Port of Melbourne

2019 – 2020

TARIFF COMPLIANCE STATEMENT

GENERAL STATEMENT

31 May 2019

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Contents

Abbreviations and acronyms

Abbreviation / acronym	Description
A	Actual
ABBM	Accrual building block methodology
ABS	Australian Bureau of Statistics
ACCC	Australian Competition and Consumer Commission
AMP	Asset Management Plans
ARR	Aggregate Revenue Requirement
BEE	Benchmark Efficient Entity
BISOE	BIS Oxford Economics
BITRE	Bureau of Infrastructure, Transport and Regional Economics
Capex	Capital expenditure
CAPM	Capital Asset Pricing Model
CCA	Cost Contribution Amount
CFA	Collaborative Framework Agreement
CPI	Consumer Price Index
Cth	Commonwealth
D	Debt
DDM	Dividend Discount Model
Deloitte	Deloitte Risk Advisory
DELWP	Victorian Department of Environment, Land, Water and Planning
E	Equity
ECR	Efficient Cost Recovery
EGM	Executive General Manager
ESC	Essential Services Commission of Victoria
F	Forecast
FFM	Fama French Model
γ	Gamma
GRESB	Global Real Estate Sustainability Benchmark
IRC	Investment Review Committee
ISO	International Standards Organisation
IT	Information technology
KPI	Key Performance Indicator
MTOFSA	Maritime Transport and Offshore Facilities Security Act 2003 (Cth)
MTOFSR	Maritime Transport and Offshore Facilities Security Regulations 2003 (Cth)
Opex	Operating expenses
PCD	Port Concession Deed

Abbreviation / acronym	Description
PCG	Project Control Group
PCJF	Preliminary Concept Justification Form
PCP	Port Capacity Project
PDIP	Port Development Implementation Plan
PDS	Port Development Strategy
PES	Port Environmental Strategy
PLF	Port Licence Fee
PLT	Port Lease Transaction
PMA	*Port Management Act 1995* (Vic)
PoM	Port of Melbourne
PRG	Program Review Group
PWG	Project Working Group
Rail Project	Port Rail Transformation Project
RAS	Rail Access Strategy
Rd	Return on debt
Re	Return on equity
Rf	Risk-free rate
RTO	Rail Terminal Operator
RTS	Reference Tariff Schedule
SAMP	Strategic Asset Management Plan
SDE	Swanson Dock East
SDW	Swanson Dock West
SL-CAPM	Sharpe-Lintner Capital Asset Pricing Model
SME	Subject Matter Experts
SoRA	Statement of Regulatory Approach
TAL	Tariffs Adjustment Limit
Tariffs	Tariffs for Prescribed Services
TCS	Tariff Compliance Statement
TEU	Twenty-foot Equivalent Unit
VPCM	Victorian Ports Corporation (Melbourne) Harbour Master
WACC	Weighted Average Cost of Capital
WATI	Weighted Average Tariff Increase
WSCAM	Wharf Structures’ Condition Assessment Manual

Supporting documents

Table i lists the supporting documents that are incorporated within, and form a part of, Port of Melbourne's (PoM) 2019-20 Tariff Compliance Statement (TCS).

Table i: 2019-20 TCS supporting documents

Appendix	Title
A	PoM, 2019-20 Reference Tariff Schedule (RTS)
B	PoM, Regulatory Model
C	PoM, Regulatory Model User Guide
D	PoM, Cost Allocation Model
E	PoM, Cost Allocation Model User Guide
F	PoM, Efficient Cost Bounds Model
G	PoM, Efficient Cost Bounds Model User Guide
H	KPMG, Report of factual findings – Prescribed Services Revenue – 30 June 2018
I	PoM, Port User and other stakeholder consultation
J	PoM, Stakeholder Overview of Rebalancing Process
K	BIS Oxford Economics, Port of Melbourne Trade Forecasts – Forecasts to FY 19, April 2019
L	BIS Oxford Economics, Trade Volumes Forecasting Model
M	BIS Oxford Economics, Port of Melbourne Forecast Mechanics
N	Synergies Economic Consulting, Determining a WACC estimate for Port of Melbourne, May 2019
O	PoM, Contracts with Port Users (Confidential)
P	PoM, Compliance with Pricing Order – Cross-Reference Table

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1. Executive summary

This is PoM's 2019-20 TCS for its Prescribed Services' tariffs for the period 1 July 2019 to 30 June 2020 (2019-20). It demonstrates how PoM's tariffs for Prescribed Services for 2019-20 comply with the Pricing Order.

In the past year, PoM has continued to develop its engagement with Port Users and other stakeholders – being anyone who is exposed to, and or impacted by, the Port – to understand better their views and priorities. This has included engaging with a wide group of stakeholders from industry, government and across the community. PoM has held extensive consultations on the Port Development Strategy (PDS) and the Port Rail Transformation Project (Rail Project). PoM has considered the views and priorities raised by Port Users and other stakeholders and, where relevant, has incorporated their feedback into this TCS.

The key positions in this TCS are:

- a one-year regulatory period
- a Weighted Average Tariff Increase (WATI) (excluding tariffs for full outbound container wharfage services) for Prescribed Services of 1.3 per cent from 2018-19 levels
- a decrease in tariffs for full outbound container wharfage services of 2.5 per cent from 2018-19 levels, in accordance with clause 2.3 of the Pricing Order. All other tariffs will increase by the Tariffs Adjustment Limit (TAL) of 1.3 per cent, being the annual change in the Consumer Price Index (CPI)[1] to March 2019
- no re-balancing of Prescribed Services' tariffs. All tariffs, except for those for full outbound container wharfage services discussed above, have been adjusted by the same percentage adjustment (i.e. 1.3 per cent). There are no new or discontinued tariffs from 2018-19[2]. PoM will work with Port Users and other stakeholders in 2019-20 to assess whether there is a case for tariff re-balancing. If appropriate, PoM will make a submission to the Essential Services Commission of Victoria (ESC) by 31 December 2019 on this matter
- PoM will not recover its full efficient costs of providing its Prescribed Services in the 2019-20 regulatory period because the forecast Prescribed Services' revenue (subject to the TAL) plus revenue from legacy contracts[3] is less than the Aggregate Revenue Requirement (ARR), which is calculated based on the accrual building block methodology (ABBM), and
- a range for the pre-tax nominal weighted average cost of capital (WACC) of 10.07 per cent to 10.92 per cent for 2019-20, with a point estimate of 10.46 per cent. The point estimate is based on a pre-tax return on debt of 5.24 per cent, a pre-tax return on equity of 12.69 per cent and gearing of 30 per cent and is used in the ABBM calculation. The point estimate compares to PoM's 2018-19 pre-tax nominal WACC of 11.52 per cent. PoM has had regard for the ESC's feedback in its 2018-19 Interim Commentary in calculating both the range and the point estimate for 2019-20. This is discussed in section 9.2.3 and **Appendix N**.

The Victorian Government is currently considering PoM's proposal for the Rail Project. If approved, PoM would undertake a capital program over the period 2018-19 to 2021-22 in the port rail solution and other agreed access projects, such as for marine infrastructure. PoM's proposal is for this investment to be recovered through an increase in its Prescribed Services' tariffs. However, because the Victorian Government is still considering PoM's proposal for the Rail Project at the time of submitting this TCS, PoM has not included the changes to Capex, revenues or tariffs associated with the project in this TCS.

Table 1 sets out the actual or forecast ARR, including and excluding deferred depreciation, as well as the Prescribed Services' revenue (subject to the TAL) plus revenue from legacy contracts for 2017-18 to 2019-20. It shows that, in all years, Prescribed Services' revenue plus revenue from legacy contracts is lower than the ARR. For 2019-20, PoM forecasts that its Prescribed Services' revenue (subject to the TAL) plus revenue from legacy contracts is $937.7 million below its ARR.

[1] All Groups Index Number, weighted average of eight capital cities published by the Australian Bureau of Statistics (ABS)
[2] PoM has agreed with the ESC to offer slipway services as Prescribed Services under contract
[3] "Legacy contracts" are for contracts for Prescribed Services that were in place at the time of Port Lease Transaction (PLT).

Table 1: ARR and Prescribed Services' revenue (subject to the TAL) plus revenue from legacy contracts, $ Million

	2017-18 (A)	2018-19 (F)	2019-20 (F)
ARR			
Return on capital	495.5	519.3	483.0
Return of capital	510.9	645.1	776.6
Operating expenses (Opex)	124.6	127.8	128.2
Indexation allowance	(91.3)	(108.2)	(61.5)
Total ARR	**1,039.6**	**1,184.0**	**1,326.3**
ARR – excluding deferred depreciation			
Total ARR – excluding deferred depreciation	**528.7**	**538.9**	**549.7**
Prescribed Services' revenue (subject to the TAL) plus revenue from legacy contracts			
WATI excluding Export Pricing Decision tariffs (%) – see Note 1	n.a.	n.a.	1.3
WATI including Export Pricing Decision tariffs (%) – see Note 1	1.1	0.9	0.5
TAL (%)	2.1	1.9	1.3
Prescribed Services' revenue (subject to the TAL) plus revenue from legacy contracts	364.1	371.2	388.6
Under-recovery of ARR	**(675.5)**	**(812.8)**	**(937.7)**

Note 1 – The ESC has requested that PoM use audited revenues from two years prior to calculate the WATI, where available, and to calculate the WATI both excluding and including export tariffs. PoM has done this for 2019-20. For 2017-18 and 2018-19, PoM has (a) used audited volumes from two years prior to calculate the WATI (because audited revenues at a service level are not available) and (b) only calculated the WATI including export tariffs.

Table 2 sets out the calculation of PoM's capital base. It shows the forecast closing 2018-19 capital base, as at 30 June 2019, becomes the opening 2019-20 capital base, as at 1 July 2019. The forecast closing 2018-19 capital base of $4,651.3 million submitted in PoM's 2018-19 TCS has been adjusted for 2017-18 actual values, and changes to the approach to indexing the capital base discussed in section 9.2.1. The forecast closing 2018-19 capital base is therefore $4,565.5 million.

While depreciation is typically deducted from the opening capital base, PoM has set straight-line depreciation to zero and has deferred its recovery to future years. This is because, as shown in Table 1 above, in 2017-18, 2018-19 and 2019-20 forecast Prescribed Services' revenue (subject to the TAL) plus revenue from legacy contracts is below the ARR. This is recognised in Table 2 by adding back deferred depreciation. This is discussed further in sections 9.2.1 and 9.2.4.

Table 2: Capital Base, $ Million

	2016-17 (A)	2017-18 (A)	2018-19 (F) (See note 1)	2019-20 (F)
Opening Capital Base (1 July)	4,142.0	4,269.0	4,413.2	4,565.5
Plus Indexation Allowance	54.8	91.3	84.5	61.5
Plus Efficient Capex	72.2	52.9	67.7	107.0
Less Depreciation	(295.7)	(510.9)	(639.2)	(776.6)
Plus Deferred Depreciation	295.7	510.9	639.2	776.6
Closing Capital Base (30 June)	**4,269.0**	**4,413.2**	**4,565.5**	**4,734.0**

Note 1 – At the ESC's request, PoM has prepared a new regulatory model that covers the period to the end of the port lease. PoM has used this model to roll forward the initial capital base as at 1 July 2016. This means that the 2018-19 forecast in Table 2 differs from that presented in PoM's 2018-19 TCS. This is discussed in section 9.2.1, **Attachment 3** and **Appendix C**.

The information in this TCS (including the appendices) fully addresses the requirements of the Pricing Order. **Appendix P** cross-references these requirements to relevant sections of this document. **Attachment 3** shows where in this TCS PoM has responded to the ESC's Interim Commentary on its 2018-19 TCS.

2. About this 2019-20 TCS

2.1 Purpose of this document

PoM is required to submit an annual TCS to the ESC by no later than 31 May each year[4] that demonstrates how its tariffs for Prescribed Services for the upcoming financial year comply with the Pricing Order. The leasing of space and facilities on Port land is classified as non-Prescribed Services. These non-Prescribed Services are not subject to the Pricing Order and PoM's associated charges are based on commercial agreements. Non-Prescribed Services are not covered by this TCS.[5]

This is the third annual TCS that PoM has submitted to the ESC. It is the penultimate TCS that PoM will submit before the ESC's first five-yearly inquiry of PoM's compliance with the Pricing Order, which will cover the period 2016-17 to 2020-21. The positions in this TCS are largely in line with those in the 2018-19 TCS. PoM has actively considered feedback received from the ESC over the last 12 months in formulating its positions, including by discussing its proposed changes with the ESC and confirming their agreement to them. The changes in PoM's positions are identified and explained throughout this document and are summarised in **Attachment 3**.

In preparing this TCS, PoM has addressed:

- clause 7.1.2 of the Pricing Order, which details the required contents of a TCS
- the ESC's follow up questions (i.e. Information Requests) on PoM's 2018-19 TCS
- the ESC's Interim Commentary on PoM's 2018-19 TCS, and
- the ESC's Statement of Regulatory Approach (SoRA) and associated Feedback Paper.

Clause 7.1.2 of the Pricing Order provides that PoM's TCS must:

- set out its tariffs for the upcoming financial year
- detail the basis of any adjustments to tariffs (i.e. re-balancing), including any new or discontinued tariffs
- explain and justify the building blocks included in the ABBM and the basis on which the WACC has been estimated
- provide information on contracts with Port Users
- describe how PoM has consulted with, and incorporated feedback from, Port Users
- explain how PoM's tariffs for 2019-20 comply with the Pricing Order, including the pricing principles and cost allocation principles
- contain any further supporting information determined by the ESC, in accordance with clause 9 of the Pricing Order, and
- comply with the information requirements in clause 8 of the Pricing Order.

Appendix P is a compliance checklist that cross-references to where in this TCS the requirements of clause 7 have been addressed. **Attachment 3** details where in this TCS the views and positions outlined in the ESC's Interim Commentary are addressed.

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[4] Under clause 7.1.1(a) of the Pricing Order

[5] The ESC undertakes periodic reviews of PoM's rental agreements with Port tenants in accordance with section 53 of the *Port Management Act (Victoria) 1995*.

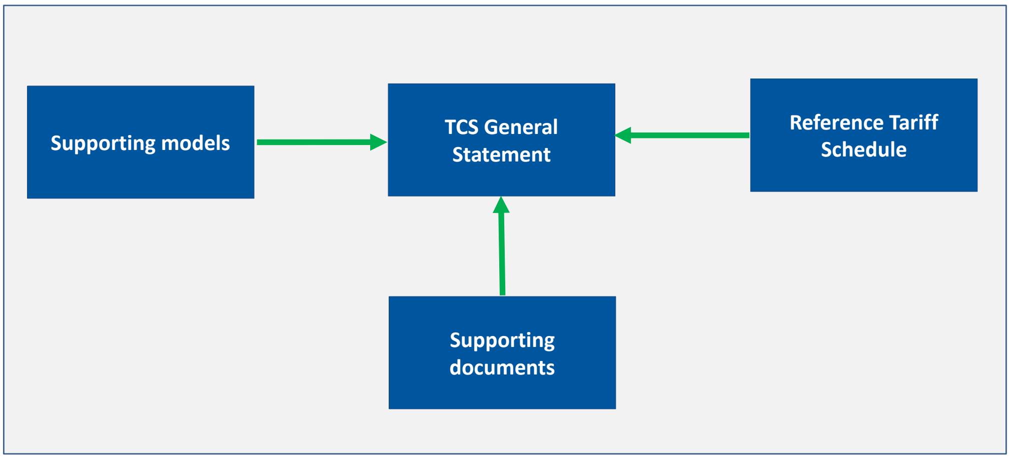
2.2 Structure of this document

The remainder of this document is structured as follows:

- section 3 explains the regulatory context to this TCS
- section 4 details PoM's 2017-18 financial and trade volume performance and the nature of the ESC's feedback on PoM's 2018-19 TCS
- section 5 details what Port Users and other stakeholders have told PoM in the course of its stakeholder engagement over 2018-19 and how PoM is responding to it
- section 6 nominates a one year regulatory period, being 2019-20
- section 7 overviews PoM's 2019-20 trade volume forecasts
- section 8 details PoM's draft performance standards
- section 9 compares the ARR, calculated under the ABBM, with Prescribed Services' revenue (subject to the TAL) plus revenue from legacy contracts
- section 10 details PoM's 2019-20 Prescribed Services' tariffs
- section 11 discusses the need to ensure efficient cost recovery
- section 12 explains that this TCS is confidential and commercially sensitive and is provided to the ESC on a strictly confidential basis
- **Attachment 1** explains and justifies PoM's 2019-20 forecast Opex
- **Attachment 2** explains and justifies PoM's 2019-20 forecast Capex, and
- **Attachment 3** details where PoM has addressed the ESC's feedback on its 2018-19 TCS.

There are a number of appendices (i.e. **Appendices A** to **P**) that support, and form a part of, PoM's 2019-20 TCS. These are structured as illustrated in Figure 1 to be as clear and accessible as possible to the ESC, Port Users and other stakeholders.

Figure 1: 2019-20 TCS document structure



2.3 Financial information, and use of terminology, in this document

This document contains the following financial information:

- 2017-18 – actual and forecast values. The forecast values were submitted in PoM's 2017-18 TCS
- 2018-19 – forecast values that were submitted in PoM's 2018-19 TCS. These forecast values have not been updated, unless otherwise specified. Actual information will be provided in PoM's 2020-21 TCS because, at the time of submitting this TCS, PoM does not have a full year of actual information for 2018-19, and
- 2019-20 – forecast values.

The 2019-20 Capex, Opex, revenue and trade volume forecasts reflect PoM's current view of the budget at the time PoM is submitting this TCS to the ESC. PoM's 2019-20 budget will not be finalised until June 2019. The forecasts in this TCS may therefore not reflect PoM's final budget for 2019-20.

All financial information provided in this TCS is denominated in nominal dollars (referred to as "current price terms" in clause 8.1.1 of the Pricing Order), unless stated otherwise. The numbers in the tables may not add due to rounding. All clause references are to the Pricing Order, unless otherwise stated. Capitalised terms that are not otherwise defined have the meaning given in the Pricing Order.

In this document:

- "Prescribed Services' revenue (subject to the TAL)" means revenue from Prescribed Services in PoM's Reference Tariff Schedule (RTS). It does not include revenue associated with contracts for Prescribed Services, and
- "ARR" means revenue calculated using the ABBM. The initial 2016 capital base included the assets associated with legacy contracts for Prescribed Services that were in place at the time of Port Lease Transaction (PLT). The "ARR" is therefore inclusive of revenue associated with these legacy contracts.

PoM has added Prescribed Services' revenue associated with the legacy contracts to "Prescribed Services' revenue (subject to the TAL)" for the purposes of comparing it with the "ARR" in Table 1 and Table 17. PoM has agreed to this treatment of legacy contracts with the ESC.

PoM has also agreed with the ESC that the costs and revenues of all new Prescribed Services' contracts entered into after the PLT should be excluded from the WATI calculation and all comparisons of revenue streams, albeit that PoM is fully disclosing the revenue earned under these Prescribed Services' contracts in the confidential **Appendix O**.

At the ESC's request, PoM has prepared a new regulatory model that covers the period to the end of the port lease. PoM is only submitting data for the regulatory year 2019-20. Future calculations, and any modelling input assumptions (e.g. CPI in future years), are included in the new regulatory model for illustrative purposes only and will change in versions submitted in future TCSs.

2.4 Next steps and stakeholder feedback

It is important for PoM to understand Port Users and other stakeholders' views and feedback to enable it to continue to meet their needs and expectations. PoM welcomes feedback on the published version of this TCS through any of the following channels:

Channel	Details
Post	GPO Box 2149 Melbourne VIC 3001 Australia
Online	http://www.portofmelbourne.com/contact-us

PoM will continue to engage with Port Users and other stakeholders as part of its commitment to engagement, as discussed in section 5.

3. Regulatory context

3.1 Nature of PoM's regulatory framework

PoM operates under a regulatory framework that came into effect on 1 July 2016. The regulatory framework is set out in the:

- *Port Management Act 1995* (Vic) (PMA), and
- Pricing Order issued by the Governor-in-Council, and made pursuant to section 49A of the PMA.

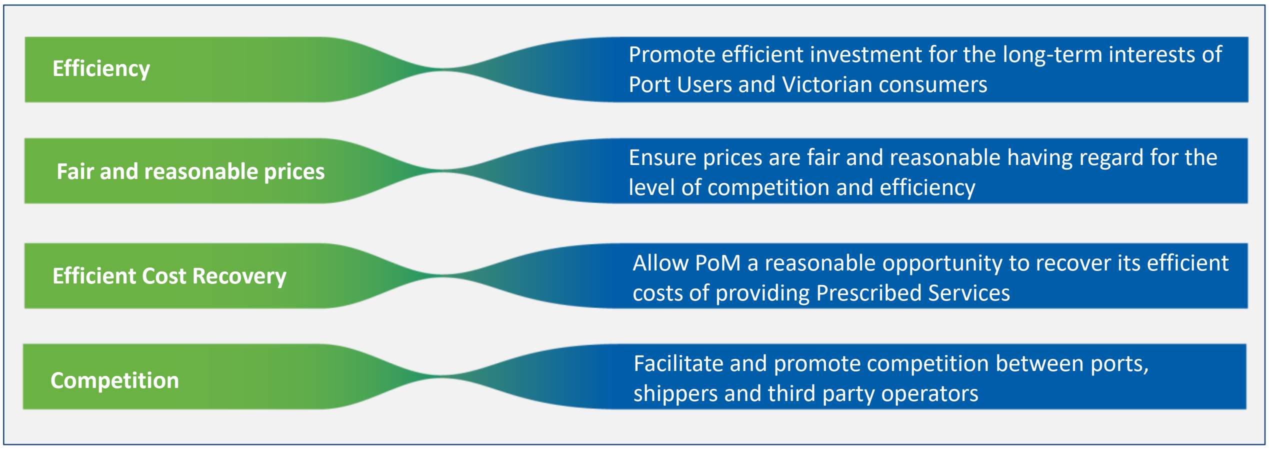
The Victorian Government developed the regulatory regime to be fit-for-purpose to reflect PoM's unique circumstances. It covers:

- Prescribed Services – these include channel services, berthing services, short-term storage and cargo marshalling facility services and other services that allow access, or use, of certain Port infrastructure[6]
- non-Prescribed Services (e.g. rental agreements for space and facilities on Port land), and
- functions related to any second container port, should one be developed in the future.

The Pricing Order relates only to Prescribed Services. Charges for non-Prescribed Services are not subject to the Pricing Order[7] and are therefore not dealt with in this TCS.

Section 48 of the PMA sets out the objectives of the regulatory framework, which are summarised in Figure 2.

Figure 2: Objectives of the regulatory framework



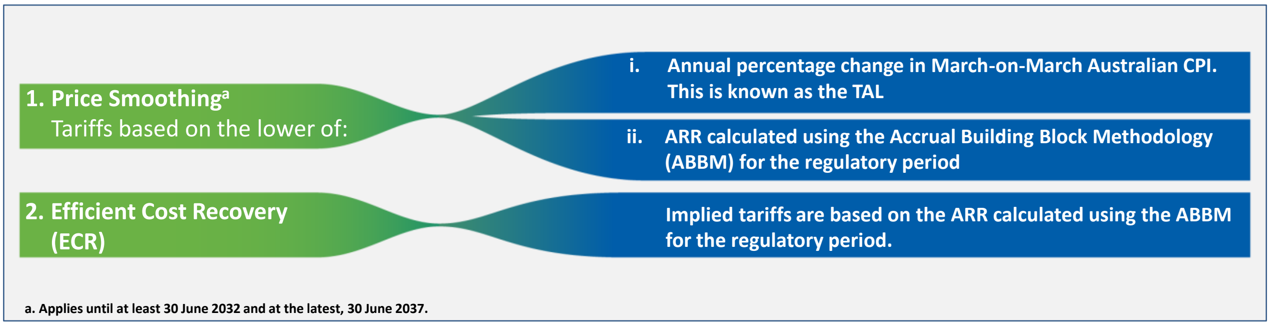
The Pricing Order:

- details the pricing principles and regulatory mechanisms that govern how PoM must set its tariffs for Prescribed Services, and
- requires PoM to demonstrate how its tariffs for the upcoming financial year comply with the Pricing Order.

[6] Prescribed Services are defined in section 49(1)(c) of the PMA
[7] Fees and charges for some non-Prescribed Services are contained in the Other Fee Schedule of the RTS. Charges for certain other non-Prescribed Services, such as leasing of space and facilities, are based on commercial agreements.

There are two key pricing principles under the Pricing Order that are summarised in Figure 3.

Figure 3: Key pricing principles



3.2 PoM's regulatory framework is unique

PoM's regulatory framework is unique as it has significantly different requirements from equivalent economic regimes for other ports and other regulated industries across Australia. PoM's regulatory framework contains:

- certain matters of prescription
- certain areas of flexibility and discretion, and
- one requirement to consider "well accepted approaches".

The matters of prescription include requirements to:

- apply the ABBM
- apply the TAL, subject to the ABBM, during the TAL period
- ensure the WATI does not exceed the TAL in any year during the TAL period
- comply with requirements for setting individual Prescribed Services' tariffs (or bundles of service revenue) about:
    - the level and structure of tariffs
    - upper and lower cost bounds
    - tariff differentiation, and
    - cost allocation
- deem Opex on the Port Licence Fee (PLF) and Cost Contribution Amount (CCA) to be efficient under the Pricing Order, and
- maintain and comply with the Export Pricing Decision.

These matters of prescription constrain the way PoM must set tariffs for its Prescribed Services, particularly during the TAL period.

The significant areas of flexibility and discretion include to:

- assess efficient and prudent Capex and Opex, other than the PLF and the CCA
- determine well accepted approaches to derive the cost of equity and cost of debt components of the WACC
- use the alternative depreciation methodology if the return of capital calculated using the straight-line methodology cannot be recovered in an applicable financial year
- allow PoM to choose the form of price control in the post TAL period (until at least 30 June 2032 and at the latest, 30 June 2037)
- allow PoM to nominate the length of the regulatory control period

- allow for tariff changes and rebalancing during the TAL period, subject to consulting with Port Users and the approval of the ESC, and
- reduce the term of the TAL period.

These areas of flexibility and discretion reflect that:

- the Victorian Government wanted to introduce a compliance monitoring framework that:
  - minimises regulatory burden
  - does not provide direct price control, and
  - facilitates and promotes competition between ports, shipping lines and third party operators
- PoM is different to other regulated businesses, such as electricity and water networks, that have different market dynamics and are subject to full economic regulation. The Port is part of a competitive national and international transport supply chain and faces effective competition from other ports and transport modes that are unregulated
- it is appropriate for the regime to adapt to evolving circumstances and needs over time, including for PoM to undertake growth-related Capex sooner than was anticipated at the time of the PLT, such as investment for rail and larger vessels, and
- economic regulation is an imprecise tool where reasonable minds can disagree on matters. For example, what constitutes efficient costs, or where there is inherent uncertainty of key inputs, such as parameters for the rate of return.

There is a requirement to “use one or a combination of well accepted approaches” to derive the cost of equity and cost of debt components of the WACC. This is discussed in section 9.2.3 and **Appendix N**.

3.3 Proposed Pricing Order changes for the Port Rail Transformation Project

The Victorian Government is currently considering a proposal from PoM to undertake the Rail Project. If the Rail Project is implemented, it may require an amendment to the Pricing Order to allow PoM to recover its investment in the Rail Project.

The Rail Project would enable PoM to reform rail services within the Port, improve operating performance and provide more efficient rail infrastructure.

PoM has consulted with industry on the Rail Project, which is essential to encourage mode shift from road to rail through the delivery of improved infrastructure and industry reform. The rail project addresses both the infrastructure and commercial frameworks necessary to enable the supply chain to grow the rail mode share.

PoM has submitted its proposed Rail Project proposal to the Victorian Government, which includes some maritime expenditure to facilitate larger container vessels. This proposal would result in an increase in tariffs for Prescribed Services to allow PoM to recover the cost of the investment.

At the time of submitting this TCS, the Victorian Government is still considering PoM’s Rail Project proposal. A decision from the Victorian Government on progressing the proposal is likely to be made in advance of PoM submitting its 2020-21 TCS to the ESC. PoM has not included the associated increases in Capex, revenues or tariffs in this TCS.

3.4 Application of the TAL

PoM’s 2019-20 Prescribed Services’ tariffs will be subject to price smoothing through the application of the TAL, except for full outbound container wharfage services.

PoM expects that its Prescribed Services’ tariffs will change in line with the annual increase in CPI until at least 30 June 2032, and at the latest 30 June 2037. This is because tariffs implied by the ABBM are expected to be higher than tariffs subject to the TAL over the TAL period. Price smoothing provides greater certainty and predictability in tariffs for Port Users.

3.5 The ESC's five-yearly review

PoM must submit a TCS to the ESC by 31 May each year that explains how its tariffs comply with the Pricing Order – this is the TCS for 2019-20.

The ESC will undertake a formal public compliance inquiry every five years[8] that will include findings on whether there has been any non-compliance and, to the extent there has been, whether any such non-compliance is "significant and sustained". The ESC's first formal compliance review will be undertaken in 2022 for the 2017-2021 review period[9]. The outcomes of the compliance inquiry must be reported to the ESC Minister within six months of each five-yearly review period.

In undertaking its five-yearly inquiry, section 48A of the PMA requires the ESC to have regard for the regulatory objectives in section 48 of the PMA (see Figure 2 above). In this regard, PoM considers that it is important to recognise that:

- economic regulation is only a safeguard to promote or mimic competition – it is not a perfect substitute for competition
- the ESC's role is to monitor compliance, rather than to set tariffs
- there are many flexible and discretionary elements of the Pricing Order (and PMA) that are open to interpretation
- reasonable minds can disagree on efficient costs or where there is inherent uncertainty of key inputs, and
- misapplying the Pricing Order may result in the PMA objectives not being achieved.

[8] Under Division 2A of the PMA, s.49I(1)
[9] The Commission must complete the inquiry no later than six months after a review period – clause 49I of the PMA

4. Historical performance

4.1 PoM's 2017-18 actual performance

Given the 31 May 2019 submission timeline, PoM does not have a full year of actual information for 2018-19 at the time of submitting this TCS to the ESC. PoM will provide this information in next year's 2020-21 TCS. PoM can only therefore provide actual information for 2017-18 at this stage.

Table 3 compares PoM's 2017-18 forecast revenue, Capex and Opex for Prescribed Services with its actual 2017-18 outcomes.

Table 3: Comparison of 2017-18 forecast and actual revenue, Capex and Opex, $ Million

	2017-18 (F)	2017-18 (A)	Difference (%)	Difference ($)
Revenue	340.8	364.1	6.8%	23.3
Capex	67.6	53.5	(20.9%)	(14.1)
Opex	128.4	124.6	(3.0%)	(3.9)

PoM's 2017-18 revenue was higher than forecast due to actual trade volumes being higher than forecast, as detailed in Table 4.

PoM's 2017-18 actual opex was broadly in line with its forecast. There was a slight underspend in controllable opex which resulted in total opex being 3 per cent lower than forecast.

As with all Capex programs, there were differences between actual and forecast expenditure in 2017-18 for a range of individual projects, with PoM having a net underspend of $14.1 million. The major areas of Capex underspend were in two categories – wharves and roads:

- Wharves:
  - the 27 South Wharf Rehabilitation project, at a forecast cost of $6.6 million, was not undertaken in 2017-18, but rather was undertaken in 2018-19, and
  - only the design and purchase of long lead items for the Swanson Dock East subsidence remediation and wharf rehabilitation project was undertaken in 2017-18. As a result, only $0.5 million of the forecast $8.5 million was incurred in 2017-18. The project was delivered in 2018-19.
- Roads – due to changes in PoM's roads' strategy and the closure of Coode Road West, the forecast $3.2 million for the rehabilitation of Appleton and Swanson Dock roads was not incurred.

Table 4 compares PoM's 2017-18 forecast trade volumes with actual volumes.

Table 4: Comparison of 2017-18 forecast and actual trade volumes

Trades	Units (Million)	2017-18 (F)	2017-18 (A)	Difference (absolute)	Difference (%)
Containers – import	TEU	1.19	1.25	0.05	4.5%
Containers – export		0.79	0.83	0.04	4.9%
Containers – empty		0.51	0.52	0.00	0.9%
Containers – Bass Strait		0.30	0.34	0.03	11.0%
Dry bulk	Revenue tonnes	3.89	4.65	0.76	19.5%
Liquid bulk		2.36	2.87	0.51	21.5%
Motor vehicles		6.49	7.36	0.87	13.4%
Breakbulk		2.64	3.38	0.74	28.0%
Channel – Melbourne	Gross tons	112.96	119.80	6.84	6.1%
Channel – Shared		126.00	134.06	8.06	6.4%

Notes:
1. 'Containers - Bass Strait' includes empty containers.
2. 'Breakbulk' includes Wheeled Unitised cargos.

4.2 ESC's feedback on PoM's 2018-19 TCS

The ESC provided informal feedback on PoM's 2018-19 TCS through its Interim Commentary.

PoM also engaged with the ESC through regular meetings during 2018-19 to discuss informal feedback on key regulatory matters and how PoM will respond to it.

The ESC indicated to PoM that its informal feedback is intended to promote transparency and predictability in the application of the regulatory framework and to provide broad guidance on its views and expectations. The ESC also indicated that this informal feedback will be an input into its five-yearly public review of PoM's compliance with the Pricing Order[10]. The ESC's 2018-19 Interim Commentary states:

> *This will benefit the five-yearly process by giving advance notice to the port and other stakeholders of key issues or concerns that may, along with any other relevant issues or concerns, form part of our five-yearly inquiries. This approach allows the port to give consideration to the issues and concerns raised by the commission, and to reflect on its position and the information it may provide over time in demonstrating compliance with the pricing order ahead of our inquiry.*[11]

PoM welcomes the continued engagement with the ESC during 2018-19. It is important for PoM to understand any issues or concerns that the ESC has about PoM's regulatory approach and positions so that PoM can respond appropriately, including by refining or further justifying its positions and approach, where necessary, in the lead up to the five-yearly review.

[10] The public review will occur in 2022 for the 2017 to 2021 review period. The public review must be conducted within six months after five yearly each review period

[11] ESC, Interim Commentary - Port of Melbourne tariff compliance statement 2018-19 (Interim Commentary), 26 October 2018, p.v

The ESC's 2018-19 Interim Commentary provided feedback on the following matters:

- the WACC
- cost allocation model
- trade volumes
- regulatory model
- standalone and avoidable cost model
- information supporting Capex and Opex forecasts
- treatment of deferred depreciation
- treatment of contract revenue
- the calculation of the WATI and tariffs, and
- tariff escalation.

Attachment 3 details how PoM has addressed these matters, including by cross-referencing where relevant to other parts of this TCS.

The ESC's feedback highlights the overall alignment between the ESC's and PoM's views on what constitutes compliance with the Pricing Order and how PoM can best demonstrate its compliance.

The one key difference between the ESC's and PoM's interpretation of the Pricing Order relates to the WACC and, in particular, what constitutes "well accepted approaches". This matter is addressed in section 9.2.3 and **Appendix N.**

The ESC has not issued PoM with a Supporting Information Determination under clause 9 of the Pricing Order and has therefore not specified the form and content of information to be provided by PoM in this TCS.

5. What Port Users and other stakeholders are telling PoM

Stakeholder engagement is fundamental to PoM's operations. PoM considers effective engagement to be not just a means to an end but rather a core operational value that is integral to the provision of its Prescribed Services, which are part of a dynamic international freight supply chain.

PoM continued its proactive engagement program with Port Users and other stakeholder over the course of 2018-19, which covered the following broad areas:

- targeted engagement on its:
    - business plans as set out in its 2050 PDS, including for the accommodation of larger vessels, and
    - Rail Project
- broad business engagement on the markets in which PoM provides its Prescribed Services and charges its tariffs, and the needs of Port Users and other stakeholders.

This section overviews:

- PoM's engagement activities in 2018-19
- the views and feedback provided to PoM by Port Users and other stakeholders, and
- how PoM has, or will, respond to address this feedback.

Appendix I provides further detail on these matters.

5.1 PoM's Port Users and other stakeholders for Prescribed Services

All of PoM's Prescribed Services' tariffs are levied on shipping lines, who are direct Port Users.

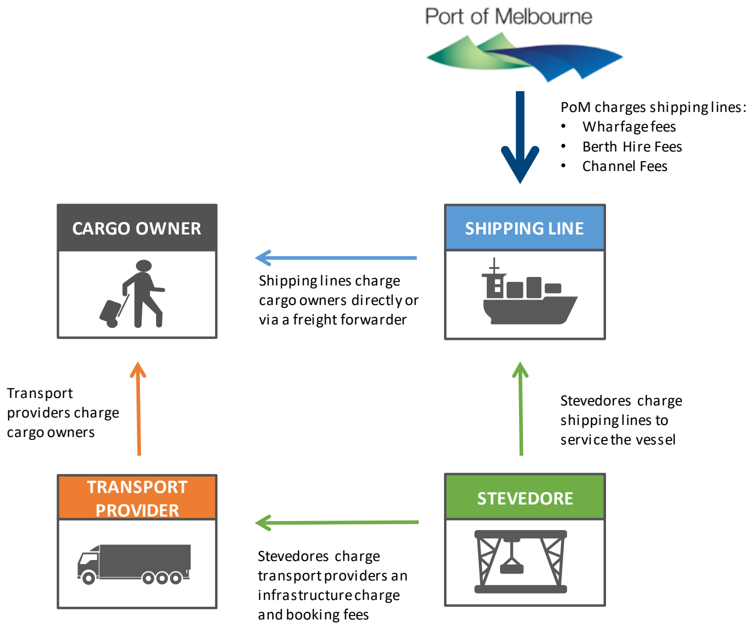
Stevedores[12], transport providers, cargo owners and freight forwarders are all examples of indirect Port Users because they rely on Prescribed Services, but they do not directly pay PoM's Prescribed Services' tariffs:

- stevedores recover their total costs based on commercial arrangements with shipping lines and transport providers. The Australian Competition and Consumer Commission (ACCC) monitors these stevedore charges and publishes an annual report. The Victorian Government is currently reviewing the recent rebalancing of stevedore charges away from shipping lines towards transport providers, and
- shipping lines and transport providers both charge cargo owners directly, or freight forwarders acting for cargo owners, for their services.

[12] PoM leases space and facilities on port land to stevedores, which are classified as non-Prescribed Services.

Figure 4 illustrates the relationship between PoM and direct and indirect Port Users for the provision of Prescribed Services.

Figure 4: PoM's relationship with Port Users for Prescribed Services



The Rail Project has a unique set of direct and indirect Port Users, which include Rail Terminal Operators (RTOs), Rail Service Providers, Intermodal Terminal Operators, Network Access Providers and Industry Associations.

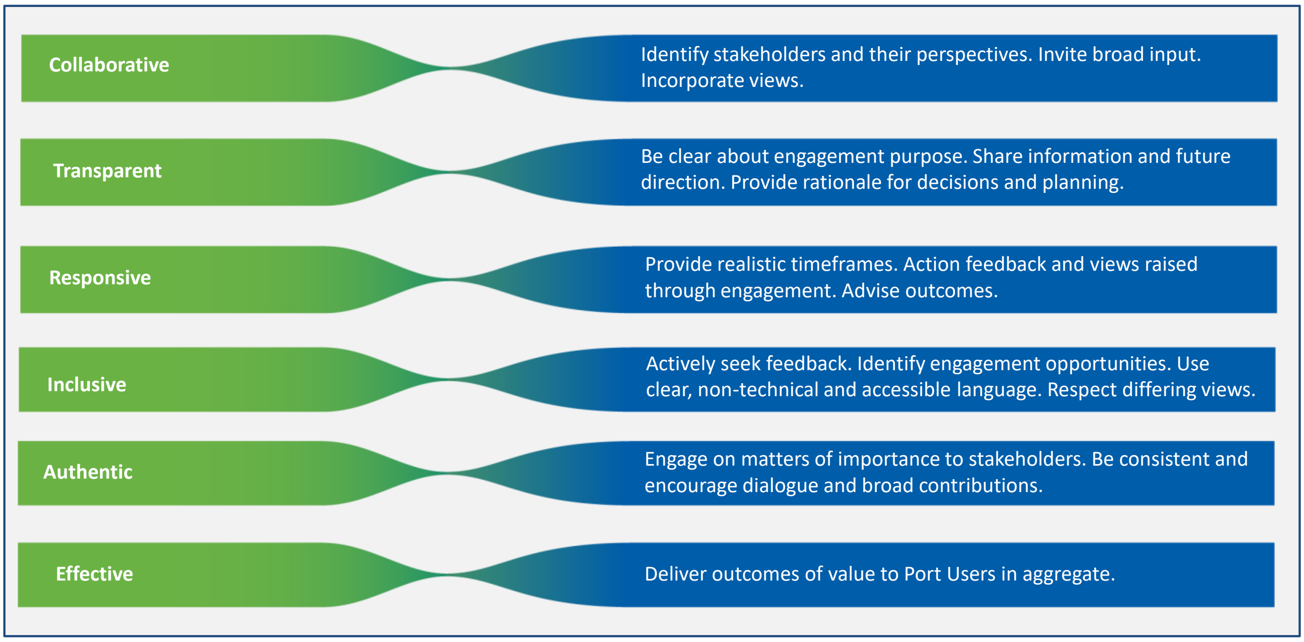
PoM engaged different Port Users and other stakeholders on the broad areas detailed above, in line with their interests.

5.2 Importance of engagement

PoM appreciates that engagement needs to be two-way to be meaningful. Accordingly, the key objective of PoM's engagement is to establish open communications with Port Users and other stakeholders, in order for PoM to:

- provide accessible, relevant and transparent information on PoM's priority investments and future direction, and
- understand, discuss and address Port Users and other stakeholders' business needs, insights and requirements on key matters to ensure that PoM is meeting their expectations now and into the future. Figure 5 sets out PoM's core engagement principles that underpin and characterise its approach to consultation.

Figure 5: PoM's engagement principles



PoM has applied these core principles in developing and conducting its engagement activities to foster genuine and meaningful discussions with Port Users and other stakeholders.

5.3 What PoM has done

PoM actively engages its stakeholders to inform them about its operations and to allow them to provide their views and perspectives on PoM's plans for the future.

Table 5 shows that, consistent with its commitment to working collaboratively with Port Users and other stakeholders, PoM has expanded its engagement activities over the past three years.

Table 5: Invitations, acceptances and attendance (individuals) – engagement activities to inform relevant TCS

Port Users and other Stakeholders	2017-18	2018-19	2019-20
Invited to participate	171	655	1,222
Accepted invitations	84	533	758
Attended the engagement activities	68	230	878
Growth in engagement attendance	n/a	338%	382%

Table 6 summarises the engagement activity PoM has undertaken, what it heard from Port Users and other stakeholders and how it has or will respond. **Appendix I** provides further detail on these matters.

Table 6: What PoM has done, what it heard and how it has or will respond

Topic	PoM's engagement activity	Port Users and other stakeholders' feedback to PoM	PoM's response
PDS	- Consulted on *2050 Port Development Strategy Discussion Paper* - Undertook 19 tailored information events and drop-in sessions - Submitted draft PDS to Minister for Ports	- Develop long-term plans to provide certainty for future industry investment - Operate efficiently and environmentally sustainably - Improve road and rail infrastructure to increase supply chain efficiency and promote mode shift to rail - Integrate with Victorian Government's broader transport plans	- Address feedback from Minister for Ports in draft PDS - Invite feedback on public exhibition version of the PDS - Have regard for further feedback in finalising the PDS by the end of 2019
Larger vessels	- Covered by PDS above, as accommodating larger vessels is a key component of PDS	- Recognise vessels size will continue to grow in line with population and economy - Invest to accommodate larger vessels in Port channels and wharves at Webb, Swanson and Appleton Docks - Protect marine and land environments in planning for larger vessels	- Completed phased trial implementation process for deployment and handling of larger vessels at Webb Dock - Undertook navigational simulations and hydrodynamic analysis - Started planning for bollards at Swanson Dock East and Swanson Dock West – to be constructed as part of proposed Rail Project - Agreed implementation program timing for mooring infrastructure and berthing assistants
Rail Project	- Consulted with industry on development of Port Rail Strategy and PRSN expression of interest - Held one-on-one meetings with industry on Rail Operating Framework and related documentation - Submitted *Port Rail Transformation Project – Proposal to Government*	- Support the Rail Project to facilitate industry reform and modal competition - Support Rail Project delivering rail and port side infrastructure and productivity improvements, and in turn the flow on benefits to Port Users, industry and the Victorian and Australian economies	Propose to Victorian Government to implement the Rail Project

PoM and Port Users and other stakeholders discussed a wide range of issues as part of the broad business engagement, in addition to the PDS, larger vessels and the Rail Project discussed above. Other key issues included:

- tariff rebalancing – Port Users and other stakeholders questioned PoM's intentions in relation to the future rebalancing of Prescribed Services' tariff. PoM explained that it will engage with Port Users and other stakeholders in the second half of 2019. If there is a case for tariff rebalancing then PoM will lodge a tariff rebalancing application with the ESC by 31 December 2019.
- innovation – Port Users and other stakeholders questioned what innovation PoM was undertaking to address emerging trends in supply chain management. PoM indicated that its major innovation initiatives in its 2019-20 capital expenditure program will focus on: accommodating larger vessels; improving the competitiveness of rail; and managing the growth in demand for liquid bulk.

- drought – Port Users and other stakeholders highlighted the current, and potential future, impact of drought on agricultural production. PoM will continue to work with Port Users and other stakeholders and consider the potential implications of drought conditions as part of its review of tariff rebalancing in 2019.
- stevedore charges – Port Users and other stakeholders expressed concern about the recent restructure of these charges, away from shipping lines and towards landside transport operators. PoM explained that stevedores set their charges on a commercial basis to recover their total costs. PoM does not charge stevedores for its Prescribed Services, although PoM does charge stevedores rent for land and facilities, which is a non-Prescribed Service.

6. The length of the regulatory period

Under clause 13 of the Pricing Order, PoM must nominate the regulatory period for the purposes of calculating its ARR using the ABBM and its Prescribed Services' revenue (subject to the TAL), as well as the associated tariffs.

Consistent with 2017-18 and 2018-19, PoM has nominated a one-year regulatory period for 2019-20.

A one-year regulatory period remains the best option for Port Users and PoM. This is primarily because PoM is still in the process of developing, in conjunction with Port Users, strategies and performance standards, which will be important considerations to inform how longer regulatory periods may work:

- **PDS** – PoM submitted a version of the PDS to the Minister for Ports in December 2018. In order to inform this, PoM published a Discussion Paper to gather input from Port Users and other stakeholders. The PDS sets out a roadmap for the future of the Port. It outlines the high-level plans and approach for developing the capacity and efficiency of the Port over the next 30 years, through to 2050, while also providing a planning framework which is adaptable and responsive to changing needs over time. PoM expects to release the PDS for public exhibition in the second half of 2019, before finalising it by the end of 2019.
- **Rail Access Strategy (RAS)** – PoM must submit this strategy to the Victorian Government by October 2019[13]. It will set out on-dock rail terminal infrastructure options for the movement of freight into, and out of, the Port that provide viable, cost effective and sustainable alternatives to road transport. The proposed Rail Project forms the majority of the scope of works to be undertaken in implementing the RAS. The proposed Rail Project is discussed in section 3.3.
- **performance standards** – PoM has developed draft performance standards to allow the ESC, Port Users and other stakeholders to assess whether PoM is meeting service outcomes in an efficient, consistent and timely manner. These will need to be settled following finalisation of the PDS and RAS, and having regard for the work that PoM proposes to undertake in 2019 to assess the case for tariff rebalancing. PoM's draft performance standards are discussed in section 8.

In PoM's view it is more appropriate to consider proposing a longer regulatory period once it settles positions on the PDS, RAS and performance standards, as they are critical to determining the future investment and performance outcomes that PoM will deliver to meet Port Users and other stakeholders' long-term needs. PoM will consult Port Users and other stakeholders on the benefits and practicalities of applying longer regulatory periods in the future once these three initiatives are settled.

[13] In accordance with section 91Q of the PMA and clause 27 of the Port Lease

7. 2019-20 trade volume forecasts

PoM engaged BIS Oxford Economics (BIS Oxford) to forecast its trade volumes for 2019-20. BIS Oxford has maintained the same approach that it used to forecast PoM's 2018-19 trade volumes. PoM forecasts channel volumes internally by applying historical correlations between ship tonnage and trade volumes to the BIS Oxford trade forecasts, in conjunction with published shipping schedules for the Bass Strait operators and cruise vessels.

In response to the ESC's 2018-19 Interim Commentary, PoM is providing the ESC the following documents to explain how its 2019-20 trade volume forecasts have been prepared and to promote the transparency of these forecasts:

- **Appendix K** is BIS Oxford's description of PoM's trade forecasts for 2019-20. This is an update of the equivalent document that was provided in the 2018-19 TCS
- **Appendix L** is a forecasting model that has been prepared by BIS Oxford. This is being provided to the ESC for the first time, and
- **Appendix M** is a handbook that should be read in conjunction with the forecasting model that explains the mechanics of how the forecasts for 2019-20 have been prepared, having regard to actual trade volumes in prior years. This is also being provided to the ESC for the first time.

BIS Oxford uses economic modelling to derive the forecasts for the following cargo types. The worksheet references are to the forecasting model:

- full containers – full outbound and full inbound worksheet
- empty containers – empty worksheet
- wheeled units and breakbulk – general cargo worksheet, and
- motor vehicles, liquid bulk and dry bulk – other bulk worksheet.

Forecasts are further prepared in terms of trade segments, where appropriate:

- domestic trade – including Bass Strait and transhipments, and
- international trade.

PoM has experienced modest growth in trade volumes so far in 2018-19. BIS Oxford has forecast that:

- full container imports (excluding Bass Strait) will grow by 5.6 per cent growth in 2018-19. More modest growth of 2.0 per cent is forecast for 2019-20, whereas
- full container exports (excluding Bass Strait) will fall back in 2018-19, based on a decline of 7.7 per cent from 2017-18. Positive growth of 4.7 per cent is forecast for 2019-20.

Appendix M explains in further detail the following approach that BIS Oxford used to forecast each cargo type:

Step 1 – for containerised trade only, acknowledge the common characteristics between major Australian container ports, namely that:

- each major container port services the relevant State
- imports are the dominant full container trade, and
- there was strong growth between the 1990s and mid-2000s, with slower growth since the Global Financial Crisis.

These common characteristics inform trade analysis. In particular, for containerised imports, the outlook tends to track the national macroeconomic outlook with state-specific demand factors. For containerised exports, BIS Oxford overlays the national production outlook with local specialisation from within PoM.

Step 2 – for each commodity, identify the macroeconomic or industry drivers.

Step 3 – explain any variances (i.e. sudden shifts in volumes) from the macroeconomic or industry drivers. These variances, which may reflect a change in modal choice, port facilities or local production factors, are examined to explain any variances.

Step 4 – apply macroeconomic drivers. Once the relationship between the trade volumes and macroeconomic drivers are established, and future structural changes are identified, the forecast trade volumes reflect the macroeconomic outlook. The macro-economic drivers include: Victorian, Tasmanian and Australian population growth; Victorian and Australian domestic final demand; Victorian, Tasmanian and Australian retail growth; Victorian machinery and equipment investment growth; Australian building (dwelling and non-dwelling) construction.

Table 7 details the source, or basis, for the key inputs and assumptions that are used in each worksheet in BIS Oxford's forecasting model at **Appendix L**. This is further explained in **Appendix M.**

Table 7: Input assumptions for BIS Oxford's forecasting model

Worksheet	Input/assumption	Source/basis
Full outbound	BISOE[14] custom series on industrial production and demand	Based on historical link between production volumes and trade
Full inbound	Retail turnover, investment and production (ABS)	Based on historical link between demand and trade
Bass Strait	Demand for consumer goods (ABS), BISOE custom series on industrial production and demand	Based on historical link between demand/production volumes and trade
General Cargo	Bass Strait trade, recent trends	Based on prominence of roll-on roll-off trade in the Bass Strait
Empty	Full imports and full exports	Balancing equation
Other Bulk	Motor vehicle sales, BISOE custom series on agricultural production and building activity	Federal Chamber of Automotive Industries, BISOE economic model (for forecasts)
Transhipments	Inbound (direct) TEUs, recent trends	Based on historical link between transhipment and direct volumes

[14] The "BISOE" economic model are series that are constructed in BIS Oxford's database that service to explain underlying movements in sectors of interest but may not reflect a public data series.

8. Performance standards

Performance standards reflect the level of service consistent with certain tariff outcomes. They increase transparency and accountability in relation to how a business performs on key matters valued by stakeholders.

PoM recognises the need to develop performance standards consistent with tariffs subject to the TAL, which:

- are within its control, and
- reflect what Port Users and other stakeholders value.

PoM developed initial draft performance standards for its 2018-19 TCS. These draft standards drew on the Bureau of Infrastructure, Transport and Regional Economics (BITRE) performance framework and had regard for the types of performance standards that are in place for the Victorian water businesses, which are also regulated by the ESC. PoM consulted Port Users and other stakeholders on these draft standards.

Table 8 details the draft performance standards provided in its 2018-19 TCS, with new provisions for on-port rail that would result from the proposed Rail Project highlighted. PoM will review these draft standards further in light of its consultation in 2019 on its PDS, the Victorian Government's impending decision on the Rail Project and PoM's proposed upcoming engagement on tariff rebalancing. PoM will revert to the ESC once this further consultation has been undertaken, including to explain any amendments to the draft performance standards.

Table 8: Draft performance standards (as per 2018-19 TCS, except for Rail Project)

Category	Outcomes (what we aim for)	Outputs (our actions)
Safety	• Zero harm to staff, contractors and the community • Provide and maintain safe marine infrastructure • Safety consultative forums	• Compliance with safety legislation • OHS inspection, monitoring and reporting program • Continue to improve port-wide OHS culture • Annual reporting on safety performance indicators
Environment	• Operate in accordance with good environmental practice • Annual Port Environmental Strategy (PES) • Sustainability Report • Incorporate Environmental, Social and Governance (ESG) into decision making	• Comply with environmental obligations • Prepare Annual PES. External certification every 5 years • ESG and Global Real Estate Sustainability Benchmark (GRESB) Infrastructure assessment • Provide a first strike response for marine pollution at a berth pocket • Obtain a global benchmark performance rating • Prepare a Sustainability Report • Utilise renewable energy sources where practicable • Consider climate change adaptation where practicable
Reliability / Availability	• Maintain infrastructure condition at current levels in accordance with Good Operating Practice • Vessel access to shipping channels 100% of the time in accordance with the declared depths as detailed in the Port Information Guide • Always having common user berths and equipment available for access.	• Apply best practice asset management processes (i.e. International Organisation for Standardisation (ISO) 55000 certification) • Maintain channel depths to provide access. PoM's channel infrastructure is based on a design container vessel of 300 metres length overall x 40 metres beam with a maximum draught of 14 metres[1] • Provide and maintain sufficient wharf capacity

Category	Outcomes (what we aim for)	Outputs (our actions)
Capacity	• PDS[2] for submission to the Victorian Government • RAS[3] for submission to the Victorian Government • Port Development Implementation Plan (PDIP)[4] for submission to the Victorian Government	• Detailed and broad consultation with Port Users and other stakeholders to inform the development of the PDS, RAS and PDIP • Develop, consult on and maintain a PDS, RAS and PDIP
Rail project (if approved)	A port rail solution that: • Lowers the cost of rail at the port interface • Creates competition in the market • Improves operating performance for a more reliable and efficient service • Provides more efficient infrastructure to enable a viable rail mode choice • Assists to deliver benefits for regional rail and facilitate the connection of a PRSN • Reduces traffic congestion in and around the Port of Melbourne • Reduces the negative health impacts of air pollution from port-related truck movements • Improves road safety, and • Reduces greenhouse gas emissions	• New rail infrastructure and land • New on-dock Rail Terminal Operator to deliver direct interface cost savings, and • New contractual operating framework to enable certainty and transparency of access and services for increased competition.
Customer Service / Partner with the community	• Keep customers informed / timely communication • Address Port Users' and other stakeholders' priorities and views • Port open days • Port tours • Community days • Playscape (community playground) • No complaints to the ESC	• Partner with supply chain participants • Identify top Port User priorities • Improve information on / useability of website • Provide convenient contact points • Consult with stakeholders on key issues (Port Access Forum, Swanson Forum, Rail Access engagement) • Maintain Playscape

1. An increase in the size of vessel utilising the channels beyond the design vessel will need enhancements to the existing channel infrastructure to maintain acceptable safety and operability margins.
2. The PDS will set out PoM's long-term (approximately 30 years through to 2050) vision for the growth and development of the Port. A public exhibition draft PDS was submitted to the Minister for Ports in December 2018. PoM expects to release the PDS for public exhibition in the second half of 2019, before finalising it by the end of 2019.The PDS will be updated and provided to the Victorian Government every five years thereafter (in accordance with section 91K of the PMA).
3. The RAS will set out on-dock rail terminal infrastructure options for the movement of freight into and out of the Port that provide viable, cost effective and sustainable alternatives to road transport. The first RAS is due to the Victorian Government in October 2019 and must be updated on an ongoing basis at the same time as the PDS. A key component of the RAS is the proposed Rail Project.
4. The PDIP is a sub-set of the PDS and includes a more detailed 15 year view of planned development activities within the Port to support port capacity and growth in trade demand. PoM submitted its "first" PDIP to the Victorian Government on 31 October 2017. The PDIP is not a public document and is intended to only be used by PoM and the Victorian Government. The PDIP will be updated in 2019 once the PDS has been finalised and published.

9. 2019-20 ARR and Prescribed Services' revenue (subject to the TAL)

Clauses 2 and 3 of the Pricing Order require PoM to set its tariffs based on the lower of those implied by the ARR or those subject to the TAL until at least 30 June 2032, and at the latest 30 June 2037. The Pricing Order requires that:

(i) In relation to the ARR:

> *Prescribed Service Tariffs must be set so as to allow the Port Licence Holder a reasonable opportunity to recover the efficient cost of providing all Prescribed Services determined by application of an accrual building block methodology of the type described in clause 4* (see clause 2.1.1(a)).

Clause 2.1.5 goes on to say that:

> *…a Port Licence Holder will not be in breach of this Order if it sets actual tariffs for Prescribed Services at a level that is lower than permitted under clause 2.1.1(a) in any relevant period*.

(ii) In relation to the TAL:

> *in addition to complying with clause 2, the Weighted Average Tariff Increase implied by the Prescribed Service Tariffs set by the Port Licence Holder in respect of any Financial Year commencing on or after 1 July 2017 must not exceed the Tariffs Adjustment Limit* (see clause 3.1.1).

This section:

- explains how PoM has attributed and allocated its costs to its Prescribed Services
- demonstrates the calculation of the 2019-20 ARR using the ABBM
- details the Prescribed Services' revenue (subject to the TAL) plus revenue from legacy contracts, and
- compares the 2019-20 ARR with Prescribed Services' revenue (subject to the TAL) plus revenue from legacy contracts.

9.1 Cost allocation

The Cost Allocation Principles in clause 5.2.1(a) and (b) of the Pricing Order require that:

> *(a) Costs that are directly attributable to the provision of the Prescribed Services must be attributed to that Prescribed Service*
>
> *(b) Costs that are not directly attributable to the provision of the Prescribed Service but which are incurred in the course of providing both one or more Prescribed Services and other services must be allocated to the Prescribed Service on the basis of its share of total revenue from all services provided by the Port Licence Holder*.

In its previous two TCSs, PoM's cost allocation method attributed and allocated costs between Prescribed Services, non-Prescribed Services and shared services, but did not allocate costs to individual Prescribed Services.

In both its Interim Commentary and Information Requests on PoM's 2018-19 TCS, the ESC sought more information about how PoM allocates its costs to individual Prescribed Services. For example, in its Interim Commentary on the 2018-19 TCS, the ESC stated:

> *We encourage the port to consider allocating costs to individual services, as required by the pricing order and as we outline our Statement*[15]*. In this regard we note that the pricing order requires costs to be allocated consistently with the cost allocation principles, and that obligation is not dependent on whether tariffs are based on the TAL or underlying costs.*[16]

[15] Statement of Regulatory Approach

[16] ESC, Interim Commentary - Port of Melbourne tariff compliance statement 2018-19, 26 October 2018, page 31

In response to this feedback, PoM has prepared a new Cost Allocation Model and an accompanying Cost Allocation Model User Guide – refer **Appendices D** and **E**. They demonstrate and explain how PoM complies with the Pricing Order to attribute and allocate its costs:

- between Prescribed Services, non-Prescribed Services and shared services, and
- between individual Prescribed Services.

9.2 2019-20 ARR calculated using the ABBM

PoM has calculated the 2019-20 ARR, using the ABBM described in clauses 2.1.1 and 4 of the Pricing Order, in PoM's regulatory model at **Appendix B**, which is explained in the User Guide at **Appendix C**. In accordance with clause 2.2.1 of the Pricing Order, PoM confirms that it has used the same ABBM and parameters for both Dedicated and Shared Channels.

Figure 6: ABBM approach

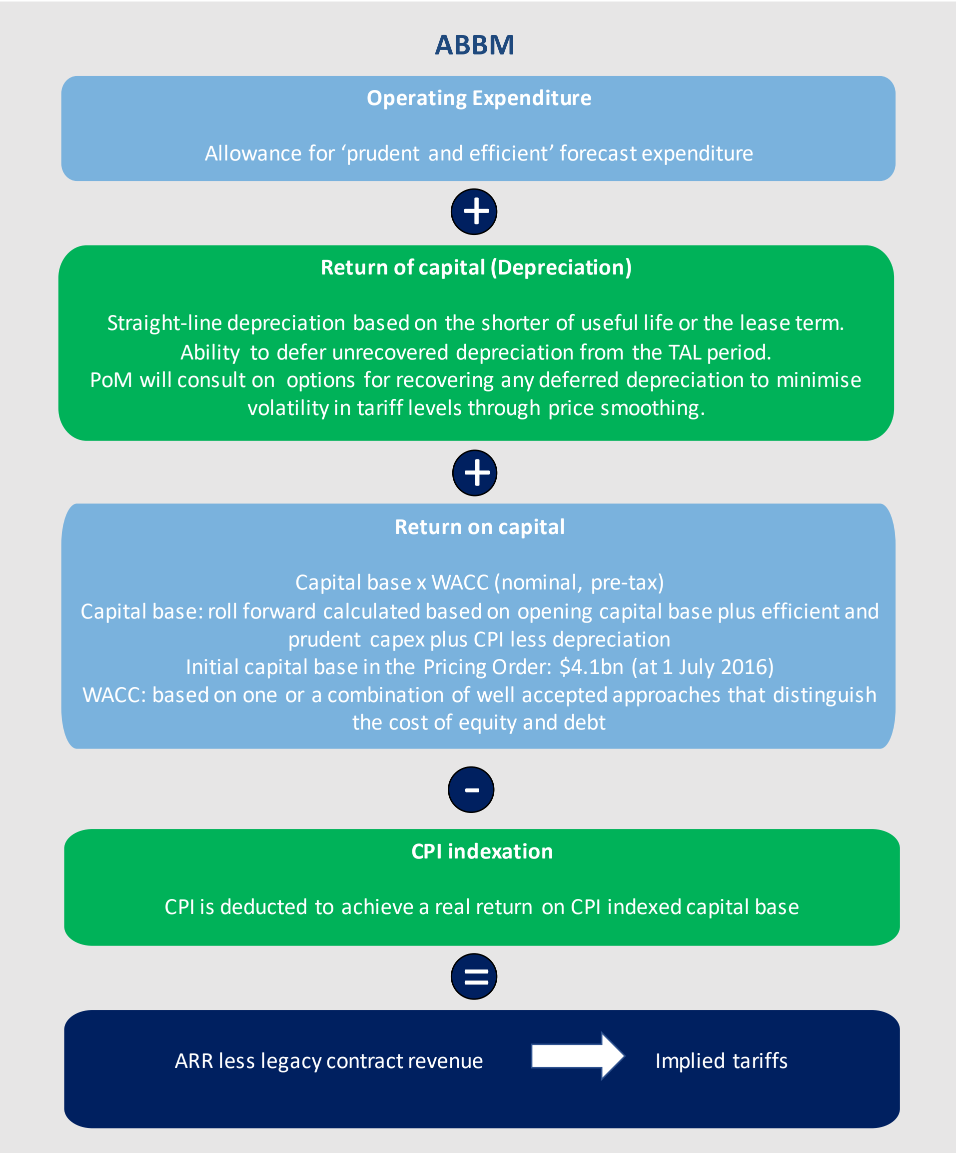


Table 9 sets out the 2019-20 ARR calculated using the ABBM. This ARR recovers the costs of legacy contracts for Prescribed Services that were in place at the time of PLT.

Table 9: ARR, $ Million

	2019-20 (F)
Return on capital	483.0
Return of capital	776.6
Operating expenses (Opex)	128.2
Indexation allowance	(61.5)
ARR (see note 1)	**1,326.3**

Note 1 – The ARR is inclusive of revenue associated with legacy contracts.

The ABBM inputs, and the calculation of each building block comprising the ABBM, are discussed below.

9.2.1 Capital base

PoM has determined the forecast rolled forward values of its capital base, at 1 July 2019, to be $4,565.5 million and, at 1 July 2020, to be $4,734.0 million. PoM has calculated these values in accordance with clause 4.2.1 of the Pricing Order by:

- adding indexation in accordance with clauses 4.2.1(b) and 4.6.1(a) of the Pricing Order. Clause 4.6.1(a) provides that the opening capital base must be indexed by the percentage change in CPI for the relevant financial year
- adding prudent and efficient net Capex in accordance with clauses 4.2.1(c) and 4.6.1(b) of the Pricing Order. Clause 4.6.1(b) provides that Capex is indexed by half a year's inflation (i.e. one half of the percentage change in CPI) for the relevant financial year. This assumes Capex is incurred mid-year, or halfway, through a financial year and is net of any capital contributions or proceeds from disposing assets, and
- deducting depreciation (i.e. the return of capital allowance). However, because in 2017-18, 2018-19 and 2019-20 PoM's Prescribed Services' revenue (subject to the TAL) plus revenue from legacy contracts is below the ARR, as shown in Table 1 and Table 17, PoM has used the alternative depreciation methodology, which involves setting the return of capital to zero and deferring recovery of straight-line depreciation to future years. This is discussed in 9.2.4.

The forecast closing 2018-19 capital base of $4,651.3 million submitted in PoM's 2018-19 TCS has been adjusted for 2017-18 actual values and other changes to the model, as agreed with the ESC (i.e. using annual March inflation to index the capital base), and is therefore $4,565.5 million.

Table 10 sets out PoM's forecast closing capital base values as at 30 June 2019 and 30 June 2020. This capital base includes the costs of contracts for Prescribed Services that were in place at the time of PLT. It does not include the costs of any new contracts that were entered into after PLT.

Table 10: Capital Base, $ Million

	2016-17 (A)	2017-18 (A)	2018-19 (F)	2019-20 (F)
Opening Capital Base (1 July)	4,142.0	4,269.0	4,413.2	4,565.5
Plus Indexation Allowance	54.8	91.3	84.5	61.5
Plus Efficient Capex	72.2	52.9	67.7	107.0
Less Depreciation	(295.7)	(510.9)	(639.2)	(776.6)
Plus Deferred Depreciation	295.7	510.9	639.2	776.6
Closing Capital Base (30 June)	**4,269.0**	**4,413.2**	**4,565.5**	**4,734.0**

PoM's regulatory model at **Appendix B** provides further details on the capital base roll forward.

9.2.2 Capex

Table 11 sets out PoM's 2019-20 forecast Capex for its Prescribed Services. PoM is forecasting an increase in its Capex in 2019-20 in the areas of:

- Channels – PoM is revising the scope of its 2019-20 dredging to take advantage of the availability of the Boskalis dredger *Magnor,* which will be in Australia late in 2019. This brings forward future planned work, so that PoM's forecast Capex in future years will reduce
- Wharves – PoM is undertaking works at Swanson Dock to comply with asset management obligations and to accommodate larger vessels, and
- Other – this incudes Capex relating to PoM's new office.

As discussed above, this forecast does not include Capex associated with the proposed Rail Project.

Table 11: Forecast 2019-20 Capex, $ Million

Capex category	2019-20 (F)
PCP	-
Channel (see note 2)	32.2
Wharves	57.9
Road	2.7
Rail	5.4
Plant	2.2
Other	6.5
Total (see note 1)	**107.0**

Notes:
1. Capex is for gross Capex (i.e. before capital contributions and asset disposals are removed).
2. The 'Channel' asset class includes channel protection assets.

Attachment 2 explains the method that has been used to prepare PoM's 2019-20 Capex forecast and why the forecast is prudent and efficient.

9.2.3 Rate of return on capital

The rate of return on capital (referred to as the WACC) aims to compensate PoM's debt and equity holders for the opportunity cost of either lending or investing their funds in the Port.

9.2.3.1 Pricing Order requirements

Clause 4.1.1(a) of the Pricing Order provides that the return on capital, required to calculate the ARR under the ABBM, should be:

> *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 which applies to the Port Licence Holder in respect of the provision of the Prescribed Services.*

Clause 4.3.1(a) of the Pricing Order states:

> *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.*

Clause 4.3.1(b) of the Pricing Order goes on to add:

> *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.*

In summary, the key Pricing Order requirements relating to the WACC are that it must be:

- calculated on a pre-tax nominal basis
- commensurate with that required by a benchmark efficient entity (BEE) providing services with a similar degree of risk to PoM in providing the Prescribed Services, and
- estimated using one or a combination of well-accepted approaches that distinguish the cost of equity and debt.

These requirements must be interpreted in the context of the objectives of the regulatory regime discussed in section 3.1. Critical to promoting the regulatory objectives is:

- the need for efficient investment in the long-term interests of users and Victorian consumers, and
- providing a reasonable opportunity for PoM to recover its efficient costs of providing the Prescribed Services (i.e. the costs that would be incurred by an efficient business in a workably competitive market, providing services with a similar degree of risk as that which applies to PoM in the provision of the Prescribed Services).

The pre-tax nominal WACC formula is expressed in Figure 7:

Figure 7: pre-tax nominal formula

$$\frac{R_e}{(1-t_c[1-\gamma])} * \frac{E}{E+D} + R_d \frac{D}{E+D}$$

Where:

Re = post-tax return on equity
Rd = pre-tax return on debt
D = proportion of debt within the assumed capital structure
E = proportion of equity within the assumed capital structure
t = corporate tax rate
γ = gamma (value of imputation credits)

9.2.3.2 Key areas of difference between PoM and ESC for 2018-19

PoM estimated a WACC of 11.52 per cent for 2018-19, which was slightly lower than its estimate of 11.54 per cent for 2017-18. In its 2018-19 TCS, PoM made some modifications to its 2017-18 approaches, including by:

- removing the US$100 million market capitalisation BEE threshold, and
- commencing a trailing average approach to estimate the return on debt, because this is more consistent with the debt management practices of a BEE.

In its 2018-19 Interim Commentary, the ESC compared PoM's WACC with recent regulatory determinations made by other Australian regulators. It stated that:

> *On a comparable basis, the port's WACC is materially higher than all but one recent regulatory determination in Australia.*[17]

It went on to add:

> *The port's relatively high WACC could be explained by industry or firm-specific factors, including aspects of different regulatory regimes. For example, energy and water businesses may involve less risk than the port's reference services.*[18]

The ESC concluded that:

> *These comparisons suggest further investigation, including of individual WACC parameters, is necessary.*[19]

The ESC noted that the reasons why PoM's WACC estimate is higher than the ESC's comparator set of WACC decisions are as follows:

- PoM's inclusion of the Fama-French Model (FFM) and Black CAPM[20] approaches to calculate the cost of equity, whereas the ESC considers that the Sharpe Lintner CAPM is the only well-accepted approach among these three models
- PoM's asset beta and equity beta values. The ESC considers that well accepted approaches tend to result in lower values
- PoM's use of an equal weighting of the Wright and Ibbotson approaches to calculate the market risk premium, whereas the ESC questioned whether the Wright approach was as equally well-accepted as Ibbotson, and
- PoM's equal weighting of three approaches to calculate gamma – market, non-market and finance theory – whereas the ESC considers that non-market approaches may be deemed well-accepted in light of other recent regulatory developments.

9.2.3.3 Different interpretations of "well accepted approaches" and key clauses in the Pricing Order

Each of the above differences between the ESC and PoM to calculating the WACC relate to what constitutes "well accepted approaches".

Its feedback to date suggests that the ESC's interpretation of "well accepted approaches" relies on three components:

- well accepted for setting the allowed return in the building block methodology
- well accepted by economic regulators, and
- in what circumstances an approach would be considered sufficiently well accepted by economic regulators - at a minimum, the approach is currently, or was recently, used by at least one regulator or review body.

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[17] ESC, Interim commentary - Port of Melbourne tariff compliance statement 2018-19, 26 October 2018, page 8

[18] *Ibid*

[19] *Ibid*

[20] Noting that the SL CAPM and Black CAPM provide the same cost of equity estimate when the equity beta is equal to 1.

PoM raised its concerns in its 2018-19 TCS about the narrowness of the ESC's interpretation and, in particular, that it:

- is not consistent with the requirements of the Pricing Order or the objectives of the regulatory regime
- is beyond the intent of the Pricing Order. The Pricing Order does not contemplate the ESC constraining PoM from considering approaches that are well accepted by other relevant parties, including financial and academic communities, and
- unduly restricts PoM's discretion intended by the regime by removing flexibility that is, and should be, built into the Pricing Order.

During 2018-19, PoM has undertaken further work on what constitutes "well accepted approaches", including by:

- giving careful consideration to ESC's October 2018 Interim Commentary
- obtaining further economic expert input, and
- engaging with the ESC and offering to have on-going meetings, including by involving experts as required, in order to better understand each other's view and to narrow the differences between them before the end of the five-yearly review period.

PoM considers that the Pricing Order should be applied:

- recognising that it is part of a unique, fit-for-purpose regulatory regime that was developed specifically for PoM at the time of the PLT
- having regard for the market in which PoM operates, including the effective competition that PoM has with other ports and transport modes and the risks that it faces, and
- consistently with the compliance nature of the regulatory framework, recognising the TAL and the Export Pricing Decision

not by reference to other industries, such as electricity and water networks, that:

- have different market dynamics, and
- are subject to full (deterministic) economic regulation.

PoM considers the Pricing Order allows PoM to use approaches that are well accepted by persons other than economic regulators, including finance practitioners and academics. PoM agrees with the ESC that whether an approach is well accepted is to be determined by a case by case assessment in each instance.

There are important differences between the Pricing Order and deterministic regulatory regimes. In the context of the WACC:

- clause 4.3.1 of the Pricing Order provides PoM with flexibility and discretion as to the approaches it uses to calculate the rate of return, provided those approaches are well accepted, and
- recognising the imprecision of the estimate of the required rate of return, there is no single correct approach or correct allowance that meets the requirements of clause 4.3.1 and 4.1.1(a). There could be a range of outcomes that are compliant with those clauses. PoM must demonstrate how its approach complies with the Pricing Order. It is not for the ESC to make a determination about what it considers to be the preferred approach or preferred rate of return.

PoM considers that these features of the Pricing Order and compliance regime allow ranges in individual WACC parameters (and the total return) to be applied by PoM.

PoM has taken this approach to determining the WACC range and point estimate for 2019-20.

9.2.3.4 PoM's estimate for 2019-20

In response to the ESC's feedback, and further analysis conducted by PoM, PoM has estimated a range for the pre-tax nominal WACC of 10.07 per cent to 10.92 per cent for 2019-20, with a point estimate of 10.46 per cent.

This is the first TCS in which PoM has presented a range for its WACC. PoM considers it is reasonable to determine a range to assess the efficient financing of a benchmark entity before choosing a point estimate from within the range based on a qualitative assessment of PoM's risk profile. The use of a range is consistent with the unique nature of the Pricing Order, which establishes processes for PoM to follow in setting prices for its Prescribed Services that must give it a reasonable opportunity to recover revenue in the range of efficient costs.

The point estimate is based on a pre-tax return on debt of 5.24 per cent, a pre-tax return on equity of 12.69 per cent and gearing of 30 per cent and is used in the ABBM calculation. This is a reduction compared to PoM's 2018-19 pre-tax nominal WACC of 11.52 per cent.

An expert report from Synergies Economic Consulting titled "*Determining a WACC estimate for Port of Melbourne*" is provided at **Appendix N** that explains both the range and the point estimate. In particular, it explains that PoM's estimated WACC is:

- determined using one or a combination of well-accepted approaches
- 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 PoM in respect of the provision of the Prescribed Services, and
- consistent with the achievement of the objectives in section 48(1) of the PMA, set out in section 3.1.

Based on **Appendix N**, PoM considers that its approach to determining the rate of return, including the development of the range and point estimate, complies with the requirements of the Pricing Order.

Table 12 overviews the key components of the WACC formula and PoM's approach to estimating each of these components for the purposes of its 2019-20 WACC. Further detail is provided at **Appendix N.**

Table 12: Pre-tax nominal rate of return

Element	Definition and estimation approach	Consistent with 2018-19 approach
Return on equity (pre-tax)	The return on equity is the return required by shareholders when providing equity capital. There is no immediate and direct means for observing, on an ex ante basis, what investors require by way of equity returns. Accordingly, estimates of the rate of return on equity have to be derived from market data and other evidence, making use, in general, of asset pricing models and other methods. In its previous two TCS submissions, PoM has adopted the equal weighting of three well accepted approaches: Sharpe-Lintner Capital Asset Pricing Model (SL CAPM); Black CAPM; Fama French Model (FFM) (the multi-model approach). This is because there were no substantive grounds to favour one approach over the other. Recognising data issues in regard to the availability of country-specific factors for the FFM, as well as the statistical significance of the zero-beta premium for the Black CAPM, PoM has modified the weightings on its three cost of equity approaches. For the 2019-20 TCS, PoM has increased the weighting on the SL CAPM to 90 per cent, and decreased the weighting on the Black CAPM and FFM to 5 per cent each. Based on expert regulatory advice, PoM continues to consider that these approaches are well-accepted within the meaning of the Pricing Order for estimating the cost of equity. As such, PoM retains its right to increase the weighting on the Black CAPM and FFM in future submissions if data issues are resolved. In regard to the market risk premium (MRP), which is a component of the return on equity, PoM has previously assigned equal weighting to the Ibbotson and Wright MRP approaches. PoM adopted an equal weighting on the basis that the MRP is likely to vary inversely with the risk-free rate, rather than remain constant over time. For its 2019-20 TCS, PoM has adopted a 50 per cent weighting on the Ibbotson MRP, a 25 per cent weighting on the Wright MRP, and a 25 per cent weighting on dividend discount models (DDMs). DDMs are currently relied upon to various extents by other Australian economic regulators. Moreover, the incorporation of DDMs adds a forward-looking component to PoM's MRP estimate.	No – weights on the SL CAPM, Black CAPM and FFM have been adjusted to 90 per cent / 5 per cent / 5 per cent, respectively – previously they were equally weighted. No – MRP weights have been changed to incorporate DDMs.

Element	Definition and estimation approach	Consistent with 2018-19 approach
Return on debt (pre-tax)	The return on debt is the required yield (or interest) on issued debt. The cost of debt is the sum of the risk-free rate (Rf) and an estimate of the debt risk premium (DRP) consistent with the risk profile of the BEE. In the 2018-19 TCS, PoM commenced a 10-year trailing average approach, which placed 90 per cent weight on the 2017 and 10 per cent on the 2018 on-the-day estimates. In the 2019-20 TCS, PoM has continued the trailing average approach, placing weights of 80 per cent, 10 per cent and 10 per cent on the 2017, 2018 and 2019 on-the-day estimates, respectively. In each subsequent year, 10 per cent of the return on debt estimate will be refreshed with the prevailing on-the day estimate for the given year. This method will result in less volatility over time and is more consistent with the debt management practices of a BEE. The trailing average approach is well accepted and is applied by more than one Australian economic regulator.	Yes – no change
Capital structure (gearing)	The capital structure (gearing) is needed to distinguish the relative proportion of equity and debt in the financing arrangements of a BEE. PoM has assumed a benchmark gearing ratio of 30 per cent based on the mid-point of domestic and international comparator entities' capital structures, which range from 21 per cent (based on the median of listed comparators) to 42 per cent (average and median of the acquisition comparators).	Yes – no change
Gamma	Gamma is an estimate of the expected proportion of company tax which is returned to investors as a tax credit through utilisation of imputation credits. PoM has not changed its approach to the calculation of gamma – the reasons for this are detailed in **Appendix N**. PoM has calculated gamma based on an equal weighting of the estimates derived from three well-accepted approaches: finance theory; an equity ownership approach; and the market valuation studies. The estimate derived from the equity ownership approach has been updated to reflect recent regulatory decisions. This does not change the overall gamma estimate for PoM of 0.25.	Yes – no change

Table 13 details the parameter estimates calculated for each element of its 2019-20 WACC. Figure 7 above shows the pre-tax nominal WACC formula, which comprises the pre-tax return on equity plus the pre-tax return on debt, where:

Re = Return on equity (pre-tax) = Return on equity (post-tax) ÷ (1- corporate tax X (1- gamma)), where
Return on equity (post-tax) = (Market Risk Premium X Equity Beta) + Risk Free Rate

E / (D+E) = (share of equity) (1-gearing)

Plus

Rd = Pre-tax return on debt = Risk free rate + Debt risk premium + Debt raising costs

D / (E+D) = (share of debt) (gearing)

The return on equity in Table 13 is based on the multi-model approach rather than the direct application of the numbers in this table using the above formula. A more detailed discussion of the parameters relevant to the WACC estimate, including the range for each parameter, is at **Appendix N**.

Table 13: Cost of capital parameters values underpinning PoM's 2019-20 WACC estimate

Element	2019-20 (F)
Return on equity (pre-tax) (**Re**)	12.69%
Market risk premium	7.77%
Equity beta	1.00
Risk free rate	1.96%
Corporate tax ($\mathbf{t_c}$)	30%
Gamma (γ)	0.25
Return on debt (pre-tax) (**Rd**)	5.24%
Risk free rate	1.96%
Debt risk premium	3.18%
Debt raising costs	0.10%
Capital structure (gearing)	
Share of debt (D/(E+D))	30%
Share of equity (E/(E+D))	70%
Pre-Tax Nominal WACC	**10.46%**

9.2.3.5 Benchmarking PoM against other regulated and non-regulated businesses

Appendix N provides a detailed discussion of how PoM's WACC estimate and its components benchmark against other regulated and non-regulated businesses.

The benchmarking analysis shows that PoM's WACC is commensurate with its risk profile in a workably competitive market and is consistent with the observed returns of comparable listed unregulated businesses selected based on a first principles analysis. In particular, PoM's WACC is comparable with listed unregulated businesses based on pre-tax and post-tax cost of equity margins.

As discussed in section 3.2, PoM is different to other regulated businesses such as electricity and water networks that have different market dynamics and are subject to different forms of economic regulation and consequently face materially different risks. For this reason, PoM has not included regulated electricity and water assets in its benchmarking analysis. For completeness, PoM has included regulated transportation businesses in the benchmarking analysis, however, would caution that a number of these businesses are inappropriate comparators as they operate under inherently different regulatory frameworks.

9.2.4 Depreciation and economic asset lives

9.2.4.1 Economic asset lives

Clauses 4.4.1(a) and 4.4.1(b) of the Pricing Order provide that PoM must depreciate its assets over a period no shorter than the economic life of the relevant asset or the remaining term of the lease, whichever is shorter.

Table 14 shows the economic lives for PoM's new Capex and the remaining lives of existing assets.

Table 14: Economic lives for new Capex and remaining asset lives

Asset category	Economic lives for new Capex	Remaining lives for the initial capital base as at 1 July 2016
Melbourne Channel	50	50
Melbourne Channel Over Dredge	3	1.5
Shared Channels	50	50
Shared Channel Over Dredge	3	1.5
Channel Protection Assets	n.a.	23
Channel Service Protection	40	14
Roads	20	8
Rail	30	18
Buildings	25	26
Wharves	25	23
Plant	10	18
Land	50	50
PCP - Wharves	50	n.a.
PCP - Civil	50	n.a.
Navigational Aids	30	n.a.
Utilities	25	n.a.
Civil	30	n.a.
Minor capital works	40	n.a.

Note: remaining life of ‘n.a.’ is assigned to asset classes that had zero value as at 1 July 2016.

The ESC’s 2018-19 Interim Commentary sought further information on PoM’s approach to determining the economic asset lives, particularly where they changed or where PoM is not relying on the CH2M report that was commissioned by the Victorian Government at the time of PLT.

The asset categories and economic lives that PoM presented in its 2018-19 TCS were consistent with the CH2M report, except for:

- Channels, which PoM broke down further into the following categories: Melbourne channel; Melbourne channel over dredge; shared channels and shared channel over dredge, and
- Plant, which PoM broke down further into buildings, utilities, civil and minor-capital works.

PoM does not consider that these changes have a material impact on the depreciation profile and has not undertaken further work to justify them. PoM considers that these changes are reasonable in order to better reflect the economic lives of sub-categories of assets and are consistent with the flexibility and discretion for determining the return of capital in the Pricing Order.

9.2.4.2 Use of the alternative depreciation method

The ESC raised a number of concerns in its 2018-19 Interim Commentary about the transparency and compliance of PoM's calculation of depreciation, including about including a zero value in the ARR if depreciation is being deferred and only recovering depreciation once over the term of the lease.

In its new regulatory model at **Appendix B**, PoM has:

- adopted a simple, transparent approach to calculating depreciation, in order to demonstrate that it is fully compliant with clause 4.4 of the Pricing Order – the five-step approach is discussed below
- continued to use the alternative depreciation methodology permitted by clause 4.4.2(a) of the Pricing Order, rather than straight-line depreciation under clause 4.4.1 of the Pricing Order. This is because the application of the TAL prevents PoM increasing tariffs to the level whereby PoM could recover its ARR (calculated under the ABBM) with the application of straight-line depreciation. PoM has set the 2019-20 return of capital to zero and deferred recovery of straight-line depreciation to future years. This method complies with the Pricing Order provisions relating to depreciation, including clause 4.4.3, which requires that the return of capital allowance is not below zero, and
- used the capital base values described in section 9.2.1 and the economic and average remaining asset lives from Table 14 above and the regulatory model at **Appendix B**. The regulatory model demonstrates that its methods for calculating deferred and straight-line depreciation only recover depreciation once. This means that the amount by which each asset, or group of assets, is depreciated over the depreciation period does not exceed the value of the asset, or group of assets, at the time of its or their inclusion in the capital base.

The new regulatory model at **Appendix B** uses a five-step approach for the TAL period:

- *Step 1* – straight line depreciation on the initial capital base and new Capex is calculated for a given year, independent of what has been returned (via the return of capital component of the ARR)
- *Step 2* – the depreciation from step 1 for a given year is combined with the balance of depreciation from prior years that has not yet been recovered to give the total depreciation that is available for recovery in that year
- *Step 3* – the headroom between the forecast revenue (during the TAL period) and the other components of the ARR (i.e. the return *on* capital, indexation and forecast Opex) is calculated
- *Step 4* – the return of capital is calculated as the minimum of the depreciation available for recovery calculated in step 2 and the headroom calculated in step 3, reduced by any nominated deferral (which may be done to reduce the variation of tariffs), and
- *Step 5* – any unrecovered straight-line depreciation from a given year is added to the closing balance of the unrecovered depreciation balance for that year (to be used to determine the return of capital for the next year).

Importantly, the unrecovered depreciation balance sits within the capital base. That is, any unrecovered depreciation remains within the capital base until it is recovered through the return of capital component of the ARR. This ensures that the initial capital base and any new net Capex is not recovered more than once.

PoM's forecast straight-line depreciation is set out in Table 10 for 2019-20.

Given this is only the third year of the regulatory regime (and the TAL period), PoM cannot, at this stage, provide a precise indication of the timing and approach for recovering its deferred depreciation. PoM acknowledges that this is a matter of significant importance to future Prescribed Services' tariffs. Factors that will affect the amount of deferred depreciation include:

- future import volumes that are driven by domestic demand, population growth and the value of the Australian dollar, levels of domestic manufacturing and the location of domestic manufacturing (imports are primarily driven by domestic consumption)
- future export volumes that are driven by the economic growth of Victoria's trading partners (exports are primarily driven by foreign demand for Victorian products)

- the level of new capital investment during the TAL period, such as for example to accommodate larger ships, and
- the length of the TAL period, which is discussed in section 6.

PoM will consult Port Users and other stakeholders and the ESC on options for recovering any deferred depreciation to minimise volatility in tariff levels through price smoothing closer to the end of the TAL period, if deferred depreciation is yet to be recovered at that time. PoM will continue to engage with Port Users and other stakeholders and the ESC on the key principles underpinning its approach to recovering deferred depreciation in the future, including its commitment to smooth prices.

9.2.5 Opex

Table 15 sets out PoM's 2019-20 forecast Opex for Prescribed Services. Around 80 per cent of PoM's 2019-20 forecast Opex is non-controllable and relates to two items, being the PLF and the CCA. These items are required by, and are calculated in accordance with the relevant requirements of, the PMA[21] and the Port Concession Deed (PCD)[22] respectively and are deemed to be prudent and efficient under clause 4.5 of the Pricing Order. As a result, only around 20 per cent, or $26 million, of Opex is controllable by PoM.

Attachment 1 explains the method that has been used to prepare PoM's 2019-20 Opex forecast and why the forecast is prudent and efficient. It also explains the basis on which Opex has been allocated between Prescribed Services, non-Prescribed Services and shared services.

Table 15: Forecast 2019-20 Opex, $ Million

Opex categories	2019-20 (F)
Port Licence Fee	86.3
Cost Contribution Amount	15.9
Labour	9.6
Repairs and Maintenance	3.7
Other	12.8
Total	**128.2**

9.2.6 Indexation allowance

The indexation building block, as required under clause 4.1.1(d) of the Pricing Order, impacts the overall ABBM by its inclusion as a negative amount. This deduction from the ABBM is made to maintain a real rate of return given that a nominal rate of return, discussed in section 9.2.3, is applied to an inflation-adjusted capital base[23], discussed in section 9.2.1. The indexation building block is the sum of the following, as discussed in section 9.2.1 above:

- the indexation of the opening capital base (clause 4.6.1(a) of the Pricing Order), and
- half a year's inflation on Capex (clause 4.6.1(b) of the Pricing Order).

[21] The Port Licence Fee has been calculated in accordance with sections 44K and 44J of the PMA
[22] The Cost Contribution Amount has been calculated in accordance with clause 27.1 of the PCD
[23] The capital base includes an allowance for indexation

PoM has used the annual March all capital cities CPI (with a one year lag) in accordance with clause 4.6 of the Pricing Order to calculate the indexation allowance.[24] The detailed calculations are contained in PoM's regulatory model provided at **Appendix B**.

Table 16: Indexation allowance, $ Million

	2019-20 (F)
Indexation Allowance	(61.5)

9.3 Prescribed Services' revenue (subject to the TAL)

The TAL is defined by the Pricing Order as "…the percentage change in CPI between the March quarter immediately preceding the relevant Financial Year and the March quarter in the Financial Year two years preceding the relevant Financial Year".

The 2019-20 TAL is based on the percentage change between the 2018 March quarter[25] and 2019 March quarter CPI[26] (All Groups Index Number, weighted average of eight capital cities published by the Australian Bureau of Statistics) and is 1.3 per cent.

The 2019-20 Prescribed Services' revenue (subject to the TAL) is derived by:

- applying the TAL of 1.3 per cent to the tariffs set out in PoM's 2018-19 RTS (other than full outward containerised wharfage tariffs, which are decreased by 2.5 per cent), and
- multiplying these tariffs by the 2019-20 forecast trade volumes prepared by BIS Oxford and PoM, in relation to channel volumes only (discussed in section 7 and **Appendix H).**

However:

- as agreed with the ESC, the calculation of the WATI excludes revenue from contracts with Port Users for Prescribed Services. The WATI is the weighted average rate of change in all tariffs, excluding tariffs for full outbound container wharfage services, and
- in response to feedback from the ESC on the 2018-19 TCS, PoM has for 2019-20 calculated the WATI using weightings based on its 2017-18 audited revenue. The 2019-20 WATI (excluding tariffs for full outbound container wharfage services) is 1.3 per cent. **Appendix H** is KPMG's "Report of factual findings – Prescribed Services Revenue – 30 June 2018".

PoM has added Prescribed Services' revenue associated with the legacy contracts to "Prescribed Services' revenue (subject to the TAL)" for the purposes of comparing it with the "ARR" in Table 1 and Table 17. PoM has agreed to this treatment of legacy contracts with the ESC.

For the avoidance of doubt, PoM's total Prescribed Services' revenue comprises:

- Prescribed Services' revenue (subject to the TAL), and
- revenue from both legacy and new contracts for Prescribed Services. This contract revenue is confidential and is separately reported to the ESC in **Appendices D** and **O**.

[24] In its 2017-18 TCS, PoM used the annual March CPI to index its capital base. In its 2018-19 TCS, PoM changed to the annual June CPI following feedback from the ESC on PoM's 2017-18 TCS. However, in its feedback on PoM's 2018-19, the ESC requested that PoM revert to using the annual March CPI. PoM supports changing back to its original indexation approach (i.e. annual March CPI), and has reflected this into the regulatory model at **Appendix B**. PoM expects that this will be the final change and that the annual March CPI will be the long-term approach. This is because consistency of approach is important over time.

[25] Twelve month March quarter CPI.

[26] This is consistent with the TAL as defined in the Definitions section of the Pricing Order being "*the percentage change in CPI between the March quarter immediately preceding the relevant Financial Year and the March quarter in the Financial Year two years preceding the relevant Financial Year*.

9.4 Comparison of ARR and Prescribed Services' revenue (subject to the TAL) plus revenue for legacy contracts

Table 17 compares the ARR with PoM's Prescribed Services' revenue (subject to the TAL) plus revenue from legacy contracts.

Table 17: Comparison of 2019-20 ARR and Prescribed Services (subject to the TAL) plus revenue from legacy contracts, $ Million

	2019-20
ARR (i.e. from Table 9)	1,326.3
Prescribed Services' revenue (subject to the TAL) plus revenue from legacy contracts	388.6
Under-recovery of ARR	**(937.7)**

Table 17 shows that the 2019-20 Prescribed Services' revenue (subject to the TAL) plus revenue from legacy contracts is $937.7 million below the ARR of $1,326.3 million. This means that PoM's efficient costs of providing Prescribed Services are more than its forecast Prescribed Services' revenue in 2019-20.

10. 2019-20 tariffs

As outlined in section 9.3, the forecast 2019-20 Prescribed Services' revenue (subject to the TAL) plus revenue from legacy contracts is lower than the ARR (calculated under the ABBM). PoM's 2019-20 tariffs are therefore subject to the TAL (except for tariffs for full outbound container wharfage services, as discussed below).

PoM also confirms that:

- its WATI (excluding tariffs for full outbound container wharfage services) for Prescribed Services is 1.3 per cent
- it has decreased tariffs for full outbound container wharfage services by 2.5 per cent from 2018-19 levels, in accordance with clause 2.3 of the Pricing Order. All other tariffs will increase by the TAL of 1.3 per cent, being the annual change in the Consumer Price Index (CPI) to March 2019, and
- it has not rebalanced its tariffs. All tariffs (except tariffs for full outbound container wharfage services) have been adjusted by the same percentage adjustment (i.e. the TAL of 1.3 per cent) consistent with clause 3.2.1 of the Pricing Order. There are no new or discontinued tariffs from 2018-19.

PoM's 2019-20 tariffs are set out in the RTS provided at **Appendix A** and are effective from 1 July 2019.

As agreed with the ESC, PoM has calculated its 2019-20 tariffs by applying the cumulative CPI index to the Initial Prescribed Services Tariffs, rather than by apply the annual CPI to the previous year's tariffs. This results in minor aggregate rounding differences that are self-correcting over time, as demonstrated in **Appendix B**.

10.1 Upper and lower bounds

Clause 2.1.1 of the Pricing Order requires that revenue for each Prescribed Service Bundle should be on, or between, the upper bound (clause 2.1.1(b)(i)), which represents the stand-alone cost of providing each Prescribed Service Bundle, and the lower bound (clause 2.1.1(b)(ii)), which represents the avoidable cost of not providing the Prescribed Service Bundle. This is commonly known as the "efficient pricing band".

In its feedback on the 2018-19 TCS, in particular in its Information Requests, the ESC sought more information about:

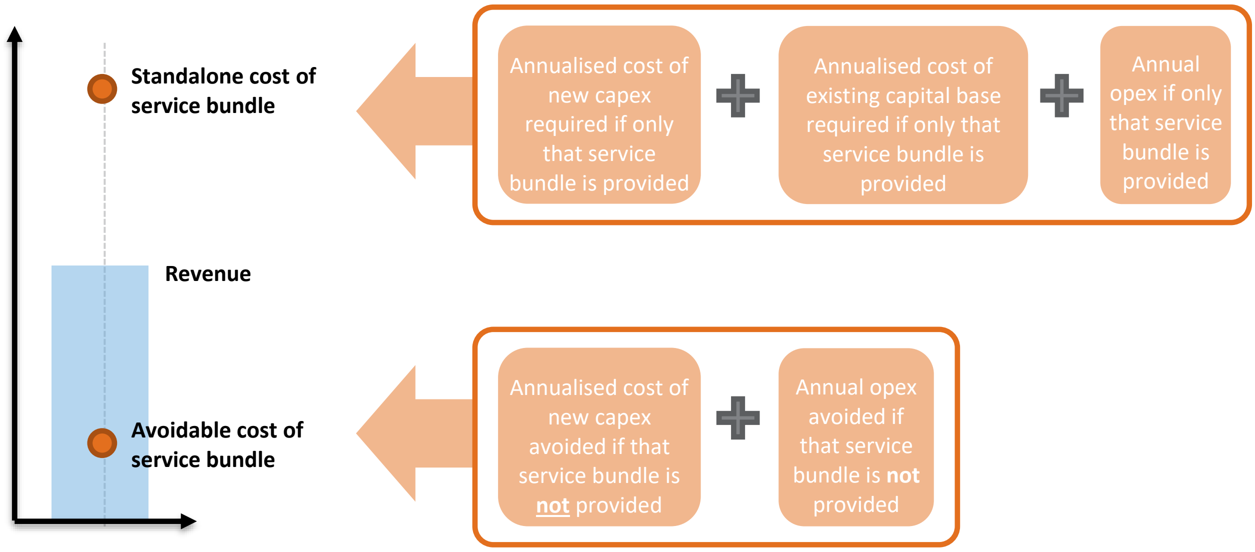
- how PoM created each Bundle and allocated revenues and costs to each Bundle, and
- why it used data from 2013-14 to 2016-17 for this analysis, rather than more recent data/forecasts.

In response to this feedback, PoM has prepared a new Efficient Cost Bounds' Model and an accompanying Efficient Cost Bounds' User Guide – they are at **Appendices F** and **G**. They show how, based on the assumptions used, PoM complies with the Pricing Order by:

- estimating the indicative standalone and avoidable costs of supplying each Prescribed Services Bundle, based on the most recent available data, and
- demonstrating that forecast revenue for each Prescribed Services Bundle falls within those efficient pricing bounds in accordance with the pricing principles in the Pricing Order.

Figure 8 shows the conceptual approach that is used in the model. The blue bar represents the revenue from a given Prescribed Services Bundle, while the two orange circles represent the standalone and avoidable costs for that bundle. The two boxes to the right illustrate what components are used in the efficient cost bounds model to make up the two cost measures respectively.

Figure 8: Illustrative representation of the efficient cost bounds



In this way, the efficient cost bounds model demonstrates that PoM's forecast revenue for each Prescribed Service Bundle complies with clause 2.1.1 of the Pricing Order by falling within the efficient pricing band.

PoM recognises that the Efficient Cost Bounds' Model will be relevant to its tariff rebalancing activity that it proposes to undertake in 2019.

11. Efficient cost recovery (ECR)

ECR is required to promote the objectives in section 48(1)(a) of the PMA:

- that PoM should have a reasonable opportunity to recover its efficient costs of providing Prescribed Services, including a return commensurate with the risks involved, and
- to promote efficient investment for the long-term interests of Port Users and Victorian consumers.

Clause 2.1.1(a) of the Pricing Order reinforces these requirements through the ECR principle which requires:

> *Prescribed Service Tariffs must be set so as:*
>
> *(a) to allow the Port Licence Holder a reasonable opportunity to recover the efficient cost of providing all Prescribed Services determined by application of an accrual building block methodology of the type described in clause 4 (Aggregate Revenue Requirement)*

Importantly, there is no express qualifier on this principle in relation to the application of the TAL. This means that the principle that PoM should have a "reasonable opportunity" to recover its efficient costs and commensurate return is independent of the obligation to apply the TAL during the period until at least 2032 and at the latest 2037.

Allowing PoM to recover its efficient costs of, and commensurate return on, investment is important to avoid compounding PoM's under-recovery of its efficient costs and having a higher capital base and tariffs at the end of the TAL period. These matters are particularly important because the Pricing Order constrains the depreciation period to the end of the lease.

PoM is also required to promote efficient investment. It is not reasonable to expect that any port operator (whether regulated or unregulated) would undertake investment where it is not commercially sustainable, due to an inability to recover efficient costs and commensurate return. For this reason, PoM is seeking amendments to the Pricing Order so as to ensure that it could recover its efficient costs of investing in the proposed Rail Project. However, because PoM's proposed amendments to the Pricing Order have not been made at the time of submitting this TCS, PoM has not included the increases in Capex, Prescribed Services' revenues or the wharfage tariff in this TCS.

PoM's previous and current TCS show that because PoM's tariffs are subject to the TAL in 2017-18 and 2018-19, PoM will not recover its efficient and prudent costs of providing Prescribed Services as calculated by the ABBM in these years. Current analysis also indicates that PoM will not recover its efficient costs and commensurate return of providing Prescribed Services for the remainder of the TAL period (i.e. until at least 30 June 2032 and at the latest 30 June 2037).

12. Confidentiality

This TCS is submitted to the ESC under clause 7 of the Pricing Order and sets out the details, and provides the information and explanations required under, that provision. This TCS is confidential and commercially sensitive and is provided to the ESC on a strictly confidential basis. The Pricing Order does not require the ESC to publish this TCS or to otherwise disclose confidential and commercially sensitive information contained in this TCS. To this end, PoM requests that the ESC treat this TCS as strictly confidential, unless otherwise agreed by the PoM.

Attachment 1 – 2019-20 forecast Opex for Prescribed Services

Opex is the operating, maintenance and other non-Capex that PoM incurs to provide Prescribed Services. Table 18 shows PoM's 2019-20 forecast Opex compared to its:

- 2017-18 actual Opex, and
- 2018-19 forecast Opex submitted to the ESC in its 2018-19 TCS.

Table 18: 2017-18 to 2019-20 Prescribed Services Opex by category ($, Million)

Opex categories	2017-18 (A)	2018-19 (F)	2019-20 (F)
Port Licence Fee	82.5	84.4	86.3
Cost Contribution Amount	15.3	15.6	15.9
Insurances, rates and taxes	0.5	1.0	1.0
Labour	9.3	10.0	9.6
Repairs and maintenance	3.5	4.0	3.7
Other – Utility and Administration (inc. security)	7.0	7.5	6.7
Other – Professional and Advisory	3.6	4.1	3.8
Transition	2.8	1.2	1.4
Total	**124.6**	**127.8**	**128.2**

Attachment 1 of this document provides a mapping of the Opex categories in Table 18 to the Opex categories in the regulatory model, at **Appendix B.**

Figure 9 to Figure 11 show each Opex category as a proportion of total annual Opex for 2017-18 to 2019-20.

Figure 9: 2017-18 (A) Opex – category as a % of total

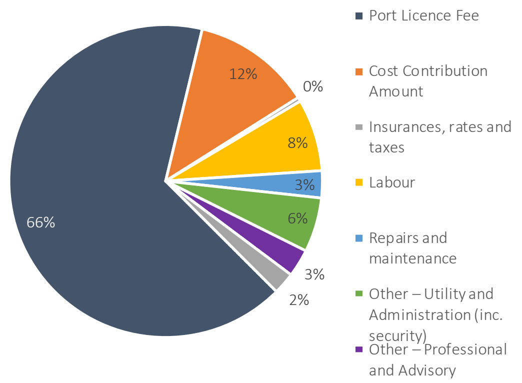


Figure 10: 2018-19 (F) Opex – category as a % of total

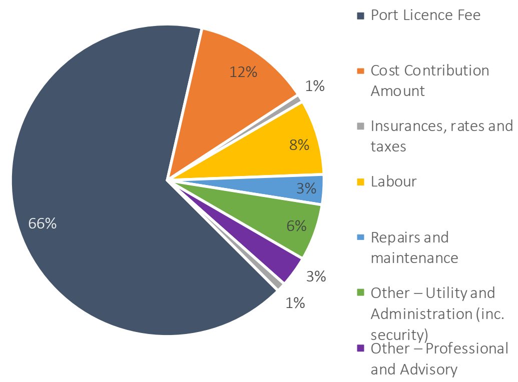


Figure 11: 2019-20 (F) Opex – category as a % of total

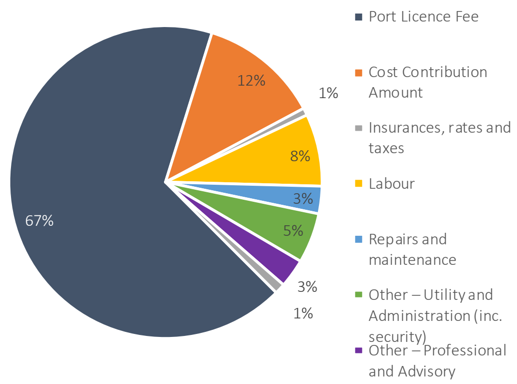


Table 18 shows that around 80 per cent of PoM's 2019-20 forecast Opex relates to two items – the PLF and the CCA. These items are non-controllable Opex. They are required by, and calculated in accordance with, the relevant requirements in the PMA[27] and PCD[28]. The PLF and CCA are deemed to be prudent and efficient under clause 4.5 of the Pricing Order.

Only around 20 per cent, or $26 million, of PoM's 2019-20 forecast Opex is therefore controllable by PoM, which is in line with prior years.

1.1. Efficiency and prudence of Opex

PoM's Opex is compliant with clause 4.1.1 of the Pricing Order, which requires PoM's Opex to reflect that required by an efficient and prudent service provider.

PoM's 2019-20 controllable Opex is efficient and prudent because it:

- is based on PoM's most recent actual Opex which provides the best available information or outcomes from competitively tendered contracts
- reflects business as usual expenditure requirements, which are prepared as part of its annual budget process. The 2019-20 Opex forecasts reflect PoM's current view of the budget at the time PoM is submitting this TCS to

[27] The Port Licence Fee has been calculated in accordance with sections 44K and 44J of the PMA
[28] The Cost Contribution Amount has been calculated in accordance with clause 27.1 of the PCD

the ESC. PoM's 2019-20 Opex budget will not be finalised until June 2019. The forecasts in this TCS may therefore not reflect PoM's final Opex budget for 2019-20, and

- reflects the application of PoM's asset management system, which has been certified to International Standards Organisation (ISO) 55001:2014 - Asset Management. This is discussed further in section 1.5 of **Attachment 2**.

Further, the following controls, practices and procedures apply to ensure all aspects of PoM's Opex are prudent, efficient and deliver value for money:

- procurement policy and approach – PoM reviewed and updated its Procurement Policy in 2017 following an internal audit administered by Deloitte Risk Advisory (Deloitte). PoM's Procurement Policy drives commercial outcomes through competitive tendering (appropriate to the value of the contract engagement) to identify preferred suppliers. This competitive pressure on suppliers will ensure that PoM only incurs efficient costs for all outsourced arrangements through market-based pricing. PoM provided a copy of its Procurement Guidelines in response to the ESC's Information Request #2 on PoM's 2018-19 TCS.
- internal audit – Deloitte has been extended to 30 June 2021 to undertake ongoing internal audit of various areas across PoM in order to assess whether the necessary controls and processes are in place, and are being followed, and to identify areas for improvement. The guiding themes underpinning these internal audits are: safety and security of all who use the Port; the need to enhance and streamline operations to ensure sustainable business performance; compliance with the concession deed and legislative and regulatory requirements; infrastructure forward planning; sound financial management to support decision making; and corporate social responsibility
- contract structure – PoM's repairs and maintenance contracts are structured based on fixed and variable cost components to ensure only necessary works are undertaken with all additional works subject to inspections or reviews and different rate schedules. This is discussed in section 1.2 below, and
- PoM has sound recruitment policies and practices in place to ensure labour costs remain efficient and prudent and reflect current market conditions.

The fact that PoM's forecast 2019-20 Prescribed Services' revenue (subject to the TAL) plus revenue from legacy contracts is lower than the ARR (calculated under the ABBM) provides a strong incentive for PoM to constrain its Opex to prudent and efficient levels. Unlike depreciation costs which can be deferred for future recovery (when Prescribed Services' revenue (subject to the TAL) is less than the ARR), unrecovered Opex during the TAL period is not recoverable in the future.

1.2. Opex forecasting method

PoM has forecast its 2019-20 Opex using a "bottom-up" approach of summing estimated efficient costs for each Opex category. These forecasts are internally developed by subject matter experts (SME) at a Natural Account Code level. This is consistent with the approach applied by PoM to forecast its 2018-19 Opex submitted to the ESC in its 2018-19 TCS.

The individual Opex categories are explained below together with an explanation of how PoM has forecast 2019-20 Opex.

Table 19: Description of Opex categories and PoM's approach to forecast Capex by category

Opex category	Description and forecasting methodology
Port Licence Fee and Cost Contribution Amount	The PLF has been calculated in accordance with sections 44K and 44J of the PMA. The CCA has been calculated based on clause 27.1 of the PCD. In accordance with clause 4.5 of the Pricing Order, costs associated with the PLF and CCA payable under the PCD are deemed prudent and efficient.
Insurance Costs, Rates and Taxes	The largest component of this expenditure category is insurance costs. PoM's 2019-20 insurance forecast is based on the actual invoiced premiums for 2018-19, which relate to coverage for: • industrial special risks (property) • port operators liability

Opex category	Description and forecasting methodology
	• environmental impairment liability • directors' and officers' liability • crime • motor vehicle • marine hull and protection and indemnity • marine cargo • business travel • cyber liability • Tasmanian workers compensation • contract works • public and products (construction) liability These actual invoiced premiums for 2018-19 are then adjusted based on discussions with PoM's insurance broker. The adjustments accommodate expected changes in premiums related to, for instance, market trends and increases in values of commissioned assets (following the completion of projects or expected revaluation increases on Property Plant and Equipment). PoM typically pays its insurance on an annual basis. Forecast expenditure relating to rates and taxes is also based on prior year actual expenditure.
Labour	PoM operates under a landlord port model and therefore the majority of its operational activities relate to the management of port infrastructure and related assets. As such, employee time is typically related to the business as a whole, apart from certain specific responsibility / cost centres which attribute all their time to a particular business segment. Labour costs relate to employee labour and on-costs. These costs are based on prior year actual expenditure adjusted for known and expected changes in required resources.
Repairs and Maintenance	Repairs and Maintenance Opex relates to repairs and maintenance on electrical infrastructure, roads and civil, hazardous berths, navigational aids and wharves, buildings and other repairs and maintenance. The 2019-20 Repairs and Maintenance forecast is based on competitively tendered fixed and variable contracts with PoM's suppliers. The fixed component of the contracts comprises around 85 per cent of the total 2019-20 Repairs and Maintenance forecast and relates primarily to routine testing, inspection and maintenance of assets. Routine inspection, testing and maintenance is driven by legislative and regulatory compliance (such as the *Building Regulations 2006*), asset criticality and implications of failure associated with these assets. The variable component comprises around 15 per cent of the total forecast and relates primarily to operation and repairs. The works program is largely driven by the asset condition reports arising from the inspection regime undertaken as part of the fixed component of the contract. This ensures that expenditure on these assets is only undertaken as and when required to maintain asset operability and condition.
Other – Utility and Administration (including security)	Other support costs include security, utilities and administration and IT, which are necessary to support the management function. In relation to: • security – This on-going contract comprises a fixed and a variable component. PoM's security requirements are primarily driven by regulatory compliance obligations under the *Maritime Transport and Offshore Facilities Security Act 2003* (Cth) (MTOFSA) and *Maritime Transport and Offshore Facilities Security Regulations 2003* (Cth) (MTOFSR)) • utility and administration – this relates to costs for advertising and promotions, professional memberships and corporate subscriptions, electricity and water charges, communication costs and training and conferences. These costs are based on actual costs in the prior year and are adjusted for known and expected changes. • IT – these costs are based on actual software licencing costs in the prior year (with the major licences being for Microsoft, TechnologyOne and Objective) and are adjusted for known and expected changes.
Other – Professional and Advisory	This relates to the engagement of professional services including legal, accounting, tax and audit, environmental, as well as engineering condition inspections. PoM's 2019-20 forecast is based on average actual costs in earlier years and adjusted for known and expected additional engagements and the consumer price index (CPI).

1.3. Opex mapping to regulatory model categorisation

Table 20 shows how the Opex categories in Table 18 relate to the more granular Opex categories in the regulatory model, at **Appendix B**.

Table 20: Mapping between Opex categories in Table 18 and the regulatory model

<table>
<tr><th>Regulatory model</th><th>TCS</th></tr>
<tr><td>Port Licence Fee</td><td>Port Licence Fee</td></tr>
<tr><td>Cost Contribution Amount</td><td>Cost Contribution Amount</td></tr>
<tr><td>Insurance, Rates & Taxes</td><td rowspan="2">Insurances, rates and taxes</td></tr>
<tr><td>Land Tax</td></tr>
<tr><td>Labour Costs</td><td>Labour</td></tr>
<tr><td>Repairs & Maintenance</td><td rowspan="2">Repairs and maintenance</td></tr>
<tr><td>Construction</td></tr>
<tr><td>Contract Security</td><td rowspan="2">Other – Utility and Administration (inc. security)</td></tr>
<tr><td>Utilities, Admin, Rental & IT</td></tr>
<tr><td>Contractors and Professional Services</td><td>Other – Professional and Advisory</td></tr>
<tr><td>Transition</td><td>Transition</td></tr>
</table>

Attachment 2 – 2019-20 forecast Capex for Prescribed Services

Capex is typically associated with the creation of new assets, many of which have long asset lives, or the renewal or rehabilitation of existing assets that are in poor condition. Capex tends to be large and variable over time and recovery of these costs is therefore spread over the life of the asset to encourage efficient use of the asset.

1.1. Capex forecast

Table 21 sets out PoM's 2019-20 forecast Capex by category, compared to its:

- 2017-18 actual Capex, and
- 2018-19 forecast Capex submitted to the ESC in its 2018-19 TCS.

Table 21: 2017-18 to 2019-20 Prescribed Services Capex by category ($, Million)

Capex category	2017-18 (A)	2018-19 (F)	2019-20 (F)
PCP	1.7	-	-
Channel	7.2	12.9	32.2
Wharves	37.4	38.0	57.9
Road	1.5	4.1	2.7
Rail	2.3	5.9	5.4
Plant	0.8	3.4	2.2
Other	2.5	3.5	6.5
Total	**53.5**	**67.7**	**107.0**

Section 1.7 of this **Attachment 2** provides a mapping of the Capex categories in Table 21 to the Capex categories in the regulatory model, at **Appendix B.**

Figure 12 to Figure 14 show each Capex category as a proportion of total annual Capex for 2017-18 to 2019-20.

Figure 12: 2017-18 (A) Capex – category as a % of total

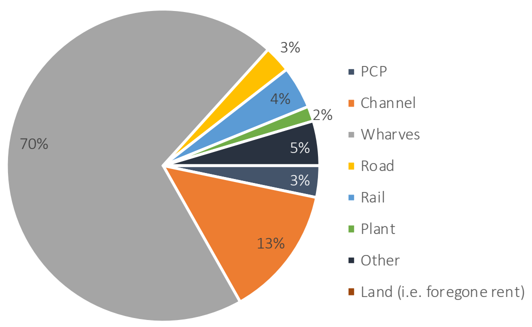


Figure 13: 2018-19 (F) Capex – category as a % of total

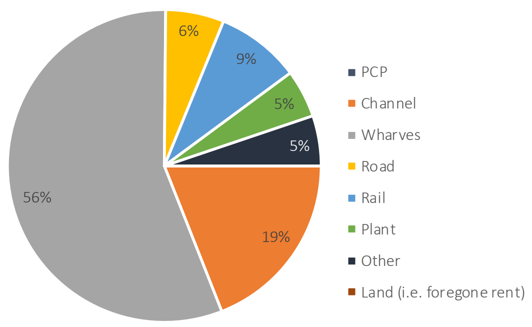


Figure 14: 2019-20 (F) Capex – category as a % of total

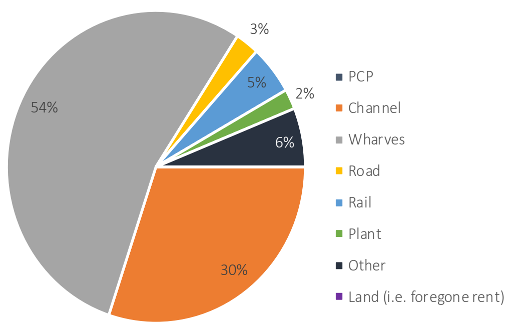


Table 21 and Figure 14 show the areas where PoM is forecasting increases in its Capex in 2019-20:

- Channels – The phasing of the five year dredging program has been adjusted for the availability of the Boskalis dredger *Magnor,* which will be in Australia late in 2019. The scope of the 2019-20 dredging works is being finalised following the completion of a simulation program for the large vessels in the Yarra River into Swanson Dock. Revising the scope of the 2019-20 dredging to take advantage of the availability of *Magnor* will result in higher costs in the short term, but overall cost savings for PoM, and therefore Port Users, in the long term.
- Wharves – The following are the key drivers of the increase in Capex on wharves in 2019-20:
    - Swanson Dock East Berth 2 Stage 2 works – these works will commence once the Stage 1 works are completed. The Stage 2 works are essential to maintain the integrity and utility of the berth as the timber piles supporting the rear crane rail are at the end of their asset life. Completion of the project will also ensure that PoM complies with its asset management obligations. There has been detailed and ongoing consultation with Patrick throughout the design process to ensure their participation in the evaluation of operational impacts of each construction scenario and to understand the duration of the project. A primary project objective has been to continue to provide two 300 metre operating berths so that Patrick can maintain its service standards for its customers.
    - Bulk liquid strategy business case – The demand for liquid bulk is forecast to increase and adapt to changing consumer uses. The sector is likely to undergo significant change in the next 10 years. There will be an increase in demand for refined product, in particular jet fuel, as the demand from the aviation industry increases. These changes will result in new supply chains, which will require new infrastructure. A challenge for PoM is the lack of future capacity for the import of liquid bulk products. Throughput analysis indicates that PoM is likely to reach capacity for liquid bulk in the medium term. A new liquid bulk wharf will take at least four years from project approval to operations starting. The

expenditure on this business case will allow PoM to fully assess investments in additional liquid bulk capacity. The business case is related to PoM's big ship planning for Swanson dock, which cannot be completed with certainty until the location and alignment of the new liquid bulk berth is identified.

- Other – this relates to utilities, navigational aids, channel service protection, civil, buildings and minor capital works. The main drivers of the increase in cost in 2019-20 are:
    - PoM's new office building, which it will move in to in the second half of 2019, and
    - expenditure on the Hobsons Bay sewer pipe protection project.

1.2. Efficiency and prudence of Capex

PoM's Capex is compliant with the Pricing Order which requires PoM's Capex to reflect that required by an efficient and prudent service provider.

PoM's 2019-20 Capex is efficient and prudent because it:

- reflects business as usual expenditure requirements, which are prepared as part of its annual budget process. The 2019-20 Capex forecasts reflect PoM's current view of the budget at the time PoM is submitting this TCS to the ESC. PoM's 2019-20 Capex budget will not be finalised until June 2019. The forecasts in this TCS may therefore not reflect PoM's final Capex budget for 2019-20
- has been developed in accordance with PoM's expenditure governance framework. It has been reviewed by PoM's Investment Review Committee (IRC) and is consistent with its Asset Management Framework. These are discussed in sections 1.4 and 1.5 below
- reflects PoM's contractual, compliance and regulatory obligations for Channels and Wharfage. This is discussed in section 1.3 below, and
- will be undertaken by external contractors appointed in accordance with PoM's Procurement Policy, which drives market-based pricing of all outsourced arrangements.

The shortfall between Prescribed Services' revenue (subject to the TAL) plus revenue from legacy contracts and the ARR means that PoM has an incentive to constrain its Capex to prudent and efficient levels. This is because it does not recover the shortfall relating to the return on Capex during the TAL period, and it cannot defer this recovery until future periods. Further, the period in which PoM can recover deferred depreciation is limited to the period between the end of the TAL and the end of the lease.

1.3. Capex forecasting method

PoM has forecast its 2019-20 Capex using a "bottom-up" forecasting methodology. Table 22 explains each Capex category and the method that has been used to prepare PoM's 2019-20 Capex forecasts for each Capex category.

Table 22: Description of Capex categories and PoM's approach to forecast Capex by category

Capex category	Forecasting method
Channels	Channels provide port access for commercial vessels visiting the Port. Maintenance dredging is a routine part of port operations to remove a build-up of sediment to allow the safe navigation of vessels throughout port waters. Maintenance dredging activities including dredging, sweeping, water injection, material transport and placement, bunding, capping and associated environmental testing and monitoring functions. PoM maintains its channels in accordance with the declared depths as detailed in the Port Information Guide. The primary legislative instrument that controls PoM's dredging activities is the *Coastal Management Act 1995* (Vic). PoM has 10 year (2012-2022) approvals, for the performance of maintenance dredging activities, from the Victorian Department of Environment, Land, Water and Planning (DELWP) and the Commonwealth Department of the Environment and Energy. The compliance requirements of the maintenance dredging activities are set out in PoM's Environmental Management Plan (EMP), approved by DELWP.

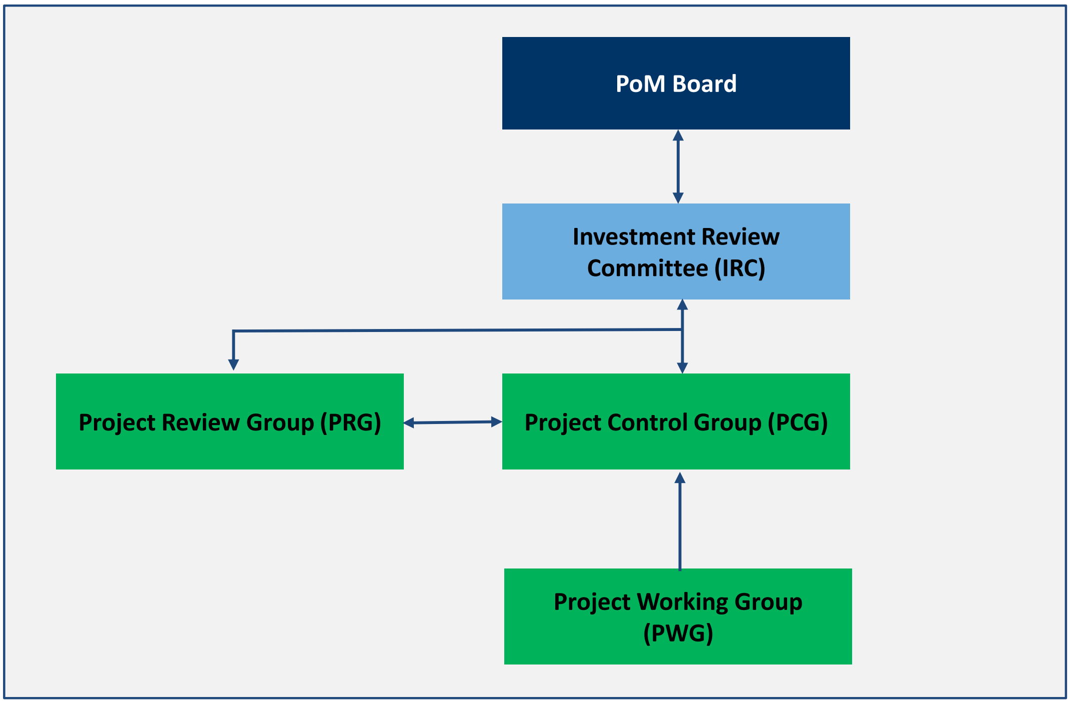
Capex category	Forecasting method
	PoM annually reviews the volumes to be dredged using the most effective and appropriate dredging methodology having regard for historical dredged volumes, the results of the most recent hydrographic surveys of port waters and the requirements of the EMP. PoM's whole of bay survey program developed, in conjunction with the Victorian Ports Corporation (Melbourne) Harbour Master (VPCM), sets out the frequency and other details of the hydrographic surveys of port waters that PoM undertakes to inform dredging requirements and needs. The survey results are also provided to VPCM. This annual review process ensures that the volumes of dredging work undertaken are efficient. PoM's dredging program is performed by an external contractor under a Collaborative Framework Agreement (CFA). The CFA was executed in February 2013 following a global tender process and was reviewed and renewed for a second four year term in February 2017. The review found that the scope of works for each dredging program had consistently delivered works that were conducted within the CFA, budgets, agreed schedules and in accordance with the requirements and obligations of the EMP.
Wharves	Wharves are the common user area for loading and unloading cargo. PoM maintains the condition of its wharves in accordance with the Wharf Structures' Condition Assessment Manual (WSCAM). Each asset has a modelling strategy, which determines the basis on which PoM assesses whether rehabilitation Capex is required. In particular, the strategy sets out the assets: • maximum potential life • effective life, and • maximum number of rehabilitations (to maintain its condition). For instance, an asset classification is assigned a maximum life of, say, 100 years and may require rehabilitation every 20 years. PoM's asset system maintains these dates which inform its Five Year Capex program and long-term Capex forecast (which forms the basis of its Five Year Capex Program). PoM provides preliminary concept scope and requirements for its Capex renewal and rehabilitation projects to an external quantity surveyor to ensure its expenditure forecast for the upcoming financial year is robust. These cost estimates are also tested and verified based on internal knowledge and expertise. All renewal / rehabilitation Capex is undertaken by external contractors selected via a select or public tender process in accordance with PoM's Procurement Policy. Rehabilitation / renewal Capex is undertaken to meet the service lives determined based on the lowest life cycle cost taking into consideration operational levels, business drivers and compliance requirements (obligations to maintain and repair and handback conditions under the PCD and is therefore efficient and prudent.
Rail	PoM owns and maintains on-port common user rail tracks, which connect to on-port private sidings as well as off-port rail networks, which are generally used for grain distribution and containerised trade. PoM's contract with Australian Rail Track Corporation (ARTC) provides that ARTC is responsible for undertaking condition inspections, developing the forward works program and undertaking the required work at agreed rates. PoM tests and verifies ARTC's renewal strategy, works program and rates through external quantity surveyors. Although the associated Capex is not reflected in this 2019-20 TCS, PoM's proposed Rail Project would fundamentally change the existing rail arrangements.
Road	PoM has common user roads on the Port which are essential for the movement of road transport, including heavy trucks, through the Port. Road rehabilitation work is determined via ongoing risk based optimised asset condition assessments, where asset utilisation is a key factor. PoM's roads are designed to facilitate truck usage in accordance with the National Heavy Vehicle accreditation scheme and PoM also has regard for VicRoads standards in designing and rehabilitating its roads. The majority of work is subject to competitive tender under PoM's Procurement Policy given the value of this work.
Plant	Plant Capex largely relates to Information Technology (IT) Capex and miscellaneous rehabilitation Capex relating to fire systems, mechanical and electrical systems (generators), gangways, equipment for contaminated waters (pumps and traps) and gates. IT Capex relates to business applications (generally software) and IT infrastructure (generally hardware) which is required to replace or refresh assets that have reached the end of their useful life. PoM bases it forecast IT costs on indicative pricing from its support partners or in some cases the manufacturer. In most cases PoM undertakes free trials of new or upgraded hardware and software to ensure it meets its needs before committing to purchase it. This supports prudent and efficient investment decisions.

Capex category	Forecasting method
	Rehabilitation of miscellaneous Capex is based on age or in-service failure and is undertaken via PoM's ongoing maintenance contracts.
Other	Other rehabilitation Capex relating to navigation aids (beacon lights) and utility assets (water, electricity and gas) is based on age (rather than condition), albeit that performance targets and asset criticality are also key considerations. These assets are replaced at end of their life (where this is defined by the expected number of years of service). Other rehabilitation Capex is undertaken via PoM's ongoing maintenance contracts.

1.4. Capex governance

PoM's Capex governance comprises a number of components which enable PoM to be confident that it is making soundly based, prudent and efficient investment decisions that will deliver outcomes that support the long-term interests of Port Users and Victorian consumers.

Figure 15 – Capex Project Governance Framework



The key elements of PoM's Capex governance structure are discussed below.

Investment Review Committee (IRC)

PoM's IRC provides governance and oversight of the operational capital investment program and all component projects. The IRC is an executive level committee which is attended by the CEO and the CFO.

Key functions of the IRC are:

- investment portfolio governance and oversight
- investment portfolio contingency management
- in-budget project / program and unbudgeted project approvals
- project / program monitoring
- project initiation stage (Preliminary Concept Justification Form (PCJF)) approvals
- project implementation stage approvals, and

- project closeout approval including benefit realisation / residual risk review

The governance and oversight function of the IRC covers all capital investment projects and programs, irrespective of sponsor and / or division. The IRC typically meets monthly or otherwise as required.

Program Review Group (PRG)

The PRG is managed by the Executive General Manager (EGM) Operations. The PRG function is to oversee and collate status and performance metrics from all projects under delivery through project delivery team(s) directly. This includes:

- budget performance and cost control
- schedule and delivery status
- quality assurance tracking
- risk and issue monitoring, and
- safety and environmental performance.

The PRG provides updates to the IRC on the above on a monthly basis.

Project Control Group (PCG)

A PCG is formed to manage large, high risk or high complexity projects. Each PCG is chaired by the responsible Executive General Manager (EGM) and includes other relevant business EGMs as well the project delivery team and business representatives from Finance and Legal.

Each PCG is responsible for the commercial, strategic, legal and risk oversight of the project, making project decisions and providing governance and support to the project delivery team. The key functions of the PCG include:

- budget and schedule management
- project delivery / performance / benefit realisation accountability
- project due diligence / risk management
- project decision making responsibility
- status reporting
- project allowance drawdown approvals
- project contingency drawdown requests

Each PCG reports monthly to the IRC and provides updates on key project decisions and direction.

Project Working Group (PWG)

A PWG is established to manage low risk or low complexity projects. The PWG comprises representatives from each business unit that have a direct relationship with the project. The PWG's role is to support the project delivery team for the duration of the project by ensuring a whole of business approach overseeing all aspects of project delivery. For large projects, the PWG's functions include:

- reviewing project budget and schedule performance
- reviewing project status reporting
- reviewing project life cycle cost assessments
- reviewing project risk profiles and mitigation strategies
- providing project decision endorsement and/or strategy alignment
- reviewing project Key Performance Indicator (KPI) performance
- reviewing project benefit realisation alignment

- reviewing project allowance drawdown requests
- managing external stakeholder input and communications, and
- supporting project delivery team decision making.

The PWG typically meets monthly or otherwise as required.

1.5. Asset Management System

Under the PCD between PoM and the State of Victoria, PoM is required to achieve certification of its asset management system to ISO 55001:2014 - Asset Management by 2021[1]. PoM has achieved this requirement in April 2019.

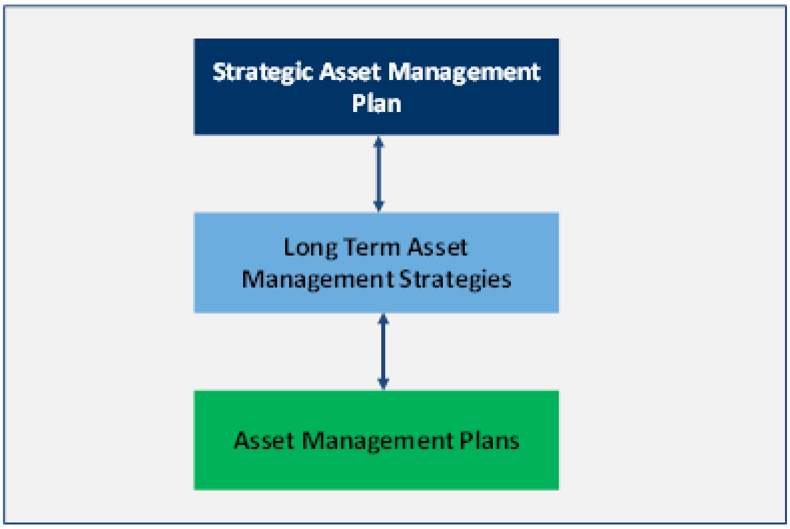
This certification has involved the development of a new Strategic Asset Management Plan (SAMP) that supersedes the previous Asset Management Strategy. The SAMP provides a framework to define PoM's asset management objectives in line with current organisational goals and aligns these with its operational processes accordingly.

Alignment of PoM's asset management system with ISO 55001 ensures PoM's asset investment decision-making processes are systematic, repeatable and take into account matters such as risk and stakeholder needs and expectations. It also promotes alignment between investment decisions and other matters including environment, quality, and safety practices.

As part of the asset management system certification project, PoM was also externally certified to the ISO 14001:2015 Environment, ISO 45001:2018 OHS and ISO 9001:2015 Quality standards under an Integrated Management System.

PoM's asset management system is structured in accordance with Figure 8.

Figure 8 – PoM's ISO certified asset management system



The key elements of the PoM's ISO certified asset management system are discussed below.

Strategic Asset Management Plan (SAMP)

The SAMP, developed in accordance with ISO 5500x sets out PoM's overarching approach to achieving its asset management objectives in line with its business objectives and asset management policy setting. The SAMP is a governance document and is not classified as a public document.

The SAMP sets out the:

- scope of the asset management system
- needs and expectations of key stakeholders impacted by the asset management system

[1] Within five years from the lease commencement date of 1 November 2016.

- asset management objectives, and
- document hierarchy, decision making criteria and business processes required for PoM to achieve its asset management objectives.

Long-term asset management strategies

PoM’s PDS and PDIP set out PoM’s strategic planning and development framework.

- the PDS will set out PoM’s long-term (approximately 30 years through to 2050) vision for the growth and development of the Port. It will contain a range of potential future port development concepts to address current and emerging strategic issues, such as continued trade growth, trends in ship size and landside transport issues and opportunities, including on-dock rail. Key drivers of these emerging issues are continued population and economic growth, industry and market sector changes, agricultural climatic conditions and international commodity prices for exports. A version of the PDS was provided to the Minister for Ports in December 2018 and is expected to be released for public exhibition in the second half of 2019 before being finalised by the end of 2019. The PDS will be updated and provided to the Victorian Government every five years thereafter, and
- the PDIP is a sub-set of the PDS and includes a more detailed 15 year view (2017-2032) of planned development activities within the Port to support port capacity and growth in trade demand. It also sets out how PoM will work collaboratively with Port Users and other stakeholders to ensure sustainable growth over the next 50 years. PoM submitted its “first” PDIP to the Victorian Government on 31 October 2017 and must update it when it updates its PDS. The PDIP is not a public document and is intended to only be used by PoM and the Victorian Government. An updated PDIP will be prepared and issued to the Victorian Government once the PDS has been finalised and published.

Asset Management Plans (AMP)

In accordance with the requirements of the PCD, PoM has developed and is maintaining a suite of AMP’s which document PoM’s approach to managing Port assets.

The AMPs serve a dual compliance purpose as they are also a fundamental requirement for the ISO 55001 certification. Operationally, the AMP’s support the delivery of the strategic objectives in the SAMP and focus on the ongoing management of Port assets including capital renewal, maintenance, and operational requirements.

1.6. Capitalisation Guideline

PoM’s Capitalisation Guideline sets out its approach to capitalising expenditure, which is capital in nature and is attributable to the acquisition and or construction of an asset. These costs typically include:

- the cost of materials and direct labour
- other costs directly attributable to bringing the assets to a working condition for its intended use
- relocation costs (where relevant)
- the costs of dismantling and removing the items and restoring the site on which they are located, and
- capitalised borrowing costs.

The objective of PoM’s Capitalisation Guideline is to ensure that its capital costs are captured in an appropriate and accurate manner so that the asset value capitalised on PoM’s Fixed Asset Register is at its Fair Value.

PoM’s capitalisation approach is consistent with the relevant accounting standards.

PoM has prepared its 2019-20 Prescribed Services Capex forecasts using the same capitalisation approach used to forecast its 2018-19 Prescribed Services Capex.

1.7. Capex mapping to regulatory model categorisation

Table 23 shows how the Capex categories in Table 21 relate to the more granular Capex categories in the regulatory model, at **Appendix B.**

Table 23: Mapping between the Capex categories in Table 21 and categories in the regulatory model

Regulatory model	TCS
PCP - Wharves	PCP
PCP - Civil	
Melbourne Channel	Channel
Melbourne Channel Over Dredge	
Shared Channels	
Shared Channel Over Dredge	
Wharves	Wharves
Road	Road
Rail	Rail
Plant	Plant
Land	Land
Utilities	Other
Navigational Aids	
Channel Service Protection	
Civil	
Buildings	
Minor Capital Works	

Attachment 3 – PoM's response to ESC feedback

Table 24 provides a consolidated list of the ESC's feedback in its 2018-19 Interim Commentary, and subsequent discussions with PoM, on what PoM should include in its TCS to demonstrate compliance with the Pricing Order on all matters other than the WACC. Compliance with the WACC is dealt with in section 9.2.3 and **Appendix N**.

Table 24:

- shows that PoM has fully addressed feedback from the ESC on all matters, using approaches that have been agreed with the ESC during 2018-19, and
- provides a cross-reference to where in PoM's 2019-20 TCS the ESC's feedback has been addressed.

Table 24: The ESC's views and position in its SoRA and Interim Commentary

Topic	ESC Interim 2018-19 Commentary	PoM's response	Addressed	TCS cross-reference
1. Cost allocation	• The ESC noted that PoM did not allocate costs between individual Prescribed Services as required by the Pricing Order	• PoM has prepared a new Cost Allocation Model and User Guide which attribute and allocate costs between individual Prescribed Services	✓	Section 9.1 and **Appendices D** and **E**
2. Upper and lower bounds	The ESC sought more information about: • how PoM created each Bundle and allocated revenues and costs to each Bundle, and • why PoM used data from 2013-14 to 2016-17 for this analysis, rather than more recent data/forecasts	• PoM has prepared a new Efficient Cost Bounds Model and accompanying User Guide. They show how, based on the assumptions used, PoM complies with the Pricing Order by using the most recent available data	✓	Section 10.1 and **Appendices F** and **G**
3. Trade volumes	The ESC noted that: • PoM's trade volume forecasting methodology should be consistent over time and that any changes in the methodology should be explained and justified • The forecasting model should: ○ be transparent and explained, and ○ allow the ESC to replicate (i.e. calculate) the results presented in its consultant's report • PoM should explain how the forecasts for each cargo type translate into the categories in PoM's regulatory model	• PoM has retained the same trade volume forecasting methodology so that there is consistency in forecasting methodology over time • BIS Oxford has provided: ○ a more detailed explanation of the trade forecasting methodology ○ a transparent model that allows the ESC to replicate the trade forecasts • PoM has explained how the forecasts for each cargo type translate into the categories in PoM's regulatory model	✓	Section 7 and **Appendices K, L** and **M**
4. Regulatory Modelling	• The ESC was concerned that the regulatory model: ○ was complex in some respects (e.g. how the capital base was modelled) and not sufficiently transparent ○ did not cover the full 50-year port lease period ○ included unrecovered depreciation in the ARR calculation	• PoM has introduced a new simpler and more transparent regulatory model and accompanying User Guide. The new Regulatory Model addresses the ESC's concerns by: ○ adopting a model structure that clearly distinguishes inputs, calculations and outputs with common formatting ○ including explanatory notes throughout	✓	Section 9 and **Appendices B** and **C**

Topic	ESC Interim 2018-19 Commentary	PoM's response	Addressed	TCS cross-reference
	○ did not make clear how the depreciation method used did not lead to an over-recovery of capital expenditure ○ did not correctly recognise that capital expenditure was assumed to be incurred in the middle of the year ○ did not use the same CPI to index both tariffs – when calculating the TAL – and the capital base ○ did not exclude tariffs for full outbound container wharfage services from the WATI ○ did not apply the TAL to the previous year's tariffs when calculating the relevant year's tariffs so that each tariff was adjusted by the same percentage change ○ included contract costs in the ARR but did not deduct contract revenue from the ARR before calculating Prescribed Services' tariffs and did not treat new and existing contracts in the same way. • As a result, the ESC sought: ○ simplification of the model to reduce its complexity and increase its transparency ○ the addition of a user manual or other explanatory material to aid useability of the model	○ covering the full 50-year port lease period ○ presenting the ARR in two ways – one excluding unrecovered depreciation, the other including it ○ demonstrating that capital expenditure and the opening capital base is only depreciated once over the port lease period ○ treating capital expenditure as being incurred mid-year ○ applying the same CPI to index both tariffs and the capital base ○ presenting the WATI in two ways – one excluding tariffs for full outbound container wharfage services and the other including them ○ adding Prescribed Services' revenue associated with the legacy contracts to "Prescribed Services' revenue (subject to the TAL)" for the purposes of comparing it with the ARR • The user guide helps address concerns about transparency and complexity by explaining how the Model works, including the calculations noted above		
5. Opex	The ESC requested PoM to: • Provide further explanation and justification for variations in Opex between years • Provide information to demonstrate that Opex is prudent and efficient such as: ○ forecasting methodology, and ○ ongoing productivity improvements	• PoM's 2019-20 Opex forecast is based on its current view of the budget at the time PoM is submitting this TCS to the ESC. PoM's 2019-20 Opex budget will not be finalised until June 2019 • PoM has explained the forecasting methodology used to derive its Opex forecast and has explained why its Opex is prudent and efficient	✓	Section 9.2.5 and **Attachment 1**
6. Capex	The ESC requested PoM to: • Further explain and justify variations in Capex between years • Provide information to demonstrate that expenditure is prudent and efficient including: ○ business cases ○ forecasting methodology ○ capital governance processes and procedures	• PoM's 2019-20 Capex forecast is based on its current view of the budget at the time PoM is submitting this TCS to the ESC. PoM's 2019-20 Capex budget will not be finalised until June 2019 • PoM has explained the forecasting methodology used to derive its Capex forecast and explained why its Capex is prudent and efficient	✓	Section 9.2.2 and **Attachment 2**

Topic	ESC Interim 2018-19 Commentary	PoM's response	Addressed	TCS cross-reference
	○ outcomes from audits of necessary controls and processes ○ asset management policies and processes, and ○ procurement and project delivery processes.			
7. Asset categories and lives	• The ESC requested PoM to provide further detailed information on the approach to determine asset lives particularly where asset categories have changed or where PoM does not rely on the CH2M report or has amended its asset lives	• The asset categories and economic lives that PoM presented in its 2018-19 TCS were consistent with the CH2M report, except for channels and plant • PoM does not consider that these changes have a material impact on the depreciation profile • PoM considers that these changes are reasonable in order to better reflect the economic lives of sub-categories of assets and are consistent with the flexibility and discretion for determining the return of capital in the Pricing Order	✓	Section 9.2.4.1
8. Depreciation (for current regulatory period)	• The ESC requested PoM to set depreciation for the regulatory period to zero when calculating the ARR if continue to use the alternative depreciation method.	• PoM has calculated the ARR both including and excluding deferred depreciation	✓	Table 1, Section 9.2.4 and **Appendices B** and **C**
9. Deferred depreciation (relating to previous regulatory periods)	• The ESC requested PoM to not include deferred depreciation in the ARR calculation. *The ESC states "if depreciation is being deferred to future years and has a value of zero, this zero value should be reflected in the revenue requirements".*	• As for item 8	✓	As for item 7
	• The ESC notes that: ○ the 10 year depreciation schedule does not necessarily represent the Port's alternative depreciation profile for the purposes of assessing compliance under clause 4.4.2 ○ presenting a functional 50 year calculation of the Port's asset values may provide some information for the purposes of demonstrating compliance with clause 4.4.	• As for Items 4 and 8	✓	As for items 3 and 7
10. Capital base – indexation of new Capex	• The ESC notes that PoM should ensure consistency with clause 4.6.1(b) of the Pricing Order, which requires Capex to be recognised as if it is incurred in the middle of the year.	• PoM has addressed compliance with clause 4.6.1(b) of the Pricing Order through amendments to regulatory model	✓	Section 9.2.1 and **Appendices B** and **C**
11. Indexation - capital base and tariffs	• The ESC requested PoM to use the same CPI to index tariffs and the capital base (in the roll forward calculation)	• In its 2017-18 TCS, PoM used the annual March CPI to index its capital base. In its 2018-19 TCS, PoM changed to the annual June CPI following feedback from the ESC on PoM's 2017-18 TCS. Based on the ESC's latest feedback, PoM has	✓	Section 9.2.6 and **Appendices B** and **C**

Topic	ESC Interim 2018-19 Commentary	PoM's response	Addressed	TCS cross-reference
		now reverted back to its original indexation approach (i.e. annual March CPI)		
12. WATI calculation and compliance with the TAL	• The ESC requested PoM to exclude export tariffs from the WATI calculation	• PoM has presented WATI with and without export tariffs to demonstrate compliance with the TAL	✓	Section 10 and **Appendix B**
	• The ESC requested PoM to calculate the WATI using tariffs weighted by audited historical revenues (not volumes)	• PoM has calculated the WATI using audited 2017-18 revenues • KPMG has undertaken the audit of PoM's 2017-18 revenues	✓	Sections 9.3 and 10 and **Appendix H**
13. Tariffs	• The ESC requested PoM to apply the TAL to previous years' tariffs so that each tariff is adjusted by the same percentage or else require a rebalancing application [Note – ESC and PoM held subsequent discussions following the 2018-19 Interim Commentary]	• As agreed with the ESC, PoM has calculated 2019-20 tariffs by applying the cumulative CPI index to the Initial Prescribed Services Tariffs, rather than by apply the annual CPI to the previous year's tariffs. This results in minor aggregate rounding differences that are self-correcting over time as shown in the Regulatory Model	✓	Section 10 and **Appendices A** and **B**
	• The ESC requested PoM to not use the Excel truncating function to round tariffs to two or four decimal places.	• PoM has presented its tariffs in same form as the Initial Prescribed Services' tariffs to either two or four decimal places	✓	**Appendices A** and **B**
	• The ESC requested PoM to provide further information to demonstrate that slipway tariffs should be included in the RTS (i.e. because they were overlooked by the drafters of the Pricing Order)	• As agreed with the ESC, PoM has removed slipway tariffs from the RTS and will rely on individual Prescribed Services' contracts for this service	✓	**Appendices A** and **B**
	• The ESC requested PoM to express those tariffs currently expressed as a percentage of prices for other tariffs as a dollar amount.	• PoM has presented all tariffs as dollar amounts	✓	**Appendices A** and **B**
14. Contract revenue	• The ESC requested PoM to ○ include contract costs in in the ABBM and deduct contract revenue from ARR before calculating RTS tariffs, and ○ treat new and existing contracts the same way [Note – ESC and PoM held subsequent discussions following the 2018-19 Interim Commentary]	• As agreed with the ESC, PoM has applied the following: ○ "Prescribed Services' revenue (subject to the TAL)" does not include revenue associated with contracts for Prescribed Services ○ "ARR" includes revenue associated with legacy contracts. • PoM has added Prescribed Services' revenue associated with the legacy contracts to "Prescribed Services' revenue (subject to the TAL)" for the purposes of comparing it with the "ARR" in Table 1 and Table 17 • For the avoidance of doubt, the costs and revenues associated with new contracts that were entered into after PLT are not included in any revenue calculation	✓	Section 9.4 and **Appendix B**