Port Capacity Enhancement Program

Stage One Engagement Summary Report

September 2022 – September 2023

Port of Melbourne

The Port of Melbourne acknowledges Aboriginal and Torres Strait Islander Peoples as the Traditional Custodians of the Land, Rivers and Sea. We acknowledge and pay our respects to Elders; past, present and emerging of all Nations.

As Australia's largest container and general cargo port, the Port of Melbourne plays an integral role in the lives of our community and the economy of south-eastern Australia.

Given the nature of our operations, it is essential that we understand the needs of our stakeholders and engage with them in a meaningful way. Those that use our port, our industry and government partners, and the wider community around our operations are critical to the success of the Port of Melbourne.

We are committed to meeting the obligations of our regulatory framework to effectively consult with Port Users, for example through our Pricing Order. We also recognise that we need to move beyond compliance to strengthen our stakeholder engagement to achieve our organisational goals and benefit the wider community. Our Engagement Framework shows how we engage and sets clear expectations for our employees, contractors and stakeholders.

As we continue to grow and mature as an organisation, so will our approach to stakeholder engagement.

As part of the Port of Melbourne's stewardship obligations, it is required to ensure that port capacity can meet the future demands of Victoria's growing economy.

The Port Capacity Enhancement Program (PCEP) was outlined in the Port of Melbourne's 2050 Port Development Strategy.

Once delivered the PCEP will ensure the Port of Melbourne continues to play a significant role in driving forward the Victorian economy.

In September 2022, we commenced engagement with our key stakeholders on this critical project.

Engagement summary report

This PCEP Stage One Engagement Summary Report contains a summary of themes raised by stakeholders and PoM's perspective on these themes.

Included are three sections covering each of the three rounds of engagement in which our stakeholders have participated and summarises the feedback we have received and how it has been considered.

Accordingly, we have not sought to address each individual point raised in each submission but have provided themes and highlighted feedback raised in our engagement through information sessions, briefings, meetings, workshops, surveys, correspondence and formal submissions.

We developed engagement to comply with our Pricing Order Engagement Protocol (POEP) and the Essential Services Commission Statement of Regulatory Approach (Version 03), and we have effectively tailored and designed our approach for our stakeholder audiences.

This report has been prepared with each engagement round reflecting the five stages of the POEP.

Overview

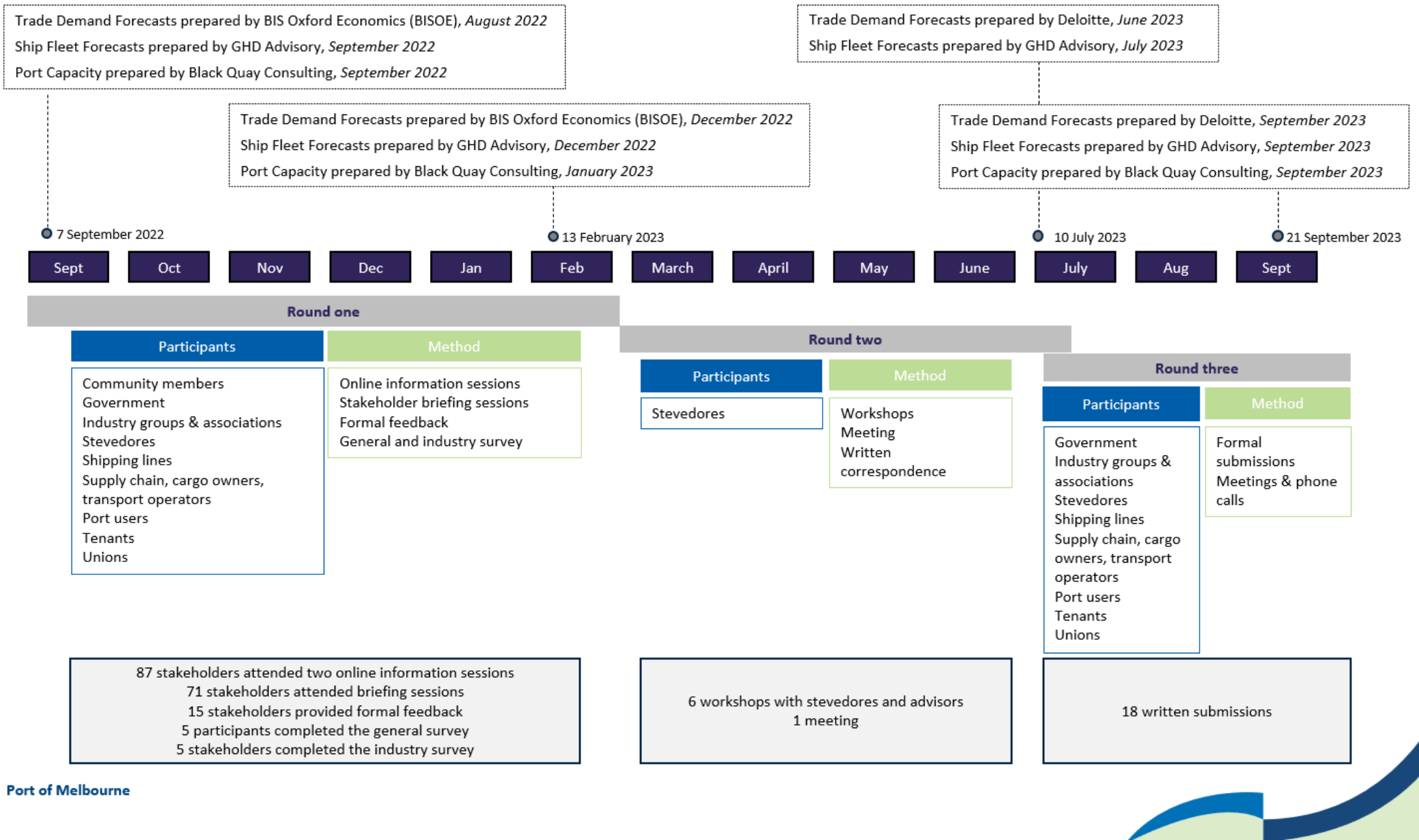
From September 2022 to September 2023, we engaged with our key stakeholders on the Port Capacity Enhancement Program (PCEP). The PCEP Stage One engagement program was focused on gathering feedback and defining the inputs for a draft Cost Benefit Analysis, and subsequent stakeholder engagement.

Our engagement approach was consistent with the Pricing Order Engagement Protocol (POEP) which was finalised and published in October 2022 and was delivered at the inform, consult and involve levels of the IAP2 Public Participation Spectrum.

Since commencing engagement, we have been responsive to stakeholder feedback and extended the engagement process to include three rounds of engagement.

Our principles:	**Pricing Order Engagement Protocol Five consultation steps:**	**Statement of Regulatory Approach:**
Genuine Inclusive Timely Transparent Accountable Continuous improvement	1. Identify need 2. Plan approach 3. Implement 4. Port user feedback 5. Consideration and decision making	Demonstrate that PoM has consulted effectively with port users and had regard to the comments provided by port users.

Engagement timeline



Round One

The PCEP Stage One engagement program commenced in September 2022, was broad reaching and included stakeholders, government, community, and other various stakeholders. Lines of enquiry were purposely broad and structured to meet the knowledge level of most individuals or organisations, and aimed to reduce barriers to participation.

This first round of engagement sought feedback on the following technical reports:

- Trade Demand Forecasts prepared by BIS Oxford Economics (BISOE), August 2022
- Ship Fleet Forecasts prepared by GHD Advisory, September 2022
- Container Capacity Review prepared by Black Quay Consulting, September 2022.

Based on these technical reports, we asked our stakeholders a series of questions on each of the above reports:

Trade forecasts	• Are the BISOE trade forecasts reasonable? • Are there additional scenarios that should be considered?
Ship fleet forecasts	• Are the input assumptions reasonable? • Are the forecasts reasonable? • Are there additional scenarios to be considered? • Is the assessment of what ship will service each trade lane reasonable?

Port Capacity	• Are the input assumptions reasonable?
	• Are there additional scenarios to be considered? (including stevedore development options)
	• Are the following terminal capacities sustainable and realistic;
	  ○ Swanson Dock East 1.26m TEU pa
	  ○ Swanson Dock West 1.4m TEU pa
	  ○ Webb Dock East 1.2m TEU pa

Feedback from Round one was used to inform updated technical reports which were published in February 2023.

PoM engaged Struber to support Round one engagement activities and prepared an Engagement Summary Report at the conclusion of Round one.

Round two

The original intent was to move from Round one into engagement regarding a PCEP Cost Benefit Analysis. However, at the conclusion of Round one and having published updated technical reports in February 2023, we found that stevedores needed to further explore the technical details associated with the Container Capacity Review. As such, we adapted our engagement approach and timeline, and prioritised stevedore engagement as our next step so we could hear more and gain further feedback.

Our engagement included the following subjects:

- Port capacity modelling
- Capacity input assumptions
- Port performance data.

We conducted one-on-one workshops with each of the stevedores, with the Port Lessor and Ports Victoria attending as observers. Subject matter experts Black Quay, author of the Container Capacity Review, also attended workshops to address specific technical questions.

Round three

In May 2023, we worked with subject matter experts Deloitte to produce a new Trade Demand forecast to ensure consistency with PoM's other regulatory processes. This data and the Q2 2023 Vessel Order Book were used to inform an update of the GHD Ship Fleet Forecast.

Round three provided an opportunity for stakeholders to provide feedback and to verify that the most appropriate and relevant data was included in the reports prepared by Deloitte and GHD. Engagement also had remained open regarding the Container Capacity Review since February 2023.

The Round three formal submission period was extended from four to six weeks at stakeholders' request to enable additional time to make meaningful submissions.

We asked our stakeholders:

- Do you consider the outcomes forecasted in the Deloitte report to be sufficiently accurate to inform a (draft) Cost Benefit Analysis?
- Are the figures in the GHD report regarding containerships per year visiting the Port of Melbourne sufficiently accurate to inform a (draft) Cost Benefit Analysis?
- Do you support the identified forecasts in the GHD report relating to vessel size, to inform a (draft) Cost Benefit Analysis?

We also asked that if stakeholder views varied from the GHD report, to provide supporting evidence indicating points of difference for our consideration.

What we heard

Our PCEP engagement activity has focused on due diligence in preparing final versions of the three technical forecast reports that will be used as input to the draft Cost Benefit Analysis.

The feedback received through each engagement round was considered by PoM and our technical experts. Where relevant, feedback was used to update technical reports. This was particularly relevant for the Container Capacity Review.

The feedback we received throughout our extensive engagement program:

- Confirmed the general approach and trade forecasting assumptions
- Confirmed the general approach and resulted in an additional sensitivity scenario for ship fleet forecasting
- Explored a range of input assumptions and different stakeholder views regarding capacity analysis, resulting in a number of updated assumptions and new sensitivity scenarios being tested.

In addition to the specific feedback about the technical reports, we heard broad views and insights that helped us to continuously improve our engagement approach. We will continue to take this approach to keep momentum as we test, validate and progress through the PCEP project phases.

Lessons learned from the Stage One engagement program will be applied as part of our planning and when considering appropriate methodology for our next PCEP engagement program, focused on a draft Cost Benefit Analysis.

We are committed to due diligence and as part of our steps to gather data and inputs to PCEP planning, we will in the future undertake work to understand heavy vehicle movements, environmental impacts and safety implications.

Key technical themes

Through the three rounds of engagement, we identified the following key themes.

Key Theme	What we heard	How we have responded
Capacity modelling assumptions	• Some stakeholders provided specific feedback on the underlying data and assumptions in the capacity modelling. • There were different views across the stevedores on input assumptions. • We recognise that different points of view remain regarding some input assumptions (and combinations thereof) however, PoM considers the conclusions on port capacity are reasonable.	• We conducted workshops with stevedores to understand their views on underlying data and assumptions. • Actual data was used to explore feedback. • Changes were made to a number of input assumptions. • Additional scenarios were modelled to understand the capacity implications of different assumptions (and alternative combinations of assumptions). •
Capacity modelling methodology	• Stakeholders provided broad and specific feedback regarding capacity modelling methodology. • Stevedores expressed a desire for more information about the process and methodology used to determine capacity. • Some stevedores expressed a preference for different modelling methodologies.	• We conducted workshops with stevedores to understand their views on methodology and capacity modelling. • Further exploration and research was undertaken to confirm the methodology. • The capacity report was updated to expand the methodology explanations.
Cost Benefit Analysis scope and approach	• Some stakeholders provided feedback and suggestions on the scope and approach of the next stage – draft Cost Benefit Analysis.	• Where appropriate, we responded to stakeholders directly in response to their feedback. • We have captured this feedback which will be used to inform the scope and engagement approach for the draft Cost Benefit Analysis.
Ship fleet	• The report provided high level detail and no concerns were raised. • Conclusions need to be clearly explained. • The underlying data and forward order book should reflect the most recent available. • Stakeholders expressed varying views on the likelihood of escalating ship size.	• Round three GHD report was updated to reflect feedback and use the most recent trade forecasts and forward order book. • Additional sensitivities were incorporated to contemplate larger ship sizes at Swanson Dock and consolidation of services.
Stakeholder engagement processes	• Some stakeholders expressed a desire for greater transparency in the overall stakeholder engagement process.	• We updated our PCEP webpage with additional information as we progressed through the rounds of engagement. • We responded directly to each submission, outlining how feedback was considered. • We extended engagement timeframes. • We introduced additional rounds of engagement. • We held additional workshops with stevedores to address their specific needs.
Trade Demand	• The report was easy to follow and extremely informative. • Some stakeholders expressed a view that the data should be updated and provided specific feedback on the economic drivers behind the forecasts.	• The Deloitte forecasts included an explanation of economic drivers.

Feedback snapshot

In addition to feedback on the technical reports, assumptions and scenarios, stakeholders provided feedback on a number of topics.

Below is a snapshot of the key topics of interest and sentiment on matters outside the direct scope of feedback on the technical reports.

PoM appreciates the broad range of feedback that was provided and will use this feedback to inform future stakeholder engagement programs.

Stakeholders provided insights into ship size deployment and things that influence ship deployment

Stakeholders expressed interest in understanding traffic flows

Stakeholders are interested in sustainability and how this will be considered through PCEP

Stakeholders provided insights into engagement processes, level of information, frequency and engagement methods

Stakeholders gave valuable insights into supply chain trends, warehousing and storage

Stakeholders provided insights into market economics and trade outlook

Stakeholders are concerned about supply chain costs and the cost of congestion

Next steps

We have adopted feedback to inform the technical reports and key inputs to the draft Cost Benefit Analysis including:

- Trade forecasts
- Ship fleet forecasts
- Capacity analysis.

PoM has engaged Deloitte Access Economics to prepare a draft Cost Benefit Analysis.

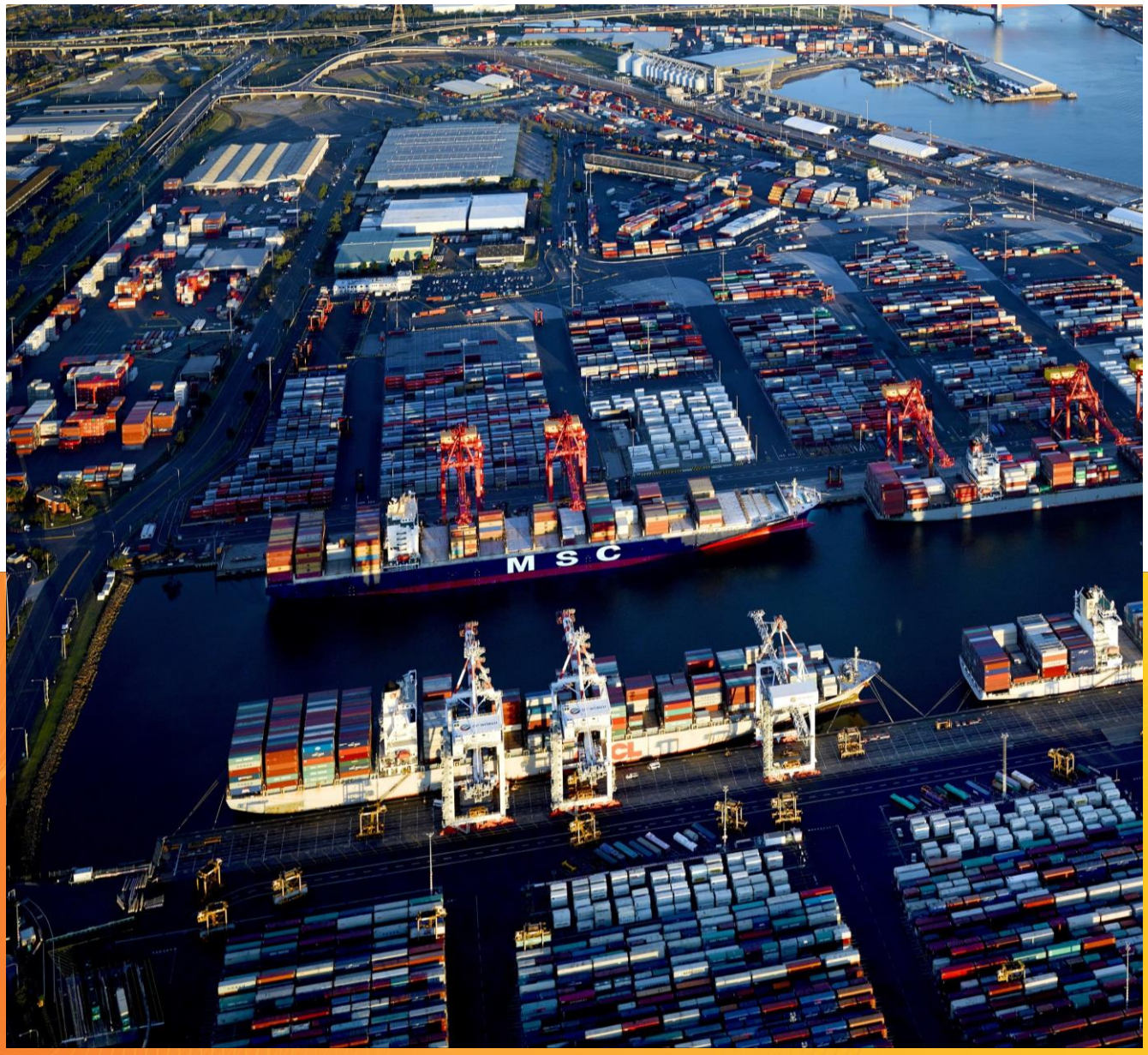
We are currently planning the engagement approach for the draft Cost Benefit Analysis, having regard to feedback received during Stage One engagement. We will notify stakeholders when information is available on next steps and timing.

More information

To find out more about the Port Capacity Enhancement Program (PCEP):

Web: Port Capacity Enhancement Program - Port of Melbourne

Email: portdev@portof melbourne.com



Engagement Report

Sept 2022 - Feb 2023

Port Capacity Enhancement Program

STRUBER

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Contents

Executive Summary

Struber played a crucial role in supporting PoM to deliver Port Capacity Enhancement Program (PCEP) Stage One engagement activities from August 2022 to February 2023.

Struber's primary responsibility was to lead engagement during this period, which included informing stakeholders and the community about PCEP, while providing opportunities for feedback on three technical reports:

- Trade Demand Forecasts prepared by BIS Oxford Economics (BISOE), August 2022;
- Ship Fleet Forecasts prepared by GHD Advisory, September 2022; and
- Port Capacity prepared by Black Quay Consulting, September 2022.

Throughout this period the following activities were delivered:

- **Facilitated stakeholder briefings and community information sessions** providing an inclusive environment for stakeholders to ask questions or express their opinions or concerns.
- **Record keeping of stakeholder interactions**: Struber documented stakeholder enquiries, issues and concerns related to PCEP to ensure accurate record-keeping, used to inform facilitation, and to support timely and appropriate responses from PoM.
- **Creation of feedback loops:** Struber created an industry and general survey to give stakeholders the opportunity to provide feedback. Struber helped capture diverse perspectives, concerns and suggestions, which were then provided to PoM.

Struber sought to ensure that the engagement process was transparent and inclusive, giving all stakeholders an equal opportunity to participate, voice their opinions and contribute to the decision-making process.

Engagement objectives

To assist in the delivery of PCEP Stage One engagement, Struber had the following engagement objectives:

- Comprehensively identify and map PoM stakeholders and lay the foundation for understanding key issues and concerns, and potential mitigation measures and responses.
- Plan, prepare, coordinate, and deliver best-practice engagement activities for PoM's key drivers for the Cost Benefit Analysis (CBA) for port capacity.
- Deliver a publicly available Stakeholder Engagement Report.

Struber consultation and timeline

Struber was involved in the following engagement activities:

August 2022

- Stakeholder mapping and planning activities conducted to inform development of PCEP Stage One engagement activities.
- Emails sent to stakeholders inviting them to a one-on-one briefing session with PoM subject matter experts throughout the engagement period.

September 2022

- PoM released information on its website which included three technical reports on trade demand, ship fleet forecasts and port capacity and were explained to stakeholders as the key drivers for PCEP
- One-on-one stakeholder briefings with key stakeholders commenced
- A social media advertising campaign was undertaken by third party marketing specialists Boss Man, to promote PCEP community online information sessions facilitated by Struber
- Development of industry and general public surveys
- Email to stakeholders explaining that the PCEP engagement period was now live and open for feedback through to 18 October 2022
- Stakeholder enquiries and issues register developed and maintained, recording interactions with stakeholders including emails, phone calls and meetings.

October 2022

- Following stakeholder feedback, further engagement was undertaken including meetings with key stakeholders and independent experts.
- The formal submission deadline was extended for all stakeholders to provide feedback.

February 2023

- Three technical reports updated to reflect stakeholder feedback and published on PoM website.
- Stakeholders provided with a formal response from PoM providing information of how their feedback has been considered in the updated technical reports.

Key themes

Engagement during this period identified eight recurring themes:

- **Stakeholder Engagement Process:** Some stakeholders expressed a desire for greater transparency in the overall stakeholder engagement process.
- **Capacity modelling methodology:** There was a broad range of feedback regarding capacity modelling. Some stakeholders expressed a desire for more information about the process and methodology used to determine capacity.
- **Capacity modelling underlying data and assumptions:** Some stakeholders expressed a view that the underlying data and assumptions in the capacity model do not reflect their operations.

- **Demand Forecast:** Some stakeholders expressed a view that data should be updated and queried the economic drivers behind the forecast.
- **Ship Fleet Forecast:** Some stakeholders expressed a view that ship fleet forecast analysis approach and conclusions could be more clearly explained in the report.
- **Ship Fleet Forecast, impact of IMO 2023:** Some stakeholders expressed a view that the impact of IMO 2023 was not adequately considered in the ship fleet forecast.
- **Ship Fleet Forecast, escalating ship size:** Stakeholders expressed varying views on the likelihood of escalating ship size.
- **Cost Benefit Analysis, scope and approach:** Some stakeholders requested more information with regards to the scope and approach of the CBA.

Further information about each key themes and how this feedback was considered is provided in the Port User Feedback section of this report.

Identify engagement need

Engagement with key stakeholders spans back to 2020, following the release of the Port Development Strategy (PDS). This included PCEP as a large potential infrastructure project designed to secure the long-term future of Tasmanian Trades at the Port of Melbourne and development of a fourth International Container Terminal (ICT).

In August 2022, PoM engaged stakeholder engagement consultancy Struber to develop and implement a stakeholder engagement program to seek feedback on the key drivers of PCEP:

- Trade Demand Forecasts prepared by BIS Oxford Economics (BISOE)
- Ship Fleet Forecasts prepared by GHD Advisory
- Port Capacity prepared by Black Quay Consulting

Once finalised, these drivers will form the basis of the Cost Benefit Analysis (CBA), which determines timeframes and need for the delivery of PCEP.

Stakeholders identified and engaged

In consultation with PoM and to establish meaningful and genuine channels of engagement, a list of key stakeholders that will be impacted or have an interest in the PCEP were identified and engaged including:

Community members - proximity of operations and future capacity development may have an impact on the residents around the local government areas of City of Melbourne, Port Phillip, Maribyrnong and Hobsons Bay. Community members located outside these local government areas were also provided the opportunity to attend a community online session and provide feedback.

Government (local state and federal) - including local councils, transport and environment departments and state ministers were engaged throughout the PCEP Stage One engagement process and were encouraged to provide feedback on the three technical reports.

Industry groups - associations or organisations representing specific sectors or industries that have a stake in the operations of the Port of Melbourne. PoM engaged with industry groups to understand industry-specific requirements, address their concerns, and foster collaboration to ensure that PCEP supports the growth and development of these industries.

Stevedores - responsible for loading and unloading cargo from ships at the port. PoM engaged with stevedores to understand their views on the three technical reports and understand any concerns or challenges that may arise due to PCEP.

Shipping lines - companies that own or operate vessels engaged in maritime transportation. PoM engaged with shipping lines to understand their logistical requirements and ensure that PCEP aligns with their operational needs, facilitating seamless vessel movements and efficient port services.

Port users - broad range of stakeholders, including cargo owners, logistics companies, and other entities utilising the port's facilities and services. PoM engaged with port users to understand their needs and their concerns in relation to the three technical reports associated with PCEP Stage One engagement.

Tenants - organisations or businesses that lease or rent facilities within the port area for various purposes such as warehousing, storage, or office spaces. PoM engaged with tenants to understand their requirements and any potential impacts or concerns related to PCEP.

Unions – represent the collective interests of port workers and employees. PoM engaged with key union groups to understand their views in relation to the three technical reports and to provide a forum for them to provide their position in relation to PCEP.

Consultation opportunities and risks

Opportunities

The following consultation opportunities were identified prior to engagement:

Provide feedback: Allow for stakeholders to provide feedback on the information provided to them around PCEP including the three technical reports for PoM to consider.

Creating relationships: Meaningful stakeholder consultation can build strong relationships between PoM and its stakeholders, leading to better collaboration and cooperation.

Risk mitigation: Early consultation with stakeholders can help identify potential risks and concerns, allowing proactive measures to be taken to address them, thereby reducing the likelihood of negative impacts.

Increased involvement: Engaging stakeholders in the consultation process early may increase their involvement and participation in consultation throughout the project.

Risks

The following consultation risks were identified prior to engagement:

Differing opinions: Different stakeholders may have differing opinions, making it challenging to reach consensus or satisfy all parties involved.

Feeling unheard: Due to such differing opinions existing, some stakeholders that provide feedback may feel like their feedback may not be heard or considered throughout the consultation process.

Not supplying feedback: Key stakeholders that may be impacted by the project may not have the time or energy to supply feedback on the PCEP and therefore their voice might be unheard.

Loud stakeholders: Stakeholders that provide negative feedback can often be the most engaged, therefore it is important to ensure that all stakeholders feedback is recorded and considered.

Plan consultation approach

The IAP2 Spectrum

In a successful collaboration between PoM and Struber, Stage 1 of the PCEP integrated the IAP2 Spectrum, guaranteeing a robust stakeholder engagement process.

The IAP2 Spectrum (Appendix A) and core values helps organisations, decision makers and practitioners make better decisions, which reflect the interests and concerns of potentially affected people and entities. The IAP2 Spectrum is an informative tool to help clarify the role of stakeholders and in planning and decision-making, and how much influence the community has over planning or decision-making processes.

PoM proactively **informed** stakeholders about the project by providing them with the three technical reports. In addition, PoM also organised stakeholder briefings and community information sessions.

Consulting with stakeholders was then undertaken by PoM to obtain feedback from stakeholders and the community on the three technical reports, providing responses to stakeholders' feedback and their concerns.

An overview of the IAP2 Spectrum and the level of engagement PoM was seeking as part of PCEP Stage One engagement was included in the presentation to each stakeholder group.

Tailored engagement approach

Struber worked with PoM to develop a tailored engagement approach to ensure all stakeholders were allocated reasonable time to be informed about PCEP and provide feedback.

PoM with the assistance of Struber, employed a targeted approach based on the level of knowledge, previous consultation history, likely understanding of project concepts and the anticipated impact of PCEP on stakeholders. Recognising the significance of the project's impact on stevedores, shipping lines, and government entities, PoM prioritised one-on-one briefings with these stakeholders to help understand their specific concerns, provide detailed information and foster direct dialogue tailored to their needs.

Additionally, PoM recognised the importance of engaging community members and offered them the opportunity to join online community information sessions. These sessions, designed to accommodate a larger audience, allowed community members to gain a comprehensive understanding of the project, voice their opinions and seek clarifications.

Figure 3. Port of Melbourne engagement overview

WHAT PoM are engaging on	WHY PoM are engaging	WHO PoM are engaging	WHEN PoM are engaging*	HOW PoM will engage	HOW PoM will gather & consider feedback
PROJECT Investment planning for PCEP	**CONSULT** PoM will engage an independent expert to conduct a Cost Benefit Analysis (**CBA**) in accordance with industry practice to inform our decision-making. PoM will consult on the input assumptions and outcomes of the CBA and will seek industry feedback to ensure that the CBA is appropriate to support our decision making.	Port Users Stakeholders Shipping Lines Stevedores	Sept – Nov 2022 on inputs Start in Jan 2023 and run through till mid 2023 on outputs	Materials: PoM will publish: Independent expert reports and summary information Industry Workshops	Written submissions to PoM PoM will consolidate and consider feedback on the inputs and on the CBA and its outputs
OUR APPROACH Pricing Order Engagement Protocol	**CONSULT** PoM will seek stakeholder feedback on the Pricing Order Engagement Protocol to ensure it meets compliance requirements and Port User reasonable expectations.	Port Users	Sep – Nov 2022	Draft Protocol published on PoM web site Written submissions to PoM 1:1 meetings (if requested)	Written submissions to PoM PoM will consolidate and consider feedback
OUR APPROACH TCS & Industry Update	**CONSULT** PoM will consult with stakeholders on what is important and use this to frame the scope of engagement and engage with stakeholders as input to the Tariff Compliance Statement.	Stakeholders	Start in Jan 2023 and run through till mid 2023	1:1 meetings Industry forums Written submissions to PoM Forum feedback	Written submissions to PoM PoM will consolidate and consider feedback

Feedback options

Stakeholders were invited to share their feedback on three technical reports: Trade Demand, Ship Fleet Forecast, and Port Capacity. These feedback options were specifically designed to cater to the various stakeholders impacted or interested by the PCEP.

Industry survey: The industry survey was provided to those involved in the shipping industry and included specific industry questions around the three technical reports as well as any other issues or concerns that PoM should be aware of. The questions, which can be viewed in Appendix C, were aimed at professionals within the shipping industry and those who may be directly impacted by PCEP.

General survey: A general survey was created with high level questions around the three technical reports and asked for further feedback on any other issues or concerns that PoM should be aware of. The questions, which can be viewed in Appendix D, were aimed at those who are interested in PCEP or attended a community information session.

Formal submission: Formal submissions were encouraged to be prepared by key stakeholders that may be highly impacted by the PCEP and wanted to provide in-depth information. Stakeholders that did provide formal submissions included tenants, stevedores, shipping lines and unions.

Implement consultation

The following engagement activities were conducted by Struber to assist PoM during the consultation process of PCEP Stage 1 engagement:

- Facilitated four community online information sessions
- Created, delivered and compiled results of general and industry feedback surveys
- Attended and provided summary notes on 10 one-on-one stakeholder briefings
- Prepared and managed stakeholder enquiries and issues register
- Attended and provided summary notes for two meetings with Black Quay Consulting, PoM and stakeholders held in October 2022

Throughout the period in **87** stakeholders attended the online community information sessions, **71** stakeholders attended the stakeholder briefing sessions and **183** stakeholder interactions were recorded.

The following section provides an overview of these engagement activities.

Online community information sessions

Four community online information sessions were held, with two taking place on 27 September and the remaining two on 29 September 2022. These sessions were an opportunity for members of the community and stakeholders to learn about PCEP including the scope of engagement, trade forecast, ship fleet forecast, port capacity and links to access reports as well as next steps.

The sessions were promoted via social media, emails and on the Port of Melbourne website from 7 September 2022.

Subject matter experts from PoM presented at the sessions including Head of Community Engagement, Head of Planning, Head of Regulation and the sessions were attended by other members of the Port of Melbourne Executive team. Throughout the sessions, attendees were given the opportunity to ask questions or provide feedback which was then addressed by a PoM technical team member.

All sessions were recorded with the approval of attendees and one session was posted on the website for public reference.

Several stakeholders emailed PoM asking for the link to watch the presentation due to having other commitments when the information sessions took place.

General public and industry surveys

At each of the online information sessions, attendees were provided links to a general public survey and industry survey, and the PoM community email address.

Following the sessions, follow up emails were provided to all respondents, including those who did not attend, 24 hours after the event. Seven days post event, another follow-up email was sent reminding attendees to provide feedback via survey links.

Both surveys were designed to be qualitative in nature, allowing stakeholders the opportunity to provide additional feedback or evidence to the questions if required.

Stakeholder briefings

Ten one-on-one briefings with stakeholders from government bodies, stevedores, shipping lines, tenants and local councils were held at PoM offices.

Slides developed by PoM were presented at these briefings, allowing for discussion about key areas of the project, including the engagement approach and the three technical reports.

Stakeholders were encouraged to ask questions and provide feedback and questions that required a follow up were recorded. Emails with the appropriate responses were sent out to stakeholders post briefing.

PoM further engagement

Following feedback from various stakeholders, PoM provided a flexible and responsive engagement approach including:

Reopening survey links: PoM was approached by a stakeholder four weeks post the submission deadline wanting to provide feedback. Requested by PoM, Struber reopened the survey links to ensure the stakeholder's feedback was captured.

Extending the formal submission deadline: PoM were engaged by stakeholders requesting an extension of the formal submission deadline, in which PoM agreed so all stakeholders were given the opportunity to provide feedback.

Additional meetings with Black Quay Consulting and stakeholders: Throughout the key stakeholder briefing sessions, stakeholders provided technical questions based on the report developed by Black Quay on port capacity. PoM identified the complexity of questions and organised a meeting between Black Quay and the key stakeholder to gain a further understanding of the findings.

PoM Community Emails: All stakeholders were encouraged to contact PoM with any further questions or queries post meetings, including the online community information sessions and stakeholder briefings.

Recording and posting community information session online: PoM recorded one of the community online information sessions and uploaded to their website to ensure all stakeholders and community members had the opportunity to view and listen to the presentation. Several stakeholders emailed PoM asking for the link to watch the presentation due to having other commitments when the information sessions took place.

Port user feedback

Feedback overview

A total of **15** stakeholders provided formal feedback on at least one of the three technical reports. Stakeholders had the opportunity to submit their feedback through one of three options: an industry survey, general survey or formal submission.

- **Three** stakeholders provided feedback via the general survey
- **Five** stakeholders provided feedback via the industry survey
- **Seven** stakeholders provided feedback via formal submission

Trade Demand Forecasts results

Stevedores, shipping lines, community members, community groups, unions and port users were among those that provided formal feedback on BISOE's report on Trade Demand Forecasts. Of the 13 stakeholders that provided feedback:

- **Nine** were positive and deemed BISOE's Trade Demand Forecast report to be accurate
- **One** was negative and had differing views on BISOE's Trade Demand Forecasts report
- **Four** were neutral and acknowledged the need for additional information or clarification before forming a definitive opinion on BISOE's Trade Demand Forecasts report

Ship Fleet Forecasts results

Stevedores, shipping lines, community members, community groups and unions were among those that provided formal feedback on GHD Advisory's report on Ship Fleet Forecasts. Of the nine stakeholders that provided feedback:

- **Four** were positive and deemed GHD Advisory's Ship Fleet Forecasts report to be accurate
- **One** was negative and had differing views on GHD Advisory's Ship Fleet Forecasts report
- **Four** were neutral and acknowledged the need for additional information or clarification before forming a definitive opinion on GHD Advisory's report on Ship Fleet Forecasts

Port Capacity results

Stevedores, shipping lines, community members, community groups, unions and port users were among those that provided formal feedback on Black Quay's report on Port Capacity. Of the 13 stakeholders that provided feedback:

- **Seven** were positive and deemed Black Quay's Port Capacity report to be accurate
- **Three** were negative and had differing views on Black Quay's Port Capacity report

- **Four** were neutral and acknowledged the need for additional information or clarification before forming a definitive opinion on Black Quay's Port Capacity report

Key themes

The feedback analysis revealed eight recurring themes that reflect the concerns and suggestions of the stakeholders. These themes provide valuable insights and serve as a foundation for addressing the stakeholders' priorities.

For a more detailed account of the specific feedback PoM received and its response, please see Appendix B.

Stakeholder engagement process:

Some stakeholders expressed a view that the overall stakeholder engagement process lacked transparency and believe PoM should have engaged with stakeholders prior to commencing the capacity model.

"PoM did not communicate with stevedores or other stakeholders that it was obtaining capacity or demand modelling, or the terms of its instructions to those consultants."

"We're concerned that the compressed timetable will compromise the quality of the stakeholder engagement indicated in the engagement overview and plan."

How this feedback was considered:

PoM is committed to stakeholder engagement that is inclusive, timely, genuine, and transparent. Its approach is guided by a commitment to listen to and be responsive to stakeholder feedback and has been informed by the Pricing Order Engagement Protocol (POEP).

The objective of the Stage One PCEP engagement process was to seek feedback from stakeholders on the findings of three technical reports that will inform the Cost Benefit Analysis (CBA). Based on feedback from stakeholders, adjustments were made to the models and reports. The three reports have been uploaded to the PoM website.

In addition, following stakeholder requests timelines for Stage One PCEP engagement were extended to allow sufficient time to consider and respond to stakeholder feedback received throughout the engagement process.

The engagement approach for PCEP has been designed to help ensure that stakeholders were engaged in a way that will guide future developments in the port that best serves Victoria whilst balancing the interests of the Port's stakeholders.

Following the outcomes of the Stage 1 engagement program PoM will look to implement further engagement with stakeholders relating to the PCEP CBA.

Capacity modelling methodology:

Feedback was received regarding the capacity modelling and a desire for more information about the process and methodology used to determine capacity.

"We advise Black Quay and PoM revisit its underlying assumptions and calculations to have regard to actual operational performance at the Port of Melbourne, and

"Any assumptions proposed by the consultant should be tested with all stakeholders before being adopted - and must be consistent with good international practice."

How this feedback was considered:

Based on feedback from stakeholders, adjustments were made to the Port Capacity Report. This included a more thorough explanation of the modelling approach and underlying calculations and scenario analysis in which key assumptions have been adjusted. The adjusted report was uploaded to the Port of Melbourne website in February 2023 for further engagement.

Capacity modelling underlying data and assumptions:

Stakeholders expressed a view that the underlying data and assumptions in the capacity model do not reflect their operations.

"The modelling is 'static' and therefore fails to take account of the dynamic interaction that occurs between call size, vessel pattern, vessel size, crane performance and crane deployment."

"The input assumptions (in the Capacity Review) are reasonable and reflect standard industry practice."

How this feedback was considered:

Stakeholders were invited to provide feedback on the assumptions and findings from the Port Capacity Report. Based on feedback from stakeholders, adjustments were made to the Port Capacity Report and the report was reissued in February 2023 for further engagement.

Actual operational data and productivity measures informed the development of the Port Capacity Report as provided by the Bureau of Infrastructure and Transport Research Economics (BITRE / waterline), an independent source which is commonly utilised by the ACCC and other government agencies to inform policy around ports and port performance. This data is appropriate given the purpose of the model is:

a. To consider the whole of port capacity
b. To inform long term port planning decisions; and
c. To allow public engagement on key findings.

Using this data removes issues relating to sharing competitively sensitive data.

Demand Forecast:

Some stakeholders expressed a view that data should be updated.

"We feel like the data is outdated and the forecasts should reflect global developments since May 2022."

"We are not opposed to the figures forecasted by BISOE. However, we believe that with the potential changing weather patterns over the last couple of years you would expect there to be more peaks and troughs which will impact the forecasted growth of this report."

How this feedback was considered:

The BISOE trade forecast was updated following engagement with the November 2022 data and included additional commentary regarding economic drivers.

An updated version of the BISOE trade forecast was published on the Port of Melbourne website in February 2023.

Ship Fleet Forecast:

Some stakeholders expressed a view that ship fleet forecast analysis approach and conclusions could be more clearly explained in the report.

"We request that the report be reissued to ensure that the report clearly explains GHD's findings and how these will be used to inform the broader PCEP process."

"There are a number of key areas where corrections or improvements must be made to the ship fleet forecast."

How this feedback was considered:

The ship fleet forecast was updated to provide a more detailed overview of the analysis approach and the conclusions.

An updated version of the GHD ship fleet forecast was published on the Port of Melbourne website in February 2023.

Ship Fleet Forecast, impact of IMO 2023:

Some stakeholders expressed a view that the impact of IMO 2023 was not adequately considered or explained in the ship fleet forecast.

"Port congestion has lessened but still being experienced in certain regions. With IMO2023 starting next year, there will be added complexity in managing service delivery as lines will have less ability to speed up in order to make up time."

"With new IMO emission targets there is a push for slow steaming and bigger vessels to ensure the carbon footprint remains minimal in global shipping, which should be reflected in the fleet forecast."

How this feedback was considered:

The updated report includes additional commentary with regards to the potential impact of IMO 2023 and this is something that will continue to be monitored.

An updated version of the GHD ship fleet forecast was published on the Port of Melbourne website in February 2023.

Ship Fleet Forecast, escalating ship size:

Stakeholders expressed varying views on the likelihood of escalating ship size.

"We see the future network where smaller vessels play an important role to provide flexibility."

"(We agree that) It is generally more cost-effective on a Per TEU slot basis to increase the ship size to respond to trade growth than to increase the number of vessel visits."

How this feedback was considered:

The ship fleet forecast was updated to provide more scenario analysis to address views of stakeholders with regards to their likelihood of introducing increased ships size.

An updated version of the GHD ship fleet forecast was published on the Port of Melbourne website in February 2023.

Cost Benefit Analysis, scope and approach:

Stakeholders requested more information with regards to the scope and approach of the CBA.

"We request that PoM provide the Request for Tender for the CBA and understand from our engagement with PoM that this request has been

"We look forward to hearing more about the CBA process being engaged throughout that period."

How this feedback was considered:

The CBA scope includes a consideration and assessment of the impact of PCEP on relevant trades. The findings from the CBA will form the basis of Stage 2 engagement which will be completed prior to the CBA being finalised.

Consideration and decision making

PoM and Struber recognise the importance of feedback obtained during the consultation period and is committed to utilising it effectively. The input and perspectives shared by stakeholders play a vital role in shaping the project's direction and outcomes.

Of the three technical reports provided to stakeholders for feedback, Port Capacity by Black Quay Consulting emerged as the most engaging topic, eliciting a wide range of opinions that spanned from strongly disagree to strongly agree.

Considering the significance of this matter, PoM conducted further engagement with stevedores and Black Quay Consulting which is further explained in the Stevedore Engagement section of this report.

In response to the valuable feedback received from stakeholders, PoM provided a comprehensive response to stakeholders, providing details of how their feedback has been considered in updating the three technical reports associated with PCEP Stage One engagement.

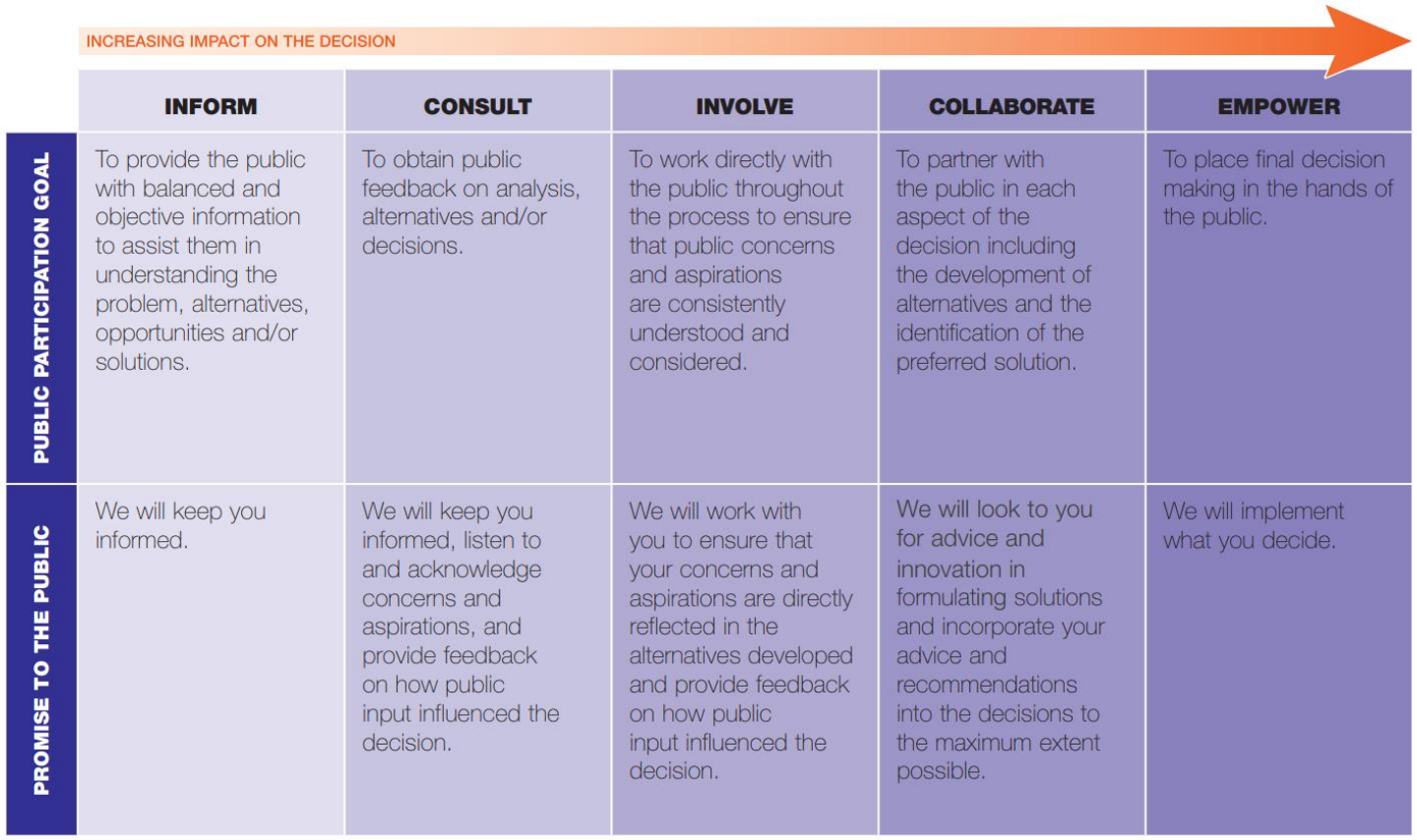
Furthermore, PoM remains committed to ongoing collaboration and communication with the Victorian government departments, ensuring that the feedback received from stakeholders is shared and discussed at appropriate levels.

PoM, with the assistance of Struber, demonstrated a commitment to best practice engagement with stakeholders by aligning its approach with IAP2 standards. Recognising the significance of meaningful and inclusive stakeholder engagement, a systematic and transparent process was implemented throughout the period Struber was involved. This commitment to best practice engagement further enhanced trust, transparency and accountability. PoM will continue to engage to these standards with future engagement on PCEP.

Appendix

Appendix A: IAP2 spectrum

Figure 1. IAP2 Spectrum



Appendix B: Stakeholder Feedback & PoM Response

Item:	Stakeholder comment:	PoM response:
1	PoM also appears to have abandoned its commitment to ensure that any timing of Terminal 4 was aligned tightly with the development of the Freight Link rail connection to Webb Dock. Failure to do so will result in increased heavy vehicle traffic into the port precinct and inner Western Melbourne. The Freight Link rail should be included in the Port Capacity Enhancement Program (PCEP) process and form part of the Cost Benefit Analysis.	While the two projects are closely aligned, the Webb Dock North development is required independently of Webb Dock Freight Link. PoM continues to advocate strongly for the Webb Dock Freight Link with the Victorian Government. Due to its size and scope requirements, the Webb Dock Freight Link is being considered as a separate project at this stage. Webb Dock Freight link will be the focus of a future stakeholder engagement, the Cost Benefit Analysis and business case process.
2	Stakeholder invites PoM to properly and genuinely consult with stevedores, the Department and other stakeholders about the need for, and appropriate timing of, any Terminal 4 project. At a minimum, this will require modelling to be re-undertaken, using shared and transparent inputs and following proper engagement around the modelling approach and terms of reference.	PoM is committed to stakeholder engagement that is inclusive, timely, genuine and transparent. Our approach is guided by our commitment to listen to and be responsive to our stakeholder feedback. The purpose of the Stage 1 PCEP engagement process was to seek feedback from stakeholders on the findings of three technical reports that will inform the Cost Benefit Analysis. Based on feedback from stakeholders, adjustments have been made to the models and reports. The three reports have been uploaded to our website and will be used to inform the Cost Benefit Analysis. Our engagement approach for PCEP has been designed to help ensure that we engage with our stakeholders in a way that will guide our

		future developments in the port in a way that best serves Victoria whilst balancing the interests of the Port's stakeholders. Importantly, we are aware of the sensitivities relating to some information which is shared with us and at all times look to ensure that we comply with our commercial and legal responsibilities.
3	A genuine and consultative process is now needed. It would be inappropriate and unsafe for PoM to seek to proceed to any business or other planning around the Terminal 4 proposal until real and robust modelling has been undertaken and all parties have confidence that it has been appropriately staged.	The PCEP is in the very early stages of development and PoM looks forward to continuing to engage with its stakeholders throughout all phases of the project to ensure the best outcome for the state of Victoria while balancing the interests of our critical stakeholders.
4	Stakeholder suggests Stevedores and other stakeholders would work with the consultant, including to provide real, operational data in support of this analysis.	Actual operational data and productivity measures informed the development of the Capacity Modelling report as provided by the Bureau of Infrastructure and Transport Research Economics (BITRE / waterline), an independent source which is commonly utilised by the ACCC and other government agencies to inform policy around ports and port performance. This data is appropriate given the purpose of the model is: • To consider the whole of port capacity; • To inform long term port planning decisions; and • To allow public engagement on key findings.

		Using this data reduces issues relating to sharing competitively sensitive data. This data was further validated and tested with findings from the draft productivity commission report.
5	Stakeholder suggests any assumptions proposed by the consultant should be tested with all stakeholders before being adopted – and must be consistent with good international practice.	The data and assumptions in the model were tested for reasonableness against recognised industry benchmarks for example PIANC and the draft productivity commission report.
6	Stakeholder suggests a working group should be established, comprising of PoM, stevedores, the Department and Ports Victoria to oversee the capacity and demand modelling processes, including jointly engaging with the modellers and reviewing and feeding back comments on draft outputs.	PoM will continue to seek input from stakeholders throughout the development of the PCEP.
7	Stakeholder invites PoM to genuinely consult. This means developing an approach to demand and capacity modelling that is dynamic, transparent, tested with stakeholders and which uses as inputs the most accurate and up-to-date operational data available.	Feedback gathered during Stage 1 of engagement has been used to inform and update both the demand and capacity modelling reports. Updated versions of these reports can be found on the PoM website.
8	Stakeholder has obtained its own, independent dynamic capacity modelling based on real, operational data. It demonstrates – based on robust, real-world data – that the maximum capacity of the Port to be at least 4.8 million TEU p.a. and	See PoM's response in relation to data in item 4. Stakeholders have been invited to provide feedback on the assumptions and findings from the capacity model. Based on feedback from stakeholders, adjustments have been made to the port capacity model and the report has been reissued.

	therefore capable of meeting expected demand comfortably until the late 2030s.	PoM is confident with Black Quay's model and projections. Black Quay has extensive international experience forecasting port capacity and its model has been shown to be accurate in predicting capacity issues.
9	As for the capacity modelling undertaken by Black Quay, discussed below, the instructions provided to BIS Oxford by PoM have not been made public. Overall, the BIS Oxford modelling reduces the average CAGR to 2.58% over the period FY21 to FY52 from the level previously used in the Port Development Strategy (3.5%). Despite forecast trade growth slowing over this period, the modelling is nonetheless being used by PoM in support of accelerating the development of Terminal 4 (see Figure 1). This is achieved by front-loading the timing of demand, with volumes increasing for the first decade (3.6%) before falling substantially in the back end. As a global operator that regularly undertakes container volume forecasting, we find it unusual that any modelling would front-end demand in this way. This timing also appears, conveniently, to align with the period over which PoM seeks to justify its investment in additional capacity but is otherwise not explained or supported by evidence. The overall impression created by BIS Oxford is that the report has been reverse-engineered to support the commercial	PoM strongly rejects that the models have been reverse engineered. BISOE has provided its independent third-party opinion to PoM. In response to the stakeholder, BISOE's updated report outlines five substantive reasons as to why a mature economy such as Australia will have diminishing container growth over time (p.35, BISOE) 1. The rate of population growth is easing over time. This comes via two different channels, decreasing natural population growth (Australia's fertility rate is below that of the replacement level) and net overseas migration falling as a share of population (which is driven by an assumption that the level of net overseas migration remains fixed over the long-term). This is a widely held view by most demographic models within Australia. 2. BISOE assume declining labour force productivity and diminishing improvements in labour force participation (due to demographic changes, largely driven by females born after 1975 making up a larger share of the female workforce). Both of these have a larger positive impact over the near term. 3. The diminishing population growth and productivity measures will lead to a smaller share of materials intensive aspects of the economy (such as building construction) over time. This amplifies the impacts of points (1) and (2) above.

	objectives of PoM and not to reflect a genuine and robust view of future container growth in Melbourne.	4. The import shares of components of the economy which continue to grow (building materials and food) in the BISOE models do not growth exponentially, rather linearly. As such, the outperformance of the growth in imports diminishes over time. 5. The positive impact that the shift towards 40ft containers has upon total TEUs (where TEU growth outpaces that of the mass of the cargo itself) diminishes over time as the 40ft share of total containers saturates (it cannot be higher than 100%).
10	It is not clear whether, or to what extent, a number of the decisions adopted by Black Quay in its modelling work are the result of instructions or data received from PoM. We note, for example, that the Black Quay report states that a number of key inputs (some of which are wrong) were 'agreed with POM'. In direct discussions with Black Quay, the stakeholder has been told that PoM tendered for desktop, static modelling of container capacity. Static modelling is a second-best approach and not as accurate or sensitive as dynamic modelling, which the stakeholder routinely undertakes across its global network. Black Quay describes its approach as follows: "The assessment includes comprehensive capacity analysis at all three (3) international container terminals located at the Port. Whilst the study is desktop based, each terminal has	PoM ran a competitive tender process to select a suitably qualified consultant to model the capacity of the port to inform future planning and development. Black Quay was evaluated to be the most suitable organisation to conduct the capacity modelling. The Black Quay approach uses a static model that has been utilised successfully internationally to inform port planning and port development. Black Quay has extensive international experience developing capacity modelling to inform future port developments. It was engaged to develop an independent capacity modelling report for PoM to help inform future investment decisions. The purpose of Stage 1 of engagement is to seek feedback from stakeholders on the reasonableness of these assumptions and findings. Based on feedback from stakeholders, adjustments have been made to the port capacity model and the report. The updated report has been

	been assessed using exclusive Black Quay capacity models and substantial investigations. Various discussions were held with Port of Melbourne staff to assess the validity and suitability of the data and information provided by the Port."	posted on our website and will be used as an input into the Cost Benefit Analysis.
11	The study is 'desk top based' rather than using real, verifiable and operational data, which could have been made available had terminal operators been involved in the process.	See PoM's response in relation to data in item 4.
12	Modelling has been undertaken in a 'black box' using "exclusive Black Quay capacity models and substantial investigations" - the model itself has not been tested or published, and the 'substantial investigations' are not described. Certainly the "substantial investigations" did not involve the most basic, first step of speaking directly to terminal operators.	See PoM's response in relation to data in item 4.
13	Information and data were provided by the Port only and the 'validity and suitability' of terminal productivity and performance data was tested only by speaking with PoM staff. This is despite PoM and its staff not operating any of the three terminals.	See PoM's response in relation to data in item 4.

14	The modelling is 'static' and therefore fails to take account of the dynamic interaction that occurs between call size, vessel pattern, vessel size, crane performance and crane deployment. Instead, the Black Quay modelling applies a generic average crane allocation based on vessel size of: • two cranes for vessels up to 5,000 TEU; • three cranes for vessels between 5,000 – 9,000 TEU; and • four cranes for vessels over 9,000 TEUs.	The modelling assumes a higher crane allocation based on average number of cranes versus average call size when compared to BITRE and the Productivity Commission report. The approach is consistent with the modelling approach ('static' modelling) adopted by the State in support of major investment decisions including the Port Capacity Project (2010), the Project Blue Scoping Study (2014) and the Port Lease Transaction (2016).
15	By contrast, the kind of dynamic capacity modelling routinely undertaken utilises a dynamic berth simulating tool to assess port operation using all of the above information and based on real operational data. Stakeholder believes that a dynamic berth capacity simulation assessment based on testing port-specific proposed vessel patterns and call size would provide more objective and quantifiable berth capacity data. The benchmarks used by Black Quay are out of date (2014), and not robust.	PoM is confident with Black Quay's model and projections. Black Quay has extensive international experience forecasting port capacity and its model has shown to be accurate in predicting capacity issues. The approach adopted is consistent with the modelling approach ('static' modelling) adopted by the State in support of major investment decisions including the Port Capacity Project (2010), the Project Blue Scoping Study (2014) and the Port Lease Transaction (2016).
16	The static approach to modelling also requires Black Quay to make other assumptions that lack support. For example, Black Quay acknowledge that they apply an arbitrary discount of 15% to reflect uncertainty associated with the static modelling assumptions. The dynamic modelling used	The 15% discount that has been applied is detailed in section 3.5 of the technical report. The discount takes into consideration actual data relating to seasonal peaking and terminal closures over the last five years.

	by the stakeholder incorporates probability-based sensitivity measures, which are both more robust and tested than arbitrary contingency values. The result of is that the Black Quay modelling leads to capacity assumptions that promote investment in additional quay line ahead of more efficient and cost-effective investment in other options, notably additional cranes. Terminal operators in Melbourne have significant scope to expand capacity through productivity increases and the deployment of additional cranes well before building new costly quay infrastructure is justified or required.	
17	The TEU to box ratio factor is the ratio of TEU to actual containers handled. The Black Quay Report states that: • BITRE Waterline 67 highlights a TEU to box ratio of approximately 1.59 across the PoM container terminals (July to December 2020). • In the absence of any forecast changes to the TEU ratio contained within the trade forecasts, PoM has confirmed that a ratio of 1.60 should be utilised for modelling, with the provision to be sensitivity tested. Black Quay has underestimated the TEU ratio. Melbourne has grown 0.02 TEU year-on-year since 2019, with a comparable growth rate in Sydney (Figure 2).	Following feedback from stakeholders the TEU ratio has been adjusted to 1.7 from 1.6 across scenario B and C.

	On that basis, stakeholder submits that any TEU ratio used for capacity modelling over the next 10 - 20 years should be based on a TEU ratio of at least 1.7.	
18	The central and most significant concern with the Black Quay analysis is that it substantially underestimates crane productivity likely to be achieved by each of the three Melbourne container stevedores over the next 10 - 20 years. The Black Quay Report assumes 140,000 TEU per crane per annum in all scenarios. As well as being significantly lower than any credible estimate, the productivity measure is fixed for all vessel sizes. It is not clear if this productivity figure was determined by Black Quay or provided to it as a modelling input by PoM. Certainly, there is no credible basis for such a low level of static productivity.	Following feedback from stakeholders our consultants have updated the measures and included scenario B and C for consideration. All berth capacity figures (for all scenarios) include berth capacity with and without the annual crane productivity parameter. Figure 41 indicates that there is minimal difference in the overall capacity when it is constrained by the annual crane productivity (i.e. difference of more than ~5%) until after 2040.
19	PIANC Working Group guidance assumes increasing crane productivity. The industry expects crane productivity to continue to improve over the next decade. The PIANC WG158 itself estimates future crane moves per year as up to 120,000 moves by 2035, which at a TEU	The reports have been updated to include scenario B and C.

	ratio of 1.6 would result in an STS crane productivity of 192,000 TEU (Figure 3). Even taking the medium productivity metric for moves as at 2030 (assumed to be 105,000 the midpoint between the medium values for 2025 and 2035), and applying the same conservative TEU ratio, the productivity figure is 168,000 TEU.	
20	Drewry Research estimates average crane productivity of 200,000 TEU p.a. The Black Quay assumption is also not aligned with Drewry, which estimated global quay crane rate productivity as 200,000 TEU p.a.	Black Quay has included section 4.9 Maximum Practical STS Crane Productivity to provide an explanation as to why the methodology and rationale for adopting the nominated annual crane productivity figures.
21	The productivity assumption is inconsistent with operational experience in Melbourne. The stakeholder notes that the Port has a very high and growing average call size, which increases crane utilisation and therefore overall crane productivity. Table 2 below provides the stakeholder's actual crane performance for Swanson Dock West, with crane rates of up to 272,703 TEU and consistently above 140,000 TEU p.a.	The 272,703 TEU/annum reflects the maximum throughput of one crane and does not consider the average throughput across all cranes when there are a higher number of cranes available (leading to lower utilisation rates). Black Quay notes that in 2018, there were 10 cranes, which was the adopted maximum cranes by Black Quay, and crane productivity was 140,000 TEU/annum/crane (as per Table 2).
22	Implications for overall capacity estimate	Reviewing actuals now provided by the stakeholder, this aligns with the notion that higher productivity is achieved when there are fewer STS cranes on the berth line. In 2018, there were 10 cranes, which was

	The low crane productivity measure adopted by Black Quay has a significant effect on the outcome from modelling. Stakeholder has undertaken an alternative capacity assessment that adopts a conservative combination of: • The accepted Drewry Research average crane productivity measure (200,000 TEU p.a.); and • An assumed 8 cranes operating on each of the three Melbourne terminals – which is less than the number of cranes assumed and modelled by Black Quay. These inputs are conservative. The stakeholder maintains that operational experience demonstrates that future crane productivity in Melbourne is materially higher than 200,000 TEU p.a., and that up to 9-10 cranes can feasibly be used on all three quay lines (as is accepted by Black Quay in its own modelling). On this conservative basis, the maximum capacity at Melbourne is 4.8m TEU p.a. This indicates that Black Quay's incorrect assumption regarding crane productivity leads to it understating existing maximum capacity by almost 25% (or 1 million TEU p.a.).	the maximum cranes adopted by Black Quay, and crane productivity was 140,000 TEU/annum/crane. This has been addressed in Scenario analysis. Black Quay modelling results are consistent with results for the stakeholder terminal for the adopted crane rates. Black Quay have described the methodology and rationale for adopting the nominated annual crane productivity figures in section 4.9 Maximum Practical STS Crane Productivity.
23	The timing of Terminal 4 represents the most significant and high-risk investment at the Port since privatisation, and the most significant likely to occur over the next two decades. It	As part of its stewardship obligations, PoM is required to act in the best interest of the State. PoM is committed to stakeholder engagement that is inclusive, timely, genuine and transparent and our approach is

	will impose substantial costs on the Victorian economy and taxpayers. For PoM to seek to justify accelerating this investment using capacity modelling based on a static, untested desk-top model populated with assumptions and data provided by a party with no direct role in operations, is neither safe nor appropriate. Stakeholder conservatively estimates that the results of PoM's modelling result in a capacity estimate that understates port capacity by at least ~1 million TEU p.a. (or ~25%).	guided by our commitment to comply with our regulatory obligations, and our intent to listen to and be responsive to our stakeholder feedback. It is incorrect to refer to any acceleration of the investment. The development needs to occur in a timely way in order to meet demand forecasts, which is the subject of ongoing engagement. Our engagement approach for PCEP has been designed to help ensure that we engage with our stakeholders in a way that will guide our potential investment in the port in a way that best serves our stakeholders and the state of Victoria as a whole. The objective of our Stage 1 process was to seek feedback from stakeholders on the reasonableness of assumptions and findings from the independent expert reports that will inform the Cost Benefit Analysis. Based on feedback from stakeholders, adjustments have been made to the models and reports and the reports have been reissued. These updated reports which will inform the Cost Benefit Analysis.
24	The work undertaken by PoM to date does not reflect any input from stakeholders and cannot support or credibly justify an acceleration of the construction of Terminal 4. For PoM to seek to justify accelerating this investment using capacity modelling based on a static, untested desk-top model populated with assumptions and data provided by a party with no direct role in operations, is neither safe nor	The PCEP is in the very early stages of development and PoM is seeking inputs from stakeholders to guide the future development and timing of the project. PoM is committed to stakeholder engagement that is inclusive, timely, genuine and transparent. Our approach is guided by our commitment to comply with our regulatory obligations, and our intent to listen to and be responsive to our stakeholder feedback.

	appropriate. The stakeholder conservatively estimates that the results of PoM's modelling result in a capacity estimate that understates port capacity by at least ~1 million TEU p.a. (or ~25%). To the extent that PoM ignores the evident failures in its process to date, and presses on, stakeholder considers this evidence that its rushed and premature development of Terminal 4 is merely intended to reverse-engineer the commercial objectives of PoM shareholders and does not genuinely have regard to the substantial cost it will impose on the Melbourne port supply chain and Victorian taxpayers.	PoM recognises the critical role our stakeholders play in managing the flow of cargo and materials into and out of the port and we see the importance of early and ongoing engagement as the project develops. Our engagement approach for PCEP has been designed to help ensure that we engage with our stakeholders in a way that will guide our potential investment in the port in a way that best serves the state of Victoria whilst considering the interests of the Port's stakeholders. The purpose of our Stage 1 process is to seek feedback from stakeholders on the reasonableness of assumptions and findings from the independent expert reports that will inform the Cost Benefit Analysis. Based on feedback from stakeholders, adjustments have been made to the models and reports. The three reports have been uploaded to our website; it is these reissued reports which will inform the Cost Benefit Analysis.
25	The Reports be reissued to stakeholders after the engagement process has been concluded, incorporating stakeholder feedback and addressing key shortcomings in the Reports. The updated reports should be confirmed as reflecting the final set of input assumptions that will be used to inform the Cost Benefit Analysis (CBA) and PoM's investment decision making. This will ensure full transparency is provided to stakeholders and that the reports meet a standard commensurate with the scale of the investment decision.	The purpose of our Stage 1 process was to seek feedback from stakeholders on the reasonableness of assumptions and findings from the independent expert reports that will inform the Cost Benefit Analysis. Based on feedback from stakeholders, adjustments have been made to the models and reports and these have been reissued to stakeholders. The updated reports have also been uploaded to our website. It is these updated reports which will inform the Cost Benefit Analysis, noting that sensitivities are also likely to be run against all key assumptions (e.g. capacity, demand, capex etc).

	We understand from our engagement with PoM that this request has been agreed by PoM.	
26	The CBA work not be undertaken until such time as the above steps have been completed to ensure that the inputs and the methodology are fit for purpose.	The CBA commenced in November to focus on defining the options and cost and benefits to be modelled. The independent expert reports will be made available once they are complete and PoM will conduct further engagement on the CBA.
27	PoM revisit the stakeholder engagement plan provided to reflect feedback that the timetable appears to be unnecessarily compressed and will compromise the quality of the stakeholder engagement.	PoM has adjusted the timeline to allow sufficient time for all stakeholder feedback to be considered and necessary adjustments made to models and reports. These adjusted timelines were communicated in early December directly to the stakeholder and via the PoM website.
28	PoM provide the Black Quay model showing each of the inputs per terminal per annum and the calculations to arrive at the berth capacity for each terminal.	This model is Black Quay Intellectual Property and will not be made available to stakeholders. Additional detail has been included in the report to provide greater transparency in the structure of the model and the underlying calculations. Please refer to Section 8 Model Overview and Appendix B - C: Key Model Inputs by Year.
29	PoM provide calculations and the supporting data as to how Black Quay has arrived at the effective number of berths and average cranes per vessel, per annum, per terminal.	This model is Black Quay Intellectual Property and will not be made available to stakeholders. Additional detail has been included in the report to provide greater transparency in the structure of the model and the underlying calculations. Please refer to Section 8 Model Overview and Appendix B - C: Key Model Inputs by Year.

30	PoM provide the crane utilisation calculated per annum per terminal.	Due to the potential commercial implications PoM is unable to provide crane utilisation relating to other terminals. Following feedback from stakeholders the capacity modelling report has been updated to provide additional supporting information in relation to the Max Average Crane Utilisation and how it has been determined. In addition, based on feedback, our consultants have developed additional scenarios (B1, B2, B3 and C) which assumes an increase in the TEU ratio (B1), crane rate (B2) and berth utilisation (B3) (with scenario C assessing the impact of all factors combined). Please refer to the updated report.
31	PoM engage with terminal operators to understand and incorporate operator's development plans into Black Quay's capacity modelling and report.	Scenario B1 to C model improved productivity by stevedores. PoM is interested in understanding any plans stevedores have to make terminals more efficient. The model assumes that stevedores will make the necessary investments to ensure yard capacity matches berth capacity. The model also assumes the terminal is berth constrained and so any development plans suggested by the stakeholder which only impact yard capacity would not change overall capacity.
32	PoM incorporate alternative lower cost capacity options (e.g. terminal operator development) into the Cost Benefit Analysis to assess whether investment by existing operators would be more prudent and efficient and change the required timing for a new container terminal.	The base case currently assumes investment in quay cranes by terminal operators to maximise berth capacity and (if required) investment in the yard to meet berth capacity. Scenario B1 to C model improved productivity by stevedores.

33	How should we reconcile the Black Quay capacity level of c.3.86m TEU (SDE: 1.26m, SDW: 1.4m, WDE: 1.2m) against the PDS which noted that in 2017 the Port Capacity Project was delivered expanding container handling capacity to 4.5 million TEU? We note this Port capacity was prior to PoM's investment to remove the knuckle at VICT creating even further capacity to the Port.	This was based on capacity estimates developed at the time of privatisation. Black Quay's modelling relies on updated assumptions.
34	Does PoM still believe the Port can handle 8.0 million TEU through the Port? If so, how should stakeholders reconcile this to the Black Quay capacity analysis? If not, what has changed since the preparation of the PDS in 2020 where PoM intended to handle 8.4 million TEU by 2050?	This is beyond the current scope of PCEP engagement. PCEP involves consideration of the next tranche of container capacity and PoM has not specifically reconsidered the maximum capacity of the Port (which will continue to be evaluated through future Port Development Strategies).
35	Could PoM please reconcile Black Quay's current WDE capacity of c.900,000 TEU against confirmation provided in April 2021 that PoM was investing $67 million in the removal of the knuckle to restore WDE's intended design capacity of 1.2 million TEU?	PoM understands Black Quay's view of WDE capacity reflects the berth utilisation identified by Black Quay (53% vs 60%) and changes to the fleet profile currently calling at VICT (smaller 2,000 TEU vessels).
36	What indicative capacity has been determined for Webb Dock North? Could PoM please explain what the increases in capacity are in 2044-2047?	PCEP is in the very early stages of development and the current focus is on determining the current port capacity. The indicative capacity for WDN is between 1.6m TEU pa and 1.8m TEU pa. In relation to the indicative up step in Webb Dock capacity shown in the GHD forecasts, this reflects a potential further tranche of container capacity being delivered. However, the PCEP project involves

		consideration of the next tranche of container capacity and PoM has not specifically considered future terminal development (which will continue to be evaluated through future Port Development Strategies).
37	Please confirm if the waiting time of 0.1 WT/ST is being consistently applied across the terminals? If not, please provide the adopted waiting times per terminal.	WT/ST is one of the considerations in determining assumed berth utilisation. Further guidance and confirmation of the adopted WT/ST is provided within section 4.10 Berth Utilisation Factor Review of the Capacity Modelling report.
38	Please provide clarity on how the wait time to service time of 0.1 being utilised in the capacity review.	WT/ST is a function of berth utilisation and vice versa. Further guidance and confirmation please refer to section 4.10 Berth Utilisation Factor Review of the Capacity Modelling report.
39	How are PoM proposing to calculate the cost of waiting time for the purpose of the Cost Benefit Analysis?	This will be a focus on the Stage 2 consultation.
40	Stakeholder requests that any data adopted for the purpose of analysing wait times take into account the unprecedented impacts of COVID-19 on the container supply chain, which has seen record low vessel schedule integrity with an average of approximately 10% on-window arrivals in FY22. Reference should be made to historic data to obtain a true reflection of wait times.	Based on stakeholder feedback, the impact of COVID disruption has been removed in scenario B3 and C. The report has been updated to highlight the limitation with regards to capturing vessel congestion within the port; Section 10 outlines a methodology to address this data gap.

41	In determining vessel wait time, the assessment should have regard to vessels that arrive off-window. If vessels arrive off schedule this should not feed into calculations on vessel wait time. The stakeholder requests that Black Quay and PoM revisit its underlying assumptions and calculations to have regard to actual operational performance at the Port of Melbourne, and ultimately update the report.	Delays in shipping schedules are common with schedule reliability averaging approx. 65% pre-pandemic, and therefore must be considered when assessing service levels and wait times. Refer to updated scenarios in the Black Quay Report.
42	Stakeholder requests that the GHD report be updated to: a. Include a clear narrative description of key findings of the report as well as key assumptions that inform the Report including (i) a clear statement that the forecast vessel fleet mix is not a key driver for new capacity at Webb Dock and (ii) the assumptions that have been made about the impact of the IMO2023 regulations on vessel designs and new builds, to provide certainty that PoM's conclusions are aligned with stakeholders' interpretation of the report; b. Analyse current vessel order data given there have been material changes since January 2022 (in particular in respect of recent new orders for 7,000 TEU vessels and recent design parameters for 10,000-14,000 TEU vessels); c. Adopt a vessel limit of 11,568 TEU to take into account actual operating conditions (as this assumption is a key	The ship fleet forecast has been updated.

	driver in the forecasted allocation of vessel calls and volumes between Swanson Dock and Webb Dock terminals); d. Explain the basis for the observation that 8-9% of vessels are unable to pass under the West Gate Bridge and/or amended to account for vessel planning specific to calling Swanson Dock; and e. Incorporate the updated Black Quay capacity report (to reflect the appropriated volume allocation between Swanson Dock and Webb Dock terminals).	
43	We request that PoM confirms that Scenario A will be adopted for the purpose of making the investment decision and articulate this position within the final report and/or in its stakeholder materials.	PoM has regulatory obligations which require it to rely on forecasts and estimates that are arrived at on a reasonable basis and are the best possible in the circumstances. Accordingly, when making the PCEP investment decision, PoM will rely upon the Scenario that best meets that description at the time.
44	Stakeholder requests that PoM wait for the imminent outcome of the vessel simulations at Swanson Dock before updating the GHD report and finalising the assessment of the key drivers for Port capacity.	This will be considered in future reviews of the fleet forecast as appropriate.
45	We request that PoM formally confirm that the base case container trade forecasts will be adopted for the investment decision and that PoM formally articulate this position.	PoM has regulatory obligations which require it to rely on forecasts and estimates that are arrived at on a reasonable basis and are the best possible in the circumstances. Accordingly, when making the PCEP

		investment decision, PoM will rely upon the trade forecasts that best meet that description at the time.
46	Stakeholder request that the BISOE report be reissued to: a. Update FY22 for actual volumes whilst maintaining future growth rates; b. Confirm why Transhipment – full Bass Strait (excl. 2WDE) volume is included within the analysis and/or remove these volumes; c. Update forecasts to reflect global developments since May 2022; and d. Include commentary on the underlying macroeconomic outlook that has been used to build up the forecasts, as well as material global issues that have been considered and the likely impact on trade patterns/growth.	a, c and d. BISOE has updated their analysis for FY22 data and latest economic data for forecasts (note that this update has not been produced with a view to 'maintaining future growth rates' – BISOE has updated their forecast taking into account the latest developments). Commentary on the global and local macroeconomic outlook has been included in the updated BISOE report. b. This was an error and has been removed from the latest forecast.
47	Stakeholder requests that PoM in consultation with Ports Victoria and the State Government, consider deferring the timing of the investment decision by 12-18 months until the economic environment is more certain.	Due to the expected duration of the planning and delivery of the program it is appropriate that planning work continue. As per our engagement overview in the PCEP engagement pack on our website, we will continue to have engagement with all stakeholders including the State Government during this period.
48	Stakeholder requests that at a bare minimum, PoM (i) refresh the volume outlook and CBA in late 2023 and share the updates with stakeholders ahead of any final investment	Engagement with stakeholders will be in accordance with the PCEP. The next stage of engagement will seek feedback on the Cost Benefit Analysis and will be carried out in the first half of 2023.

	decision; and (ii) where container volumes are lower than the forecasts included in the CBA or informing investment decision making, reassess the timing for new capacity and share the updates with stakeholders ahead of any final investment decision.	
49	In 2020, PoM's Port Development Strategy (PDS) stated that the capacity of the Port (excluding the knuckle) was 4.5 million TEU. Black Quay's report finds the capacity of PoM (including the knuckle) to be 3.86 million TEU. PoM's position has been that the WDE Project will deliver VICT an additional 0.4 million TEU capacity. This means that there is a discrepancy of well over 1 million TEU.	Refer to Items 33, 34 and 35 of above. This was based on capacity estimates developed at the time of privatisation. Black Quay's modelling relies on updated assumptions. The Black Quay capacity modelling is consistent with the Port Capacity Model (PCM) as outlined in the Essential Services Commission's review of the Webb Dock East expansion (2022).
50	In 2020, the PDS also noted that the Port could handle the forecast container volume of 8.4 million TEU. However, the Black Quay and GHD reports now suggest that the Port's capacity is capped out at approximately 6.6 million TEU, representing a difference of 1.8 million TEU;	Refer to Items 33, 34 and 35 of above. The PCEP involves consideration of the next tranche of container capacity and PoM has not specifically reconsidered the maximum capacity of the Port (which will continue to be evaluated through future Port Development Strategies).
51	In April 2021, PoM confirmed that it was investing $67 million in the removal of the knuckle to restore WDE's intended design capacity of 1.2 million TEU. However, Black Quay calculates Webb Dock East's current berth capacity to be c.900, 000 TEU and shows no standard scenario where	Refer to Items 33, 34 and 35 of above. Key drivers of the difference in capacity are the appropriate berth utilisation identified by Black Quay (53% vs 60%) and changes to the fleet profile currently calling at VICT (smaller 2,000 TEU vessels, which may not call at VICT in the future post-knuckle removal).

	VICT reaches 1.2 million TEU until 2040 (even though the knuckle will be removed in 2023).	
52	In July 2022, the State confirmed that the timing for Bay West was informed by a Port capacity figure of 8 million TEU. Again, Black Quay and GHD reports now suggest that the Port's capacity is capped out at approximately 6.6 million TEU.	Refer to Items 33, 34 and 35 of above. The PCEP involves consideration of the next tranche of container capacity and PoM has not specifically reconsidered the maximum capacity of the Port (which will continue to be evaluated through future Port Development Strategies).
53	Further, we cannot reconcile the Black Quay view of the Port's capacity with the stakeholder's own model (which is based on actual operating data). The stakeholder's own model is supported by third party modelling from Moffatt & Nichol. The gap between the models is more than 1 million TEU and there are numerous examples of where the Black Quay view is clearly misaligned with actual sustained operations at the Port. For example, Black Quay states that Swanson Dock East already reached its berth capacity in 2022 (with an assumed 9 cranes). This is completely at odds with operational reality. The stakeholder operates only 7 cranes today, with an average utilisation of less than 25%.	There is an inverse relationship between number of cranes and crane utilisation. Based on feedback received from stakeholders, Black Quay have tested a number of different assumptions including developing two additional scenarios (B2 and C). In reviewing the stakeholder's capacity modelling, the key drivers of the difference can be attributed to assumptions relating to the effective number of berths and berth utilisation, an allowance for non-working time for vessels at berth, and an allowance for seasonal peaking.
54	The data used in the [Fleet Forecast] report is now aged (as of January 2022) and does not reflect recent material market developments and core assumptions that drive the	GHD report has been updated. However, we note that the original report uses July 2022 numbers not January 2022 numbers.

	forecasted allocation of vessel calls and volumes between Swanson Dock and Webb Dock terminals.	
55	The BISOE trade forecast report should be updated for FY22 actual volumes and the forecasts (as at May 2022) should be refreshed to account for significant global developments which will impact the macroeconomic factors that drive trade forecasts.	BISOE data has been updated and reissued.
56	In the stakeholder's view, the extreme level of global economic uncertainty impacting the demand outlook and potential for significant change to global trade patterns is such that the most appropriate outcome would be for a 12-18 month delay in progressing the investment decision, with the CBA and volume outlook to be refreshed at that time. There is significant economic benefit of a short deferral to ensure that investment timing is prudent and efficient without compromising the port planning process.	Due to the expected duration of the planning and delivery of the program it is appropriate that planning work continue. As per our engagement overview in the PCEP engagement pack on our website, we will continue to have engagement with all stakeholders including the State Government during this period.
57	PoM and Black Quay have not engaged with the stakeholder during the preparation of the report to seek input on operational inputs and assumptions.	Black Quay has had regard to the feedback provided during this process (from the stakeholder and others) in updating its scenarios analysis.
58	The Black Quay Report applies a capacity cap to the berth capacity calculation. The cap is derived by simply multiplying the assumed maximum number of cranes that can be accommodated on a berth by a theoretical annual	Black Quay has included section 4.9 Maximum Practical STS Crane Productivity to provide an explanation as to why the methodology and rationale for adopting the nominated annual crane productivity figures.

	crane productivity. It is this basic methodology that has been used to ultimately determine the maximum capacity at the Port. This is highly unconventional for the reasons outlined below. Black Quay simply adopts a theoretical maximum practical STS crane productivity for a gateway terminal of 140,000-160,000 TEU/annum/crane as per guidance contained within PIANC WG158, a 2014 international theoretical guideline. Black Quay have then adopted the lowest end of this range for Swanson Dock at 140,000 TEU/annum/crane as the maximum crane productivity. This very high-level approach of applying an artificial cap is not one the stakeholder or Moffat & Nichol have ever seen before. It is highly unusual that Black Quay have not had regard to actual operational data.	PoM ran a competitive tender process to select a suitably qualified consultant to model the capacity of the port to inform future planning and development. Black Quay was evaluated to be the most suitable organisation to conduct the capacity modelling. The Black Quay approach uses a static model that has been utilised successfully internationally to inform port planning and port development. In reviewing the stakeholder's capacity modelling, the key drivers of the difference can be attributed to assumptions relating to the effective number of berths and berth utilisation, an allowance for non-working time for vessels at berth, and an allowance for seasonal peaking.
59	The 12-month rolling average TEU/crane/annum from February 2015 to August 2019 was 232,000 TEU/Crane/Annum for cranes 4 to 6 (three cranes), with average crane utilisation of only c. 40%. Across the 12-month period to September 2018, where the stakeholder operated with 5 effective cranes, the stakeholder handled 1,075,000 TEU (with a low crane utilisation of 38%). Black Quay's cap in this scenario would be 700,000 TEU.	Black Quay has included section 4.9 Maximum Practical STS Crane Productivity to provide an explanation as to why the methodology and rationale for adopting the nominated annual crane productivity figures. Based on feedback from stakeholders, adjustments have been made to the port capacity modelling and the report. The adjusted report has been uploaded to our website; these reports will inform the Cost Benefit Analysis. In reviewing the stakeholder's capacity modelling, the key drivers of the difference can be attributed to assumptions relating to the effective

	Across the period May 2018 to April 2019, the stakeholder operated with only 2 berths and 7 cranes (due to berth remediation works) and achieved average throughput of c.1.1 million TEU per annum, with crane utilisation at only 28%. The stakeholder is not observing a reduction in crane productivity on servicing larger vessels. Black Quay indicates that 190,000 TEU/crane/annum has been achieved historically, but that an increase in vessel size would decrease this number. This assumption is again at odds with actual operational performance. It is inconceivable that Black Quay could reach the conclusion that East Swanson Dock reached its capacity in 2022 at a capacity level of 980,000 TEU per annum. The stakeholder has achieved in excess of this level with extremely low levels of crane utilisation and only 7 working cranes. This highlights that the Black Quay assumption of 140,000 TEU/crane/annum is not aligned with the operational reality of terminal operations at East Swanson Dock and must be revisited.	number of berths and berth utilisation, an allowance for non-working time for vessels at berth, and an allowance for seasonal peaking.
60	Black Quay has adopted another highly unconventional approach of applying a 15% reduction to the 'maximum annual' capacity on top of adopting a berth utilisation figure that already takes into account all the parameters for the optimal running of a container terminal facility	Refer to section 3.5 of the updated report for a greater explanation of the 15% buffer. A factor of 15% is applied to the maximum annual capacity to determine the optimum annual capacity. This factor is consistent with modern port planning principles and considers two elements:

		1. Allowance for unexpected fluctuations such as terminal shutdowns (e.g. industrial relations related, severe weather disruption) and major shipping events. 2. Allowance for expected fluctuations across the course of the year, such as seasonal peaking.
61	Black Quay defines the Crane Working Time for the vessel as "the average amount of time each crane at berth will work the vessel as a percentage of the vessel productive time". Black Quay has adopted a Crane Working Time of 87.5% of vessel productive time. This is based on advice from PoM which assumes a 1-hour shift handover for every 8-hour shift." This does not reflect actual terminal operating practice. The standard Crane Working Time for the stakeholder is 7.25hrs (with a meal break of 45 minutes for each shift). However, the terminal can operate with continuous operations, meaning that the cranes continue to operate without disruption throughout the shift. This input assumption represents a discrepancy of 240,000 TEU berth capacity for the stakeholder's terminal alone	Based on feedback from stakeholders, adjustments have been made to the port capacity modelling and the report. The adjusted report has been uploaded to our website; these reports will inform the Cost Benefit Analysis.
62	Black Quay notes that berth utilisations of 63% for a 3-berth terminal and 53% for a 2-berth terminal have been adopted.	Following stakeholder feedback berth utilisation assumptions have been updated in Scenarios B3 and C

	At a high level, the stakeholder agrees with Drewry's view as presented in the PoM Consultation 2022 paper that once 65% berth utilisation is exceeded for a 3-berth terminal, ship queuing may increase and service quality may reduce. However, in practice, regard must be had to the relative berth utilisation benchmark for each individual terminal operator by reference to their national planning capabilities (providing practical opportunity for an additional margin to be added on top of the 65% benchmark) including the ability of the terminal to increase crane intensity to negate delays. We therefore consider 65% to be the minimum benchmark for the stakeholder. We would also note that a minimum of 65% berth utilisation is consistent with Infrastructure Victoria's recognised benchmarks to be considered in planning new ports.	
63	Black Quay has adopted a net crane rate of 31mph. The stakeholder at East Swanson Dock over the past 5 years has operated well in excess of 31nmph. FY20 to FY22 crane rates were impacted by COVID-19 and Industrial Action, with the average at c.37nmph across FY18-FY19. Black Quay do not seem to have had regard to actual operational data which is readily available and should inform the capacity analysis. Black Quay should adopt the gross crane rate to capture the gross productivity per historical	Based on feedback from stakeholders, adjustments have been made to the port capacity modelling and the report. The adjusted report has been uploaded to our website; these reports will inform the Cost Benefit Analysis.

	data capturing events like breakdowns instead of applying a 15% buffer to reduce overall capacity. A further notable error within the report is the observation that Webb Dock East crane productivity is higher than Swanson Dock by 10,000 TEU/crane/annum. This is incorrect and actual data should be assessed.	
64	We note that Black Quay state that they have undertaken a 'sensibility check' on the berth capacity calculations using TEU per metre of quay line. We do not agree that it is generally accepted that a quay line productivity of 1,100 to 1,500 TEU/m/annum is considered reasonable for ports such as Port of Melbourne. Infrastructure Victoria indicate that the recognised benchmark to be considered in planning new ports in Melbourne is berth throughput of 2,200-2,400 TEU/m/year. We strongly believe that the Swanson Dock terminals are capable of handling well in excess of 1,500 TEU/m/annum and that this metric should not be given any weight when determining if the allocated capacities are indeed reasonable.	Black Quay has used a benchmark which is appropriate in its expert opinion. It also aligns with published data by Drewry and PIANC.
65	The stakeholder strongly disagrees with the theoretical analysis within the Black Quay report and the conclusion reached by Black Quay that berth capacity is the limiting factor at Swanson Dock. The conclusion is peculiar and at odds with recent third-party modelling that has concluded that yard	Black Quay assumes in its model that Stevedores will make the necessary investments / operational improvements to ensure that the yard capacity matches the berth capacity. This leads to berth capacity being the necessary assumed limiting factor.

	capacity is the limiting factor at Swanson Dock (including Moffat & Nichol's capacity assessment in Appendix C). PoM also engaged WSP to undertake modelling in 2021, with preliminary analysis shared with the stakeholder similarly noting yard capacity as the limiting factor. Given the conclusion reached by Black Quay is an outlier when compared to other independent expert analysis recently undertaken, further validation is essential.	In reviewing the stakeholder's capacity modelling, the key drivers of the difference can be attributed to assumptions relating to the effective number of berths and berth utilisation, an allowance for non-working time for vessels at berth, and an allowance for seasonal peaking.
66	The above highlights a range of significant issues with the Black Quay report. Black Quay's assessment of capacity compared to Moffat & Nichol's assessment is particularly significant, with a variance of 1.05m TEU per annum. This is a variance of close to 30%. The difference between approaches also extends to the constraining factor adopted, which compounds the stakeholder's concerns.	Please refer to updated report, Scenarios B and C. In reviewing the stakeholder's capacity modelling, the key drivers of the difference can be attributed to assumptions relating to the effective number of berths and berth utilisation, an allowance for non-working time for vessels at berth, and an allowance for seasonal peaking.
67	A gap in capacity of over 1 million TEU, c. 50%, along with a fundamental variance in the underlying constraining factor as outlined in table 4 above, means that further exploration of these issues must be undertaken by PoM.	Please refer to updated report, Scenarios B and C. Further detail regarding the assumptions in relation to the annual crane capacity cap has been outlined within the revised capacity modelling report. In reviewing the stakeholder's capacity modelling, the key drivers of the difference can be attributed to assumptions relating to the effective number of berths and berth utilisation, an allowance for non-working time for vessels at berth, and an allowance for seasonal peaking.

68	In all other capacity modelling exercises undertaken on the Port in recent years, the yard has been identified as the limiting factor at Swanson Dock. Black Quay's position is an outlier, finding that the berth is the limiting factor. As a result of this finding, Black Quay has undertaken minimal analysis on yard capacity or on the ability to develop yard capacity, including terminal operator development scenarios. Black Quay confirmed in our meeting on 20 October 2022 that development of the yard capacity was not explored after the berth was determined to be the limiting factor. This is not typical or standard practice.	Black Quay assumes in its model that Stevedores will make the necessary investments / operational improvements to ensure that the yard capacity matches the berth capacity. This leads to berth capacity being the necessary assumed limiting factor.
69	We refer to Black Quay's assumption in relation to stack height. The maximum stacking height for straddles can be 3 (or higher) as straddle carriers can be 1 over 3. As such current equipment should not be the limiting factor and a maximum of 3 high can be adopted.	Based on feedback from stakeholders, adjustments have been made to the port capacity modelling and the report. The adjusted report has been uploaded to our website; these reports will inform the Cost Benefit Analysis.
70	The Black Quay finding that berth is the constraining factor for Swanson Dock, artificially inhibits the ability for operators to invest in their yard (cranes, straddles, change in operating mode) to expand capacity as required.	Black Quay assumes in its model that Stevedores will make the necessary investments / operational improvements to ensure that the yard capacity matches the berth capacity. This leads to berth capacity being the necessary assumed limiting factor.
71	As noted in our feedback in section 2.1 above, we do not consider the determined capacities for any of the three	Please refer to updated report, Scenario B1 to C. In reviewing the stakeholder's capacity modelling, the key drivers of the difference can be attributed to assumptions relating to the effective

	terminals to be realistic particularly East Swanson Dock's berth capacity which is grossly understated.	number of berths and berth utilisation, an allowance for non-working time for vessels at berth, and an allowance for seasonal peaking.
72	It appears that Black Quay have adopted a wait time to service time ratio of 0.1 or 10%. However, it is unclear how this measure is being used for the purpose of the capacity review. It should be noted that theoretical studies that have modelled the wait time to service time ratio have been based on one port or one terminal only. Under such circumstances, terminal operators have very limited to no control over when a vessel will arrive and this inevitably causes delays/increased waiting time.	The approach gives consideration to various reviews and the type of operations at the Port of Melbourne - refer to section 4.10 Berth utilisation factor review.
73	The benefit of the NOC must be taken into account when measuring the wait time at the Port of Melbourne. Adopting an industry standard would not do justice to the unique capability of the NOC to optimise berth utilisation and minimise wait times. Given more than 70% of services that call into the stakeholder in Melbourne call the same stakeholder exclusively across Australia, wait time almost becomes an anomaly as the stakeholder has the ability to manage the entire Australian coastal schedule, adjusting operation times or speeding up or slowing down vessels as required to ensure that the vessel maintains its coastal schedule and the stakeholder meet customer expectations.	Based on feedback from stakeholders, adjustments have been made to the port capacity modelling and the report. The adjusted report has been uploaded to our website; these reports will inform the Cost Benefit Analysis. Please refer to updated report, Scenario B3 and C.

	The NOC provides a major benefit to shipping lines minimising delays and the impact from disruptions.	
74	It is important to highlight that the data has been taken during the height of COVID and hence depicts the worst wait times ever experienced at the Port at a time when vessel schedule reliability was at an historic low. We also note that the shipping data provided on slide 39 of the Black Quay report is not a true reflection of individual operator's capabilities. The data depicts inflated waiting times in the second half of 2020 due to unprecedented low schedule reliability which is unrepresentative of container vessel scheduling.	The actual WT/ST actuals have been provided for illustrative purposes only and have not been used to inform berth utilisation assumptions (see figure 25).
75	In conclusion we strongly disagree that the berth is the constraining factor when calculating the capacity of East Swanson Dock.	Black Quay assumes in its model that Stevedores will make the necessary investments / operational improvements to ensure that the yard capacity matches the berth capacity. This leads to berth capacity being the necessary assumed limiting factor.
76	We also fundamentally disagree that the inputs that have been adopted by Black Quay most notably in relation to berth capacity are reasonable given operational reality and the ability to further improve productivity and invest to develop capacity. Whilst the other two terminal operators will provide their own view based on their own in-depth knowledge of their own operations, based on our understanding of our competitor's capability and the third-party analysis	PoM notes the stakeholder's position. Based on feedback from stakeholders, adjustments have been made to the port capacity modelling and the report. The adjusted report has been uploaded to our website; these reports will inform the Cost Benefit Analysis.

	undertaken by Moffat & Nichol, we also disagree with the capacity that Black Quay has calculated for the other stevedores.	
77	PoM's fleet forecasts as prepared by GHD, appear to confirm that the forecast vessel fleet mix is not a key driver for needing to build additional capacity at Webb Dock North as there is ample capacity for all three terminals to handle the fleet mix for more than the next 20 years. Container shipping schedules have historically had high levels of schedule reliability, allowing container terminal operators to allocate designated berth windows to shipping lines and minimise wait times. It does not make sense to draw any conclusions regarding waiting times based on data across an unprecedented period of disruption and low schedule reliability.	Noted, however evidence provided by key stakeholders and further review from GHD indicates vessel size will continue to increase over time and there will be a requirement to provide additional big ship capacity in the future.
78	We agree with the observation that there have been recent new orders for 7,000 TEU vessels (25 Seaspan), however this data requires updating to reflect all current 7,000-8,000 TEU vessels now on order (109 as at August 2022). Whilst GHD note that these new orders show new interest to replace the 6-8,000 TEU size fleet, we would go much further than this to note that the large number of recent orders of this size actually represents the emergence of a new favoured	Refer to the updated Ship Fleet forecast section 4.3 Containership Supply and assume access constraints and section 7.1.4 Throughput carried by containerships up to 11,500 TEU nominal capacity by 2050.

	vessel class that will most likely cause a dampening effect on vessel upsizing in Australian trades.	
79	The order book provided in the GHD report as of January 2022 is not reflective of more recent design parameters for 10,000-14,000 TEU vessels. Since January we have seen designs of 330-334m (LOA) by 48.2 (beam) and 335-336m (LOA) by 51m (beam). As of 25 August 2022, such designs represented 69 new builds. Please refer to Appendix B for supporting data. The design parameters for large vessels are highly relevant as they impact the ability for a vessel to call at Swanson Dock under the Harbour Master's Directions.	The Ship Fleet forecast has been updated with more recent data.
80	The GHD Report adopts a maximum vessel size for Swanson Dock of 10,000 TEU on the basis that this represents the point at which vessels are constrained by the West Gate bridge. This observation is incorrect. Vessels up to 11,568 TEU (337m x 45.6m or 315 x 48.2m) can call at Swanson Dock based on the acceptable Length Overall (LOA) and beam specifications in the current Harbour Master Directions. Furthermore, as PoM is aware, there are planned simulations of 337m x 48.2m vessels happening now which if successful would result in, the vessel nominal TEU limit increasing to 12,726 TEU.	Refer to the updated Ship Fleet forecast section 4.3 Containership Supply and assume access constraints and section 7.1.4 Throughput carried by containerships up to 11,500 TEU nominal capacity by 2050.

	Refer to the updated Ship Fleet forecast section 4.3 Containership Supply and assume constraints and section 7.1.4 Throughput carried by containerships up to 11,500 TEU nominal capacity by 2050.	
81	The observation that 8-9% of vessels are unable to pass under the West Gate Bridge is misleading and inaccurate based on our actual experience of similar or larger vessels calling East Swanson Dock. Whilst the basis for the 8-9% figure determined by GHD is unclear, with vessel planning specific to calling Swanson Dock (through adjusted air draft, where vessels have a collapsible mast and/or ballast volume and/or trim) many of these vessels can transit under the Westgate bridge. For example, the NEMO/Aus Express service is currently split between Webb Dock and East Swanson Dock and the vessels calling each precinct are of a similar size.	Refer to the updated Ship Fleet forecast section 4.3 Containership Supply and assume constraints and section 7.1.4 Throughput carried by containerships up to 11,500 TEU nominal capacity by 2050.
82	As PoM is aware, simulations of 337m x 48.2m vessels are imminent, and if successful, will increase the vessel limit at Swanson Dock to 12,726 TEU. As set out in Appendix B, the simulations of 337m x 48.2m vessels applies to 7-10% of additional vessels that could call Swanson Dock. Given the significant quantum of additional vessels covered by the simulation and the fact that the outcome of the simulation is likely to be known over the next couple of months, the	Once these results are made available, they will be considered and inform future reviews.

	stakeholder considers that PoM should wait for the outcome of the current simulations. The GHD report should then be updated. This will ensure that the final report used to inform an investment decision for Webb Dock development timing reflects actual operating conditions.	
83	FY22 actual volumes appear to be overstated by c.100k TEU. We request that BISOE update FY22 for actual volumes whilst maintaining future growth rates. This would result in a 10-year CAGR no greater than 2.5%. BIS OE appear to have regard to Transhipment - full Bass Strait (excl. 2WDE). It is unclear why this volume is being included within the analysis, when Bass Strait volume is typically excluded from international container terminal volume analysis.	BISOE report has been updated to reflect these comments.
84	We note that BISOE prepared the container forecasts based on the state of the world as of May 2022. Since that time, there have been significant global developments and there is a new level of global uncertainty which will have impacted the macroeconomic factors that drive trade forecasts. We therefore request that PoM have BISOE revisit their forecasts and provide commentary for global developments that have occurred since May 2022. The PCEP process, which is informing a significant investment decision, should be based on the most up to date economic data available.	BISOE report has been updated to reflect these comments.

85	The extreme level of global economic uncertainty impacting the demand outlook and global trade patterns is such that the most appropriate outcome would be for a 12-18 month delay in progressing the investment decision, with the CBA and volume outlook to be refreshed at that time. There is significant economic benefit of a short deferral to validate that the timing is prudent and efficient without compromising the port planning process.	Due to the expected duration of the planning and delivery of the program it is appropriate that planning work continue. As per our engagement overview in the PCEP engagement pack on our website, we will continue to have engagement with all stakeholders including the State Government during this period.
86	The stakeholder is of the view that the engagement process timetable is unnecessarily tight. It appears that PoM is consulting on complex inputs in September and October with feedback to be provided by PoM in October/November. The stakeholder is concerned that the compressed timetable will compromise the quality of the stakeholder engagement indicated in the engagement overview and plan. Taking the time to ensure that quality inputs inform the CBA is critical.	The timeline has been adjusted and extended, impacting both stage 1 and stage 2 engagement and providing greater opportunity for stakeholder engagement.
87	Unfortunately, the level of detail provided lacks transparency and we still do not know what inputs have been used per annum across the forecast period to determine both berth and yard capacity for each of the 3 terminals. We note that generic, theoretical inputs appear to be being used by Black Quay so there should not be commercial sensitivities in answering these questions for all three terminals.	Section 8 of the updated report addresses these issues.

	In particular, question berth (i), we requested the model showing each of the inputs to arrive at berth capacity for each terminal. The response provided does not directly answer the question. Whilst the formula for berth capacity has been provided, it is now clear that multiple inputs are changing per annum and only two inputs (related to the stakeholder only), have been provided (vessel productive time and average cranes per vessel). Inputs that have not been provided (and these appear to be changing over time) include effective berths, max berth utilisation, crane working rate and net crane rate per annum, for each terminal. The provision of all inputs per annum per terminal cuts across 6 individual questions that have been asked and are not adequately addressed. These questions are (Question 5, berth questions (a), (b), (c), (e) and (m)). Whilst we have been provided with the number of cranes per vessel, there is no transparency on the crane utilisation that is being assumed per annum across the forecast period. Further, it is not clear how Black Quay have arrived at the effective number of berths and average cranes per vessel (General question (a)). Simply referring to the fleet forecasts as the driver without supporting calculations or a detailed methodology is not helping to close the information gap. We reiterate our request for clarity on a number of critical inputs across the forecast period. This could be readily	

	achieved by sharing a version of the berth and yard capacity model.	
88	In addition to the Black Quay report, we would have liked to see the views of modelling or analysis carried out by Victorian Government agencies such as Department of Transport/Freight Victoria/Ports Victoria/Infrastructure Victoria.	The stakeholder engagement pack references other relevant reports on slide 28. You are welcome to review other publicly available reports.
89	We wish to have had the opportunity to provide views on the specifications for the expression of interest or tender process for selection of the terminal operator for the new Webb Dock North container terminal.	The program is currently at Identification phase. We have not determined our consultation process relating to this issue at this point.
90	We want to see stronger commitments to integrate international human rights instruments such as the United Nations Guiding Principles of Business and Human Rights into PoM operations.	Port of Melbourne's three-year Sustainability Strategy was approved by our Board in August 2021. As part of this strategy, PoM has undertaken to develop a Human Rights Policy for its business operations aligned to the United Nations Guiding Principles on Business and Human Rights. The Sustainability Strategy also includes the development of a Supplier Code of Conduct which will set out the environment, social and governance expectations PoM has of the suppliers and contractors it engages. The Supplier Code of Conduct will include PoM's expectations around a commitment to uphold human rights, labour rights and prevent modern slavery.

		PoM's ESG performance is publicly reported in its annual Sustainability Report. Additional information on PoM's approach to identifying and reducing the risk of modern slavery and human rights abuses in its own operations and its supply chain is reported in its annual Modern Slavery Statement. Both of these reports are available on the Port of Melbourne website.
91	This submission proposes that PoM formally acknowledge the port workforce and trade unions that represent that port workforce as a PoM stakeholder, and ensure that is recognised in consultation documentation.	We will continue to engage with Port Users, MUA, Government and Community and other workforce participants.
92	This submission proposes that PoM undertake itself, or request the organisation selected to undertake a cost-benefit analysis, a thorough review of a number of the Black Quay modelling inputs (as identified in this submission) to test the validity of the assumptions and sources, having regard to additional information now available, in particular the Productivity Commission's draft report on its inquiry into the long-term productivity of Australia's maritime logistics system.	The Black Quay report and model has been updated following feedback from stakeholders and having regard to findings from the recent Productivity Commission report.
93	This submission proposes that PoM consider joining with other Australian port operators, perhaps coordinated by Ports Australia, to support the stakeholder's representations to the Commonwealth that the Competition and Consumer Act	At this point we are responding only to submissions that relate directly to the scope of Stage 1 stakeholder engagement, that being the inputs into the Cost Benefit Analysis (Port Capacity, Ship Fleet Forecast and Demand Forecast).

	2010 be strengthened by requiring container shipping lines to adhere to specified service standards.	
94	This submission proposes that PoM give further consideration to the stakeholder's proposal that PoM commit to prepare a workforce impact statement for all new investments (perhaps over a specified dollar value, to be agreed).	At this point we are responding only to submissions that relate directly to the scope of Stage 1 stakeholder engagement, that being the inputs into the Cost Benefit Analysis (Port Capacity, Ship Fleet Forecast and Demand Forecast).
95	Await the final report of the Productivity Commission inquiry into the long-term productivity of Australia's maritime logistics system before settling on its own port performance metrics, and participate in any industry wide stakeholder dialogue that seeks to reach a consensus on which port performance metrics are required and who will manage the process of obtaining, reporting and analysing data against those agreed metrics so there is a single national system of port performance monitoring and analysis.	At this point we are responding only to submissions that relate directly to the scope of Stage 1 stakeholder engagement, that being the inputs into the Cost Benefit Analysis (Port Capacity, Ship Fleet Forecast and Demand Forecast).
96	This submission proposes that PoM engage with the stakeholder on the Bass Strait shipping line relocation proposal.	PoM will continue to engage with stakeholders throughout the process (as appropriate).
97	This submission proposes that PoM publish, as part of the PoM 'stakeholder engagement report' a strategy position that seeks to draw out the key planning and capital expenditure implications from the published technical papers addressing	The CBA will address this information and Stage 2 of engagement will involve consultation on the CBA.

	port capacity, ship fleet forecasts and container demand forecasts for stakeholder information and consideration.	
98	This submission proposes that PoM provide the stakeholder with the opportunity to submit views on the specifications, founded on ESG performance standards, for the expression of interest or tender process for selection of the terminal operator for the new WDN container terminal.	Refer to Item 90 above.
99	We suggest that the PoM … adopt and publish a clear and complete definition of: • Vessel production time (at berth). We do not consider the statement that "The vessel productive time factor considers the average time that a vessel is worked, as a percentage of its total time at berth. This accounts for vessel mooring and de-mooring time etc and has been assumed to be 3 hours per vessel and the assumed vessel" is a complete definition; and • Non-productive time, where we note that Black Quay says "Total time at berth consists of vessel productive time (as per above) as well as an assumed three (3) hours of non-productive time for each vessel visit for mooring/de-mooring etc".	The non-productive time as provided by Black Quay has been assessed against the findings of the Productivity Commission report and found to be accurate. Additional detail has been provided in the report to address this comment.
100	PoM needs to keep under review the dwell time values presented by Black Quay.	Black Quay have considered dwell times and the underlying assumptions are provided in the report.

101	It is not clear what is meant by 'parcel' and 'parcel size', which are not defined. We suggest these terms be defined by PoM.	Black Quay defines parcel and parcel size. Please refer to section 6 of the report.
102	We suggest that PoM undertake an analysis of the extent to which (i) container ship stowage planning (having regard to the characteristics of stowage planning on ships that service the Australian container market (Australia being primarily a destination port nation with 5 port stops, and having a high level of empty container returns)); and (ii) terminal operator yard planning, is a factor in the higher operating time of PoM relative to ports benchmarked in the World Bank report, resulting in the Commission concluding that turnaround times at Australian ports are above the international average.	Both container ships stowage planning and terminal operator yard planning have been considered in the current report.
130	We suggest that PoM model the optimality of the ratio of stacking cranes (both manual and ASCs) to STS craned based on an ASC gmph of 18, with the actual gross crane rate, using data from a 6 month or 12-month period. This would help assess the relative capital efficiency of the different approaches to technology being used by different terminal operators.	At this point we are responding only to submissions that relate directly to the scope of Stage 1 stakeholder engagement, that being the inputs into the Cost Benefit Analysis (Port Capacity, Ship Fleet Forecast and Demand Forecast).
104	We believe that PoM, following stakeholder feedback on the technical papers addressing port capacity, ship fleet	The CBA will address this information and Stage 2 of engagement will involve consultation on the CBA.

	forecasts and container demand forecasts should publish, as part of the PoM 'stakeholder engagement report' a strategy position that seeks to draw out the key planning and capital expenditure implications from the published technical papers addressing port capacity, ship fleet forecasts and container demand forecasts for stakeholder information and consideration.	
105	We would like to see the PoM PDS Delivery Program to also address workforce impacts	At this point we are responding only to submissions that relate directly to the scope of Stage 1 stakeholder engagement, that being the inputs into the Cost Benefit Analysis (Port Capacity, Ship Fleet Forecast and Demand Forecast).
106	We urge the PoM to await the final report of the Productivity Commission before settling on its own metrics, and then participate in an industry wide stakeholder dialogue that seeks to reach a consensus on which port performance metrics are required and who will manage the process of obtaining, reporting and analysing data against those agreed metrics so there is a single national system of port performance monitoring and analysis.	At this point we are responding only to submissions that relate directly to the scope of Stage 1 stakeholder engagement, that being the inputs into the Cost Benefit Analysis (Port Capacity, Ship Fleet Forecast and Demand Forecast).
107	[In regard to the BIS Oxford Economics International Container Demand Forecasts], we have only two comments on the report:	Data tables for the TEU forecasts are provided along with the BISOE report on the PoM website. BISOE has adopted the definition of transshipment cargo from PoM's Reference Tariff Schedule, being cargo that is unloaded from one

	First, we would like to see inclusion of data tables that underpin the graphics so precise TEU data is available; and Second, we would like to see definitions e.g. the BIS Oxford Economics definition of transhipment.	vessel in the port and reloaded for export on another vessel (see PoM 2022-23 RTS, p.5 footnote 9). Please refer to page 30 of the updated BISOE report for further information.
108	We believe that there needs to be transparency about the process, whenever triggered, for selecting a terminal operator for the new terminal at WDN, and that process and the principles that will guide the selection process, should be announced as soon as possible. For example, we believe that PoM, as an operating company of a consortium of pension fund owners that are publicly committed to a package of ESG performance standards, should align its tender process with those ESG performance standards.	PoM notes the stakeholder's position. At this point we are responding to submission that relate to the defined scope of Stage 1 stakeholder engagement, that being the inputs into the Cost Benefit Analysis (Port Capacity, Ship Fleet Forecast and Demand Forecast).
109	We wish to foreshadow that we would expect to be provided with the opportunity to submit views on the specifications, founded on ESG performance standards, for the expression of interest or tender process for selection of the terminal operator for the new WDN container terminal. We believe it would be desirable, and consistent with PoM's obligations to conform with the UN Guiding Principles on Business and Human Rights, that it requires any new	PoM notes the stakeholder's position. At this point we are responding to submission that relate to the defined scope of Stage 1 stakeholder engagement, that being the inputs into the Cost Benefit Analysis (Port Capacity, Ship Fleet Forecast and Demand Forecast).

	terminal operator to comply with best practice ESG performance standards, and that way, those performance expectations ca be embedded in the lease that will be signed by the selected terminal operator, to which it can then be held to account.	
110	We note that the Black Quay modelling input parameters on STS cranes differs from the Commission's actual data. The key point we make about the Black Quay averages for STS cranes is that caution should be exercised when using averages for modelling. Request: PoM may wish to review the Black Quay modelling input for STS cranes.	Black Quay has been engaged to model the port capacity to inform port planning process. There has been sensitivity testing on STS crane rates to assess the likely range of capacity and we accept Black Quay's view that the approach for using averages is suitable.
111	The stakeholder is advised by port workers at the PoM that not all actual STS cranes are utilised by terminal operators, and that some STS cranes remain mostly idle. This may be due to such cranes being old and unreliable and or cranes being out of service for repairs of maintenance. Again, the results of modelling that does not fully take such factors into account means that results could be distorted.	This is addressed in section 4.9 of the Black Quay report regarding the maximum practical ship to shore productivity.
112	We are uncertain of the source of [the] modelling input [of "minimum achievable crane spacing of 90m"]. It is our understanding that terminal operator guidance on STS crane spacing is considerably less than 90m.	The modelling is measure of what is the maximum number of STS cranes that could operate across the entire berth length has been performed in accordance with PIANC WG158.

	Request: We believe it would be useful if PoM published individual terminal operator guidance or requirements on STS crane spacing.	
113	It is not clear from the Black Quay report as to how it arrived at an assumed 3 hours as the berth non-productive time for modelling purposes. We note that the Commission, in the section on start and finish time on P33 of its Technical paper says that "The average time taken between when a ship arrived at berth (all lines fast) and when cargo operations started (first lift) varied across ports. Adelaide had the longest start time on average (2.7 hours), while Melbourne had the fastest (1.3 hours on average)." This suggests that 3 hours may not be a reasonable assumption at PoM.	The 3 hours is consistent with assumptions in recent Productivity Commission report. Additional detail has been provided in the report to address this comment.
114	The Commission noted, as does Black Quay, that the currently published data on Australian port performance do not cover the time that containers spend in the container yard. The Commission says that information regarding dwell times would enable a deeper understanding of where a container spends most of its time in port and may reveal areas for improvements.	Noted, and this comment has been provided to Black Quay.
115	The Commission noted that quarantine and customs processes may also increase dwell times for some containers, and	Noted, and this comment has been provided to Black Quay.

	therefore information on durations of customs clearances would be beneficial. We agree, because advice provided to the stakeholder by terminal workers at Port of Melbourne indicates that quarantine inspection services (Department of Agriculture, Fisheries and Forestry) are regularly delayed, thus delaying the approval for release of containers from the terminal, which adds to dwell time.	
116	We say that the efficiency of yard operations, particularly at the stacks, is highly dependent on terminal operator management decisions and policy.	The model each terminal is berth constrained and so any development plans which only impact yard capacity would not change overall capacity.
117	There appears to be different terminal operator policy regarding the ratio of manual straddles to each STS crane. An additional factor to consider, which needs to be assessed in scenario testing, is the number of stacking cranes that are non-operational due to planned or unplanned maintenance and or repair over selected time periods.	Black Quay modelling does not assume the straddles are a limiting factor. The modelling assumes that additional straddles will be added as required to meet capacity.
118	We note that one of the key observations of Black Quay (on the overall capacity modelling reported in Figure 26) is that "The berth capacity of each terminal is ultimately dictated by a cap formed by the assumed minimum crane spacing and maximum annual crane productivity".	This has been shared with Black Quay and reflected in the updated report. In addition, the total number is a measure of what the maximum number of STS cranes that could operate across the entire berth length rather than a defined spacing.

	We have already indicated our uncertainty around the source for the modelling input that the minimum achievable crane spacing be 90m, and that PoM consult with the terminal operators on that parameter to obtain actual practice to test the assumption.	
119	We also note that capacity in the modelling is 3,860,000 TEUs per annum (by 2030) [calculated by adding the Black Quay conclusions on port capacity (i.e. SDE: 1,260,000+SDW: 1,400,000+WDE: 1,200,000] noting that no new quay line is due to come online in that period to 2030 (because the modelling already factors in completion of the WDE project). To achieve 3.680,000 TEUs per annum terminal operators would need to invest collectively in 8 new STS cranes (SDEx2, SDWx3 and WDEx3) to achieve the port capacity projection, given the assumptions on other key modelling inputs. Such an investment would be in the order of A$126 million.	We do not make a comment on the cost of the investment. Otherwise, we agree, the total capacity assumes investment by stevedores in more cranes, this can be found in the Black Quay report.
120	We also note that Black Quay has identified the maximum practical STS crane productivity as 140,000 (Swanson Dock) and 150,000 (WDE) per STS crane per annum, derived from guidance contained within PIANC WG158, which identifies the maximum practical STS crane productivity for a gateway terminal of 140,000-160,000TEU/annum/crane and	Black Quay have described the methodology and rationale for adopting the nominated annual crane productivity figures in section 4.9 Maximum Practical STS Crane Productivity and Appendix E - PoM Future Crane Utilisation Review.

	that Black Quay notes that this represents a highly efficient terminal and cranes. Black Quay reports that the Swanson Dock terminals currently deploy 14xSTS cranes and WDE 5xSTS cranes. Using those numbers, the maximum crane productivity in the port would be 2,710,000 TEUs per annum (14x140,000 + 5x150,000). Yet the actual port throughput is already 3,230,000. We query whether, having regard to those data, the modelling is sound.	
121	We know from the Commission's draft report that the PoM already has the lowest time per crane move of any Australian port (see Table 5), the highest crane intensity (see Figure 9) and the best crane productivity in Australia, whether measured on a gross or net ship rate [where according to Waterline, the ship rate is a combined measure of capital and labour productivity) (sic) (see Figure 8) and importantly that the container moves per hour already exceeds the Black Quay benchmark of 50 containers an hour to deliver an acceptable level of service for the terminal operators to satisfy their shipping line customers.	Black Quay modelling adopts a higher ship rate and the report has been updated following feedback received from stakeholders.
122	We note that Black Quay says the capacity modelling indicates that the capacity at all three (3) of the PoM container terminals is predominately dictated by the productivity achieved at berth. We accept that productivity at berth is	The Black Quay model reviewed capacity at berth, yard and gate and has assumed the berth is the limiting factor. The model has assumed that Stevedores will invest in yard operation to maintain capacity with the berth.

	important but the lack of availability of raw data on other container movement operations within the terminal that support the berth element of ship loading/unloading should not mean that the remainder of terminal operators should not also be considered.	
123	The GHD analysis showing that only 82% of scheduled ship visits actually occurred in calendar year 2021 compared with typical levels of 95-98% service delivery in calendar years 2018-2020, and the level for 2022 is expected to be 76%, which mirrors known global supply chain issues and port congestion for the period 2021 to June 2022. GHD predicts it will take several years for service delivery to reach an assumed 100% for planning purposes: While there has been some easing of global supply chain pressures, most analysts are predicting that supply chin disruption will continue well into 2023, and that factors such as the impact of the COVID-19 pandemic and differing national responses to the pandemic, the Russia-Ukraine conflict which is impacting on trade but also on the global energy market, and global economic conditions where inflation and interest rate trends are impacting on consumer spending will all impact on the stability of supply chains.	PoM will continue to monitor global events and the potential supply chain impacts.
124	The data presented in the Modelling Results for Scenario A - 5.7 Port of Melbourne Throughput by Precinct given ship	PoM has an obligation to provide capacity in line with forecasted demand.

	size development - Figure 5 (P22) confirms the MUA prediction of a trend towards an imbalance in throughput between the Swanson Dock and Webb Dock, showing that the ship size constraints at Swanson Dock combined with the investment in the Webb Dock East project will result in an increasing market share of container traffic going to Webb Dock. This trend is even more pronounced in Scenario B depicted in Figure 14 on P33. Both graphs show that from somewhere between 2031 and 2034 container volumes at Swanson Dock will peak and go into gradual decline until 2050, while Webb Dock volumes will dramatically increase from that period right through to 2050, with well over half the Melbourne throughput being handled by Webb Dock. Request: It is unfortunate that the Black Quay modelling did not extend to 2050 also, so [sic] assess if there is a correlation between its modelling and the GHD ships size modelling - both of which point to likely market shares between the Swanson Dock and Webb Dock terminals.	Under both Scenario B and C Swanson Dock terminals assumed throughput increases from 2022 through to 2050.
125	It is our view, based on current information, that the relocation of the Bass Strait shipping operators will have significant implications for the cost, reliability and scheduling of Bass Strait freight transport because it adds about 45-50 extra	We are currently working through these issues with the impacted tenants and will continue to engage on an appropriate option which secures the long-term future for Tasmanian trades.

	minutes in sailing time each way i.e. 90+ minutes for each inbound and outbound voyage, which: • Reduces the in-port time and therefore the pressure to meet sailing schedules, noting that reliability and punctuality are the hallmark of the Bass Strait shipping operations to service the just-in-time supply chain requirements of Tasmanian fresh food producers; • Increases the risk of not meeting berth slot times, which can cause delays in berthing, given that berthing relies on availability of towage and mooring services; • Adds to operational costs, especially bunker (fuel); and • Increases navigation risks due to congestion in the smaller basin in the Victoria/Appleton Dock area of the port.	
126	Both shipping operators have considerable sunk costs in Webb Dock, and relocation will result in losses on that investment, which raises depreciation issues and adds to costs for redeveloping the wharf and lay down area at Victoria/Appleton Dock. The relocation has also resulted in one shipping operator with a new ship on order having to commission an engine upgrade to meet the faster sailing speed necessary to meet the daily service schedule, at a cost of around ten million Euro.	Please see response in item 129.

	These factors have implications for Tasmanian producers and manufacturers who rely on Bass Strait shipping, including: • Increased freight costs; • Reduced reliability of ship scheduling i.e. reduced service standards; and • Increased risk of product damage due to reduced port times and the need to speed up loading and unloading operations, potentially increasing insurance costs.	
127	In the longer term, the increased cost of Bass Strait sea freight may encourage Tasmanian shippers who use PoM as a transshipment port for international exports, to seek out an international shipping line which would be prepared to make direct ports calls to Tasmania. Such an outcome would seriously damage the business model of Bass Strait Australian shipping operators, and reduce container throughput at the PoM.	Please see response in item 129.
128	There could be implications for both Tasmanian and Victorian shippers who are supported by the Tasmanian Freight Equalisation Scheme (TFES) given that the assistance payable for goods shipped to mainland Australia and for goods transhipped through the PoM is capped. Should the likely increase in Bass Strait sea freight costs exceed the maximum amount of assistance available, shippers will	Please see response in item 129.

	receive no additional benefit from the TFES and will be required to meet the full increased TEU freight costs.	
129	Increasing the costs of Bass Strait freight movement is uneconomic and will be to the detriment of Tasmanian producers and manufacturers and ultimately Victorian consumers. Request: We wish to engage in further dialogue with PoM on the Bass Strait shipping line relocation proposal.	PoM notes the stakeholder's position. At this point we are responding to submissions that relate to the defined scope of Stage 1 stakeholder engagement, that being the inputs into the Cost Benefit Analysis (Port Capacity, Ship Fleet Forecast and Demand Forecast).
130	We would like for it (capacity review) to be included because that's some of the challenges we are facing today. We are struggling to get the window that suits us best. We must use the buffer that does suit us and we would love for it to be considered because it's one of our critical issues we are facing at the moment.	This has been a key consideration in determining the appropriate maximum berth utilisation and will continue to be a key consideration in determining the ports capacity.
131	Need to specify that question of wait time very clearly because we want no waiting time if our ships arrive on time for booked window.	The Port of Melbourne understands the importance of avoiding any additional wait time to shipping line operations and this will continue to be a key consideration in determining the ports capacity.
132	Does not entirely agree with the vessel size in the short-term as it is not a feasible option in the future from east to west or west to east. Stakeholder believes the future network may provide an increased role due to flexibility.	The ship fleet forecast has been updated to consider feedback from the shipping lines.

133	Although the impact on overall volume is likely captured within the CAGR range, Free Trade Agreements have the potential to drive trade PoM volumes; Australia is currently negotiating FTAs with key trade partners the EU, the UK and India. Also, ongoing development of the PoM rail network, including the metro (Port Rail Shuttle Network), interstate (WIFT and/or BIFT), and Inland Rail have the potential to redirected volume away from competing ports to PoM.	BISOE has included commentary on domestic supply chains (including the prospect of changes in the market share of PoM) and Free Trade Agreements on pages 33 and 34 of their updated report.
134	The PoM also needs to consider current limitations in ports other than Melbourne that form part of Asia-Oceania trades, and that any improvement in restrictions will potentially impact the Port of Melbourne fleet forecast by allowing for larger vessels to operate in that trade. For example, if the Port of Auckland improves on the current 5,500 TEU limitation, it could allow for upsizing of vessels on related trade lanes where both Melbourne and Auckland are part of the port rotation.	The upper band of the fleet forecast has been developed with this consideration.
135	Stakeholder's own assessment of the SDE baseline capacity is 1.5M TEU.	Capacity analysis has been updated based on stakeholder feedback.
136	The report needs to consider: Potential by each of the respective stevedores to unlock latent yard capacity i.e. by	The updated Black Quay report includes scenarios that consider improved stevedore productivity and investments.

	consolidating or relocating terminal buildings, to create additional TGS.	
137	The report needs to consider the ability of the Swanson Dock stevedores to increase yard capacity by changing their operating mode/model i.e. increasing the max carrying height of straddles, from 1-over-2 to 1-over-3, or increasing stacking density by commissioning ASC's or RTG's.	The updated Black Quay report includes scenarios that consider improved stevedore productivity and investments.
138	Rail and landside connectivity; reference to DPWA having direct rail access via WSIT are outdated as WSIT is no longer a direct extension of DPWA, with it being developed into the Melbourne Logistics Park (MLP) operated by subsidiary DPWA Logistics, a full-service intermodal depot with less ability to be used for overflow by DPWA. Patrick will potentially see some benefit from the East Swanson Intermodal Terminal but like with DPWA and MLP, commercial and operational practices may limit its ability to be used as overflow. In the case of both MLP and ESIT, given that there is a road separating the quay line and the railhead, it is 'near-dock' rather than direct or 'on-dock' rail access.	Black Quay assumes in its model that Stevedores will make the necessary investments / operational improvements to ensure that the yard capacity matches the berth capacity. This leads to berth capacity being the necessary assumed limiting factor.
139	Impact of the West Gate Tunnel on port precinct road access and capacity; upon completion, WGT may improve the ability of the Swanson Dock stevedores to marshal trucks	The terminal gate has not been considered a constraining factor on port capacity at this point in time. Further consideration of the alignment of

	and manage roadside traffic, which will alleviate pressure on the terminal gate.	the road network will be looked at in future design stages of the project.
140	Relocation of the Tasmania trades up-river and displacement of incumbent Appleton Dock and Victoria Dock container depot and intermodal facilities. What impact will the proposed layout post-relocation of StraitLink and/or SeaRoad upriver (with Qube Logistics no longer operating an intermodal at Vic Dock), have on the Swanson Dock traffic flow?	This will be the focus of future work by PoM.

Appendix C: Industry Survey - Typeform

No.	Question:
Question 1:	Are the BISOE forecasts in the report reasonable?
Question 2:	Are there additional scenarios to be considered?
Question 3:	Are the Ship Fleet input assumptions reasonable? Why or why not?
Question 4:	Are the Ship Fleet forecasts reasonable? Why or why not?
Question 5:	Are there additional scenarios to be considered?
Question 6:	Is the assessment of what ship will service each trade reasonable?
Question 7:	Are the input assumptions in the Capacity Review reasonable? Why or why not?
Question 8:	Are there additional scenarios to be considered?
Question 9:	Is Swanson Dock East 1.2m TEU pa reasonable capacity?
Question 10:	Is Swanson Dock West 1.26m TEU pa reasonable capacity?
Question 11:	Is Webb Dock East 1.2m TEU pa reasonable capacity?

Question 12:	What level of wait time to service time is acceptable for shipping lines and port users?
Question 13:	Is there anything else you would like to add?

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Appendix D: General Public Survey – Typeform

No.	Question:
Question 1:	What are your overall initial thoughts on this presentation today?
Question 2:	What are your thoughts about 'Trade Demand' information shared in today's presentation?
Question 3:	What are your thoughts about the 'Ship Fleet Forecast' information shared in today's presentation?
Question 4:	What are your thoughts about the 'Port Capacity' (Demand Forecast) information shared in today's presentation?
Question 5:	Is there anything else we should know/consider?
Question 6:	How would you prefer to be communicated with in future engagement activities? (Multiple choice - may select more than one option) Industry briefings Face-to-face Emails E-newsletters, digital maps etc.

Round two Stevedore workshops

Engagement Summary Report

Port of Melbourne

Contents

Executive summary

As part of the Port of Melbourne's (PoM) stewardship obligations, PoM is required to ensure that port capacity can meet the future demands of Victoria's growing economy.

The Port Capacity Enhancement Program (PCEP) was outlined in the 2050 Port Development Strategy (PDS). Once delivered, PCEP will ensure the Port of Melbourne continues to play a significant role in driving forward the Victorian economy.

The PCEP Stage One Engagement program commenced in September 2022, was broad reaching and included port users, government, community, and various stakeholders (Round one). The original schedule was then designed to move to a Cost Benefit Analysis engagement program. However, at the conclusion of the initial engagement and having published updated technical reports in February 2023, we found that stevedores needed to further explore the technical details associated with the Container Capacity Review.

At the commencement of the 'Stage One' engagement program, engagement was designed to be delivered over a period of three months (Round one) however the program was extended significantly, resulting in three rounds of engagement as demonstrated in the table below.

Engagement stage		Engagement source materials	Engagement period
Round one	Stakeholders and Community – Broad reaching engagement and formal submissions	• Trade Demand Forecasts prepared by BIS Oxford Economics (BISOE), *August 2022* • Ship Fleet Forecasts prepared by GHD Advisory, *September 2022* • Container Capacity Review prepared by Black Quay Consulting, *September 2022*	September 2022 to February 2023 Materials published 7 September 2023
Round two	Stevedore workshops	• Trade Demand Forecasts prepared by BIS Oxford Economics (BISOE), *December 2022* • Ship Fleet Forecasts prepared by GHD Advisory, *December 2022* • Container Capacity Review prepared by Black Quay Consulting, *January 2023*	March 2023 to July 2023 Materials published 13 February 2023
Round three	Stakeholders - Formal submissions	• Trade Demand Forecasts prepared by Deloitte, *June 2023* • Ship Fleet Forecasts prepared by GHD Advisory, *July 2023*	July 2023 to September 2023 Materials published 10 July 2023
Stage one complete		• Trade Demand Forecasts prepared by Deloitte, *September 2023* • Ship Fleet Forecasts prepared by GHD Advisory, *September 2023* • Container Capacity Review prepared by Black Quay Consulting, *September 2023*	21 September 2023

PoM's engagement approach has been developed consistent with the Pricing Order Engagement Protocol (POEP) which was finalised and published in October 2022.

This Round two Engagement Summary Report focuses on engagement delivered, including closing the loop and highlighting 'what we heard' through Round two engagement with DP World, Patrick and VICT stevedores. Ports Victoria and the Port Lessor attended workshops as observers, and Black Quay as subject matter experts. Engagement was led by our PCEP project team.

Round two engagement was centred on:

- Stevedore Round one formal submissions
- PoM written feedback
- Subsequent exchanges and the adoption of submission content in the Port of Melbourne – Container Capacity Review, *January 2023* Black Quay report.

A snapshot of Round two engagement is below.

February 2023	Stevedores invited to attend one-on-one workshops with PoM including observers Ports Victoria and the Port Lessor; Stevedore Workshop one
	PoM provided written feedback to stevedore Round one submissions
March 2023	Stevedore Workshop one
	Stevedores provide PoM with remaining discussion points following Workshop one
April – May 2023	PoM scheduled one-on-one workshops; Stevedore Workshop two
	PoM responds to each stevedore
	Workshop two held online including observers Ports Victoria and the Port Lessor and subject matter experts, Black Quay
June 2023	Standalone meeting with one stevedore to share historical data as requested
July 2023	Round two engagement closed out

Appendix A summarises feedback from stevedores and how it was considered by Black Quay in finalising the Container Capacity Review, published at the conclusion of the PCEP Stage One engagement program.

The key topics covered in Round two are summarised below. It is noted that there were different points of view across all of the stevedores. The table below provides an overview of the scope of feedback received and should not be read as a cohesive view of all stevedores, on each topic.

Key topics covered in this round of engagement	
Crane cap methodology, crane utilisation and intensity, crane rates and working time	Some stevedores provided feedback that: • The crane cap methodology was not suitable • Crane utilisation and crane rates could be higher in the future with assumed productivity improvements • Crane rates should be measured as a 'gross' rate; from first lift to last lift • Crane intensity should be higher, noting that the deployment of cranes is a commercial decision by the stevedore.

Cost Benefit Analysis engagement	Some stevedores expressed a desire to be involved in the development of the Cost Benefit Analysis as it relates to their operations.
Fleet forecast	There was limited feedback on the ship fleet forecast however some stevedores suggested that the outcomes of ship simulations at Swanson Dock should be reflected in the fleet forecast and should be incorporated into the vessel assumptions for capacity analysis.
Future stevedore development	Some stevedores provided feedback on potential future developments and suggested that the Container Capacity Review should consider potential stevedore development options when determining overall future capacity.
Modelling methodology	Some stevedores expressed a preference for a dynamic modelling methodology, rather than static modelling.
Number of berths and non-working time at berths **Berth utilisation**	Different views were presented on the number of berths and modelling assumptions regarding three berth functionality. Feedback was received that the non-working time at berth is captured within berth utilisation and should be removed from capacity inputs. Some stevedores suggested that the berth utilisation assumptions were too conservative and that vessel arrival patterns can be managed as part of vessels calling at multiple Australian ports.
Optimum capacity factor	Some stevedores suggested the application of an optimum capacity factor and whether this resulted in "double counting" operational constraints or when used in conjunction with the planning buffer.
Operating hours	Some stevedores noted that operating hours should include time associated with outages, including weather allowances.
Planning buffer	Some stevedores provided feedback that applying an optimum capacity factor and planning buffer resulted in a 'buffer on buffer'.
Productivity benchmarks	Some stevedores provided feedback that productivity benchmarks based on PIANC WG158 guidance are too low for port planning purposes.
Seasonal peaking	Stevedores expressed different views on the application of a seasonal peaking factor.
Stakeholder feedback	Some stevedores provided feedback that the updated Container Capacity Review (January 2023) did not demonstrate material changes based on stakeholder feedback received during PCEP Round one engagement.
Staged approval process	Some stevedores expressed a preference for a staged approval process, separating the Tasmanian Trade relocation decision from the fourth international container terminal decision.

Twenty-foot equivalent unit (TEU) ratio	Feedback was provided on the TEU ratio suggesting that a TEU ratio of 1.7 should be considered for long-term planning purposes.
Trade forecast	There was limited feedback on the trade forecasts however, some stevedores suggested that the trade forecast should consider current softening of trade.
Vessel Productive Time	Some stevedores provided feedback that non-productive vessel time was overstated in the Container Capacity Review and that the Review does not contemplate that stevedores can undertake continuous operations to cater for demand.
Wait time to service time (WT:ST)	Feedback was received on the WT:ST and how this should be applied (i.e., as a peak or average across the entire year).
Yard capacity	Some stevedores suggested that the dwell time assumptions could be reduced, and that investment could address the yard capacity as a constraining factor.

Identify consultation need

We heard in Round one that stevedores wanted genuine and ongoing engagement about PCEP.
Round two engagement responded to this feedback by:

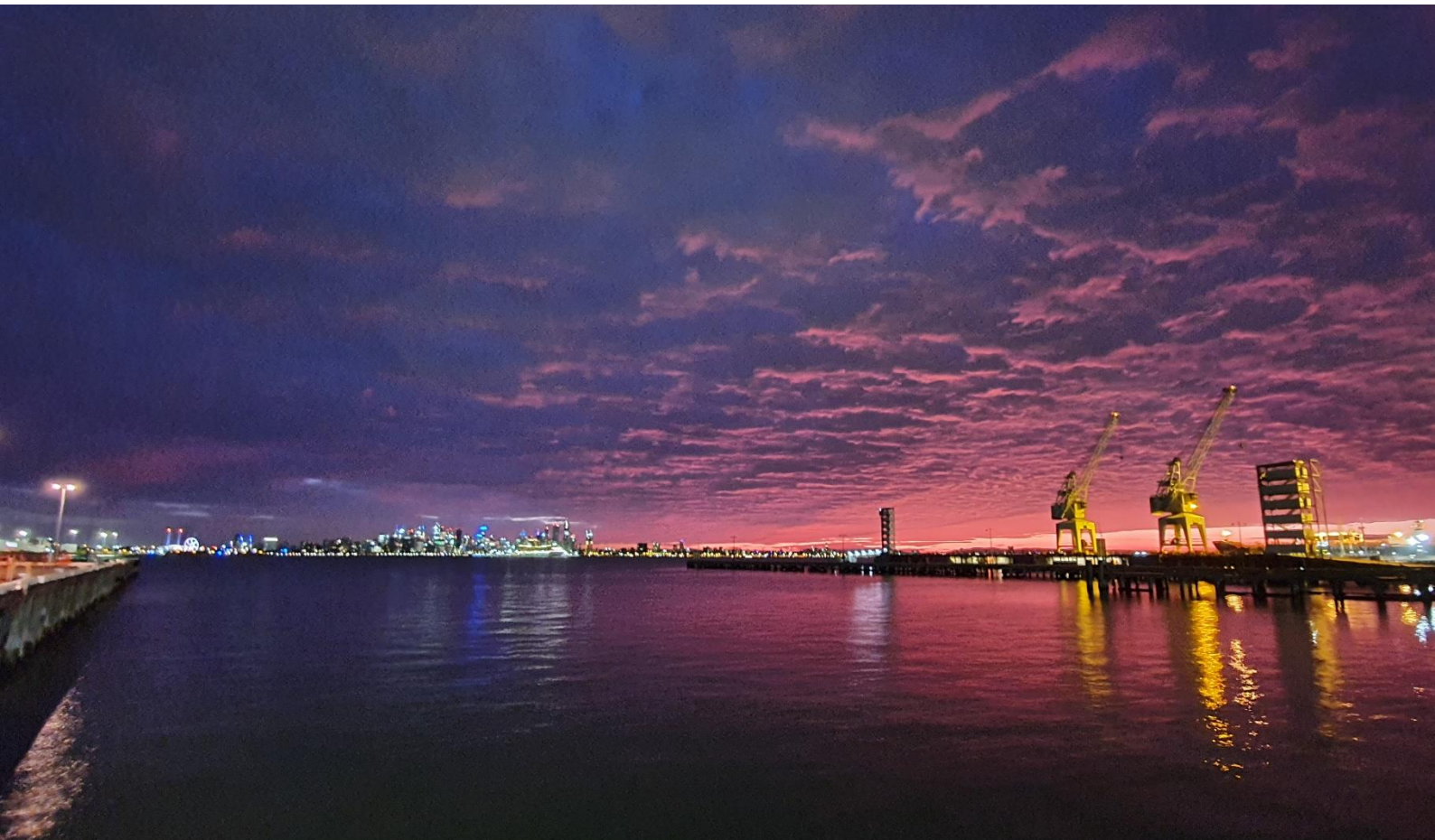
- Delivering greater depth and regularity of engagement
- Responding to additional queries in relation to Round one submissions and capacity data inputs
- Being transparent about how stevedores were informing the capacity assessment
- Gaining a better understanding of details informing stevedores position on capacity.

The purpose of one-on-one stevedore workshops was to:

- Provide a forum to discuss stevedore submissions and PoM feedback
- Explore areas of agreement and disagreement and discuss methodology and forecast inputs
- Gain additional insights and data from stevedores that might inform the capacity analysis
- Inform decision making and data to enhance the port capacity analysis for use in the draft Cost Benefit Analysis.

These workshops assisted PoM to ensure that port capacity forecasting was robust and could be used to inform PCEP Stage Two; centred around the development, delivery and engagement of a draft Cost Benefit Analysis.

These workshops provided us with an opportunity to fully explore and discuss the stevedores' technical feedback.



The following opportunities, risks and mitigations were considered following Round one as key to the success of Round two stevedore engagement.

Opportunities	Risks and Mitigation
Meaningful engagement: Provide opportunities for stakeholders to engage in more detail on technical topics of interest having heard this request in Round one.	Different points of view: Technical opinions and different stakeholder perspectives may still exist when the final technical reports are published. Mitigation: Workshop discussion was captured in meeting notes and shared with participants recognising where different positions remained.
Close the loop: Address and close out feedback on topics relating to capacity, and how PoM and Black Quay will consider feedback and how feedback has been used to inform the capacity report.	Discussion is constrained (commercial sensitivity) or unequal weighting of views: Stevedores may not share as openly with multiple participants at the table, and/or equal participation is difficult to achieve. Mitigation: Workshops held with stevedores individually and attended by observers to ensure consistency in delivery. Individual written responses were structured to respond in detail to feedback received from each stevedore.
Capture insights: Validate and where possible gain more data and insights on operating assumptions underpinning capacity.	Frustration on timelines: Other stakeholders may perceive that stevedores were given disproportionate opportunity to participate which could result in frustration amongst stakeholders who broadly agreed with outcomes of (existing) technical reports. Mitigation: Redouble efforts to ensure end-to-end stakeholders have an opportunity to participate in Round three engagement.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Plan consultation approach

Round two engagement was designed to gain further technical feedback from stevedores at the involve level of the IAP2 Public Participation Spectrum. Further information on the IAP2 spectrum can be found in Appendix B.

Our objective was to provide participants with the opportunity to ask questions directly in a workshop environment, removing barriers to allow open and frank discussion, particularly given stevedores' strong views about the updated January 2023 version of the Container Capacity Review.

Ports Victoria and the Port Lessor were observers at a total of six workshops (March and May 2023) and heard the detail and complexity of capacity discussions.

Participation was extended to include technical experts Black Quay as the author of the Container Capacity Review in the three May workshops. Some stevedores also engaged their own technical experts who participated in some of the discussions.

Engagement objectives

Objectives were developed in direct response to Round one stakeholder feedback and an identified need by PoM that more technical discussions with stevedores were required to:

- Provide a forum to discuss stevedore submissions and PoM feedback
- Explore areas of agreement and disagreement and discuss methodology and forecast inputs
- Gain additional insights and data from stevedores that might inform the capacity analysis
- Inform decision making and data to enhance the port capacity analysis for use in the draft Cost Benefit Analysis.

Tailored Engagement Approach

Round two engagement activities were developed based on our knowledge of each stevedore and in response to requests for further engagement, particularly in relation to terminal specific information and views regarding PCEP.

Following the first round of one-on-one workshops (March 2023) greater clarity was achieved regarding the rationale for stevedore feedback with a number of issues clarified and some resolved.

However, given some stevedore feedback and remaining points of difference, a second set of one-on-one workshops were conducted in May 2023 with each stevedore, PoM, Ports Victoria and the Port Lessor as observers, and subject matter experts Black Quay.

An additional meeting was also undertaken with one stevedore regarding historical data.

Feedback options

PoM encouraged and received feedback from stevedores on key points of difference as well as other issues relating to Round one engagement.

Although Round two was designed for stevedores, consideration was also given for a broader stakeholder audience. As such, extended engagement timelines were communicated via broadcast e-mail to stakeholders who had participated in Round one engagement, advising of extended engagement timelines.

Implement consultation

Round two engagement with stevedores comprised two sets of one-on-one workshops held in March and May 2023, centred around stevedore Round one formal submissions, subsequent written feedback from PoM, and the adoption of Round one submission content in the published Port of Melbourne – Container Capacity Review, *January 2023* Black Quay report.

February 2023	Stevedores invited to attend one-on-one workshops with PoM including observers Ports Victoria and the Port Lessor; Stevedore Workshop one
	PoM provided written feedback to stevedore Round one submissions
March 2023	Stevedore Workshop one
	Stevedores provided PoM with remaining discussion points following Workshop one
April – May 2023	PoM scheduled one-on-one workshops; Stevedore Workshop two
	PoM responds to each stevedore
	Workshop two held online including observers Ports Victoria and the Port Lessor and subject matter experts, Black Quay
June 2023	Standalone meeting with one stevedore to share historical data as requested
July 2023	Round two engagement closed out

Workshop one

March 2023: Workshops to discuss stevedore submissions and PoM response

Workshops were scheduled to allow stevedores an opportunity to seek further clarification in relation to how PoM had regard to information in their submissions, and subsequent PoM responses.

In line with the POEP, these workshops were held (a minimum of) two weeks after stakeholders received PoM's formal response as shown in the table below:

	Invited to participate in Workshop one	PoM formal response issued to stevedore submissions	Date of workshop
Stevedore One	3 February 2023	10 February 2023	7 March 2023
Stevedore Two	3 February 2023	10 February 2023	14 March 2023
Stevedore Three	9 February 2023	10 February 2023	20 March 2023

One stevedore expressed broad agreement with the updated technical reports. A number of outstanding points of difference remained between the viewpoints of the other two stevedores and data adopted in the January 2023 version of the Container Capacity Review.

It was agreed that a second set of workshops would be beneficial to allow further discussion.

Workshop two

March 2023: Stevedores inform Workshop two content

To aid in the development of an agenda for the second set of workshops, stevedores were asked to provide a summary of the key points of difference that remained unresolved between their views and that of the updated Container Capacity Review (January 2023). One stevedore did not identify any disputed issues.

In April and May 2023, PoM provided written responses to stevedores highlighting how their additional feedback had been considered and detailed further changes which would be considered in the final Container Capacity Review.

May 2023: Workshops with subject matter experts Black Quay

The following table demonstrates POEP compliance for Workshop two:

	Stevedores provide key points of difference to the Container Capacity Review	Invited to participate in Workshop two	Email response from PoM to stevedores	Date of workshop	Follow-up discussion (as requested)
Stevedore One	30 March 2023	28 April 2023	20 April 2023	16 May 2023	21 June 2023
Stevedore Two	28 April 2023	28 April 2023	12 May 2023	23 May 2023	Not applicable
Stevedore Three	No submission	2 May 2023	17 May 2023	31 May 2023	Not applicable

June - July 2023: Round two engagement close-out activities

Following the conclusion of workshops, PoM provided Meeting Notes to participating stevedores as a record of topics and detail discussed.

Further, in relation to a request from one stevedore, PoM agreed to share historical data (where available) related to:

- Wait times
- Berth utilisation
- Ship arrival delays.

As such, PoM met with this stevedore in June 2023 and provided data dating back to 2016, the commencement of the 50-year lease.

Communications with stevedores concluded Round two engagement in July 2023. Appendix E of the Black Quay Container Capacity Review (Round Two Stevedore Workshops, Appendix A, P20) provides detail of where feedback was considered and what changes were made in response to feedback.


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Port user feedback

During Round one and Round two engagement activities (September 2022 to July 2023), stevedores provided feedback on key themes relating to port capacity and PoM engagement. Round two engagement provided an opportunity to further understand stevedore feedback and how it might inform the Container Capacity Review.

How feedback has informed the Container Capacity Review

The following seven themes submitted via written correspondence from two stevedores during Round two were adopted and have informed changes to the Container Capacity Review.

Topic	Feedback received	How this feedback was considered
Crane Cap / Crane Productivity	Two stevedores expressed concern with adopting an annual crane cap to inform capacity and believed this was too simplistic a measure. These stevedores suggested the removal of the annual crane cap as a limiting factor.	This feedback from stevedores regarding the utilisation of the "Annual Crane Cap" methodology was accepted and the Container Capacity Review utilises the "Uncapped" methodology and uses the resultant Crane Productivity and utilisation to benchmark and assess the reasonableness of the overall capacity assessment.
Crane Rate	Feedback received during this period suggested there is scope for stevedores to improve crane rates in the future. Stevedores suggest a gross crane rate of 30 moves per hour be adopted in the Container Capacity Review.	This feedback was tested against the historic trend and international benchmarks for increasing productivity in crane rates. Scenario(s) have been modelled in the Container Capacity Review incorporating enhanced productivity assumptions of 30 gross moves per hour for Swanson Dock.
Maximum vs Optimal Capacity	Two stevedores expressed concern about the application of an Optimal Capacity Factor and questioned whether this resulted in "double counting" operational constraints. These stevedores believed that the Optimal Capacity Factor should be removed.	The Optimal Capacity Factor included terminal operating constraints (industrial, weather etc) and seasonal peaking. In direct response to feedback, the Optimal Capacity Factor of 15% has been replaced by a Seasonal Peaking Factor of 10% in the Container Capacity Review. Terminal operating constraints have been reflected in the terminal operating hours. The Seasonal Peaking Factor is based on historical data indicating 10% to 14% seasonal peaking. Seasonal Peaking must be considered because all other inputs are factored on an annualised performance. Under these performance arrangements, terminals would typically operate above average during peak season which would result in excessive port and broader supply chain congestion.
Other development options	One stevedore requested that all potential stevedore development options should be considered and included when determining overall future capacity.	PoM strongly supports stevedore investments in yard capacity to the extent that they enhance the ability of the terminal to service the capacity of the quay line. The updated Container Capacity Review report considers possible stevedore productivity enhancements to service the quay line capacity.

Productivity benchmarks	Two stevedores provided feedback that productivity benchmarks based on PIANC WG 158 guidance are too low for port planning purposes.	The Black Quay work has been informed by numerous sources including their expertise, performance data, stakeholder feedback, PIANC 158 and other literature as outlined in the Container Capacity Review report. Feedback provided by stevedores will inform the inputs PoM takes forward to the draft CBA.
Staged approval process	One stevedore provided feedback regarding their preference for a staged approval process, separating the Tasmanian Trade relocation from the fourth international container terminal.	PoM's investment decision making will be informed by feedback and will be aligned with internal governance requirements for project and investment decision making.
TEU / Box ratio	Stevedore feedback suggested that the TEU ratio has been increasing and that it would be higher in the future. The original TEU ratio adopted in the capacity modelling was 1.6. Stevedores recommended that the assumption for future capacity should be 1.7.	This feedback was tested against the historic trend for increasing TEU/Box ratio and accepted. Scenario(s) have been modelled in the Container Capacity Review incorporating a TEU ratio of 1.7.

Feedback not included in the Container Capacity Review

The following five items submitted by stevedores via written correspondence outline points of difference that were considered but have not been adopted for inclusion in the Container Capacity Review.

Topic	Feedback received	How this feedback was considered
Crane utilisation	Feedback received from some stakeholders indicated the crane utilisation figure referenced in the Port Capacity model was too low. Stakeholders requested for crane utilisation to be increased to reflect actual performance.	Taking into consideration changes already made through the removal of the "crane cap" methodology, crane utilisation was used for benchmark purposes only as to the reasonableness of assumptions made in Black Quay's Container Capacity Review. The crane utilisation would not directly limit the max crane productivity (TEU/crane/per annum).
Crane intensity	Two stevedores provided feedback to suggest the Crane Intensity was too low and not suitable for maximum capacity planning. There was a belief amongst these stevedores that crane intensity was a commercial consideration rather than a technical consideration.	PoM acknowledged that crane intensity is as much a commercial consideration as it is a technical consideration, and a function of call size as well as vessel size. Although it is accepted that Crane Intensities are likely to be higher in the future as average ship size and throughput increases, based on the Productivity Commission 2022 report findings, PoM considers the Crane Intensity adopted by Black Quay to be high but reasonable.
Planning buffer	Feedback received from two stevedores suggested the application of a planning buffer and an Operational Capacity Factor would result in double counting or "buffer on buffer".	A planning buffer is not used in the same way as the Operational Capacity Factor and deals predominately with risks in delivery delay and fluctuations in trade demand. Consistent with historic port planning practices, the planning buffer will continue to be applied to the Maximum Reasonable Capacity for port planning purposes. Further to this, the Essential Services Commission in its 5-year review and S49Q

		inquiry confirmed the appropriateness of the planning buffer.
Port capacity methodology	Concern that port capacity modelling should be dynamic not static.	The use of a static methodology is consistent with previous capacity modelling conducted in Australia to support investment decision making, and the Black Quay approach has been utilised on other comparable projects within Australia and abroad. Through the PCEP Stage One Stakeholder Engagement program, feedback has been sought on operational parameters from the stevedores. This feedback has informed updates to the Black Quay capacity assessment where reasonable from a port planning perspective.
Seasonal peaking	As noted above, two stevedores expressed concern about the application of an Optimal Capacity Factor and questioned whether this resulted in 'double counting' operational constraints. These stevedores believed that the optimal capacity factor should be removed. When this was removed and replaced with the seasonal peaking factor, one stevedore provided feedback that the seasonal peaking factor was already contemplated through other input assumptions. One stevedore confirmed that they apply a similar seasonal peaking factor in their own terminal planning.	The seasonal peaking factor is based on historical data indicating 10% to 14% seasonal peaking. Seasonal peaking must be considered because all other inputs are factored on an annualised performance basis. Under these performance arrangements, terminals would typically operate above average during peak season which would result in excessive port and broader supply chain congestion.
Vessel productive time	One stevedore expressed the position that non-productive vessel time was overstated in the model and ignored that stevedores can undertake continuous operations to cater for demand. One stevedore provided feedback that the model should be adjusted to increase vessel productive time to 100%.	The Black Quay assumptions have been benchmarked against actual data. The feedback received was seen to be overly optimistic in its assessment and did not take into consideration other factors that may impact productive time including mooring and de-mooring vessels and other operational disruptions that may occur during crane operating hours (i.e. shift changes).

What we heard about engagement

The stevedore workshops also provided the opportunity for stevedores to provide broader feedback relating to PCEP and the Stage One engagement program. The following provides a summary of the other feedback received during the workshops.

Topic	Feedback received	How this feedback was considered
Cost benefit analysis engagement	One stevedore requested to be involved in the development of the Cost Benefit Analysis as it relates to their operations.	Future engagement methodology relating to the draft Cost Benefit Analysis will be designed based on what we've heard and lessons learned throughout Stage One.
POEP Compliance	One stevedore suggested that PCEP Stage One engagement was non-compliant with POEP.	PoM is committed to stakeholder engagement that is inclusive, timely, genuine and transparent. PCEP Stage One engagement has been designed and delivered to provide stakeholders with the opportunity to meaningfully engage on the three technical reports that will inform the draft CBA. Stakeholder feedback received during this time was considered and has resulted in updates to all three reports. Engagement timelines throughout Stage One engagement have met, and in most cases exceeded, those defined in the POEP.
Stakeholder feedback	One stevedore provided feedback that PoM had not provided substantive responses or material changes to the Container Capacity Review.	PoM provided substantive responses to each of the specific matters raised by each of the stevedores through each round of the engagement. In addition, PoM conducted workshops with stevedores to further understand feedback and discuss how it had been considered in making updates to all three technical reports. Whilst stevedore feedback informed a number of changes within the Container Capacity Review, PoM recognises that not all feedback has been adopted. In this regard, PoM must respect the basis and responsibilities of port stewardship as it relates to port planning and investment decision making.

Consideration and decision making

Given the nature of our operations, it is essential that we understand the needs and views of our stakeholders and engage with them in a meaningful way. Those that use our port, our industry and government partners, and the wider community around our operations are critical to our success.

Our Stakeholder Engagement Framework shows the way we engage and sets clear expectations for our employees, contractors and stakeholders.

When we engage, we consider our regulatory obligations, the needs and expectations of our stakeholders and plan engagement with the intent to listen and be responsive to our stakeholders. Throughout Round two engagement we adhered to IAP2 standards and met POEP obligations, providing stevedores with a meaningful platform to share views, data and insights.

PoM values the contributions made by stevedores during Round two engagement activities, resulting in further inputs to the Container Capacity Review. Even after the Round two workshops were completed, we maintained written communications with one stevedore and remained open to feedback.

We acknowledge that differences between the perspectives of two stevedores and details appearing in the final Container Capacity Review may remain. We also note that PoM is not required to ensure that all port users are satisfied with our assumptions. However, we are committed to engage effectively and to have regard to the comments provided by port users.

Next steps

Round three engagement and Stage One close out

PoM commenced Round three engagement activities in July 2023, centred around the following three technical reports:

- Trade Demand Forecasts prepared by Deloitte, *June 2023*
- Ship Fleet Forecasts prepared by GHD Advisory, *July 2023*
- Container Capacity Review prepared by Black Quay Consulting, *January 2023*

The Round three engagement methodology included a formal submission period encouraging participation from a broad range of port stakeholders to provide insights on the above-mentioned reports.

PoM's approach throughout PCEP Stage One engagement showcases a commitment to responding to 'what we heard' by being flexible with our timelines and engagement methodology, providing opportunities to further understand stakeholder perspectives to inform decision making.

Appendix A Black Quay Capacity

The following is an extract from the Black Quay Port of Melbourne – Container Capacity Review Final Report, September 2023.

The extract summarises how feedback from stevedores was considered by Black Quay in finalising the Container Capacity Review, published at the conclusion of the PCEP Stage One engagement program.

Key Input	*Are the input assumptions reasonable?*		Scenario (s) added/amended in response to feedback
	What we heard	**What has been done**	
		Based on this, it has been determined that Crane Intensities are unlikely to increase materially during seasonal peaks (PoM)	
Seasonal Peaking	Feedback provided by stevedores noted that there should be no additional allowance for seasonal peaking as it is already captured within the *base case* berth utilisation of 53%/63% for a 2 berth / 3 berth terminal. However, it was noted that seasonal peaking of 15% was generally considered to be appropriate for yard capacity.	Two new scenarios (Scenario D and D1) has been added to the modelling to assess the relative impact on capacity if seasonal peaking is excluded from berth capacity and that it is assumed that the supply chain would accept higher waiting times during seasonal peaks. It is noted that the application of the seasonal peaking factor was considered to not be appropriate by stevedores in the context of the *base case* berth utilisation, not the higher berth utilisation rates of 60%/65% for a 2 berth / 3 berth terminal proposed by some stakeholders.	Scenario D and D1.
Wait Time to Service Time	Feedback provided by shipping lines generally noted that waiting time should be no greater than 2 hours (which translate to a wait time to service time of less than 10% for most calls in Melbourne). Feedback provided by some stevedores noted that the wait time to service time ratio should be the average across the entire year, and not a max that should be maintained during seasonal peak periods. Feedback provided by stevedores noted that waiting time should only consider delays to vessels that arrive "on-window", not vessels that arrive "off-schedule".	The impact of excluding seasonal peaking has been considered within two new scenarios (Scenarios D and D1), and assumes an average wait time of 10% across the year, with some congestion/higher wait time to service time ratios during peak periods as the port nears its capacity. (It is noted that the application of the seasonal peaking factor was considered by stevedores to not be appropriate in the context of the *base case* berth utilisation only, not the higher berth utilisation rates of 60%/65% for a 2 berth / 3 berth terminal proposed by some stakeholders.)	Scenario D and D1.
Berth Utilisation	Feedback provided by stevedores noted that the berth utilisation adopted in the base case is too conservative and that it is standard practice to adopt a higher berth utilisation of 60%/65% for a 2 berth / 3 berth terminal.	The higher berth utilisation proposed by stevedores has been considered in scenarios (B3 and C).	Scenario B3 and C.

Key Input	*Are the input assumptions reasonable?*		Scenario (s) added/amended in response to feedback
	What we heard	**What has been done**	
	Feedback provided by stevedores noted that due to the scheduling capability within the Australian market (i.e. stevedores operating at multiple ports across Australia), they have a greater ability to manage vessel arrival patterns and can therefore operate at a higher berth utilisation without causing congestion.	Given the horizontally integrated nature of stevedores across multiple Australian container ports, there is in theory scope for a greater level of scheduling of vessel arrivals. It is noted however, that the historic figures utilised within the report to inform the determination of the appropriate berth utilisation profile (Section 4.9.3) would already incorporate any of these benefits. Nevertheless, additional scenarios B3 and C have been added to reflect the impact on berth utilisation if the implied scheduling capability of stevedores can be improved such that the proposed berth utilisation of 60%/65% for a 2 berth / 3 berth terminal can be maintained without compromising wait time to service time ratios.	Scenario B3 and C.
Fleet Forecast			
Fleet Forecast	Whilst Black Quay has not been involved in the Stakeholder consultation in relation to GHD's fleet forecast, it is understood that feedback provided by stevedores noted that there are some vessels with a capacity of up to 11,500 TEU's within the global fleet that fit within the Swanson Dock limits, although the availability of these vessels is currently low.	GHD has developed a new scenario (Scenario B) within the fleet forecast in response to stakeholder feedback. Scenarios D1 within the capacity modelling assess the impact of the alternate fleet profile to assess the relative impact of GHD's alternative fleet forecast (Scenario B).	Scenario D1.
Trade Forecasts	Black Quay was not involved in the Stakeholder feedback stage for the trade forecasts. However it is noted that the trade forecasts have been updated.	Trade forecasts have been updated by others and included within the Black Quay model.	All Scenarios

Round three
Stakeholder formal submissions

Engagement Summary Report

Port of Melbourne

Contents

Executive summary

As part of our stewardship obligations, Port of Melbourne (PoM) is required to ensure that port capacity can meet the future demands of Victoria's growing economy and as such, engaged about future port capacity.

Our engagement approach was consistent with the Pricing Order Engagement Protocol (POEP) which was finalised and published in October 2022.

The final, Round three of engagement was delivered throughout July to September 2023 and concluded the PCEP Stage One Engagement Program as highlighted in the table below.

Engagement stage		Engagement source materials	Engagement period
Round one	Stakeholders and Community – broad reaching engagement, and formal submissions	• Trade Demand Forecasts prepared by BIS Oxford Economics (BISOE), *August 2022* • Ship Fleet Forecasts prepared by GHD Advisory, *September 2022* • Container Capacity Review prepared by Black Quay Consulting, *September 2022*	September 2022 to February 2023 Materials Published 7 September 2023
Round two	Stevedore workshops	• Trade Demand Forecasts prepared by BIS Oxford Economics (BISOE), *December 2022* • Ship Fleet Forecasts prepared by GHD Advisory, *December 2022* • Container Capacity Review prepared by Black Quay Consulting, *January 2023*	March 2023 to July 2023 Materials published 13 February 2023
Round three	Stakeholders - Formal submissions	• Trade Demand Forecasts prepared by Deloitte, *June 2023* • Ship Fleet Forecasts prepared by GHD Advisory, *July 2023*	July 2023 to September 2023 Materials published 10 July 2023
Stage one complete		• Trade Demand Forecasts prepared by Deloitte, *September 2023* • Ship Fleet Forecasts prepared by GHD Advisory, *September 2023* • Container Capacity Review prepared by Black Quay Consulting, *September 2023*	21 September 2023

The PCEP Stage One engagement program was focused on gathering feedback and defining inputs for a draft Cost Benefit Analysis which will be the next stage of engagement on port capacity enhancement.

This Engagement Summary Report is focused on formal submissions received between 24 July and 31 August 2023 as part of Round three engagement, which informed final versions of each forecast report as indicated above, published on the PCEP webpage, 21 September 2023.

PoM developed and delivered Round three engagement in line with POEP, allowing a minimum of two-weeks to review and consider material(s) and content, and a minimum four-weeks to provide feedback.

10 July 2023	Round three engagement commences
24 July 2023	Formal submission period open
14 August 2023	Formal submission period extended
31 August 2023	Formal submission period closed
21 September 2023	Round three engagement closed out

What we heard

Several stakeholders called out interest in areas beyond the three forecast reports. As a consequence, we have taken note of particular stakeholders and their areas of interest for future engagement.

Although we are in the early feasibility phase of PCEP and will be for some time, to ensure due diligence and as part of our continuous steps to gather data and inputs for planning PCEP, we will in the future engage and act to close the loop on these broader subject areas. This includes heavy vehicle freight movements, intermodal activity with the road and rail network, environmental impacts and emissions (noting the IMO CII Regulation) and safety issues across the supply chain.

Throughout this engagement period we have achieved a better understanding regarding stakeholder support for PCEP, operational and cost impacts related to congestion and reduced the number of points of difference identified since starting engagement in September 2022.

Submissions received

PoM welcomed formal submissions from 18 stakeholders with varying views, insights and suggestions which will help us continue to improve our engagement programs, so we not only comply with the POEP, but are able to tailor and design our approach to keep momentum as we test, validate and progress through the project phases of PCEP.

During Round three engagement submissions were received from the following stakeholder cohorts:

Industry groups & associations	4	Shipping lines	5
Supply chain	1	Stevedores	3
Cargo owner	3	Union	1
Retail cargo owner	1		

A number of submissions specifically referenced the trade forecast and provided insights on specific industry views and perspectives regarding the long-term- growth outlook. None of these submissions disagreed with the general outlook or provided feedback that required updates to the Deloitte trade forecast.

We received broad feedback around shipping issues, which we consider highly valuable although not triggering a requirement for a revised fleet forecast, by GHD.

Since February 2023, PoM has been collecting feedback on capacity, most notably with stevedores as part of Round two engagement. There are a number of changes that have been incorporated into the final September 2023 Container Capacity Review.

Identify consultation need

Having undertaken significant engagement since September 2022, PoM needed to reach a conclusion on trade, ship fleet and capacity forecasts. Having engaged widely early-on when introducing PCEP with broad open questions followed by detailed technical workshops with stevedores regarding port capacity, Round three engagement primarily needed to address updated trade and ship fleet forecast reports and seek any additional feedback on capacity.

Given several methods had been adopted as part of the engagement program so far, a further formal submission period was considered an appropriate way to gain insights and data that would close out any gaps in information or identify any further issues for PoM to consider, and in due course would provide a guide into Stage Two engagement regarding the draft Cost Benefit Analysis.

As had previously been the case, the PCEP webpage would be the single source of truth for engagement materials and each milestone communicated via broadcast email (electronic direct mail - eDM).

The table below identifies risks and opportunities considered early when deciding the methodology for Round three engagement, and closing out Stage One of the PCEP engagement program.

Opportunities	Risks
Formal submission period: Allows participation for stakeholders achieving a broader range of voices and insights. Also allows flexibility for stakeholders to respond at a level that is achievable with resourcing, knowledge and awareness, and relevant to their operations.	Written content: This structured approach may create barriers to participation with particular details featured in the reports unable to be unpacked or explained at length, in written format. Mitigation: Informal awareness raising of the submission period via existing means and relationships, quick response to inbound enquiries via the project email.
Formal submission process: Allows PoM to review and consider in detail, information that may improve the robustness of data in the forecasts and in turn, the draft Cost Benefit Analysis.	Written subject matter: Inbound submissions may be relevant to other subjects beyond trade, ship fleet and capacity forecasts. Mitigation: Acknowledge additional areas of concern and respond in a way that is effective and appropriate for stakeholders. Consider relevance for inclusion in draft Cost Benefit Analysis engagement.
Capturing data: Written data provided by stakeholders means a higher level of accuracy in detail, versus meeting notes and record keeping of face-to-face interactions.	Volume of submissions: PoM may receive a volume of submissions that is challenging to responded to within an appropriate timeframe - without previous clear indicators of participation via this method. Mitigation: Establish project timelines and resourcing that is flexible, effective and enables subject matter expert access to submission content.

Plan consultation approach

In planning for Round three engagement PoM wanted to achieve inclusiveness, allowing different types of stakeholders to be involved. As an additional benefit, it was anticipated that this formal submission period may provide insights that would help inform future engagement and capture participants particular areas of additional interest.

Round three was designed to primarily achieve:

- Technical feedback and data-based insights from stakeholders
- An understanding of the bigger picture by hearing the flow-on effects for stakeholders relating to future possible congestion – what does it mean for our stakeholders?
- Robust forecast data, providing a level of assurance and due diligence for inputs to the draft Cost Benefit Analysis.

Gaining views on the bigger picture from stakeholders was also considered advantageous for future planning of the Stage Two draft Cost Benefit Analysis engagement program.

Providing access to all three reports via the PCEP webpage would achieve the above objectives and reflects the 'consult' level of the IAP2 Public Participation Spectrum. Further information on the IAP2 spectrum can be found in Appendix B (Round Three Stakeholder formal submissions, P14).

The table below identifies the provided lines of enquiry for Round one and those published on the PCEP webpage for Round three to guide submission content.

Round three also included a call to action for stakeholders noting that if views varied from the Deloitte and/or GHD report, to provide supporting evidence indicating points of difference for PoM's consideration.

	Round one	Round two	Round three
Trade forecasts	• Are the BISOE trade forecasts reasonable? • Are there additional scenarios that should be considered?	n/a	• Do you consider the outcomes forecasted in the Deloitte report to be sufficiently accurate to inform a Cost Benefit Analysis?
Ship fleet forecasts	• Are the input assumptions reasonable? • Are the forecasts reasonable? • Are there additional scenarios to be considered? • Is the assessment of what ship will service each trade lane reasonable?	n/a	• Are the figures in the GHD report regarding container ships per year visiting the Port of Melbourne sufficiently accurate to inform a Cost Benefit Analysis? • Do you support the identified forecasts in the GHD report relating to vessel size, to inform a Cost Benefit Analysis?

Port Capacity	As presented in September 2022:
	• Are the input assumptions reasonable?
	• Are there additional scenarios to be considered (including stevedore development options)?
	• Are the following terminal capacities sustainable and realistic;
	  ○ Swanson Dock East 1.26m TEU pa
	  ○ Swanson Dock West 1.4m TEU pa
	  ○ Webb Dock East 1.2m TEU pa		

Implement consultation

The PCEP communication channels, being the webpage and project specific email address, and their adoption throughout the Stage One engagement program allowed for Round three to be streamlined, providing a single source of truth (via webpage) and two way communication via the email portdev@portofmelbourne.com.

To commence Round three, broadcast information was provided via eDM with direct links to forecast reports (one click-through). The portdev email inbox was monitored at high frequency.

The below table details the Round three consultation program and method applied:

	Activity	Channel	Call to action	Key message
10 July 2023	**Round three engagement commences**	eDM to 760 email addresses	Email submissions to portdev Links to download reports	Key changes to each report
24 July 2023	**Formal submission period open**	eDM to 735 email addresses	Email submissions to portdev Links to download reports	Key changes to each report Key considerations for submission
14 August 2023	**Formal submission period extended**	eDM to 714 email addresses	As above	Submission close date 31 August 2023
	Indirect engagement with identified stakeholders	*Pre-existing meetings and phone calls*	*Visit the PCEP webpage*	*Email submissions to portdev*
	Submission received	portdev email	n/a	Thank you for your submission
31 August 2023	**Formal submission period closed**	portdev email	n/a	Formal submission period closed
	18 submissions received			
21 September 2023	**18 responses to submissions**	Portdev email	n/a	Thank you for participating and bespoke response to submission
	Round three engagement closed out	eDM to 713 email addresses PCEP webpage	Final forecast reports available	Stage One engagement program closed out


GYPROCK

Port user feedback

Throughout the period 24 July to 31 August 2023, PoM received 18 submissions which varied greatly. This has allowed us to consider not only information to inform final versions of the forecast reports, but also it has provided a deeper understanding of the bigger picture for our stakeholders and their particular areas of interest.

We heard about how future congestion might impact our stakeholders, and what this looks like in different circumstances including from a cost perspective, with consideration for end users, customer experience and also the importance of reputation on the global stage, including our own.

We were provided data from stakeholders reflective of recent growth, anticipated TEUs, surcharges and fees. Examples provided to us highlighted experiences and lessons learned throughout the pandemic.

Round three engagement was designed to achieve the following, and our participants were able to provide views on each of our objectives:

- Technical feedback and data-based insights from end-to-end port users
- An understanding of the bigger picture by hearing the flow-on effects for stakeholders relating to future possible congestion – what does it mean for our stakeholders?
- Robust forecast data, providing a level of assurance and due diligence for inputs to the Cost Benefit Analysis.

Submissions overview

<table>
<tr><th colspan="3">18 submissions received</th></tr>
<tr><td>Trade forecasts
Deloitte</td><td>Ship fleet forecasts
GHD</td><td>Container Capacity Review
Black Quay</td></tr>
<tr><td>4 direct call outs in relation to the Deloitte trade forecast</td><td>5 direct call outs in relation to GHD’s ship fleet forecast</td><td>6 direct call outs in relation to the Black Quay capacity forecast</td></tr>
<tr><td colspan="3">Subjects covered in submissions</td></tr>
<tr><td colspan="2">Operating days
Seasonal peaking factor
Impacts due to potential congestion
Future engagement on road and rail
Heavy truck movements
Supply chain and logistics
Fees and surcharges
Delivery impacts
Wait time and service time
Increased costs and commercial impacts
Global shipping and market challenges
Collaboration and data sharing</td><td>Crane Utilisation
ASC Operations
Resourcing
Storage impacts
Environment and safety
The IMO CII Regulation
Market outlook
Vessel size
CBA methodology and engagement
Customer experience
Brand reputation
Workforce implications
Complexities in identifying capacity forecasting</td></tr>
</table>

During Round three engagement submissions were received from the following stakeholder cohorts:

Industry groups & associations	4	Shipping lines	5
Supply chain	1	Stevedores	3
Cargo owner	3	Union	1
Retail cargo owner	1		

Trade forecast

A number of submissions specifically referenced the trade forecast and provided insights on specific industry views and perspectives regarding the long term growth outlook. None of these submissions disagreed with the general trade outlook or provided feedback that required updates to the Deloitte trade forecast.

PoM has noted however, that we need to continue to monitor this situation given macro-economic uncertainty. While there has been growth over the long term there are peaks and troughs over the short term. These short term movements can create a slightly different foundation for future forecasts - even though the long term growth trend remains solid. The forecast had a high and low scenario included in the base forecast and PoM will use these in sensitivity testing.

Fleet forecast

There were comments about how the fleet forecast may be applied and broader feedback around shipping issues including:

- Possible long term preference for larger ships on some services and PoM should support the use of larger ships
- Understanding the impact of the IMO changes
- The importance of service reliability and ships not being made to wait
- The potential for changing fuel types to be used in ships
- Questioning the appropriate ship limit in each precinct for planning purposes.

While these insights are valuable to PoM this did not trigger the requirement for a revised fleet forecast. The fleet forecast included two scenarios to cover different potential ship sizes at Swanson Dock, and service consolidation. PoM will continue to work with the Harbour Master and Ports Victoria to safely maximise the size of ships that can call at all precincts.

Capacity forecast

As previously noted, a number of changes as a result of stevedore feedback appear in the final September 2023 Container Capacity Review. While there was no additional feedback to populate in the final version of the Container Capacity Review, we did receive positive feedback on the work undertaken and the complexity of the task.

We would like to thank our stakeholders for their ongoing interest and participation in both PCEP and PoM engagement programs.

Comments from our stakeholders

We note that there are high trade volume growth forecasts for the Port of Melbourne.

This is an extremely complex matter taking into account a massive variety of factors that ultimately seeks to balance costs (money, time, effort, other factors (e.g., congestion).

The wait time to service time should be based on a period of at least 12 months.

Given that the market is still contending with the pandemic recovery, the technical reference paper on the future containership fleet analysis, 2023-2050 may be slightly premature.

Where small differences arise in the forecast reports, we believe that these are mostly immaterial in the context of what PoM is trying to achieve.

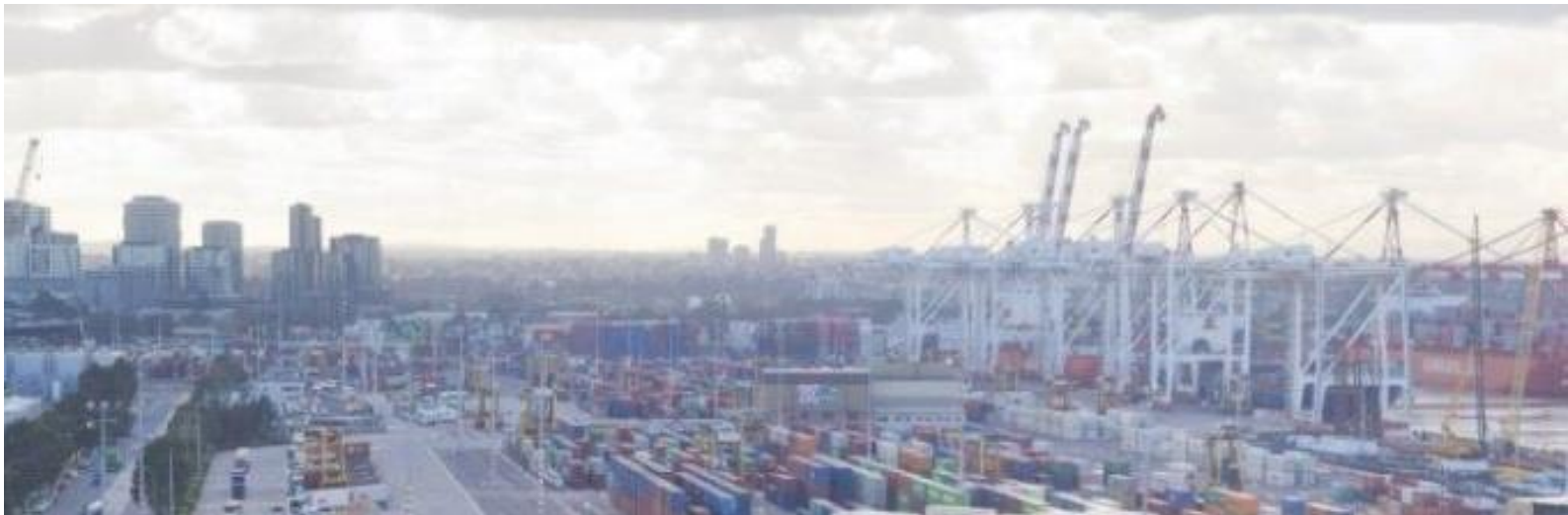
The only way to berth on time and turn around larger capacity vessels is to further expand the Webb dock complex with either a much larger VICT or a fourth terminal.

The fleet projections and trade forecasts are brilliant. They are high level detailed, easy to follow and extremely informative.

The report didn't review the commercial aspect of using Swanson Dock over Webb Dock – the pilots required for vessels over certain LOA, additional tugs based on weather conditions etc.

We rely on logistics service providers to ensure port infrastructure and supporting networks are capable of handling existing and forecasted volumes of cargo moving through the network.

As Australia faces a long-term trajectory of population growth, more containers, trains, ships, aircraft and trucks will be using infrastructure networks right across the freight supply chain.



Consideration and decision making

The Stage One engagement program has allowed PoM to consider improvements to our future engagement practices, including responding to the areas that are most relevant and interest our unique stakeholder base.

Over the past 12 months since September 2022 PoM has engaged on three forecast reports, and this month has achieved a major milestone thanks to the time our stakeholders have put in to providing submissions, completing surveys, attending meetings, workshops and presentations, and allowing us to understand what congestion means for the future.

We are pleased to have published final versions of the technical forecast reports as follows:

Stage one complete	• Trade Demand Forecasts prepared by Deloitte, *September 2023* • Ship Fleet Forecasts prepared by GHD Advisory, *September 2023* • Container Capacity Review prepared by Black Quay Consulting, *September 2023*

Based on Round three engagement, PoM received no feedback that required updates to the trade and ship fleet forecasts.

Since February 2023, PoM has been collecting feedback on capacity, most notably with stevedores as part of Round two engagement. As a result, changes have been incorporated into the final September 2023 Container Capacity Review as follows:

Scenarios have been updated to reflect feedback related to:

- Gross crane rates
- TEU ratio
- Berth utilisation
- Seasonal peaking
- Ship fleet forecast scenario

Next steps

PCEP Stage Two engagement program – Cost Benefit Analysis

PoM is currently refining details to define and deliver Stage Two engagement regarding the draft Cost Benefit Analysis being prepared by subject matter experts Deloitte.

Our approach in collaboration with Deloitte aims to identify potential economic, capital and operating costs associated with different options for delivering additional container capacity in Melbourne.

This body of work has been informed by Stage One stakeholder participation and the aforementioned reports. We look forward to announcing our Stage Two, draft Cost Benefit Analysis engagement milestone dates in the near future.

A separate Stakeholder Engagement Report will be prepared and published following the draft Cost Benefit Analysis engagement program.

Future Engagement

While our PCEP Stage One activity has been centred around due diligence in preparing these final versions of the forecast reports, we understand there is an important body of work to come in understanding the road and rail network. As such, we have noted areas of interest expressed by stakeholders and will use this to inform future engagement programs.

Appendix B IAP2

The IAP2 Public Participation Spectrum as shown in the Port of Melbourne Stakeholder Engagement Framework, on page 9.

Inform	Consult	Involve	Collaborate	Empower
We will provide balanced, objective, accurate and consistent information to support stakeholders to understand issues, opportunities and solutions.	We will seek feedback from stakeholders, listen to concerns and aspirations and inform them of the outcome of their feedback.	We will work directly with stakeholders to ensure their needs are directly and consistently understood and considered, and provide feedback on the outcome of their contribution.	We will partner with stakeholders, including: development of alternative plans, decision-making, and identifying preferred solutions.	We will engage with stakeholders to build networks, create opportunities and empower groups to lead the development of initiatives. Stakeholders are enabled/equipped to actively contribute to the achievement of outcomes.

What this might look like for Port of Melbourne engagement

Fact sheets	**Contributions to enquiries**	**Workshops**	**Involvement in Taskforces and advisory panels**	**Working Groups**
Website	**Electronic Direct Mail (EDM)**	**Roadshows and briefings**	**Advisory committees**	**Joint ventures**
Social media	**Correspondence**	**Public or industry meetings**	**Technical advisory groups**	**Provision of data**
Digital and print publications	**Calls for comment or submissions**	**Webinars**	**Roundtables**	**Sponsorships**
Presentations and events	**Surveys**	**Education sessions**	**Reference groups or expert panels**	
Media releases	**Focus groups**	**Stakeholder workshops**		

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