital base, so that the value of the capital base reflects efficient capital expenditure as required by clause 4.2.1(c) of the pricing order.

For the years where actual data is available, the port should record actual disposals and contributions for each asset class defined in the port's roll forward model; even if the value of contributions and disposals is zero. For years where actual data is not available, the port should provide forecasts or estimates.

The port should also use a consistent approach to the value of those assets.[50]

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[49] Port submission, p. 15

Actual and forecast depreciation

For the reasons outlined in our consultation paper we have decided to maintain our position on the use of forecast and actual depreciation. The port may use actual or forecast depreciation to roll forward its capital base, but should nominate its approach at the beginning of each regulatory period.

4.2. Capital expenditure

4.2.1. Matters we considered in developing our position

Expenditure assessment

Our consultation paper listed tools that are used in other regulatory regimes to assess forecast and actual capital expenditure. We outlined our expectation that the port would provide evidence relevant to the expenditure it submits.

Subject to feedback from stakeholders, we stated we would consider preparing a technical paper and requirements in our information determination on expenditure compliance.

In its response, the port raised two points in relation to expenditure assessment. Firstly, it considered that it is best positioned to identify the expenditure assessment methods most appropriate. Secondly, it did not support the use of top-down economic benchmarking as a technique for assessing the prudence and efficiency of its expenditure and gave reasons for this view.[51]

Interactions between service quality and capital expenditure

Our consultation paper observed that clauses 4.2.1(c) and 4.1.1 of the pricing order require the port to demonstrate that its expenditure on providing prescribed services is prudent and efficient. We identified that the scope of prescribed services is relevant when considering the efficiency and prudence of expenditure. We considered it would be difficult to assess the port's compliance with the efficiency and prudence tests without knowing:

- the forecast service levels those expenditure forecasts are intended to deliver

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[50] Two approaches to valuing asset disposals are commonly used. A regulatory values approach would remove the regulatory value of the asset from the capital base, while a disposals value approach would remove the market value (sale price) of the asset.

[51] Port submission, p. 14

- the actual service levels that past expenditure did deliver.

In its response, the port stated it was not clear what service levels the commission was referring to,[52] noting also that the commission has not yet exercised its powers to issue standards of service and supply under the Port Management Act.[53] It submitted that the government currently oversees the port's compliance with service levels for core infrastructure as required under the Port Concession Deed[54].

The port considered that any assessment of the prudence and efficiency of capital expenditure would be best undertaken by applying capex assessment techniques[55].

The port also stated that service levels are not used in other regulatory regimes to assess the prudence and efficiency of capital expenditure. Instead, it is used in ex-ante regimes to ensure that capital expenditure savings are driven by efficiency savings and not at the expense of service quality. The port stated that the port regulatory regime is not an ex-ante incentive regime and we do not approve its capital expenditure at the start of regulatory periods.[56]

4.2.2. Our positions

Expenditure assessment tools

The port will need to demonstrate that its expenditure assessment methods are compliant with the pricing order and the objectives of the regulatory regime. Where we provide guidance, it is intended to illustrate the range of commonly-used measures for demonstrating expenditure compliance to economic regulators. Our intent remains that the port would choose from within this range. Benchmarking is an example of how the port could provide information to support its tariff compliance statement.

While the port must explain the assessment techniques it has used, we must also satisfy ourselves that these techniques demonstrate compliance with the pricing order. Our statement of regulatory approach therefore provides guidance on available techniques for demonstrating compliance.

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[52] Port submission, p. 13

[53] The port sought clarity on our suggestion that service performance data is relevant to the port's compliance with the prudence and efficiency tests for expenditure. We note that this relates to clauses 4.2.1(c) and 4.1.1 of the pricing order. This is separate to our powers under s.55 of the Port Management Act to develop, issue and review standards of service and supply in respect of prescribed services.

[54] Port submission, p. 13

[55] Port submission, p. 13

[56] Port submission, p. 13

We do not propose to produce a technical paper on expenditure compliance demonstration techniques at this time. We include examples of the characteristics of efficient capex compliance demonstration techniques in our statement of regulatory approach and may provide more examples in an information determination. These will be illustrative examples that the port may utilise for different types of expenditure for which it is seeking to demonstrate compliance with the pricing order.

Interactions between service quality and capital expenditure

We consider we need information on the relationship between capital expenditure and service quality so we can assess compliance with the pricing order's expenditure efficiency requirements.

While we do not approve the port's annual expenditure under this regulatory regime, we must assess the port's expenditure compliance every five years and come to a view as to whether the port has been complaint and, if not, whether any non-compliance is 'significant and sustained'. A high expenditure with reduced service performance may be inefficient whereas a high expenditure forecast with improved levels of service performance (assuming this is at levels port users' value) may be considered efficient. Service performance plans and outcomes are therefore relevant to our assessment of compliance.

Under our previous monitoring regime[57] the port provided service performance data on the proportion of vessels visiting the port that were draught constrained and the proportion of vessels delayed from scheduled berthing time or the advised arrival time. We would expect the port to engage with its port users to identify the service quality measures that matter most to port users.

4.3. Return on capital

Chapter 5 addresses the return on capital provisions in the pricing order.

4.4. Depreciation (Return of capital)

The pricing order allows the port to recover an allowance for the return of capital (this is also called depreciation).[58]

Under the pricing order, the default approach is straight line depreciation. However, the port may use a different approach if the tariffs adjustment limit prevents the port from recovering its

[57] The previous monitoring regime was given effect through a price monitoring determination.

[58] Pricing order, clause 4.4.

aggregate revenue requirement or the approach will reduce the expected variance in prescribed service tariffs.

In addition to this, depreciation payments for an asset must not exceed the value of the asset at the time it was added to the capital base and must not be negative.

4.4.1. Matters we considered in developing our position

In our consultation paper we outlined the information that we expected the port to provide on depreciation in its tariff compliance statements. After receiving the port's tariff compliance statement and responses to our information requests, we consider it would be beneficial to provide further guidance on the information we expect on depreciation.

Deferred depreciation

In the port's 2017-18 tariff compliance statement the port chose to use a different approach to the straight line depreciation method. The method adopted by the port deferred the recovery of depreciation, but the port did not clearly show how or when it would recover the deferred depreciation.[59] Deferring depreciation has the potential to lead to tariff volatility in later regulatory periods. We raised this matter in our interim commentary on the port's 2017-18 tariff compliance statement.[60] We stated that 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. Given the potential impact that deferred depreciation can have on port users we will provide guidance on how the port can show that its proposed depreciation methods will not lead to tariff volatility.

Showing assets are only depreciated once

We also noted in our interim commentary that it was unclear in the port's tariff compliance statement if the port's proposed depreciation method would recover depreciation costs more than once.[61] For this reason, our statement of regulatory approach provides guidance on how the port can show that its depreciation methods are compliant with clause 4.4.1(c) of the pricing order.

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[59] Port of Melbourne 2017, *2017-2018 Tariff Compliance Statement*, May, Appendix B, Section 1.05.

[60] Essential Services Commission 2017, *2017-18 Port of Melbourne tariff compliance statement: Interim commentary*, 9 November, p. 19.

[61] Essential Services Commission 2017, *2017-18 Port of Melbourne tariff compliance statement: Interim commentary*, 9 November, p. 19.

4.4.2. Our positions

Our approach to assessing depreciation will depend on how the port calculates depreciation. If the port uses straight-line depreciation, our assessment will focus mainly on checking the port's depreciation calculations. However, if the port uses a different method, we will also check how the port proposes to allocate their depreciation costs over time.

Demonstrating compliance with straight-line depreciation requirements

The port should provide its depreciation schedules setting out information on:

- the remaining economic lives of its assets
- the value attributable to assets
- the amount of depreciation applicable to each type of asset.

We also expect the port to provide a depreciation schedule showing forecast depreciation allowances over the whole life of all assets in the opening asset base and new capital expenditure forecast to be incurred in the current regulatory period. This will help us to assess compliance with clause 4.4.1(c).

Demonstrating compliance with alternative depreciation methods

If the port uses a different depreciation method that defers some or all depreciation because the tariffs adjustment limit constrains its revenues, we expect it to show how that method is consistent with the pricing order and the objectives of the regulatory regime, including that it cannot recover straight-line depreciation in the applicable years. This can be shown by comparing the aggregate revenue requirement using the straight-line depreciation method and the revenues forecast from applying the tariffs adjustment limit. We also expect the port to show how it will recover the deferred depreciation. This explanation should include details on how it might smooth tariffs and what the triggers could be for the port to begin to recover the deferred depreciation. The port should also show how it has consulted port users on this matter.

If the port uses a different depreciation method, as with straight-line, we would also expect it to provide a depreciation schedule showing all forecast depreciation payments over the entire life cycle of all the assets in the opening asset base and new capital expenditure forecast to be incurred in the current regulatory period.

4.5. Operating expenditure

4.5.1. Matters we considered in developing our position

In our consultation paper we set out some tools the port could use to show its operating expenditure is compliant with the pricing order and the objectives of the regulatory regime. After assessing the port's tariff compliance statement and response to our information request, we do not consider it is necessary, at this stage, to provide further extensive commentary on operating expenditure matters to that provided in our statement of regulatory approach.

4.5.2. Our positions

We expect the port to show its operating expenditure is compliant with the pricing order and the objectives of the regulatory regime in a similar manner to how it shows its capital expenditure is compliant.

We will consider which forms of evidence and tools are appropriate for showing compliance, based on the nature and circumstances of the operating expenditure being assessed. We expect the port to provide the forms of evidence relevant to the operating expenditure in its tariff compliance statement.

Our approach to assessing operating expenditure will be guided by the materiality of the port's forecast operating expenditure and how it compares to historical levels. Relatively stable operating expenditure is not likely to require the same level of detail to show compliance as large step changes.

4.6. Cost allocation

The pricing order requires the port to allocate its costs between prescribed services and all other services and to each individual prescribed service.[62] Costs that are directly attributable to a service are to be allocated to that service. Costs that are not directly attributable are allocated to a service by the share of total revenue for that service.

4.6.1. Matters we considered in developing our position

In our consultation paper, we stated that the port should provide the underlying cost and revenue data, and supporting calculations used to allocate indirect costs to prescribed services. After

[62] Pricing order, clause 5.2.1

receiving and analysing the 2017-18 tariff compliance statement, we have broadened our information expectations in the statement of regulatory approach.

4.6.2. Our positions

When demonstrating compliance with the pricing order requirements and the objectives of the regulatory regime, we expect the port to:

- explain how it has implemented the cost allocation principles
- explain any significant changes in cost allocation
- submit models reflecting in detail its costs allocation calculations
- submit the underlying inputs.

We will review the port's cost allocation using the information supplied above to ensure it meets the requirements of the pricing order and the objectives of the regulatory regime.

4.7. Regulatory period

The regulatory period is the time period over which the aggregate revenue requirement is forecast. It is also the time period between readjusting the capital base to account for differences between actual and forecast capital expenditure. The longer the regulatory period, the greater the risk that forecasts differ from actuals. For example, this can create different incentives for regulated businesses to reduce their costs.

The pricing order allows the port to determine the period of time over which to apply the pricing principles and cost allocation principles (the regulatory period).[63] The port may adopt different lengths of regulatory periods over the term of the port lease.

4.7.1. Matters we considered in developing our position

In our consultation paper we identified the types of information we would expect the port to submit in its tariff compliance statements to demonstrate that its choice of regulatory period is consistent with the pricing order and the objectives of the regulatory regime.

In the 2017-18 tariff compliance statement the port adopted a one year regulatory period for 2016-17 and for 2017-18, and foreshadowed considering a period as long as the remaining lease term.

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[63] Pricing order, clause 13.1.1

In our interim commentary we discussed the possible challenges and implications of a longer regulatory period and the need for port users' views to be accounted for in the decision on the length of the regulatory period. Given the challenges related to longer regulatory periods we consider it helpful to provide guidance on matters we expect the port to consider when choosing the length of its regulatory periods.

4.7.2. Our positions

We consider that it is in the interest of port users to:

- clearly understand why the port has chosen a particular length of regulatory period and how it will achieve the objectives of the regulatory regime
- encourage the port to take a consistent and principled approach to determining the length of the regulatory period in the future
- be consulted by the port when it is deciding on its regulatory period length
- ensure the port has given appropriate attention to the interaction between the length of regulatory period and the expected accuracy and reliability of forecasts.

We also expect the port to clearly outline the factors influencing its choice of the length of regulatory period in its tariff compliance statements.

Regardless of the regulatory period chosen by the port, we must undertake our compliance inquiries every five years. For example if the port chose a regulatory period of 9 years, we would still need to assess the port's compliance with the pricing order every five years.

5. Guidance on estimating return on capital

In this chapter, we discuss our guidance regarding the return on capital clauses in the pricing order, as indicated in section 4.3 of this paper.

We consider that the return on capital provisions may require more guidance than the other building block parameters. As a result, we have discussed the return on capital in a separate chapter to the other building block parameters.

In this chapter we set out:

- a brief explanation of the return on capital
- the pricing order provisions relevant to the return on capital
- what we said in our consultation paper regarding the return on capital
- the port's tariff compliance statement and responses to our consultation paper related to the return on capital
- our analysis and views including our approach to assessing the port's compliance with the return on capital provisions in the pricing order.

5.1. The return on capital

In the pricing order, the return on capital is the return on the capital base that the port's debt and equity investors will require in order to commit capital to the business. It is therefore compensation for the risks, opportunity costs and time value of money that investors face when committing funds to the port, for the purposes of supplying prescribed services.

The pricing order, like other Australian regulatory regimes, provides an allowance for a return on capital commensurate with that required by a benchmark efficient entity that provides services with a similar degree of risk to the regulated entity (the port). By ensuring that the return on capital is commensurate with the returns required by an efficient benchmark entity the regulatory regime ensures that port users only pay for efficient financing decisions by the port, whilst allowing the port a reasonable opportunity to recover the efficient costs of providing prescribed services, including a return commensurate with the risks involved.

The standard equation used to calculate the nominal pre-tax weighted average cost of capital (WACC) is:[64]

[64] This is often referred to as the *Officer* pre-tax cost of capital formula; see Officer R.R. 1994, *The cost of capital of a company under an imputation tax system*, Accounting and Finance, 34 1, May.

$$WACC = \left[\frac{Cost\ of\ equity}{1 - Tax\ rate\ \times (1 - Gamma)} \times (1 - Gearing)\right] + [Cost\ of\ debt\ \times Gearing]$$

where:

- 'Cost of equity' represents the cost of equity capital;
- 'Cost of debt' represents the cost of debt capital;
- 'Gearing' represents the proportion of debt capital within the business;
- 'Gamma' represents the value of imputation tax credits; and
- 'Tax rate' represents the statutory corporate tax rate.[65]

5.2. The pricing order provisions

The pricing order contains two specific clauses that are pertinent to the return on the capital base.

Clause 4.1.1 specifies that the port should calculate an aggregate revenue requirement using an accrual building block methodology. The clauses of the pricing order relevant to the return on capital are reproduced below.

> 4.1.1 (a) an allowance to recover a return on its capital base, commensurate with that which would be required by a benchmark efficient entity providing services with a similar degree of risk as that which applies to the Port Licence Holder in respect of the provision of the Prescribed Services Further guidance on this calculation is provided at clause 4.3 of the Pricing Order
>
> **4.3 Return on Capital**
>
> 4.3.1 Subject to clause 4.3.2, in determining a rate of return on capital for the purposes of clause 4.1.1(a) the Port Licence Holder must use 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.
>
> 4.3.2 The rate of return to be calculated for the purposes of clause 4.1.1(a) must be determined on a pre tax, nominal basis.

We will assess whether the return on capital applied by the port complies with these provisions of the pricing order. Our role is not to substitute or otherwise determine a return on capital for use by the port, for the purposes of determining the port's aggregate revenue requirement.

[65] In the original model developed by Officer (1994), the tax rate is defined as the effective rate of corporate taxation. However, standard regulatory practice in Australia is to apply the statutory rate of corporation tax.

5.3. Interpreting the key return on capital terms

The pricing order requires that:

- the port must determine a return on capital commensurate with that which would be required by a benchmark efficient entity with a similar degree of risk as that which applies to the port in respect of the provision of the prescribed services (clause 4.1.1(a)); and
- in determining the rate of return, the port should use one or a combination of well accepted approaches that distinguish the cost of equity and debt (clause 4.3.1).

We refer to these as the 'return on capital clauses'.

The pricing order does not prescribe the precise meaning of these two clauses. For example, while the pricing order directs the port to use one or a combination of 'well accepted approaches', it does not specify what is meant by 'well accepted approaches'. Further, while the port is directed to derive a rate of return commensurate with that required by a benchmark efficient entity, it does not specify the risk characteristics of a benchmark efficient entity that should be reflected in the return on capital.

Therefore, it is necessary to interpret the meaning of these return on capital clauses when determining a rate of return, for the purposes of calculating an aggregate revenue requirement and assessing whether the port has complied with the requirements of the pricing order.

5.4. Our views in our consultation paper

Well accepted approaches

In our consultation paper we explained that various approaches exist for estimating the cost of equity, cost of debt and level of gearing for a benchmark efficient entity, but that not all are well accepted in a regulatory context in Australia. For example, some approaches used in academia or by finance practitioners are not well accepted in Australian regulatory practice, and their application can be difficult in practice due to data quality and availability issues or methodological choices.

We noted in the consultation paper that our initial view was that we should interpret 'well accepted approaches' to mean those approaches that are commonly used in Australian regulatory practice.

Benchmark efficient entity

We also explained in the consultation paper that the direction in the pricing order that the rate of return used by the port when determining the aggregate revenue requirement should be commensurate with the returns required by a benchmark efficient entity is consistent with standard Australian regulatory practice. This ensures that consumers and port users do not pay for inefficient financing decisions by the port.

In the consultation paper we indicated that our initial view was that the relevant risk characteristics of the services provided by the port include that the prescribed services:

- relate primarily to the provision of wharfage and channel access services;
- are provided by a port that predominantly derives revenue from services to container cargo, with a smaller share of bulk and non-bulk cargo; and
- are provided by a port in Australia.

We noted that while these characteristics should guide the selection and use of comparator entities to estimate key WACC parameters (such as the equity beta and gearing), few comparators if any will embody all of these ideal characteristics. Therefore, it will be necessary for the port, when selecting comparators, to make trade-offs between elements of comparability. We also emphasised that a systematic approach to comparator selection should be followed over time to avoid 'cherry picking' comparators in each regulatory period.

5.5. The port's views in response to the consultation paper

Well accepted approaches

In its response to the consultation paper, the port submitted that the meaning of 'one or a combination of well accepted approaches' includes not only the approaches accepted by regulators (both Australian and international), but also those approaches adopted by the financial and academic communities.[66] The port argued that while the approaches followed by regulators can provide important considerations for the meaning of 'well accepted', it reflects only a subset of possible approaches that may be considered 'well accepted'.

The port submitted that it is essential to include:[67]

- consideration of approaches used in a workably competitive market because the efficiencies referred to in the Port Management Act and the Essential Services Commission Act are intended to reflect the out-workings of a workably competitive market; and
- the models used by financial practitioners and in academia – regulators have adopted models developed in academia and also adopted models used by financial practitioners, acknowledging that each model has its own merits and flaws.

[66] Port submission, p. 16

[67] Port submission, p. 16

The port contended that the fact that the pricing order allows for the use of 'one or a combination' of well accepted approaches provides the port with flexibility to have regard to a number of different approaches rather than be limited to a single approach.

Benchmark efficient entity

In its response to the consultation paper, the port submitted that seeking to define terms in the pricing order like 'benchmark efficient entity providing services with a similar degree of risk', is inconsistent with the Victorian Government's intent that the new regulatory regime is a compliance monitoring regime.[68] The port argued that the high-level drafting of the pricing order is intended to afford the port the discretion to interpret and demonstrate compliance with the pricing order in the first instance. The port submitted that had the Victorian Government wanted a narrower meaning of 'benchmark efficient entity providing services with a similar degree of risk', then the drafting of the pricing order would have reflected that intent.[69]

The port's adviser, Synergies Economic Consulting (Synergies) proposed that the benchmark efficient entity should be defined as a 'freight-focussed private sector provider of the equivalent of the prescribed services with a market capitalisation above US$100m'"[70]. Synergies also submitted that the benchmark efficient entity should be a standalone one, in the sense that it is not vertically integrated (upstream or downstream), and provides only the prescribed services. Synergies did not explain why the benchmark efficient entity should be a private sector provider.

5.6. Our position on the return on capital

The port has submitted that the drafting of the pricing order provides it with considerable flexibility in the way it determines the rate of return to be used for the purposes of calculating the aggregate revenue requirement, including flexibility to select the approaches that are used to estimate the WACC, and to define the characteristics of the benchmark efficient entity.

In our view, the commission is required to assess the port's compliance with the pricing order and do so in the context of the objectives of the regulatory regime. The pricing order provides for the port to determine an aggregate revenue requirement including a return on capital. However, the regulatory regime constrains how the aggregate revenue requirement is to be calculated and therefore the outcomes of that calculation. Specifically, those aggregate revenue requirement outcomes must satisfy the objectives of the Port Management Act (section 48(1)) and the regulatory regime. The port recognises this in its response to the consultation paper.

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[68] Port submission, p. 15

[69] Port submission, p. 15 and 16

[70] Synergies 2017, *Determining a WACC estimate for Port of Melbourne*, May, p. 24.

Our role is to assess whether the port has complied with the requirements of the regulatory regime. In order to do this, it is necessary for us to interpret the meaning of the pricing order, including the return on capital clauses. Our interpretation of these clauses in the pricing order is based on:

- the plain language or meaning of the terms in the pricing order; and
- the broader context of the regulatory regime (including the achievement of the objectives of the Port Management Act and the Essential Services Commission Act).

We have considered further the appropriate interpretation of the pricing order, and these views are set out below.

5.6.1. Well accepted approaches: the commission's views

The first issue is the meaning of the phrase 'well accepted approaches' to determining a rate of return. We consider it is useful to consider the following:

- by whom must approaches be 'well accepted'?
- for what purpose are the approaches 'well accepted'?
- what approach or approaches must be 'well accepted' – the approaches to estimating the cost of equity and debt, or each component or input to the estimates of the cost of equity and debt?
- under what circumstances would approaches be considered 'well accepted'?

By whom and for what purpose must approaches be well accepted?

Our view is that clause 4.1.1(a) makes clear that the sole purpose of the building block model is to derive an aggregate revenue requirement. One of the four components of the revenue requirement is the return on capital. This suggests an obvious interpretation of clause 4.1.1(a) is that:

- the approach or combination of approaches must be well accepted for the purpose of setting an allowed return for use within an accrual building block methodology

- the term 'accepted' appears to denote some form of agreement to a proposed approach. Therefore, we consider that a view on the meaning of 'well accepted' that would be consistent with the regulatory regime would be approaches that are accepted by those entities that normally determine the inputs to an accrual building block methodology – that is, economic regulators[71].

[71] Or review bodies that have the task of overseeing the decisions of economic regulators, such as the Australian Competition Tribunal.

Consequently, our view is that it would be consistent with the regulatory regime for the port to use one or a combination of approaches that are well accepted by economic regulators that determine allowed returns for a benchmark efficient entity, for use in an accrual building block methodology.

We consider that if the approach, or combination of approaches adopted by the port are not well accepted, then the port would not have complied with the pricing order or the objectives of the regulatory regime.

We consider that the port's alternative construction, which includes approaches that are well accepted in academia and/or by finance professionals, may disregard the context in which the return on capital is estimated — namely, to determine a return on capital allowance for use within a building block methodology, for the purposes of promoting a regulatory objective.

Further, we consider that greatest weight should be placed on an approach or combination of approaches that best achieve the requirements of the pricing order and the objectives of the regulatory regime. In this regard, we consider that it would be consistent with the regulatory regime if the port were to adopt approaches used by economic regulators, namely to determine an aggregate revenue requirement through an accrual building block methodology.

What approach or approaches must be well accepted?

Another consideration is how the word 'approach' should be interpreted. For instance, does 'approach' mean return on capital estimates, or estimates of the individual parameters used to estimate the overall return on capital (i.e. return on capital outcomes)?

Our view is that the word 'approach' implies a 'method' or a series of steps used in the estimation process. Therefore, 'approach' does not necessarily refer to the overall quantum of the return (the return on capital outcomes). This means that, when we assess whether the port has adopted one or combination of approaches that is well accepted, we will not be examining the specific estimates of the return on capital (or individual WACC parameters used to estimate the return on capital) determined by other regulators. As discussed below, return on capital outcomes will be a relevant consideration for us when making our compliance assessment, but only in the context of assessing whether the return on capital determined by the port is commensurate with the return required by a benchmark efficient entity.

The pricing order provides that the port may use 'one or a combination of well accepted approaches.' We consider that if the port uses more than one approach when determining the rate of return, all of those approaches used must be well accepted by economic regulators that determine a return on capital for use in an accrual building block methodology. Further, the way in which the port combines each of those approaches to determine the cost of equity or the cost of debt must also be well accepted by economic regulators and must be consistent with the pricing order and the objectives of the regulatory regime.

Under what circumstances approaches would be considered well accepted?

A final consideration is under what circumstances an approach or combination of approaches would be considered sufficiently 'well accepted' by regulators. For example, does this require numerous or a majority of regulators to accept the approach, or would acceptance by a single regulator be sufficient? Should the approach be currently in use, or is it sufficient that it was once well accepted by economic regulators?

Our view is that these questions need to be addressed on a case-by-case basis because the specific context is likely to be important. For example, it may be that a particular approach is accepted by only one regulator at a particular point in time, but that regulator's decision to accept the approach in question is underpinned by considerable analysis, consultation, evidence and persuasive reasoning. Under such circumstances, it may be reasonable to consider that approach to be well accepted.[72]

We consider that at a minimum, at least one economic regulator should be using (or should have recently used) an approach for it to be considered 'well accepted'. We will consider each approach on a case-by-case basis and decide, based on the evidence available, whether it ought to be considered well accepted for the purposes of assessing compliance against the requirements of the pricing order.

Conclusion on 'well accepted approaches'

In summary, our view is that to demonstrate compliance the port should:

- specify its approach or combination of approaches to the estimation of the cost of debt and the cost of equity
- explain why this approach or combination of approaches are well accepted by regulators that determine a return on capital for application within an accrual building block methodology, within a regulatory framework with similar objectives, purposes and a similar degree of risk as the regulatory regime that applies to the port.

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[72] A good example of this is the approach to determining the cost of debt allowance. Prior to 2013, all regulators in Australia adopted the so-called 'on-the-day' approach to determining the cost of debt allowance. In December 2013, the Australian Energy Regulator (AER) completed a fundamental review of its approach to determining the allowed rate of return and published a rate of return guideline. In that guideline, the AER chose to move away from its traditional on-the-day approach and decided instead to adopt what has become known as the 'trailing average' approach to determining the cost of debt allowance. This change of approach was the culmination of 12 months of consultation, research and analysis in which almost all stakeholders agreed that the AER should replace its on-the-day approach with the trailing average approach. The AER was the first regulator in Australia to change its cost of debt approach. Subsequently, several other regulators in Australia have conducted similar fundamental reviews of their WACC methodologies, or conducted major regulatory resets, and several of these regulators have followed the AER and replaced the on-the-day approach with the trailing average approach (albeit that all regulators implement this approach in somewhat different ways). Thus, approaches can differ over time and so a case-by-case approach may need to be adopted.

5.6.2. Returns commensurate with those required by a benchmark efficient entity: the commission's views

The requirement of clause 4.1.1(a) of the pricing order is that the return on the capital base should be commensurate with that which would be required by a 'benchmark efficient entity' providing services with a similar degree of risk as that which applies to the port in respect of the provision of the prescribed services. The effect of clause 4.1.1(a) is to place a second requirement on the port's return on capital.

We consider that clause 4.1.1(a) means that in order to comply with the requirements of the pricing order, it is not sufficient that the approach or combination of approaches used by the port to determine the return on capital is well accepted. The overall return on capital outcome is also important. Therefore, when assessing compliance, we will consider whether the return on capital outcome is likely to be commensurate with the returns required by a benchmark efficient entity.

In our view, in order to comply with clause 4.1.1(a) of the pricing order (i.e. for the return on capital outcome to be commensurate with the returns required by a benchmark efficient entity), the port would need to demonstrate that:

- the return on capital it has determined reflects the risk characteristics of a benchmark efficient entity providing the prescribed services
- the port has used appropriate techniques and methods to estimate the return on capital

Relevant risk characteristics

We note that the purpose of defining the characteristics of a benchmark efficient entity is to ensure that the risks faced by a benchmark efficient entity are as close as possible to the risks likely to be faced by the port. If the benchmark efficient entity is defined as facing risks not relevant to the port, then the return on capital would not be commensurate with the returns required by an efficient business providing the prescribed services.

We maintain the views we set out in the consultation paper, that the ideal relevant risk characteristics of the services provided by the port include that the prescribed services:

- relate primarily to the provision of wharfage and channel access services
- are provided by a port that predominantly derives revenue from services to container cargo, with a smaller share of bulk and non-bulk cargo
- are provided by a port in Australia.

As we discuss below, in practice, it may be difficult to identify a sufficiently large set of comparators that reflect all of the risk characteristics of the benchmark efficient entity closely. Therefore, it may be necessary for the port, when selecting comparators, to make trade-offs between elements of comparability. We have also considered whether there are other relevant characteristics of a

benchmark efficient entity that would be relevant. One issue is the extent to which the port's market power is constrained by the threat of competition. The port's adviser, Synergies, submitted that the port 'currently has market power', and that the existence of market power 'will have a mitigating effect on systematic risk.'[73] However, Synergies went on to submit that the port's market power is constrained by:

- the regulatory regime that the port is subject to
- clear evidence of contestability
- the possibility that a second port in the Melbourne region could be built by 2055.

We consider that it is unlikely that the port faces significant competition today in relation to the provision of prescribed services. Indeed, the lack of such competition is the rationale for regulation. Further, we consider that it is, at the present time, highly uncertain whether a second port will be developed in the Melbourne region. However, even if this were a reasonable likelihood, Synergies suggests this would occur only in 2055, when the existing port is forecast to reach full capacity. As this timeframe is nearly 40 years away, it seems unlikely that the potential for a second port exerts significant competitive pressure on the port today.

Given these considerations, it is our view at this stage that another important characteristic of the benchmark efficient entity is that it is unlikely to face significant competition in the provision of services similar to those of the prescribed services.[74]

We do not agree with the port that it is necessary to restrict the size of the benchmark efficient entity to a firm with a market capitalisation in excess of US$100 million. The port's approach of applying a size filter when compiling a sample of comparators may be reasonable to avoid bias in beta estimation. However, it is not obvious that size should define the risk characteristics of a benchmark entity.

We have also concluded that the benchmark entity need not be defined as being either a regulated or unregulated entity. Rather, the appropriate benchmark is an entity that is 'efficient' and that faces risks relevant to the ports provision of prescribed services. The relevant standard for efficiency should be that expected in a workably competitive market.[75]

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[73] Synergies 2017, *Determining a WACC estimate for Port of Melbourne*, May, section F.1.2.

[74] Firms operating in highly competitive markets are, therefore, unlikely to be close comparators for the port's provision of prescribed services.

[75] This follows a similar finding in *Australian Energy Regulator v Australian Competition Tribunal (No 2)* [2017] FCAFC 79 at 530

Selection of comparators

It is a standard regulatory approach to use listed comparator companies (with risk characteristics similar to that of the benchmark efficient entity) to estimate the return on capital. However, in practice, it is very difficult to identify a sufficiently large set of comparators that reflect all of the risk characteristics of the benchmark efficient entity closely. Therefore, as we noted in the consultation paper, it may be necessary to make trade-offs between elements of comparability, in order to identify a sufficiently large sample of comparators to undertake the estimation work.

To the extent that the comparators identified do not reflect the risk characteristics of the benchmark efficient entity well, it may be necessary to carry out a qualitative, first-principles analysis of the risk characteristics of the comparators and the benchmark efficient entity. So that we can assess compliance, the port should explain how its empirical estimates of key parameters (such as gearing and the equity beta) should be interpreted and adjusted to account for any differences in risk characteristics identified. For example, if the benchmark efficient entity likely faces a different level of systematic (non-diversifiable) risk than of the comparators used by the port to estimate beta, the port should provide analysis that demonstrates how it has accounted for this in its return on capital estimate.

Estimation techniques and methods

We also consider that in order to demonstrate that it has complied with the requirement in the pricing order and the objectives of the regulatory regime, the port would need to show that it has used appropriate estimation techniques and methods to estimate the return on capital. We consider that if the port has used inappropriate estimation techniques and methods, then the return on capital is unlikely to be commensurate with the returns required by a benchmark efficient entity.

The port should:

- justify the estimation techniques and models it has used to estimate the return on capital
- demonstrate that it has accounted for estimation uncertainty appropriately
- justify the reasonableness of the overall return on capital used to calculate the aggregate revenue requirement
- explain any changes in approach it has adopted over time, to satisfy us that the most favourable return on capital outcomes have not been ‘cherry-picked’ over time by varying the approaches used.

5.7. Compliance assessment framework

We consider that it is important to provide guidance on how we intend to assess whether the port has complied with the requirements of the pricing order and the objectives of the regulatory regime.

A three-step process for assessing compliance

We will consider the return on capital determined by the port, and follow a three-step process for assessing compliance:

1. First, we will assess whether the approach or combination of approaches used by the port to determine the allowed rate of return are 'well accepted'. We refer to this as the 'well accepted test'. In order to apply this test, we will compare the approach or combination of approaches used by the port to the principles we have described above.

    a. If the port has used an approach or combination of approaches that is well accepted, it would have passed the well accepted test, and the port may be compliant with the requirements of the pricing order.

    b. If the port has not used an approach or combination of approaches that is well accepted, then the port may not be compliant.

2. If the port has passed the well accepted test, then we would assess whether the return on capital outcomes determined by the port, when calculating the aggregate revenue requirement, are commensurate with the return required by a benchmark efficient entity with a similar degree of risk as that which applies to the port in respect of the provision of the prescribed services. We refer to this as the '*benchmark efficient entity test'*. We would apply this test using two steps:

    a. First, we would undertake high-level cross-checks to assess if the overall return on capital used by the port is likely to be commensurate with the returns that would be required by a benchmark efficient entity. Examples of the types of the high-level cross-checks that we may employ are provided below. If these cross-checks indicate that the return on capital used by the port is commensurate with the returns that would be required by a benchmark efficient entity, then the port would be considered compliant.

    b. If the cross-checks suggest that the return on capital used by the port is not commensurate with the returns that would be required by a benchmark efficient entity, then we would seek to identify specific areas of concern—for example., individual parameter estimates that may have been over-estimated or under-estimated, or the way in which estimates have been combined to determine the overall rate of return—for further investigation.

3. We will also assess whether the port's approach is consistent with the pricing order and the objectives of the regulatory regime. If we identify specific areas of concern with the port's estimate of the return on capital, we may do further, focused analysis in those specific

areas to assess in further detail if the port's return on capital complies with the requirements of the pricing order.

We consider that the three-step compliance assessment framework outlined above is proportionate and consistent with its monitoring and reporting obligations under this regulatory regime.

Examples of high-level cross-checks that we may employ

As described above, our first step in assessing compliance of rate of return outcomes is to employ high-level cross-checks to assess whether the return on capital used by the port is likely to be commensurate with the returns required by a benchmark efficient entity. Examples of the cross-checks that we may use include the following:

- Other regulatory decisions for similar industries, such as transport infrastructure primarily used for freight, or other industries with similar risk characteristics. Such regulatory decisions often set out detailed reasons and analysis and so constitute a rich source of information from which we may draw
- Survey of practitioners relating to particular market-wide[76] components of WACC which can then be combined into an overall WACC point estimate or WACC range
- Examination of the estimates of individual WACC parameters used by independent valuation experts, brokers and analysts in valuation reports. These valuation reports would ideally relate to firms with comparable characteristics to the port. However, expert valuation reports that do not relate directly to comparable companies can still be useful for cross-checking market-wide WACC components
- Qualitative assessments of whether the systematic risk of the benchmark efficient entity is higher or lower than the systematic risk of the average firm in the market. If the benchmark efficient entity is assessed to be of lower risk than the average firm in the market, then the cost of equity used by the port should be lower than the cost of equity of the average firm in the market
- Assessment of whether the cost of debt used by the port is less than the cost of equity—which should be the case for most firms, unless the firm is in financial distress.

More detailed analysis that we could undertake to investigate specific areas of concern

If, in the second step of our compliance assessment process, we identify particular parameter estimates of concern that warrant closer scrutiny, we intend to undertake more detailed, focussed investigation of those specific areas. This more detailed analysis could include, for example:

[76] Market wide components are those not related to the individual characteristics of the benchmark efficient entity but relating to general economic conditions. For example, the market risk premium, risk-free rate or the value of imputation tax credits (also referred to as 'gamma').

- a review of whether the port has made reasonable assumptions and/or used appropriate data when implementing particular estimation models or methodologies
- sensitivity testing of any empirical analysis relied upon by the port when estimating the return on capital
- a 'first principles analysis' of the risks faced by the port, with a view to comparing these risks to those of the comparator sample (based on a benchmark efficient entity providing services with a similar risk profile to that of the port). Such analysis could be used to assess whether, for example, the risks faced by the benchmark efficient entity are likely to be higher or lower than the risks implied by the comparator sample used by the port when preparing its return on capital
- primary analysis and empirical work to establish independently the reasonableness of the estimate of individual parameters of particular concern, including empirical implementation of other approaches that are well accepted by relevant economic regulators to identify if these approaches produce a return on capital estimate that is materially different from that proposed by the port
- examination of whether the return on capital estimate (and individual parameter estimates) used by the port fall within reasonable confidence bands or plausible ranges.

If, based on the sorts of analyses described above, no single parameter estimate appears obviously unreasonable, we would assess how individual parameter estimates have been combined. Choosing parameter estimates that are consistently at the high (or low[77]) end of identified parameter ranges might produce a return on capital that is not commensurate with the returns required by a benchmark efficient entity.

We will also consider whether the port has followed a consistent approach to estimating individual parameters and to combining estimates over time. Unexplained changes to the methods adopted by the port over time may potentially be a sign of 'cherry-picking' to consistently deliver the highest possible return, rather than the return required by a benchmark efficient entity with a similar degree of risk as that which applies to the port, and therefore may be another indication of non-compliance.

[77] In the case of gamma, the lower the estimate, the greater will be the overall return to the regulated business.