



INDEPENDENT REVIEW  
Ed Willett

# **Ports and Maritime Administration Act 1995 and Port Botany Landside Improvement Strategy**

Final Report  
May 2023

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## Foreword

I am pleased to lead the review of the *Ports and Maritime Administration Act 1995* and the Port Botany Landside Improvement Strategy.



Following extensive engagement with stakeholders on the Review Discussion Paper and Review Options Paper last year, I am now able to present the final recommendations and findings of the Independent Review of the *Ports and Maritime Administration Act 1995* (the Act) and Port Botany Landside Improvement Strategy (PBLIS), to the Minister for Transport for the NSW Government's consideration.

The Final Report responds to the Terms of Reference of 12 November 2021 and includes recommended reforms to the Act and PBLIS. These recommendations have been carefully informed by stakeholder input, external research and detailed analysis. They reflect the value and importance of this legislative framework for maintaining a safe and effective ports and maritime environment and identify opportunities to improve efficiencies at our ports.

The Review found that the policy objectives of the Act remain valid. I heard no compelling arguments for broad changes to the scope and purpose of the Act, nor found any reasons to propose broad changes. Instead, the Review found opportunities to improve parts of the Act and its application and I make 16 Recommendations and five Findings. These changes are designed to facilitate the delivery of the Act's objectives and support safety, efficiency, and effective governance arrangements for our ports and maritime environment.

The Review makes 21 Recommendations to ensure an effective port operating environment for container management at Port Botany into the future. I also make three Findings in relation to PBLIS about proposed options that are not recommended for implementation.

PBLIS was recognised by stakeholders as having successfully resolved the historical serious congestion issues at Port Botany and I recognise this achievement. However, PBLIS has tended to lock in port practices from the time of implementation, deterring innovations that have improved operations at other ports around the world. PBLIS has also created an environment where the associated parties (road operators in particular) have increasingly relied on PBLIS to manage what would otherwise constitute ordinary commercial relationships.

The centrepiece recommendation of this Review is to enhance the PBLIS regulatory regime with the addition of a performance scheme based on the principles of incentive-based regulation. This regulated scheme will reduce the administrative burden on both stevedores and transport operators while promoting improved port efficiency.

The scheme will not focus on penalising individual instances of poor performance, but instead will encourage the overall efficiency of landside operations. Road operators and stevedores that

demonstrate they meet required performance standards will be able to transition into the scheme, which will be underpinned by ongoing transparent performance monitoring to ensure performance is maintained and improved. The ability to reinstate the PBLIS rules will be maintained in the event that performance drops below required standards.

Detailed interim amendments to the PBLIS rules are recommended, to improve the operation of PBLIS prior to the completion of transition to the incentive-based scheme.

Finally, a number of recommendations are also made to improve:

- the availability of data on container movements;
- the management of traffic within the port; and
- rail operations.

It has been hugely beneficial to meet with and hear from a broad range of stakeholders throughout the review process. I thank everyone who has participated in engagement opportunities, provided feedback on the Review Discussion Paper and Review Options Paper and hosted me on site visits. The ongoing commitment from stakeholders across the industry to inform the process has ensured the development of a range of options that will improve landside operations.

I appreciate that some stakeholders will be concerned by any suggestion that PBLIS should be substantially changed and that change inevitably imposes new costs. Stakeholders recognise the change that PBLIS made when it was introduced and

have invested a great deal of time and energy into the existing arrangements. I do not consider that any substantive changes should be made immediately and believe that stakeholders should be provided adequate time to adjust.

Ultimately, I believe that landside operations at Port Botany and relationships between stakeholders can be significantly improved. This Final Report explores ways in which this can happen.

The Review was supported by a team within Transport for NSW (TfNSW) and I thank them for their contribution and support throughout the review process. I commend the team for the professionalism, diligence, expertise and skill they have brought to bear. In particular, I extend my thanks to Bianca Slack-Smith, Marie Lodge, Prasadi Dayatilake, Belinda Smith, Dilan Withanage and the other Freight Branch staff who have also made significant contributions.

My thanks are also extended to the Minister and the NSW Government for the opportunity to lead this Review as the Independent Reviewer and, in doing so, to contribute to the improvement of efficiency and operations at our ports.

Sincerely,



**Ed Willett**  
Independent Reviewer



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## Executive Summary

Efficient and productive ports are a key contributor to the overall freight supply chain, the cost of goods, the value of exports and the people of NSW and Australia. The State's three trading ports contribute more than \$15 billion to NSW's economy each year and examining the regulatory framework that underpins their effective operation is important to ensure ongoing international competitiveness.

On 12 November 2021, the NSW Government announced a comprehensive Review of the *Ports and Maritime Administration Act 1995* (the Act) and the Port Botany Landside Improvement Strategy (PBLIS). Mr Ed Willett was appointed to lead the Review as the Independent Reviewer, supported by Transport for NSW (TfNSW).

The Act sets the framework for ports and maritime management across NSW, including relevant functions of the Port Authority of New South Wales (Port Authority), the two private port operators (Port of Newcastle and NSW Ports) and TfNSW. It also specifies the marine safety functions of the Minister and contains provisions relating to the management of wharves and moorings, port price monitoring and the regulation of parts of the port supply chain. The Act is relevant for both the freight industry and the recreational and domestic commercial vessel sectors.

PBLIS was established under the Act and was introduced in 2010 to support improved efficiency and reduced congestion in and around the Port Botany precinct. PBLIS regulates the container stevedore landside servicing of trucks and trains (loading and unloading of containerised freight) at NSW's primary container port, Port Botany, and is supported by non-regulatory measures.

The Review has been conducted using a three phased approach: Discussion Paper, Options Paper and Final Report to government. The NSW Government Better Regulation principles and evidence-based research and analysis, including independent external inputs and comprehensive engagement with stakeholders, has guided the Review.

The Review makes 37 Recommendations and eight Findings for the government's consideration which can be adopted as a package. The Recommendations relate to changes that require legislative amendment. Findings are changes which do not require legislative amendments or where key proposals made by stakeholders have been considered but are not recommended for progression.

### Ports and Maritime Administration Act

The Review of the Act has considered whether the framework for ports and maritime administration remained effective. It considered the objectives of the Act and their suitability for the current and expected future ports and maritime environment, along with stakeholder feedback provided during consultation.

The policy objectives of the Act remain valid but there are opportunities to improve parts of the Act and its application, to facilitate the delivery of the Act objectives to support safety, efficiency and effective governance arrangements for NSW's ports and maritime environment.

Sixteen Recommendations are made to amend the Act, to modernise and streamline it, clarify functions, improve safety and efficiency in ports and wharves, improve visibility of the port related supply chain and address other issues raised during consultation with stakeholders. These Recommendations include proposals from stakeholders and all require legislative change. In addition, five Findings have been made that do not require legislative change or outline issues for consideration.

These Act amendments will ensure the legislation remains an effective and modern regulatory tool.

## **Port Botany Landside Improvement Strategy**

As a key gateway for international trade Port Botany plays an important role in the NSW economy, contributing \$10.7 billion to NSW Gross State Product annually. The port is the second largest container port in Australia and container volumes are forecast to more than triple by 2056. It is estimated that 42 per cent of all goods in a Sydney household are imported in containers through Port Botany. The efficient flow of containers into and out of Port Botany impacts the efficiency of the whole supply chain and the businesses and community that rely upon it.

PBLIS has delivered on its intended aim to address landside congestion and some of the inefficiency issues that were originally identified prior to its introduction. This is supported by stakeholder feedback and independent analysis.

However, elements of the PBLIS design are not ideal and must be addressed to ensure they remain contemporary and reflect the considerable change in the port operating environment since the introduction of PBLIS. PBLIS currently adopts a punitive approach to meeting benchmarks and the regulation is based on performance rules that are enforced via reciprocal penalties. Road operators that fail to meet a performance rule pay a penalty to the relevant stevedore, and when stevedores fail to meet a performance rule they pay a penalty to the relevant road operator. These penalties serve as a form of compensation to the adversely affected party. This is unlike most best practice economic regulation which is based on the principle of incentive regulation, as there is nothing in the design of PBLIS that incentivises behaviour that exceeds the benchmark set in the rules.

The PBLIS regulatory structure does not allow for flexibility to adapt to a changing port operating environment. Significantly, the design discourages the development of positive commercial relationships by encouraging industry parties to increasingly rely on PBLIS instead to manage industry relationships. The Review found that PBLIS imposes high administrative costs on all parties involved. As a result, PBLIS is not suitable to continue unchanged as there is considerable opportunity to improve its operation and ensure it provides further benefit to NSW.

PBLIS is a unique arrangement globally, as other jurisdictions in Australia and international ports do not regulate vehicle or rail servicing operations at the port landside interface to the same extent as under PBLIS.

While PBLIS has been effective in dealing with the congestion issues it was designed to address, landside container movement at Port Botany can be conducted significantly more efficiently and at lower cost to all involved than PBLIS currently allows. PBLIS has become an impediment to implementing effective solutions to current problems. An environment for

improved operations can be promoted by shifting the focus of oversight from penalties for individual failure to rewards for overall performance, encouraging better commercial relationships for mutual gain, providing better information on container movements and booking systems and providing good data on overall port performance. Stevedores and road carriers will thereby have the freedom and resources needed to continually improve their work environment.

The Review makes 21 Recommendations for change to PBLIS covering the port road interface, data transparency, port access and port rail. Findings have also been made where three proposed options were not recommended.

The centrepiece Recommendation recognises enhancements to the existing PBLIS are warranted to enable all supply chain parties at Port Botany – including road and rail operators, stevedores, the port operator and customers – to adapt and evolve with greater flexibility to innovate within the safety net of PBLIS. The recommended enhancement provides for the managed transition of the PBLIS rules to a Performance Scheme that is more consistent with the principles of incentive-based regulation and is designed to enhance port efficiency, remove regulatory barriers to innovation and reduce administrative burden on stevedores and road operators.

The regulated Performance Scheme would be underpinned by comprehensive and transparent ongoing performance monitoring and, as the Scheme is part of PBLIS, government would retain the potential to return stevedores or operators to the current prescriptive module of PBLIS if port performance deteriorates.

Stevedores and road operators can transition to the PBLIS Performance Scheme over a minimum two-year period by meeting and maintaining set performance levels. The performance benchmarks for stevedores and road operators are selected to drive overall port efficiency.

In addition to the enhanced Performance Scheme, ten changes to the PBLIS rules are recommended to improve the operation of PBLIS, prior to the completion of the transition to the PBLIS Performance Scheme. These would also apply for operators that continue operating within the prescriptive module due to their performance not meeting the required benchmarks. These include:

- Four changes that are mostly voluntary, are suitable to be applied while the PBLIS rules are in place and would also likely be retained once operators have transitioned to the Performance Scheme.
- Six changes are to current regulatory requirements and are relevant while the existing PBLIS rules remains in place.

Significant opportunities exist to improve port efficiency by enhancing the availability of data to support commercial outcomes. While data sharing has already enabled innovation, it could provide additional value where it is used to provide performance insights and guide decision making for both business and government.

Four Recommendations address the current lack of data transparency and propose increased data visibility across the port supply chain to support operational efficiency and provide a comprehensive understanding of containerised freight movements in NSW.

Increasing the information available publicly on stevedore, truck, rail and empty container park performance would provide greater visibility to industry of these parts of the port supply chain, increasing data analysis insight potential for industry and removing any ambiguity or misunderstandings to support improved industry relationships. Enhancing the data provided to government will better inform long-term strategic planning for the freight supply chain by providing an improved understanding of where constraints and opportunities exist.

In addition, the current practice of not using Electronic Delivery Orders at empty container parks is creating operational inefficiencies and warrants requiring empty container redirections to be provided in an appropriate electronic format. Full import containers exceed the volume of full export containers, necessitating the movement of large numbers of empty containers in the supply chain and this change will improve efficiency of container movement.

To capitalise on data sharing and the benefits it provides it is recommended to progress development of a Freight Community System (FCS) Strategic Business Case and, if positive, develop a phased implementation plan and proceed as a high priority. A FCS would provide a digital infrastructure backbone to existing hard infrastructure assets and future investments, and enable industry collaboration to optimise freight movements in Australia.

Consideration was given to how best to manage port road access to support the efficient operation of the landside interface. It is recommended to investigate the need for a second Truck Marshalling Area where trucks can park prior to accessing a stevedore and, if required, examine options for its development. The introduction of a certification requirement for container transport road operators at Port Botany is also recommended to assist port efficiency, encourage and facilitate professional performance levels across all operators and support the establishment of the PBLIS Performance Scheme.

The administration of PBLIS requires detailed understanding and oversight of the operations of the port landside logistics supply chain. Due to its highly operational nature, the administration of PBLIS may be more appropriately undertaken by the port operator NSW Ports, given its strong focus on port operational efficiency and engagement with port users.

Shifting this responsibility, under a service delivery contract, to the private sector would mitigate potential inefficiencies that result from the oversight of PBLIS being undertaken by the NSW Government, which is not an operational party in the port landside supply chain. This change would generate benefits from aligning the port operator's long-term planning to achieve overall port efficiencies with a comprehensive understanding of the ongoing implementation of the PBLIS arrangements. It is expected this change would also support improved communication and collaboration between all parties in the supply chain. It is therefore recommended to engage NSW Ports to administer PBLIS and manage the TMA and the TfNSW ANPR camera networks as a service provider to TfNSW, with the NSW Government (TfNSW) retaining responsibility for and control of the Act, Regulation and Mandatory Standards.

Over the past decade, rail volumes at Port Botany have not grown at the same rate as road and have declined in recent years. Both government and industry have set targets to increase the rail mode share at Port Botany. Coordination challenges for rail across the supply chain still appear to be significant and are likely to be the product of a series of decisions made by both governments and industry over recent decades. Ideally, in such circumstances, industry-



led responses would address the coordination issues, either through contractual or voluntary arrangements, or through mergers and acquisitions. The fact that such solutions have not emerged suggests that there may be characteristics or impediments in the port rail supply chain that hinder effective market-led responses.

While the coordination problems are significant, a number of initiatives, decisions and processes are underway that may increase rail efficiency at the port by providing new incentives for improved coordination inside and outside the port gate. These investments and processes, if effectively leveraged, should result in a more coordinated, integrated and appealing freight rail service offering to the market.

Regulatory intervention by government is premature while these initiatives, agreements and infrastructure are being implemented and have yet to mature. Consistent with the Better Regulation Principles, a regulatory intervention should only be pursued after non-regulatory, market-based, commercial or cooperative approaches have been given a reasonable opportunity to work.

A PBLIS style government intervention in port rail management is not recommended. However, when the current industry investments mature and the rail governance initiatives underway are in place, if the right environment for industry-led solutions is not present and other policy initiatives to facilitate improved coordination prove ineffective, then the government retains the ability to intervene in the market (via the Act) through regulatory approaches.

To improve rail operations at the port, it is recommended to remove the regulation of stevedore rail servicing arrangements to allow stevedores to set service terms and charges as appropriate. The regulation has not proven effective at supporting continued growth in rail use and may have deterred rail utilisation rather than encourage it. In addition, to ensure public rail infrastructure managers' (Sydney Trains and ARTC) services are appropriately aligned with the port rail task and as rail investments mature, Government should consider further options for improving the interface and coordination between supply chain participants and functions.

This report outlines the Recommendations and Findings in detail and with rationale. The Recommendations and Findings complement each other and form a package of reform that will support the Act and PBLIS remaining an effective and modern regulatory tool. Further the PBLIS Recommendations will address some of the inefficiencies within the prescriptive rules and deliver an enhanced capacity for operators that demonstrate acceptable performance to transition to a scheme with reduced administrative burden and more flexibility for innovation. The package is recommended for adoption in order to secure the ongoing safety, sustainability and productivity of our key trade gateways – the ports of NSW.

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# Recommendations and Findings

## Act Recommendations and Findings

### Improving safety

#### **Act Recommendation 1: Dangerous goods time limit penalty**

Replace the current three tier dangerous goods in ports time-limit penalty structure with an ongoing penalty that applies for each day that dangerous goods remain at port facilities beyond the set time limits.

#### **Act Recommendation 2: Mooring licences**

Remove the reference to identification numbers issued under the Commonwealth *Marine Safety (Domestic Commercial Vessel) National Law Act 2012* (Cth) as a condition of holding a mooring licence in NSW.

#### **Act Recommendation 3: Towage, lines handling and bunkering services**

Introduce a statutory licensing regime administered by Port Authority to:

- Replace the current towage licence system, administered by Port Authority under its harbour master powers and Port Safety Operating Licence
- Apply licensing requirements for the provision of lines handling services, using a similar approach to towage licensing
- Apply licensing requirements for the provision of some bunkering services, including information requirements and minimum safety standards.

#### **Act Recommendation 4: Permit requirements for bunkering and other works**

Update permit requirements to:

- Extend the current requirement for vessels carrying dangerous goods to obtain written approval for carrying out bunkering or specified work to other commercial vessels that do not carry dangerous goods but where pilotage is required or where the master is required to hold a certificate of local knowledge
- Remove cleaning or painting the ship's hull, polishing or cleaning the ship's propeller, and running a radar if the ship is a tanker from the list of specified works that require written approval.

#### **Act Recommendation 5: Enforcement of private port operator directions**

Make changes to private port operator directions to introduce a criminal offence and penalty infringement notice (PIN) for persons who breach private port operator directions at Port Botany, Port Kembla, and Port of Newcastle, relating to: the driving, stopping, and parking of vehicles; the movement, handling or storage of goods; or any activity that may pose a risk to safety and security at the port.

#### **Act Recommendation 6: Notice of private port operator directions**

Amend the port operator direction notification period from at least two weeks to at least one week to allow for more timely responses to general (non-emergency) safety or security issues.

#### **Act Recommendation 7: Traffic control at ports and wharves**

Extend liability for non-compliance with parking rules in all ports and on TfNSW or Port Authority land near a port or wharf to the owner of the vehicle.

### **Information and environmental sustainability**

#### **Act Recommendation 8: Vessel environmental performance information**

Require trading ships to provide relevant port authorities with vessel performance information such as fuel types, exhaust gas cleaning systems, noise emission levels and noise mitigation measures where relevant, and for vessels carrying bulk liquids to also provide information such as pump and outlet capacities.

#### **Act Recommendation 9: Port price monitoring scheme reporting requirements**

Change the port operator charges notification period to provide 40 business days' notification to the Minister before implementation, and within that period 20 business days' notification to industry before implementation.

### **Act Recommendation 10: Vessel manifest information and data formats**

Strengthen vessel manifest information requirements and information sharing mechanisms to support quality information provision and efficient data sharing.

#### ***Vessel manifests***

1. The following information should be provided by a vessel owner in a manifest for goods loaded or discharged from a vessel to the relevant port operator:
  - The Harmonized System (HS) classification based on internationally agreed descriptors for imports and exports.
  - For containerised imports, the inland point of destination or origin for the container within Australia.
2. A criminal offence should be created in the Regulation for failure to provide required information in a manifest within required timeframes.

#### ***Effective information sharing***

3. Delivery orders for cargoes and vessel manifests should be provided by the owner of the vessel to relevant parties, including port operators and empty container parks, in an appropriate electronic format, unless agreed otherwise.
4. Information provided in vessel manifests and delivery orders should also be made available by relevant parties to the NSW Government.

## **Modernising and streamlining**

### **Act Recommendation 11: Port boundaries**

TfNSW should review the application of current port boundaries and update the boundaries if required.

### **Act Recommendation 12: Transport for NSW functions**

Clarify functions of TfNSW to reflect changes in responsibilities for managing waterways infrastructure and the provision of maritime services across NSW and improve clarity of the role of TfNSW. Additional functions should capture TfNSW's role in keeping Sydney Harbour free of debris, the maintenance of additional waterways infrastructure (such as river entrance management infrastructure and vessel maintenance facilities), and other maritime functions TfNSW undertakes.

### **Act Recommendation 13: Maritime Advisory Council functions**

Expand the functions of the Maritime Advisory Council (MAC) to include advice and recommendations on maritime property, in addition to the current MAC functions of providing advice on maritime safety, infrastructure and research, in relation to domestic commercial vessels and recreational vessels.

#### **Act Recommendation 14: Port Authority objectives**

Allow Port Authority to engage in activities that are complementary to its principal objectives, with the Minister's approval.

#### **Act Recommendation 15: Application of the navigation service charge**

Remove the navigation service charge exemptions applied in Port Botany and Sydney Harbour in the Regulation so that vessels that enter ports are subject to the navigation service charge for each entry.

#### **Act Recommendation 16: Updates to the Act and Regulation**

Outline the objectives of the Act and make other amendments to remove outdated references and requirements and simplify the Act.

### **Act Findings**

#### **Act Finding 1: Differential port charges for environmental performance**

Differential charges can provide a strong signal to port users to support improvements to environmental outcomes.

#### **Act Finding 2: Consideration of Port Authority commercial and regulatory functions**

Government could consider Port Authority structure, which includes both commercial and regulatory functions, to determine whether it is appropriate.

#### **Act Finding 3: Consider pilotage provision**

The future of pilotage services in NSW should be included in any review of Port Authority functions or structure.

#### **Act Finding 4: National collection of stevedore and ship performance data**

Data collection on stevedore quayside and ship performance and related benchmarking should be undertaken at the national level by the Australian Government.

#### **Act Finding 5: Independent price regulation of port charges is not suitable**

Changes to the NSW Government port charges price monitoring scheme approach are not required.



## PBLIS Recommendations and Findings

### Port Road Interface

#### **PBLIS Recommendation 1: PBLIS Performance Scheme**

Introduce (via a managed transition process) a regulated performance-based incentive scheme for the stevedore and road interface that rewards efficient performance of stevedores and road operators, and provides flexibility to support innovation in landside operations. Monitoring will provide transparency of ongoing landside performance. Government should retain the potential to re-introduce the current, prescriptive PBLIS rules if port performance deteriorates.

#### **PBLIS Recommendation 2: Change carrier cancellation rules to take or pay**

Change the slot booking notice period and cancellation rules for carriers to a take or pay arrangement.

#### **PBLIS Recommendation 3: Facilitate no booking until discharge**

Enable stevedores to voluntarily implement a no booking until discharge system that allows container pick up booking once the import container has been discharged from the vessel.

#### **PBLIS Recommendation 4: Staggered time zone commencement**

Facilitate the optional commencement of truck servicing time zones every half hour instead of every hour.

#### **PBLIS Recommendation 5: Differential pricing of time zones**

Stevedores should consider applying different prices to truck time zones to encourage 24/7 landside port access.

#### **PBLIS Recommendation 6: Remove the broad power for regulating stevedore charges**

Remove the broad Regulation power for regulating stevedore charges, and remove associated PBLIS stevedore charge notification and government assessment requirements.

#### **PBLIS Recommendation 7: Apply late penalties per truck trip rather than per container**

Apply PBLIS late arrival penalties per truck trip rather than per container.

**PBLIS Recommendation 8: Apply unforeseen events to terminal sections**

Increase flexibility in stevedore unforeseen event application to allow partial closure of a stevedore terminal for an impacted time zone, instead of the whole terminal during that time zone.

**PBLIS Recommendation 9: Update penalty rates by Consumer Price Index (CPI)**

Backdate PBLIS penalty rates by CPI from 2010 and apply ongoing annual CPI increases.

**PBLIS Recommendation 10: Remove large and small carrier classifications**

Remove the option for stevedores to separate carriers into Large Carriers (Class B carriers) and Small Carriers (Class A carriers) for the purpose of releasing slots.

**PBLIS Recommendation 11: Remove TfNSW approval for stevedore import and export slot allocation**

Remove the requirement for TfNSW to approve the stevedore import and export slot allocation.

**Data Transparency****PBLIS Recommendation 12: Road data transparency**

Increase the information publicly available on stevedore truck servicing and carrier performance, and improve data provided to government.

**PBLIS Recommendation 13: Rail data transparency**

Provide detailed information on stevedore rail window and rail operator performance to industry, make data publicly available, and encourage visible container tracking.

**PBLIS Recommendation 14: Empty container data transparency and efficiency**

Require empty container storage facility data and make suitable data publicly available, and require empty container redirections be provided in an appropriate electronic format.

**PBLIS Recommendation 15: Freight Community System (FCS)**

Progress development of a FCS Strategic Business Case and, if positive, develop a phased implementation plan to proceed as a high priority.

## Port Access

### **PBLIS Recommendation 16: Second truck marshalling area**

Investigate the need and timing for a second truck marshalling area (TMA) and, if required, consider options for its development.

### **PBLIS Recommendation 17: Certified transport operator access**

Introduce a certification requirement for container transport road operators at Port Botany.

### **PBLIS Recommendation 18: Engage NSW Ports as a service provider to administer elements of PBLIS, truck marshalling area and TfNSW camera network**

Engage NSW Ports to administer PBLIS, and manage the TMA and the TfNSW ANPR camera networks as a service provider to TfNSW with the NSW Government (TfNSW) retaining responsibility for and control of the Act, Regulation and Mandatory Standards.

## Port Rail

### **PBLIS Recommendation 19: Remove regulated rail servicing arrangements**

Remove the regulation of stevedore rail servicing arrangements to allow stevedores to set charges and service terms as appropriate.

### **PBLIS Recommendation 20: Improve governance frameworks to align public infrastructure managers with the port rail task**

Ensure public rail infrastructure managers (Sydney Trains and ARTC) requirements are appropriately aligned with the port rail task.

### **PBLIS Recommendation 21: Examine future rail options**

As rail investments mature, consider further options for improving the interface and/or coordination between supply chain participants and functions.

## PBLIS Findings

### **PBLIS Finding 1: Investigate options for stevedore impacted trucks – PBLIS Option A2**

Not recommended

### **PBLIS Finding 2: Points system – PBLIS Option B10**

Not recommended

### **PBLIS Finding 3: Oversight of access arrangements – PBLIS Option C18**

Not recommended







INDEPENDENT REVIEW

Ports and Maritime Administration Act 1995  
Port Botany Landside Improvement Strategy

# 1

## About the Independent Review



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## 1.1 Review scope

On 12 November 2021, the NSW Government announced a comprehensive Review of the *Ports and Maritime Administration Act 1995* (the Act) and the Port Botany Landside Improvement Strategy (PBLIS). The Review was conducted by Mr Ed Willett, the Independent Reviewer, and supported by Transport for NSW (TfNSW).

The Review was guided by the NSW Government Better Regulation Principles<sup>1</sup> using evidence-based research and analysis, including independent external inputs and detailed engagement with stakeholders.

The Review Discussion Paper was published in December 2021 and was followed by a series of consultation meetings with stakeholders in early 2022. Feedback provided in these meetings was supplemented by 26 written submissions. The Review Options Paper was published in June 2022 followed by consultation meetings in July, with 21 additional written submissions also received.

Three independent studies were commissioned on different aspects of PBLIS to inform the Review Findings and Recommendations. These included a Cost Benefit Analysis (CBA) of direct and indirect costs and benefits of PBLIS by Castalia,<sup>2</sup> (see Appendix 1), the Advisian international and national comparison of port landside interfaces (Port Comparison Research),<sup>3</sup> (see Appendix 2), and the Deloitte Access Economics PBLIS industry behavioural research (PBLIS Behavioural Research)<sup>4</sup> (see Appendix 3).

Parts of the Regulation not related to PBLIS were reviewed by TfNSW, and the Regulation was amended on 1 September 2021. While these provisions have largely not been revisited, the Review has considered feedback provided during the Regulation review process that was deferred for consideration as part of a broader review. Some issues with non-PBLIS parts of the Regulation were also raised during consultation on the Review and have been considered where appropriate.

### 1.1.1 Ports and Maritime Administration Act

The Act sets the framework for ports and maritime management across NSW, including relevant functions of the Port Authority of New South Wales (Port Authority), the two private port operators (Port of Newcastle and NSW Ports), and TfNSW. It also specifies the marine safety functions of the Minister and contains provisions relating to the management of wharves and moorings, port price monitoring, and the regulation of parts of the port supply chain. The Act is relevant for the freight industry and the recreational and domestic commercial vessel sectors.

The Review of the Act has assessed the policy objectives and considered whether those objectives remain suitable. The Review then considered whether the Act requires any

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<sup>1</sup> NSW Treasury 2019, *NSW Government Guide to Better Regulation*, Sydney, NSW

<sup>2</sup> Castalia 2022, *Cost-Benefit Analysis of PBLIS Performance*, Sydney, NSW

<sup>3</sup> Advisian 2022, *PBLIS Comparison Study*, Sydney, NSW

<sup>4</sup> Deloitte Access Economics 2022, *PBLIS Industry Behavioural Research*, Sydney, NSW

changes to deliver the policy objectives, to ensure the framework underpinning ports and maritime administration in NSW is appropriate and effective.

### **1.1.2 Port Botany Landside Improvement Strategy**

PBLIS was introduced in 2010 to support improved efficiency and reduced congestion in and around the Port Botany precinct. PBLIS is a regulated arrangement that covers the performance of stevedores (road and rail servicing) and road carriers at the container terminals.

PBLIS is established under the Act, with the details set out in Part 6 of the Ports and Maritime Administration Regulation 2021 (the Regulation) and in the separate Port Botany Landside Operations Mandatory Standards (Mandatory Standards).

The review of PBLIS has considered:

- Why PBLIS was introduced and what it was expected to achieve
- What PBLIS has achieved to date
- Whether PBLIS remains the best approach, and, if so, whether the PBLIS arrangements are appropriate, and if not, what are the alternative options.

The Review has also considered the broader supply chain operating environment in relation to PBLIS, the expected future port environment and whether there have been any direct or indirect costs or savings resulting from PBLIS and any unintended adverse impacts on the supply chain.

### **1.1.3 Out of Scope**

Some matters were recognised as out-of-scope for the Review.

Options relating to the long-term lease arrangements applying to Port Botany, Port Kembla, and Port of Newcastle were considered within the context of those existing lease arrangements continuing without change.

The NSW Government recognised that the matter of stevedore charges is a national economic issue and referred a request for their review to the Australian Government for consideration. The Productivity Commission completed an Inquiry Report, Lifting productivity at Australia's container ports: between water, wharf and warehouse published in January 2023. Because stevedores operate in major container ports in multiple jurisdictions it recommended a national response to stevedore charges to ensure regulatory consistency across Australia via a mandatory industry code administered and enforced by the Australian Competition and Consumer Commission (ACCC). The existing PBLIS requirements that apply to stevedore charges were considered in the Review.

The Review terms of reference is at Appendix 4.

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## 1.2 Review process

The Independent Review process included:

- 12 November 2021 - Independent Review led by Mr Ed Willett announced
- 16 December 2021 – Review Discussion Paper published and public consultation undertaken until 4 March 2022
- 11 February to 4 March 2022 - first round of stakeholder consultation meetings and site visits completed (see Appendix 5 for a list of stakeholder consultation attendees and submissions)
- 21 February 2022 – Cost Benefit Analysis (CBA) published
- 25 May 2022 - PBLIS Comparison Study Landside Container Management published (Advisian report), PBLIS Industry Behavioural Research Study published (Deloitte report) and Review Discussion Paper written submissions published
- 16 June 2022 – Review Options Paper published and second round of public consultation undertaken until 29 July 2022 (see Appendix 5)
- 24 November 2022 – Review Final Report timing update advising of a small delay to expected completion.

### 1.2.1 Stakeholder consultation

An extensive public consultation process was undertaken in line with the NSW Government's Better Regulation Principles. The Review heard from individuals, logistics and retail businesses, port operators, peak industry bodies and industry advisory groups, container stevedores, transport operators (road and rail), maritime (domestic commercial and recreational vessels), unions, agriculture exporters, government, community groups and other stakeholders.

Two rounds of consultation were undertaken. The first round focused on the Review Discussion Paper which outlined the Review scope and provided relevant data and information but did not include proposed changes. This process collected stakeholder feedback to understand issues and suggestions for reforms.

The second round of consultation focused on the Review Options Paper and outlined the Review findings and proposed options for changes to the Act and PBLIS. Feedback was sought on the options proposed.

The first round of stakeholder consultation on the Review Discussion Paper included a series of virtual (due to the COVID-19 situation) consultation roundtable sessions that were open to all interested stakeholders, and individual meetings with the Independent Reviewer. These included:

- Five virtual round table sessions (four for freight stakeholders and one for maritime stakeholders) attended by 39 participants and some individual meetings with stakeholders.

- Site visits with stevedores at Port Botany (DP World, Hutchison, and Patrick Terminals), port tours (NSW Ports and Port Authority at Port Botany and Port of Newcastle at Newcastle Port), transport operators, industry associations, and empty container parks at Port Botany.

The review received 26 written submissions (of which 20 were from organisations and six from individuals) on the Review Discussion Paper. Non-confidential submissions were published on the TfNSW website.

The second round of consultation on the Review Options Paper included further roundtable sessions conducted both in-person and virtually:

- Four roundtable sessions (both in-person and virtual) were attended by 60 participants, along with some individual meetings.

The Review received 21 written submissions (of which 19 were from organisations and 2 were from individuals) on the Review Options Paper. A list of stakeholder consultation attendees and submissions is at Appendix 5 and a comparison of options proposed and final Recommendations is at Appendix 6.







Source: Destination NSW

# 2

INDEPENDENT REVIEW  
Ports and Maritime Administration Act 1995  
Port Botany Landside Improvement Strategy

## Ports and Maritime Administration Act



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## 2.1 Ports and Maritime Administration Act overview

The Act covers a wide range of ports and maritime matters related to administration and safety. It is made up of nine Parts and four Schedules which cover the establishment of Port Authority of New South Wales (Port Authority), provision of port charges, marine safety and other functions.

The purpose of the *Ports and Maritime Administration Act* (the Act) is to:

- establish Port Authority as a statutory State owned corporation and outline its objectives and functions
- promote competition and productivity in ports and the port related supply chain
- clarify functions and enable private port operators, Port Authority and Transport for NSW (TfNSW) to maintain and enhance safety and security at ports and maritime facilities
- provide for port charges and government monitoring of these charges
- provide an effective framework for achieving its objectives, including the imposition of penalties to support enforcement.

An overview of the areas covered under the Act is provided below.

### 2.1.1 Marine safety and other functions

#### Marine safety

The Minister has responsibility for marine safety, including the safe operation of recreational and commercial vessels, safety of navigation in ports and other waters and environmental protection in connection with the use of vessels in State waters (Part 3 of the Act). This includes the provision of marine safety and other infrastructure and services for use by vessels, as well as investigation of marine accidents and incidents. The Minister's functions under the Act and the Regulation can be delegated to support effective implementation of relevant provisions.

#### Minister's other functions

The Minister is also responsible for managing commercial port facilities and contracting for pilotage services and supply of services when these functions are not performed by a port corporation, as well as the acquisition of land (Part 3).

Section 10B of the Act enables the regulation of parts of the port supply chain to promote competition and productivity at the ports of Sydney Harbour, Botany Bay, Newcastle, and Port Kembla. PBLIS is implemented in the Regulation and the Mandatory Standards under this power.

#### Maritime Advisory Council

The Maritime Advisory Council (MAC) is established under Part 3 of the Act. It provides advice to the Minister on the operation of marine legislation, maritime safety and expenditure priorities relating to maritime infrastructure and research in relation to

recreational and domestic commercial vessels. It does not provide advice on freight related matters.

Council members are appointed by the Minister. They must have demonstrated individual expertise across one or more of the recreational boating, commercial vessel, or maritime property sectors.<sup>5</sup>

The MAC was renewed in 2020 following a public Expression of Interest process, consistent with the Public Service Commissioner's Appointment Standards for Boards and Committees in the NSW Public Service. MAC currently has ten council members, whose membership will lapse in August 2023. Further details of the MAC council members can be found [here](#).

Meetings are held biannually or at the Minister's discretion.

## Transport for NSW functions

TfNSW is responsible for maritime and other functions under the Act,<sup>6</sup> as delegated by the Minister, as well as the management of relevant property.

## Waterways Fund

TfNSW also administers the Waterways Fund under Part 4 of the Act, which includes money collected from penalties for offences under the Act.<sup>7</sup> The Waterways Fund can only be used in accordance with the Act and for specific purposes including: meeting expenditure related to TfNSW functions under the Act; payments authorised by the Minister to fund the Minister's functions relating to marine safety and provision of maritime infrastructure and services for vessels; and remuneration of TfNSW staff engaged in the administration of the Act.

The Waterways Fund directly benefits maritime customers by enabling reinvestment of all TfNSW maritime property related income and vessel related fees and charges, to build and maintain maritime infrastructure and deliver maritime safety and service programs across the State.

Examples include the Boating Now Program, which has resulted in increased accessibility and safety across NSW Waterways through the delivery of more than 200 infrastructure projects.

In addition, in October 2020 the NSW Government announced a \$205 million investment commitment in regional maritime infrastructure, regional dredging, ferry wharf upgrades and Maritime property improvements, to be funded from the Waterways Fund.

The Waterways Fund also benefits the broader NSW community by operating for the delivery of maritime functions and infrastructure, and supporting broader NSW Government social, economic, and sustainability outcomes.

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<sup>5</sup> The Regulation covers the MAC governance arrangements. Members are not reimbursed for their participation, although reasonable travel expenses may be recouped.

<sup>6</sup> As well as other 'marine legislation' which is the [Marine Safety Act 1998](#), the [Marine Pollution Act 2012](#), the [Marine Safety \(Domestic Commercial Vessel\) National Law Act 2012 \(Cth\)](#), and their associated regulations.

<sup>7</sup> Except where those penalties are paid to a port corporation.

## Safety directions

Under Part 4A of the Act, TfNSW or Port Authority may give directions to users to maintain or improve safety and security at a port (other than a private port) or wharf owned by them. If these directions are not complied with, the Act allows enforcement action to be taken.<sup>8</sup>

### 2.1.2 Port operators

#### Port Authority

Port Authority is the trading name of the Newcastle Port Corporation, which is the only statutory State owned port corporation currently established in NSW. The objectives of port corporations are to be a successful business and to:

- promote and facilitate trade through its port facilities
- promote and facilitate a competitive commercial environment in port operations
- improve productivity and efficiency in its ports and the port related supply chain
- ensure that its port safety functions are carried out properly.

Port Authority's Port Safety Operating Licence is issued by the Minister and enables Port Authority to perform port safety functions in the ports of Sydney Harbour, Botany Bay, Newcastle, Port Kembla, Yamba and Eden.

Port safety functions include:

- pilotage
- port communications
- maintenance and inspection of navigational aids
- surveying, monitoring and information sharing about depths of channels and berthing boxes, as well as fixing and collection of pilotage charges and navigation service charges at some ports
- administration of dangerous goods legislation
- emergency response and acting as lead agency for responses to maritime incidents, including investigation of marine pollution incidents
- maintenance of the Vessel Arrival System for coal loading vessels at Port of Newcastle
- towage, including promotion of a non-exclusive Towage Licence in Sydney Harbour, Botany Bay, Newcastle and Port Kembla.

Port Authority also owns and operates berths at Glebe Island, White Bay, Eden and Yamba, and acts as harbour master (directing and controlling the movements, entry and exit of vessels within port areas) in all six of the NSW pilotage ports under the *Marine Safety Act 1998* (Marine Safety Act).

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<sup>8</sup> Exercised by TfNSW or Port Authority staff, as well as 'authorised officers' – including removal of a vehicle, vessel or goods.

## Private operators

Two private port operators – Port of Newcastle and NSW Ports – are responsible for the commercial operation and management of NSW's three largest ports under long-term lease arrangements. Port Botany and Port Kembla were leased to NSW Ports in 2013 for 99 years and Newcastle Port was leased to Port of Newcastle in 2014 for 98 years. The roles and responsibilities of the private port operators are contained in these leases and the Act.

A private port operator has the power to give directions related to safety or security under the Act and enforce compliance (with other responsibilities covered under the lease arrangements) (Part 3A).<sup>9</sup> They can also require information from port users to support compliance monitoring, calculation and collection of port charges, and compilation of statistics.

### 2.1.3 Port charges

#### Charges

A range of port charges may be applied by the port operators (NSW Ports, Port of Newcastle, and Port Authority) for different activities at specific sites (under Part 5) such as navigation services, pilotage, berthing, site occupation, wharfage and use of port infrastructure.

Port charges in the Act are relevant for vessels accessing ports at Sydney Harbour, Botany Bay, Newcastle, Port Kembla, Yamba and Eden.

#### Port price monitoring

The objective of the port price monitoring scheme is to promote the efficient operation, use of and investment in major port facilities and a competitive commercial environment in port operations by monitoring the prices that port operators charge users of those facilities.

Port operators are required to notify the Minister (Part 6) of new charges and changes to or removal of existing charges. They are also required to publish information about planned changes on their websites. Annual reports on port charges revenue are provided to the Minister under the port price monitoring scheme. The Minister can publish reports and statements using this information.

Part 6 does not confer any explicit price regulation powers on the Minister and is silent on any measures that could be taken if the Minister had concerns regarding any notified port charges. However, there are measures open to the Minister in such circumstances where the Independent Pricing and Regulatory Tribunal (IPART) could be engaged. According to the NSW Treasury:

“The price monitoring scheme in Part 6 of the PAMA was specifically designed to work with the existing regime in the Independent Pricing and Regulatory Tribunal Act 1992 (NSW) (IPART Act) so that if the need arose:

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<sup>9</sup> The private port operators are required to provide biannual reports to the Minister on the use of port operator directions. The Minister may publish reports using this information.

- IPART could assist TfNSW and/or the Minister in undertaking the price monitoring under Part 6 and/or
- IPART could be directed to undertake a review of the effectiveness of the price monitoring regime and report to the Government”.<sup>10</sup>

Further, according to NSW Treasury, in the event that the Government decides that the price monitoring scheme is insufficient to deter anti-competitive behaviour, it retains the ability to take steps that it considers appropriate in the circumstances. For example:

- “the Premier may refer concerns regarding the level of prices for a review by an independent government agency, such as IPART
- the Government may amend Part 6 of the PAMA to include more stringent price controls or to introduce sanctions to compel compliance or
- the Government may, if it considers it appropriate, implement a State-based access and pricing regime...”<sup>11</sup>

While these measures are open to the Minister and the Government, it is likely that such measures would only be considered in response to identification of a serious problem.

## **2.1.4 Management of wharves, moorings, port facilities and works**

Access to wharves and moorings by recreational and domestic commercial vessels in NSW is covered by the Act (Part 6A).

For commercial vessels, relevant authorisation is required to access wharves, piers, jetties, landing stages or docks in Sydney Harbour (that are owned by TfNSW).<sup>12</sup>

TfNSW has established a Wharf Access Policy to provide consistent and transparent arrangements for commercial vessel operators seeking to use the network of commuter and charter wharves in Sydney Harbour and its tributaries and to ensure that public transport services provided under contract to TfNSW are given priority access to the wharves to deliver timetabled passenger services.

Only holders of a private mooring licence are permitted to moor their vessel on navigable waters. Private mooring licences are issued to individuals for vessels 5.2 metres or more in length that are registered in NSW. These licences are subject to special conditions relating to the mooring apparatus and vessel, with other conditions applied as required. The licences are not leases of the seabed and there is no guarantee of tenure. A private mooring licence cannot be traded or sub-let in any way.

Commercial mooring licences are issued to TfNSW-approved marine businesses, clubs and associations. A commercial licence permits vessels to occupy moorings under a commercial

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<sup>10</sup> NSW Treasury 2015, Submission to the National Competition Council: Glencore’s application for Declaration of Shipping Channel Services at Port of Newcastle, p. 10

<sup>11</sup> NSW Treasury 2015, Submission to the National Competition Council: Glencore’s application for Declaration of Shipping Channel Services at Port of Newcastle, p. 12

<sup>12</sup> Commercial vessel access to commuter and charter wharves in Sydney Harbour and its tributaries is regulated under the Regulation.



arrangement, with licence conditions relating to the apparatus and vessel, including other conditions applied as required.

TfNSW also offers a number of courtesy moorings which are free for the boating public and available to use in most locations on a 24-hour basis.

Part 6A also covers the use of port facilities by vessels, investigation of existing or proposed port facilities for use by vessels and removal of unauthorised works.

## **2.1.5 Other matters**

### **Legal proceedings, offences and penalties**

The Act includes offences and penalties relating to compliance with directions and the management of wharves, moorings and port facilities. The Act outlines requirements and processes for issuing penalty notices and any court action (Part 8).

### **Miscellaneous**

The Act covers port boundaries, liability of owners and masters of vessels, addressing obstructions or encroachments in waters and cost recovery for enforcing compliance.

### **Schedules**

Schedules 1, 2 and 5 in the Act cover the transfer of assets and staff from the former Maritime Services Board, which was previously implemented. Schedule 3 has been repealed.

Schedule 4 provides details of the regulatory powers to promote competition and productivity at ports (relevant to Act Section 10B) – including the ability to apply information and reporting requirements, the setting of mandatory standards, provision of compliance incentives and penalties, and the regulation of supply chain charges.

## 2.2 Act Review findings overview

NSW has four major commercial ports that are its trade gateways to the world – Port Botany is NSW’s primary container, bulk liquid and gas port. Port of Newcastle is the world’s largest coal export port, and also handles grain exports and other commodities. Port Kembla is NSW’s largest motor vehicle hub, and also handles grain exports and other commodities. And Sydney Harbour is Australia’s busiest waterway with thousands of visits from commercial and recreational vessels as well as trading ships.

There are also 16 other regional harbours in NSW. Of these, the Port of Eden and the Port of Yamba are also defined as pilotage ports under the Marine Safety Act and designated ports under the Act along with the four major commercial ports referred to above. Other regional harbours include Coffs Harbour, Port Macquarie and Port Stephens.

**Figure 1: Ports and Harbours of NSW**



Source: Transport for NSW

Ports in NSW provide a critical link between the landside and seaside elements of the supply chain and play a key role in supporting the growth in all trade. When outlining why port performance matters the Productivity Commission noted "...ports play a vital role in linking Australian producers and consumers with world markets. The bulk of Australia's goods trade passes through ports. This included nearly all imports and most exports (both by value and volume). These imported goods include important inputs into Australian production and include many of the goods purchased by Australian consumers."<sup>13</sup> The State's three trading ports have grown to contribute more than \$15 billion<sup>14</sup> to the NSW economy each year.

In addition to the ports, each year more than two million people go boating using recreational or small commercial vessels on NSW's more than 2,000 kilometres of coastal and inland waterways. Boaters' vessel storage requirements and access to the State's waterways are supported by over 22,000 mooring sites, more than 700 boat ramps, 234 wharves, and more than 90 slipways.

NSW has a maritime legislative framework consisting primarily of three Acts that together support efficiency at the ports of NSW and ensure there are appropriate mechanisms in place to maintain high standards of marine safety and environmental protection in the trading ports and coastal waters of NSW.

- *Marine Safety Act 1998* – provides for the safe operation of vessels in ports and waterways, promotes the responsible operation of vessels in those waters to protect the safety and amenity of other water users, as well as the amenity of occupiers of adjoining land, and provides an effective framework for the enforcement of marine legislation.
- *Marine Pollution Act 2012* – sets pollution prevention requirements for all vessels in State waters to protect the NSW marine environment from pollution from vessels and gives effect to Australia's ratification of the International Convention for the Prevention of Pollution from Ships (known as MARPOL).
- *Ports and Maritime Administration Act 1995* – establishes the framework for ports and maritime management across NSW, strengthens maritime and port safety and security and enhances and supports efficiency at the ports and along the port related supply chain.

When enacted in 1995, the Act, along with the *Ports Corporatisation and Waterways Management Act 1995*, established three statutory port corporations to manage the commercial port land belonging to the NSW Government in Sydney and Botany Bay, Newcastle and Port Kembla. The Act also incorporated changes to improve efficiency, promote trade, and ensure the safety of ports and maritime activities.

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<sup>13</sup> Productivity Commission 2022, [Inquiry into Australia's Maritime Logistics System Final Report](#), p. 143

<sup>14</sup> Estimate based on [\\$13.6 billion contribution from Port Botany and Port Kembla](#) and a [\\$1.8 billion contribution from Port of Newcastle](#)

Since then, the Act has been amended numerous times to reflect the changing ports and maritime operational landscape. These amendments include:

- Major reforms to drive efficiency improvements in the port supply chain and to promote productivity and competition at ports, including the development of PBLIS in 2010, which followed the 2008 Independent Pricing and Regulatory Tribunal (IPART) review into the port landside interface.
- The leasing of NSW's three largest ports to private operators: Port Botany and Port Kembla to NSW Ports in 2013 for 99 years and Newcastle Port to the Port of Newcastle in 2014 for 98 years. The transfers were facilitated by the *Ports Assets (Authorised Transactions) Act 2012*. The roles and responsibilities of the private port operators are prescribed in lease arrangements and the Act.
- In 2014, the Sydney Ports Corporation, Port Kembla Port Corporation and Newcastle Port Corporation were amalgamated into Newcastle Port Corporation, trading as Port Authority of New South Wales (Port Authority). Provisions in the *State Owned Corporations Act 1989* are also relevant for this change.
- The transfer of harbour master and pilotage provisions to the *Marine Safety Act 1998*.
- The transfer of the management of dangerous goods in ports functions from the Work Health and Safety Regulation 2011.
- The transfers of the management of wharves and moorings and other general waterways management functions from the Management of Waters and Waterside Lands Regulations 1972.
- The transfer of various functions to facilitate government agency structure changes over time.

This Review of the Act has considered whether the framework for ports and maritime administration remained effective. It considered both the objectives of the Act and their suitability for the current and expected future ports and maritime environment, along with stakeholder feedback provided during consultation on the Review Discussion Paper and Review Options Paper.

The Review found that the policy objectives of the Act remain valid. It heard no compelling argument for broad changes to the scope and purpose of the Act, nor found any reasons to propose broad changes. Instead, it found opportunities to improve parts of the Act and its application to facilitate the delivery of the Act objectives to support safety, efficiency and effective governance arrangements for NSW's ports and maritime environment.

The Review was guided by the NSW Government's Better Regulation Principles, which include consideration of simplification, removing unnecessary or outdated provisions and whether government action is necessary and proportional.

Sixteen Recommendations are made to amend the Act, to modernise and streamline it, clarify functions, improve safety in ports and wharves, improve visibility of the port related supply chain, and address other issues raised during consultation with stakeholders. These Recommendations include a number of proposals from stakeholders, and all require legislative change.

The Review makes five Findings that do not require legislative change. One Finding can be implemented under the current terms of the Act, but is included as a Finding to ensure Review considerations are clear for stakeholders. Two Findings consist of key issues or proposals raised by stakeholders that have not been recommended for implementation but whose rationale has been detailed. Two Findings are suggestions for potential further consideration by government but do not have sufficient drivers to be recommended for change.







Source: Port Authority of NSW

INDEPENDENT REVIEW

Ports and Maritime Administration Act 1995  
Port Botany Landside Improvement Strategy

# 3

## Act Recommendations and Findings

# Act Recommendations and Findings

The Review Options Paper put forward 15 options for changes to the Act. Stakeholders were then consulted on the options and further consideration was given to understand the impacts and benefits. The Review recommends 16 changes to the Act, which incorporate the changes proposed in the Review Options Paper and further changes and clarifications, where required.

Act Findings are also provided where Recommendations do not require Act amendments, or where key proposals made by stakeholders are not recommended for progression, or where suggestions for potential further consideration by government are made but do not have sufficient drivers to be recommended for change.

Act Recommendations	
<b>Improving safety</b>	
Act Recommendation 1	Dangerous goods time limit penalty
Act Recommendation 2	Mooring licences
Act Recommendation 3	Towage, lines handling and bunkering services
Act Recommendation 4	Permit requirements for bunkering and other works
Act Recommendation 5	Enforcement of private port operator directions
Act Recommendation 6	Notice of private port operator directions
Act Recommendation 7	Traffic control at ports and wharves
<b>Information and environmental sustainability</b>	
Act Recommendation 8	Vessel environmental performance information
Act Recommendation 9	Port price monitoring scheme reporting requirements
Act Recommendation 10	Vessel manifest information and data formats
<b>Modernising and streamlining</b>	
Act Recommendation 11	Port boundaries
Act Recommendation 12	Transport for NSW functions
Act Recommendation 13	Maritime Advisory Council functions
Act Recommendation 14	Port Authority objectives
Act Recommendation 15	Application of the navigation service charge
Act Recommendation 16	Updates to the Act and Regulation
<b>Act Findings</b>	
Act Finding 1	Differential port charges for environmental performance
Act Finding 2	Consideration of Port Authority commercial and regulatory functions
Act Finding 3	Consider pilotage provision
Act Finding 4	National collection of stevedore and ship performance data
Act Finding 5	Independent price regulation of port charges is not suitable



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## 3.1 Improving safety

### 3.1.1 Dangerous goods time limit penalty

#### **Act Recommendation 1: Dangerous goods time limit penalty**

Replace the current three-tier dangerous goods in ports time-limit penalty structure with an ongoing penalty that applies for each day that dangerous goods remain at port facilities beyond the set time limits.

Dangerous goods can pose significant risks to port facilities, and their management is regulated to ensure they are handled and stored safely. Port facility time limits for dangerous goods are applied from the time the goods enter the port facility (for import or export) to when they are transported out of the port. Both the cargo owners and stevedores are responsible for ensuring dangerous goods are not kept at the port facility beyond the time limits and stevedores are also required to appropriately store and handle the dangerous goods while at the port, ensuring that the total concentration of dangerous goods in the terminal does not exceed set limits.

Section 101 of the Ports and Maritime Administration Regulation 2021 (the Regulation) specifies the different time limits based on the category of dangerous good. The port facility time limits are:

- two hours for certain explosives and radioactive goods
- 12 hours for containers packed with more than 500 kilograms of prescribed dangerous goods (such as flammable or toxic gases), certain explosives, low specific activity materials and restricted chemicals
- 120 hours for other kinds of dangerous goods.

Currently there are three tiers of penalties that can apply to the dangerous goods cargo owner or the stevedore if time limits are exceeded by: less than 48 hours; between 48 and less than 96 hours; or 96 hours or more.

Some dangerous goods containers have overstayed port facility time limits beyond the 96 hours. In 2021-22 there were 369 dangerous goods penalties issued, with 34 issued for overstaying beyond the 96-hour limit.<sup>15</sup>

Replacing the current three-tier penalty structure with a daily penalty offence that applies to each day that dangerous goods are left at a port facility past the relevant time limit would address the potential risks these goods pose and maintain appropriate management of dangerous goods in ports. This change would ensure there is an effective incentive to comply with dangerous goods time limit requirements and that dangerous goods are appropriately removed from port facilities. The penalty amount would be reviewed to ensure it remains current and suitably proportionate to the risks it is designed to address.

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<sup>15</sup> Port Authority of New South Wales data

During consultation on the Review further analysis on the impacts of this change was requested, including its specific regulatory impacts. To implement this change, a legislative amendment would be required which would include appropriate consideration of regulatory impacts.

### Net benefits

- Ensures the continued and consistent effectiveness of the management of the dangerous goods penalty structure by creating an incentive to comply with requirements that extend beyond 96 hours
- Simplifies the penalty structure to improve clarity, consistent with the NSW Government Better Regulation Principles.

## 3.1.2 Mooring licences

### Act Recommendation 2: Mooring licences

Remove the reference to identification numbers issued under the Commonwealth *Marine Safety (Domestic Commercial Vessel) National Law Act 2012* (Cth) as a condition of holding a mooring licence in NSW.

Only holders of a mooring licence (private or commercial) issued by TfNSW are permitted to moor their vessel in NSW. Mooring licences are subject to certain prescribed conditions and may be varied, suspended, cancelled, or transferred. Reasons for suspending or cancelling a mooring licence include if the vessel to which the mooring licence relates is not seaworthy or presents a risk to the environment or property, or if suspending or cancelling the licence is in the public interest.

Under Section 29 of the Regulation, one of the conditions of holding a mooring licence in NSW is that a vessel occupying a mooring must be registered under the *Marine Safety Act 1998* (the Marine Safety Act) or have a certificate of operation or vessel identification number issued under the *Marine Safety (Domestic Commercial Vessel) National Law Act 2012* (Cth).

A vessel identification number can be automatically issued when a person applies for: a certificate of survey; non-survey approval; C Restricted approval; a specific exemption; or indicates intent to build a vessel. Alternatively, a person can make a standalone application for an identification number.

Obtaining an identification number may not by itself provide assurance that the vessel is in good condition. Vessels moored in poor condition pose risks to maritime safety and the environment. Removing the use of identification numbers issued under the National Law when applying for a mooring licence would therefore help to ensure robust requirements and standards are in place as a condition of obtaining a mooring licence.

During consultation, some stakeholders requested broader changes to improve mooring management, which is out of scope for this Review. Improvements to mooring management are considered separately on an ongoing basis by TfNSW and specific work on mooring reform and end-of-life vessels is currently underway.

## Net benefits

- Improves the robustness of the mooring licensing scheme in NSW by ensuring that the requirements for obtaining a mooring licence appropriately address the condition of the vessel.

### 3.1.3 Towage, lines handling and bunkering services

#### **Act Recommendation 3: Towage, lines handling and bunkering services**

Introduce a statutory licensing regime administered by Port Authority to:

- Replace the current towage licence system, administered by Port Authority under its harbour master powers and Port Safety Operating Licence
- Apply licensing requirements for the provision of lines handling services, using a similar approach to towage licensing
- Apply licensing requirements for the provision of some bunkering services, including information requirements and minimum safety standards.

The safe and effective provision of towage, lines handling and bunkering services are essential for port operations. Regulating a licensing regime for these services would support safer port operations by setting clear standards and performance indicators.

Towage, lines handling and bunkering are services that can present risks to safety, the environment, and property, as well as to ongoing port operations. Given these potential risks, it is appropriate that streamlined regulatory oversight of these services is established to appropriately address them.

A statutory licensing regime also promotes competition in the market for these services. The licensing regime would be non-exclusive, meaning that any service provider wishing to commence or continue operations in a port or ports could apply for a license. To date, the lack of a 'right' to provide services conferred by a licence has impeded contestability in the provision of these services.

## Towage

Towage services refers to the use of tugboats to help move or position other vessels, usually during entry to or exit from a port or berth, which is a critical safety function at ports.

Port Authority of New South Wales (Port Authority) currently administers a towage licence system under its Port Safety Operating Licence (PSOL) for the ports of Sydney Harbour, Botany Bay, Newcastle, and Port Kembla (Port of Eden is planned). Vessels directed by the harbour master as requiring towage services must utilise providers who have been issued with a towage licence from Port Authority (under its non-exclusive licence arrangement).

Requirements and standards currently applied to towage licences in NSW include the availability of the service, emergency equipment and response, booking systems, service standards (including certificates, training and maintenance of an auditable safety management system), conditions for subcontracting, minimum requirements of the tug fleet,

general obligations such as prevention of pollution, reporting of accidents and incidents, as well as recording and monitoring of performance.<sup>16</sup>

Replacing the existing licensing regime administered under the PSOL with a statutory licensing regime provides greater clarity for users and strengthens enforcement of requirements and standards to ensure these services are provided safely and efficiently. Current enforcement action by way of a harbour master direction is an indirect approach as the directions apply to the vessel using a towage service, rather than the towage service provider itself. Introducing a requirement under the Regulation for service providers to be licensed offers an effective approach to facilitate the safe and efficient provision of this critical port service.

In May 2022, the Victorian Government passed the *Transport Legislation Amendment (Port Reforms and Other Matters) Act 2022* (Vic), which requires providers of towage services to hold a licence to provide services under the *Port Management Act 1995* (Vic) and outlines the licensing regime for this purpose. Under this legislation, which commenced in March 2023, requirements and standards can be set that relate to minimum numbers of vessels, towing and pushing capacity, ability and availability of vessels to provide the necessary service and emergency response capabilities.

During consultation, stakeholders that supported this option recommended towage licensing should include penalties for non-compliance, compliance management processes, complaints handling mechanisms and standards for matters such as service continuity, stakeholder consultation, safety, and environmental impacts. Other feedback was that regulation could result in more costly towage tariffs for customers. The Review considers that this change is proportional and suitable to support safety and efficiency outcomes. Impacts could be minimised where possible by implementation of a streamlined licensing process.

The recommended statutory licensing regime in NSW could set out key safety conditions and efficiency outcomes, standards in relation to operational requirements and reporting against key performance indicators relating to operational and environmental safety and service delivery.

## Lines handling

Port users, including terminals and shipping lines, access a lines handling service to ensure the safe mooring and unmooring of a vessel from wharf infrastructure. This mooring operation is a critical part of a successful vessel port call and is currently unregulated.

Lines handling services are currently provided at the ports of Sydney Harbour, Botany Bay, Newcastle, Port Kembla and Eden.

Applying a licensing requirement in a similar approach as the proposed towage licence provides Port Authority with the ability to require minimum service capability and safety performance to support port safety and efficiency outcomes. The licence could include standards such as requiring providers to maintain an adequate safety management system

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<sup>16</sup> Details of existing towage licences are available at Marine governance | Port Authority New South Wales [portauthoritynsw.com.au](http://portauthoritynsw.com.au).

that is subject to periodic audits, reporting of all incidents when servicing a vessel and to advise of the outcome of safety investigations.

During consultation on the Review, lines handling operations were noted as being critical for the prevention of property damage, pollution incidents and personal injury, and to overall port productivity.

## Bunkering

Bunkering is the process of refuelling ships. The provision of bunkering is a high-risk activity as it can involve the transfer of large quantities of fuel and may occur in busy commercial ports among other vessels and port activities and in the presence of other dangerous goods.

There are numerous bunkering service providers in Sydney Harbour, Port Botany, Port Kembla and Newcastle.

Ships are currently required to inform Port Authority of their intention to carry out bunkering activities. However, there are no licensing or registration requirements for bunkering providers at the commercial ports of NSW, with insufficient information regarding who is providing these services, how these services are being provided and the quality of the service. The Regulation currently does not enable Port Authority to set standards for bunkering providers that covers appropriate training and equipment standards for performing these tasks, or for incident response.

A licensing requirement would provide a formal requirement for the consistent provision of information by bunkering providers on their operational standards. Port Authority would be able to specify and monitor minimum standards for training, equipment, and emergency response arrangements during bunker transfer operations and have oversight of the service providers' insurance coverage, which should be based on the level of service being provided.

A licence arrangement for bunkering services could also include indicators relating to safety and environmental performance. This may include minimum requirements in relation to service delivery equipment, such as hose testing and adherence to applicable Australian standards and guidelines, as well as agreements on operating parameters to ensure safe operations.

The specific application of a statutory licensing regime will require further consideration prior to implementation. Taking a risk-based approach, it is expected to apply to providers of bunkering services to larger commercial vessels (those requiring pilotage or the master to hold a certificate of local knowledge) at the commercial ports of Sydney Harbour, Botany Bay, Newcastle, Port Kembla, Eden and Yamba. It should apply to providers that service these vessels from either the landside or waterside to ensure appropriate management of risks.

Providers of bunkering to recreational or smaller domestic commercial vessels should be excluded from the regime, as this requirement may be disproportionate to the risks they pose. It should also not apply to facilities licensed under the *Protection of the Environment Operations Act 1997*, administered by the NSW Environment Protection Authority (EPA), as



these facilities are already appropriately regulated.<sup>17</sup> This means, for example, the regime would not cover provision of bunkering directly from marinas or bulk liquid facilities.

However, bunkering service providers that transport fuel from a licensed facility to vessels in a commercial port for the purpose of bunkering will be covered under the statutory licensing regime. This is because the refuelling of a vessel from a vehicle outside a licensed facility is not covered under that facility's EPA licence.

During consultation on the Review, one stakeholder requested sufficient flexibility be built in to support changes in practice during a transition to any new statutory licencing regime. This should be considered during implementation, which will include consultation with stakeholders.

### Net benefits

- Provides a robust statutory licensing regime to support the safe and effective provision of critical port operations to ensure that there are no disruptions to trade
- Supports enforcement of standards and requirements for towage, lines handling and bunkering to ensure safety outcomes and appropriate oversight by Port Authority
- Promotes competition in the market for these services.

#### 3.1.4 Permit requirements for bunkering and other works

##### **Act Recommendation 4: Permit requirements for bunkering and other works**

Update permit requirements to:

- Extend the current requirement for vessels carrying dangerous goods to obtain written approval for carrying out bunkering or specified work to other commercial vessels that do not carry dangerous goods but where pilotage is required or where the master is required to hold a certificate of local knowledge
- Remove cleaning or painting the ship's hull, polishing or cleaning the ship's propellor, and running a radar if the ship is a tanker from the list of specified works that require written approval.

Under Section 81 of the Regulation, a master of a ship that is carrying dangerous goods must not carry out certain work or bunkering (re-fuelling) on the ship while it is in the waters or berthed at a port facility without the written approval of the relevant port authority. A master of a ship must also ensure that the work or bunkering complies with the conditions of that written approval. Port Authority's current practice is to request written approval from commercial vessels that require either pilotage, a pilotage exemption, or a certificate of local knowledge at its ports through Port Authority's Port Management System. This ensures that work and bunkering on vessels are undertaken safely.

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<sup>17</sup> The EPA requires facilities that store or handle chemicals in bulk, including fuel, to hold an environment protection licence for this activity.

The current specified 'work' under the Regulation includes: hot work on the ship; work that immobilises the ship; freeing gas from the ship's tanks; cleaning or painting the ship's hull; polishing or cleaning the ship's propeller; underwater inspections of the ship; and running a radar if the ship is a tanker.

Risks are posed by vessels that are not carrying dangerous goods when they are bunkering or when certain work is being carried out on the vessel. For example, there are inherent safety and environmental risks associated with refuelling, such as injury to crew, damage to equipment or the vessel, oil spills and pollution incidents, as well as when specified works are carried out, such as hot work and freeing gas from the ship's tanks.

Extending the current requirement to obtain written approval to other commercial vessels that are not carrying dangerous goods would assist Port Authority in safely managing risks associated with bunkering and other specified works and provide consistency in how safety and environmental risks are managed.

This change is intended to cover commercial vessels where the master is required to hold a certificate of local knowledge, where pilotage is required, or where the vessel has a pilotage exemption certificate. It would not apply to recreational vessels or smaller domestic commercial vessels.

During consultation on the Review, stakeholders indicated this change could increase the administrative burden and raise user charges without significant improvement in service or risk management. Expanding the regulatory requirement to cover additional vessels is consistent with Port Authority's current practice and is not intended to create undue administrative requirements. The approval process is streamlined through Port Authority's Port Management System and no fees are charged for considering these applications.

In addition to expanding the types of vessels that require written approval for bunkering and specified works (Act Option 4) the Review recommends removing existing references in the definition of 'work' including: cleaning or painting the ship's hull; polishing or cleaning the ship's propeller; and running a radar if the ship is a tanker. Taking a risk-based approach, these activities are either not considered to require written approval, or they are appropriately regulated under other legislation and so do not also need written approval from Port Authority.

During consultation on the Review, an expansion of this requirement was sought to cover all works posing a risk to health and safety or the environment (such as noise pollution) or that impact a vessel's seaworthiness (such as life-boat drills and the maintenance of fire protection systems). To minimise administrative requirements for vessels that need to obtain written approval, the Review considers that specified works should be limited to activities that pose a clear safety risk and are not covered under other regulatory requirements.

It should be noted that this change is different to the bunkering licensing regime under **Act Recommendation 3: Towage, lines handling and bunkering services**. While both seek to strengthen the safe and effective management of ports by applying regulatory requirements to risky activities, the approaches taken are different.

The requirement to obtain written approval for bunkering is a direction to a commercial vessel to enable visibility of a proposed activity by Port Authority. It is important for Port Authority to be aware of certain higher risk activities taking place in the port, including bunkering, so that it can properly monitor and manage overall port safety.

The bunkering licensing regime in **Act Recommendation 3: Towage, lines handling and bunkering services** would apply to bunker service providers. It would not operate to grant access to land or water or approve bunkering activities on an individual basis but is aimed at ensuring that bunkering service providers are appropriately qualified and equipped, among other things, to provide bunkering services.

### Net benefits

- Strengthens the safe management of ports by Port Authority by ensuring bunkering and specified works on vessels are undertaken safely
- Provides a consistent approach for bunkering and specified activities for commercial vessels in ports
- Updates the legislation and provides clarity for users by aligning the Regulation with current practice
- Taking a risk-based approach removes unnecessary requirements from the approval process to minimise regulatory impact on users.

### 3.1.5 Enforcement of private port operator directions

#### **Act Recommendation 5: Enforcement of private port operator directions**

Make changes to private port operator directions to introduce a criminal offence and penalty infringement notice (PIN) for persons who breach private port operator directions at Port Botany, Port Kembla, and Port of Newcastle, relating to: the driving, stopping, and parking of vehicles; the movement, handling or storage of goods; or any activity that may pose a risk to safety and security at the port.

Under Part 3A of the Act, a private port operator can, for the purposes of maintaining or improving safety and security at the port, give directions (port operator directions) regulating the following activities in the landside port precinct of a private port, including:

- the driving, stopping and parking of vehicles
- the movement, handling, or storage of goods
- any activity that may pose a risk to the safety or security at the port.

Directions can be posted on signs in the port, given directly to people, or gazetted and published on the port operator's website. For example, NSW Ports has issued directions in Port Botany, Enfield Intermodal Logistics Centre and Port Kembla relating to parking of vehicles, leaving trailers unattached, leaving trailers/goods unattended, and prohibiting works without their written consent. Directions may be updated and replaced as required by the port operator.

A private port operator can take action to enforce directions, such as removing persons not complying with the direction and moving or removing vehicles or goods as required. A private port operator can recover the costs of enforcing directions from the person that did not comply. NSW Police can also assist in dealing with people that do not comply with port operator directions as necessary.

Port operators are required to report to the Minister on safety or security directions twice per year. This includes reporting on directions they have issued or removed, any breaches of directions and actions taken by the port operator to enforce compliance with directions.

These enforcement powers are different to the powers available to government under Part 4A of the Act. TfNSW and Port Authority, in the landside precinct of a port or wharf (but not the private ports), are able to enforce safety directions (including for traffic control) by issuing an 'on the spot' penalty infringement notice (PIN) of \$500, or by commencing criminal proceedings in court (maximum penalty of 30 penalty units) for non-compliance.

It is the role of government to administer the criminal justice system in the public interest. While government agencies are generally responsible for issuing PINs and prosecuting offences under relevant legislation, government and private entities can work in partnership to ensure the safety and security of significant assets are managed and maintained, as shown in the examples below.

### **Examples of traffic control by private entities**

- Major airports in Australia are operated by private entities. To facilitate effective management of traffic and parking at airports, the Australian Government implements an opt-in infringement scheme for private airport operators under the Airports (Control of On-Airport Activities) Regulations 1997 (Cth), based on local council parking enforcement processes. It operates at many major airports in Australia, including Sydney Airport. The scheme can be enforced by authorised persons, which includes the Australian Federal Police, an airport operator or their employee or contractor.
- The operation of toll roads in NSW is managed by a private operator. To assist the private operator with effective enforcement of the toll system, their authorised officers can issue PINs for infringements, such as not paying the toll. TfNSW can commence any proceedings in court for non-compliance on their behalf if required.
- The NSW 'pay parking scheme' under the Road Transport (General) Regulation 2021 enables private organisations that are approved for the scheme (referred to as 'declared organisations') to operate a parking scheme at their facilities – this includes hospitals and universities. Under the scheme, authorised officers from declared organisations can issue PINs when someone falsely claims a parking fee has been paid or damages a parking meter.

### **Strengthening enforcement of private port operator directions**

Not complying with a direction can result in serious safety and security issues, depending on the nature of the direction and its breach. For example:

- Vehicles stopped, parked and queued on port roads causing traffic congestion can create safety issues for port staff and other drivers and vehicles using these roads – requiring engagement of traffic marshals and sometimes the assistance of NSW Police.
- Carrying out unapproved works can impede safety and security in the port precinct.

- Disobeying a direction related to the movement or handling of goods, such as a direction not to leave goods unattended, can present a significant risk to the safety of persons and property, particularly where dangerous goods are involved.

The introduction of a criminal offence and PIN for breaching a private port operator direction would strengthen enforcement of directions on the landside of private ports. The NSW Government would authorise the issuing of PINs by private port operator staff. For serious or escalating breaches, the NSW Government could commence criminal proceedings in court on behalf of the private port operators. The ability for private port operator staff to issue PINs would be limited to the port operator safety and security directions.

This change would ensure effective enforcement of port operators' directions and strengthen the safe operation of the ports of Botany, Port Kembla and Newcastle. The Cost Benefit Analysis of PBLIS also noted enforcement of parking rules in the port precinct contributed to reducing traffic congestion at Port Botany.<sup>18</sup>

Clarification could be provided on the types of matters related to traffic control that authorised officers of private ports could give directions on, without limiting the private port operator's ability to appropriately manage safety and security at ports. This would be similar to Part 5 of the Regulation that currently specifies some of the traffic control directions that could be given to the driver of a vehicle standing or parking on TfNSW or Port Authority land near a port or wharf. These include directions to park or not park a vehicle in a particular area or to remove the vehicle. This additional change would provide clarity for port users on their obligations in port areas, further strengthening the safe operation of private ports.

During consultation on the Review, it was queried whether this would duplicate functions across authorities. There is no duplication as this change relates to staff of the private port operators issuing PINs to enforce directions in the private ports. Port Authority and TfNSW would continue to manage the safety and security of other ports and wharves as they do currently, including by issuing PINs for breaches of directions.

Stakeholders also asked how the process would function, including training of authorised officers. The general PIN scheme in NSW is established under the *Fines Act 1996* and includes an automated processing system operated by Revenue NSW. Issues such as training of authorised officers and the review of individual fines will be considered during implementation.

The existing requirement for private port operators to regularly report to the Minister on port operator directions, including actions to enforce compliance, provides visibility of enforcement actions. While it was requested that the current reporting timeframes to the Minister be changed from twice a year to annually, the current arrangements should be retained to ensure the Minister retains appropriate oversight.

During consultation, a stakeholder questioned whether in the context of this option the improved enforcement of parking rules combined with the limited availability of parking at Port Botany may displace congestion outside of the port precinct which could impact local residents. Appropriate traffic control and parking management in the port precinct is critical to the efficient operation of this nationally significant trade gateway. Outside of the privately

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<sup>18</sup> Castalia 2022, Cost-Benefit Analysis of PBLIS Performance, Sydney, NSW, p. viii



operated port precincts, at Port Botany and other ports, traffic and parking are managed by state and local government entities.

The introduction of certification requirements or a truck licensing scheme for road operators, as applied at other ports internationally (**PBLIS Recommendation 17: Certified transport operator access**) would further assist in strengthening enforcement action at private ports. For example, repeat breaches of port operator directions could result in the licence being suspended or revoked.

### Net benefits

- Strengthens enforcement of port operator safety and security directions to support safe and efficient operations and management of private ports
- Provides clarity for port users on their obligations in port areas by outlining the types of traffic control related matters private port operators could give directions on.

### 3.1.6 Notice of private port operator directions

#### Act Recommendation 6: Notice of private port operator directions

Amend the port operator direction notification period from at least two weeks to at least one week to allow for more timely responses to general (non-emergency) safety or security issues.

Private port operators can issue port operator directions for the purposes of maintaining safety and security at the port. These directions can be posted on signs in the port, given directly to people, or gazetted and published on the port operator's website.

Private port operators are currently required to give at least two weeks' notice of their directions to the relevant harbour master for the port and to the Minister if the direction relates to the management of dangerous goods. This advanced notification is not required if the direction is given in an emergency.

Reducing the notice period for private port operator directions from at least two weeks to at least one week would allow for more timely responses to general (non-emergency) safety or security issues.

Stakeholders raised no issues relating to this change during consultation.

### Net benefits

- Supports effective port management by allowing more timely responses to general (non-emergency) safety or security issues.

### 3.1.7 Traffic control at ports and wharves

#### **Act Recommendation 7: Traffic control at ports and wharves**

Extend liability for non-compliance with parking rules in all ports and on TfNSW or Port Authority land near a port or wharf to the owner of the vehicle.

Part 5 of the Regulation provides requirements for parking of vehicles on TfNSW or Port Authority land near a port or wharf. These include complying with a direction given by an authorised officer, such as: to not park in a particular area; to move the vehicle; to join a queue; to not enter a particular area; or to comply with any signs or traffic control devices. Non-compliance with these requirements can incur a maximum penalty of five penalty units, or a \$150 PIN.

However, the current requirements do not adequately address situations where the driver cannot be found, such as when a driver abandons a vehicle or leaves it unattended. This can cause safety and traffic management issues in situations where vehicles are parked illegally. Extending liability for failure to comply with Section 41 of the Regulation to the owner of the vehicle would strengthen enforcement of parking offences. This would be similar to arrangements currently in place for driving and parking offences on land outside of port and wharf areas, such as under the *Marine Estate Management Act 2014* and the *Roads Act 1993*.

Appropriate safeguards from liability are in place for owners in this other legislation and this approach would be applied here. For example, the owner would not be guilty of an offence if they supplied details of the driver of the vehicle at the time of the offence, or if the vehicle was stolen or illegally taken and used.

When put forward in the Review Options Paper (Act Option 7), the proposal was to apply only to land near a port or wharf owned by TfNSW or Port Authority. During consultation, a stakeholder requested that it should also apply inside the ports, as the same risks and challenges with abandoned or unattended vehicles on land near a port or wharf also apply inside port precincts. Therefore, the recommendation is to apply this change both inside all ports as well as to TfNSW and Port Authority land near a port or wharf. This will strengthen enforcement and security and ensure a consistent approach across the ports and wharf landside in NSW.

The extension of this Recommendation to private ports will further support changes to strengthen the enforcement of private port operator safety directions (**Act Recommendation 5: Enforcement of private port operator directions**) when related to traffic control.

Stakeholders also noted that extending liability to owners will not address problems with congestion, access and safety. This Recommendation is aimed at one aspect of traffic control and will not on its own address broader issues with traffic congestion. Other Recommendations made to assist in managing traffic congestion, access and safety, which are relevant for Port Botany include **PBLIS Recommendation 7: Apply late penalties per truck trip rather than container** and **PBLIS Recommendation 5: Differential pricing of time zones** aimed at improving container density so fewer truck trips are needed to move containers and encouraging off-peak usage of the port, as well as **PBLIS Recommendation**

**16: Second truck marshalling area** to investigate the need for a second truck marshalling area for trucks to park in the port precinct.

Implementation of this change would need further consideration of any privacy issues related to the sharing of vehicle owner information with private port operators, noting other private sector entities such as toll operators and CTP insurers are given lawful access to this information for specific purposes.

### **Net benefits**

- Strengthens effective traffic control by addressing situations where vehicles are parked illegally with the potential to cause safety and traffic management issues and the driver cannot be found
- Improves consistency in traffic control measures across all ports and wharf landside areas.



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## 3.2 Information and environmental sustainability

### 3.2.1 Vessel environmental performance information

#### **Act Recommendation 8: Vessel environmental performance information**

Require trading ships to provide relevant port authorities with vessel performance information such as fuel types, exhaust gas cleaning systems, noise emission levels and noise mitigation measures where relevant, and for vessels carrying bulk liquids to also provide information such as pump and outlet capacities.

Under the Act, port operators can request information from vessels for specific purposes, including monitoring compliance with port operator directions, calculating and applying port charges, compiling required statistics and co-ordinating communication at the port.

An expansion of these requirements would support ongoing monitoring of vessel environmental performance through the provision of information such as:

- the type of fuel(s) in use on the vessel (including sulphur content, where applicable)
- whether or not the vessel is fitted with an exhaust gas cleaner (scrubber) system
- noise emission levels for the vessel (both alongside at wharf or at anchor) and noise control / mitigation measures in place (if any)
- the capacity of all relevant pumps and outlets for vessels carrying bulk liquids.

The specific vessel environmental performance matters that port operators can request information on should be determined during implementation.

This information would contribute to effective management of environmental protection and risk mitigation strategies in ports – for example, air quality and noise control.

Port operators in NSW all have environmental performance related plans. NSW Ports has developed a 2022 Sustainability Strategy, Port Authority has net zero targets and a Sustainability Plan, and Port of Newcastle has sustainability commitments, including through its Active Environmental Management approach. Access to vessel performance information could help to identify opportunities for improvement and assess new initiatives. Collection of this information could also assist with determination of future port infrastructure needs and support the NSW Government's Net Zero policy, which forecasts reduced emissions reduction in NSW by 2030 and a goal of net zero emissions by 2050.<sup>19</sup>

During consultation, some stakeholders requested information be provided on an aggregate or one-off basis where possible to reduce the administrative effort. This change is not intended to have adverse impacts on vessels, and any administrative impacts of this change would be mitigated where possible by utilising information and formats that are readily available. The impact of this change on vessels therefore is considered proportional and suitable to support environmental impact mitigation initiatives.

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<sup>19</sup> Department of Planning, Industry and Environment 2020, [Net Zero Plan Stage 1: 2020-2030](#), Sydney, NSW, p. 4

This Recommendation is complementary to **Act Finding 1: Differential port charges for environmental performance**, which notes that port operators are able to apply different port charge rates based on vessel environmental performance and that this can be an important driver of improved environmental performance. Under the Act, port operators can request information from vessels for the purpose of calculating port charges, which would also apply to any environmental based charges they choose to introduce. Port operators should minimise administrative requirements for vessels in complying with these two requirements by providing streamlined processes so information provided can be utilised for both port charges and monitoring vessel environmental performance.

### Net benefits

- Contributes to effective management of environmental performance and risk mitigation strategies in ports by making consistent information available regarding the environmental performance of vessels
- Supports the ongoing monitoring of vessels' environmental performance to help identify opportunities for improvement and assess new initiatives, as well as inform future port investments.

## 3.2.2 Port price monitoring scheme reporting

### Act Recommendation 9: Port price monitoring scheme reporting requirements

Change the port operator charges notification period to provide 40 business days' notification to the Minister before implementation, and within that period 20 business days' notification to industry before implementation.

Under the port price monitoring scheme in Part 6 of the Act, the Minister is responsible for monitoring the prices that port operators charge users to promote a competitive commercial environment in port operations. The Minister does not regulate or approve port charges.

The scheme requires port operators to publish charges on their websites, report on charges annually to the Minister and notify the Minister of changes to the charges. Under the notification requirement, port operators must inform the Minister of the introduction or removal of any charges and any increases to existing charges at least 20 business days before the change and publish the change on their website (thereby notifying industry) at least 10 business days before the change. Details of the changes provided to the Minister include what the charge will be used for, how it is calculated and who will pay the charge. The port operators have to date taken differing approaches to their notification processes within this statutory framework.

The Review Options Paper proposed increasing the notification timeframe to the Minister to 40 business days before implementation (Act Option 9) leaving the 10 days' notice to industry unchanged. To ensure the notification process is reasonable and clear for port operators, government and industry, it is recommended that the notification timeframe be 40 business days in total. Port operators would be required to notify the Minister at least 40 business days before implementation, and within that period, publish the change on their website at least 20 business days before the change is implemented, to give industry 20 business days' notice.



This would facilitate a consistent approach across all port operators and support appropriate monitoring of port charges. It would also provide industry with an increased statutory notice period for upcoming changes to port charges. While this would be a change to the Act requirements, this approach aligns with the practice of most port operators.

The proposed approach was discussed with the three port operators and any issues raised have been considered in finalising the Recommendation. Other stakeholders raised no concerns during consultation.

### **Net benefits**

- Ensures a consistent approach to port charges notification across port operators and provides clarity of the regulatory reporting requirements
- Facilitates appropriate monitoring of port charges by ensuring the Minister is suitably advised under the port price monitoring scheme
- Provides increased and consistent notice to industry of upcoming changes to port charges prior to implementation.



### 3.2.3 Vessel manifest information and data formats

#### **Act Recommendation 10: Vessel manifest information and data formats**

Strengthen vessel manifest information requirements and information sharing mechanisms to support quality information provision and efficient data sharing.

##### ***Vessel manifests***

1. The following information should be provided by a vessel owner in a manifest for goods loaded or discharged from a vessel to the relevant port operator:
  - The Harmonized System (HS) classification based on internationally agreed descriptors for imports and exports
  - For containerised imports, the inland point of destination or origin for the container within Australia.
2. A criminal offence should be created in the Regulation for failure to provide required information in a manifest within required timeframes.

##### ***Effective information sharing***

3. Delivery orders for cargoes and vessel manifests should be provided by the owner of the vessel to relevant parties, including port operators and empty container parks, in an appropriate electronic format, unless agreed otherwise.
4. Information provided in vessel manifests and delivery orders should also be made available by relevant parties to the NSW Government.

#### **Strengthen vessel manifests**

A manifest is a document listing cargo information for the use of customs or other officials. Vessel owners must currently provide certain information in a manifest relating to the loading or discharge of goods, including the address of the consignee and the berths at which the goods are loaded/discharged, as well as other information about the goods that the relevant port operator reasonably requests. Port operators use this information to calculate port charges under the Act.

In addition to these current requirements, vessels owners should also provide the following information to relevant port operators in vessel manifests:

- The inland point of destination/origin for the container within Australia (represented by a 4-digit Australian postcode) if the goods are carried in a container. This would provide a single and reliable source of data on import and export distribution patterns within NSW and improve understanding of road and rail infrastructure requirements for cargo movements to facilitate infrastructure planning.
- Harmonized System (HS) Code descriptions, including the relevant Australian Harmonized System Commodity Classification for the goods (as published by the Australian Government). Providing the HS six digit code would improve freight information by removing variation in terminology when using generic categories to classify imports and exports.

Stakeholder feedback during consultation included the need to strengthen vessel manifest information requirements and outlined how repeated non-compliance with these, such as not providing all relevant information or providing incomplete information, impacts the ability to calculate port charges.

Currently, the Regulation makes it a criminal offence for vessel owners to not provide a manifest to the relevant port operator, with a maximum penalty of 20 penalty units. However, there is no penalty for not providing all the information required under the Regulation, or for not providing manifests within the specified timeframes, which differ based on the port and whether the goods are imports or exports.

As port operators rely on the completeness of vessel manifest information to appropriately calculate their charges, a maximum penalty should be introduced for failing to provide all required information in a manifest and for failing to provide manifests within the required timeframes. This would strengthen enforcement of these requirements.

### Effective information sharing

The system-to-system electronic exchange of information is important for the effective operation of the port supply chain. The provision of vessel manifests in an appropriate electronic format should be mandated to improve information sharing, unless agreed otherwise with the port operator. It is noted that general industry practice for container trade at Port Botany is to use Electronic Data Interchange (EDI) format for manifests. However, this format may not be suitable for some other trades through ports in NSW.

The benefits of electronic information sharing are data standardisation, improved quality of data and minimisation of errors (for example, associated with manual data entry), as well as streamlining of processes and reduced administration.

Stakeholders supported this change during consultation, highlighting the benefits of improved information sharing. On the change proposed in the Review Options Paper (Act Option 12), which specified information should be provided in EDI format, stakeholder feedback was that this may become outdated as the industry transitions to other formats such as Application Programming Interface (API) for information exchanges. Stakeholders also commented that existing standards for electronic information exchanges should be fully utilised, with some data still provided in paper form.

Other feedback included that the provision of Electronic Import Delivery Orders (EIDOs) should also be mandated under the Act. Delivery Orders are issued by shipping lines and authorise the release of cargo for their onward processing and transport through the supply chain to the cargo customer.

In line with mandating vessel manifests in electronic format, it is recommended that vessel owners be required to provide delivery orders in an appropriate electronic format to relevant parties, including port operators and empty container parks. This is consistent with the requirement for vessel owners to provide empty container redirection notices in electronic format to empty container parks for their subsequent provision to road operators, as outlined in **PBLIS Recommendation 14: Empty container data transparency and efficiency**. It is noted that like EDIs, EIDOs may also be superseded by other electronic exchange formats.

Changes to the Act to mandate that provision of electronic information should be flexible to accommodate different system-to-system information exchange formats and to ensure the requirements remain fit for purpose for the future ports environment. There should also be alignment with recognised information sharing standards to minimise administrative effort in providing information.

To provide greater visibility of import and export container movements, it is recommended that relevant parties receiving mandated electronic information (including port operators and empty container parks) provide that information to the NSW Government. Incorporating this requirement under the Act would also support the establishment of a Freight Community System, see **PBLIS Recommendation 15: Freight Community System**.

### **Net benefits**

- Improves consistency in the information provided in vessel manifests to provide a more accurate and reliable overview of import and export container movements to inform planning for future freight supply chain requirements
- Ensures compliance with vessel manifest requirements by strengthening enforcement provisions
- Modernises and streamlines information sharing methods to support efficient and effective information transfers.



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## 3.3 Modernising and streamlining

### 3.3.1 Port boundaries

#### **Act Recommendation 11: Port boundaries**

TfNSW should review the application of current port boundaries and update the boundaries if required.

The port boundaries for Botany Bay, Sydney Harbour, Port Kembla, Newcastle, Eden and Yamba are included in Schedule 4 to the Regulation. This provides boundaries for where and how powers under the marine legislation are applied, particularly the safety functions and responsibilities of Port Authority as set in its PSOL. Waters outside of these boundaries are the responsibility of TfNSW.

There have been various changes to the management of NSW waters, such as the establishment of Port Authority in July 2014 following the amalgamation of the Sydney, Newcastle and Port Kembla Port Corporations. In NSW, Port Authority is generally responsible for managing vessels over 30 metres in length (being vessels that require pilotage services, or a relevant exemption from pilotage, or that require the master to hold a certificate of local knowledge) and TfNSW is responsible for other vessels.

The movements in port areas of vessels over 30 metres in length that require pilotage services are closely monitored and managed by the Vessel Traffic Service (VTS) provided by Port Authority. Applying a risk-based approach and utilising a combination of radar, security cameras, and Automatic Identification System (AIS) trackers on vessels, the VTS covers the port waters traversed by relevant vessels.

The current port boundaries extend beyond the areas that are used by vessels that access ports and include areas not covered by the VTS that are used by recreational and domestic commercial vessels, or that are not navigable. For example, the port boundaries include significant coverage of tributaries into Port Botany or Sydney Harbour such as parts of the Parramatta, Georges and Cooks rivers.



TfNSW should review the application of current port boundaries and update them if required. This detailed review should consider whether the port boundaries remain effective and appropriate to manage the State's waters safely and effectively.

During consultation, stakeholders asked how this potential change (Act Option 10) would impact management of navigational aids/markers and the potential duplication or confusion about agency roles and responsibilities in the management of waterways. Different vessels currently access shared waterways in NSW, and the management of these waterways is divided between Port Authority and TfNSW. The implications of changing the boundaries for the ports and maritime legislative framework would be comprehensively considered in a review of port boundaries, including ensuring clarity of responsibilities.

### Net benefits

- Identifies issues with the current port boundaries that could impact the effective management of port waters
- Determines whether changes to port boundaries are required to ensure organisational responsibilities are appropriately defined and legislation is aligned.

## 3.3.2 Transport for NSW functions

### Act Recommendation 12: Transport for NSW functions

Clarify functions of TfNSW to reflect changes in responsibilities for managing waterways infrastructure and the provision of maritime services across NSW and improve clarity of the role of TfNSW. Additional functions should capture TfNSW's role in keeping Sydney Harbour free of debris, the maintenance of additional waterways infrastructure (such as river entrance management infrastructure and vessel maintenance facilities), and other maritime functions TfNSW undertakes.

Over time, the marine legislation and agency organisational structures and functions have evolved, such as with the transfer of marine safety and other functions from Roads and Maritime Services to TfNSW.

TfNSW's functions under the Act require clarification to ensure TfNSW's responsibilities and obligations are clear. These functions include marine safety, pollution prevention and maritime infrastructure and facilities management functions, such as:

- The long-standing function of keeping Sydney Harbour, and on limited occasions, other waterways, free from debris. This function was historically undertaken by the Sydney Harbour Trust, then the Maritime Services Board, and now sits with TfNSW. This key responsibility enhances the protection of the marine environment and amenity for waterway users and prevents navigational hazards. TfNSW operates multi-purpose vessels on Sydney Harbour staffed by specially trained teams to carry out this function.
- Maintenance of river entrance management infrastructure and vessel maintenance facilities. In 2020, some waterway assets were transferred from Crown Lands to TfNSW. As a result, TfNSW now has responsibility for the management of significant coastal infrastructure for use by vessels and industries. This infrastructure includes



river entrance management infrastructure, river training walls and vessel maintenance facilities. TfNSW also provides other key infrastructure and facilities in response to the increasing use of waterways in NSW.

During consultation, stakeholders were supportive of including TfNSW's functions of keeping waterways free of debris and maintaining waterway infrastructure (Act Option 13) in the Act. Stakeholders also suggested that other functions of TfNSW be captured, such as dredging management and the responsibilities of TfNSW in regional harbours. Improvements in how dredging is delivered are being considered on an ongoing basis by TfNSW and specific work to develop a long-term sustainable dredging program to support boater access to key waterways is underway.

### Net benefits

- Supports better understanding of TfNSW's maritime functions and the maritime responsibilities of government under the Act
- Ensures TfNSW functions under the Act are aligned with current operational responsibilities.

### 3.3.3 Maritime Advisory Council functions

#### **Act Recommendation 13: Maritime Advisory Council functions**

Expand the functions of the Maritime Advisory Council (MAC) to include advice and recommendations on maritime property, in addition to the current MAC functions of providing advice on maritime safety, infrastructure and research, in relation to domestic commercial vessels and recreational vessels.

The Maritime Advisory Council (MAC) provides advice to the Minister on the operation of the marine legislation and the National Law, maritime safety and expenditure priorities for the exercise of TfNSW's functions relating to maritime infrastructure and maritime research in relation to domestic commercial vessels (as defined in the *Marine Safety (Domestic Commercial Vessel) National Law Act 2012* (Cth)) and recreational vessels. It does not provide advice on freight-related matters.

The MAC currently has 10 council members and meetings are held bi-annually or at the Minister's discretion. Council members are appointed for a maximum of three years. After this period, members are eligible for re-appointment at the discretion of the Minister. Alternatively, the Minister may elect to refresh council membership.

Council members are appointed by the Minister and in accordance with the Regulation. Each must have demonstrated individual expertise across one or more of the recreational boating, domestic commercial vessel, or maritime property sectors. However, the required maritime property expertise is not currently reflected in the statutory functions of the MAC.

During consultation on the Review Discussion Paper, stakeholders suggested expanding the role of the MAC to better reflect all TfNSW maritime functions, including management of property vested within it.

It is recommended that the functions of MAC under the Act be clarified to include the provision of advice on expenditure priorities for TfNSW's functions in relation to maritime property. This would align the statutory functions of the MAC with an existing competency required of its members and the maritime functions of TfNSW. It would also provide greater clarity on matters the MAC advises the Minister on.

Stakeholders supported this change during consultation on the Review Options Paper and commented that the functions of the MAC already covered under the Act could be made clearer.

### Net benefits

- Aligns the statutory functions of the MAC with the expertise required of its members and the functions of TfNSW to provide clarity and improve understanding of the skills and expertise of the MAC
- Provides clarity on all relevant areas that the MAC advises the Minister on in relation to domestic commercial and recreational vessels.

### 3.3.4 Port Authority objectives

#### Act Recommendation 14: Port Authority objectives

Allow Port Authority to engage in activities that are complementary to its principal objectives, with the Minister's approval.

The Port Authority is established as a statutory State Owned Corporation (SOC) under Part 2 of the Act, in conjunction with Part 3 and Schedule 5 of the *State Owned Corporations Act 1989*. The Act sets out the principal objectives and functions of Port Authority. As a SOC, Port Authority can only engage in activities covered by these Acts, or another statute.

The Port Authority performs regulatory functions and provides safety service and commercial functions. This organisational structure is explored further in **Act Review Finding 2: Separation of Port Authority functions** below. Putting the port safety role aside, under the Act, the objectives of Port Authority include:

- to promote and facilitate trade through its port facilities
- to promote and facilitate a competitive environment in port operations, and
- to improve productivity and efficiency in its ports and the port-related supply chain.

In line with other SOC's, Port Authority objectives also include:

- To be a successful business and, to this end —
  - to operate at least as efficiently as any comparable businesses, and
  - to maximise the net worth of the State's investment in it, and
  - to exhibit a sense of social responsibility by having regard to the interests of the community in which it operates and by endeavouring to accommodate these when able to do so.

The Act provides very limited scope to accommodate activities that are outside of these objectives. The Port Authority however manages a range of lands and there is the potential for complementary activities to be accommodated without impacting port functions, which could further the broader objectives of the SOC to be a successful business and exhibit a sense of social responsibility.

This, for example, could support Port Authority's management of Glebe Island and White Bay which are part of a broader integrated redevelopment process in the Bays West area. One example of a complementary activity is the facilitation of service industries that indirectly support maritime functions.

These complementary activities should be allowed provided Port Authority's primary focus remains on its principal objectives and functions. The Ministerial approval role will ensure appropriate NSW Government oversight to determine whether the activities proposed are complementary.

### Net benefits

- Ensures complementary activities that are outside of Port Authority's principal objectives, are not unduly restricted under the Act
- Ensures appropriate government oversight of these complementary Port Authority activities.

## 3.3.5 Application of the navigation service charge

### Act Recommendation 15: Application of the navigation service charge

Remove the navigation service charge exemptions applied in Port Botany and Sydney Harbour in the Regulation so that vessels that enter ports are subject to the navigation service charge for each entry.

The navigation service charge is the port entry charge applied to all trading vessels for access to ports. The Port Authority provides this service and therefore collects this charge at Port Botany and Sydney Harbour. NSW Ports applies the navigation service charge at Port Kembla and Port of Newcastle at Newcastle Port.

The navigation service charge at Port Botany and Sydney Harbour covers the costs of providing port access which includes:

- hydrographical surveys
- navigation aids
- port operations (communications and vessel traffic services)
- port safety and security measures
- emergency response
- environmental protection and pollution control
- Harbour Master duties and responsibilities
- the management of dangerous goods.

The exemption from the navigation service charge for Port Botany and Sydney Harbour was introduced into the Regulation in 2002 and reflected an administrative arrangement in place at that time. The exemption applied to vessels which:

- leave the port of Sydney Harbour and, without leaving the territorial sea of Australia or entering another port, enter the port of Botany Bay, or
- leave the port of Botany Bay and, without leaving the territorial sea of Australia or entering another port, enter the port of Sydney Harbour.

The exemption was, at times, also applied to vessels which left and returned to the same port, either Port Botany or Sydney Harbour. The practice continued until 2018-19 when Port Authority began applying the exemption in accordance with the Regulation. The practice of multiple port entries is an infrequent activity undertaken by a limited number of bulk liquid vessels. This activity is likely due to delivery scheduling practices as there are no port infrastructure capacity constraints.

The Port Authority and some industry operators then negotiated that a vessel leaving and returning to the same port in Sydney would be granted an exemption of 50 per cent of the navigation service charge for subsequent entries. The 2021 Regulation review incorporated this negotiated arrangement.

A vessel delivering two cargoes at different times and choosing to make two port entries creates the same port traffic as two vessels and should be charged accordingly for the access provided. This vessel activity does not provide a saving to the port operator and applying an exemption is therefore not efficient or appropriate for managing port access.

Separately to the Regulation exemption, Port Authority can waive port charges as required and does so for the navigation service charge when vessels are directed to leave the port for reasons such as poor weather. This operational policy provides an exemption from the second navigation service charge for re-entry into the relevant port if the vessel returns within the time permitted. Since September 2019, on 30 occasions vessel owners have been granted navigation service charge exemptions under this policy when the vessel has left the port due to reasons outside of their control.

Industry feedback included that the exemption be expanded to align with previous practice and that the operational policy of providing exemptions from the navigation service charge when vessels are directed to leave the port be included in the Regulation rather than in its current application as an operational policy. Other feedback included support for the removal of any exemptions to the navigation service charge other than for vessels that are directed to leave a port.

### **Net benefits**

- Ensures the navigation service charge for port entry remains directly linked to port vessel traffic to ensure that port operator effort in providing safe and efficient port access is directly linked to the charge
- Ensures ongoing efficient access to port infrastructure as freight volumes increase
- Aligns the application of the navigation service charge across all ports in NSW and updates the Regulation.

### 3.3.6 Updates to the Act and Regulation

#### Act Recommendation 16: Updates to the Act and Regulation

Outline the objectives of the Act and make other amendments to remove outdated references and requirements and simplify the Act.

Changes are proposed to simplify, update and streamline the Act and remove unnecessary or outdated requirements. Some stakeholders provided feedback during consultation that the Act should be updated to provide clarity and improve legislative consistency, including clarifying its objectives. These updates are consistent with current government legislation drafting practice.

The proposed changes include but are not limited to the following recommendations:

- Detail the objectives of the Act clearly to modernise the Act in line with current drafting practice as well as other marine legislation that has been more recently reviewed (*Marine Pollution Act 2012* and *Marine Safety Act*).
- Remove references to multiple port corporations, noting that there is now only one port corporation in operation, trading as the Port Authority of New South Wales (Port Authority).
- Clarify that differential port charges can be fixed for environmental reasons. This is currently possible, but could be made clearer for stakeholders (see **Act Finding 1: Differential port charges for environmental performance** for further details).
- For the port charges site occupation charge provisions, remove the requirement for a map to be physically kept at the office of the relevant port authority, so that maps can instead be available online.
- Update references to trading and commercial ports, to clarify, simplify, and modernise terminology.
- Introduce a definition of bunker fuel relating to the management of dangerous goods, to improve Act clarity.

#### Net benefits

- Provides greater clarity on matters covered under the Act and ensures it remains fit for purpose by updating and modernising legislation in line with current and expected future practice, including streamlining the Act where appropriate.

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## 3.4 Act Review Findings

The Act Recommendations include changes that are required to the legislation to address issues raised by stakeholders, changes resulting from the Review analysis, and updates.

The Act Review Findings do not require legislation changes. Some can be implemented under the current terms of the Act, but are included here to ensure Review considerations are explained for stakeholders. Others are key issues or proposals raised by stakeholders that have not been recommended for implementation, with the rationale set out; or, suggestions for potential further consideration by government that do not have sufficient drivers to be recommended for change.

### 3.4.1 Differential port charges for environmental performance

#### **Act Finding 1: Differential port charges for environmental performance**

Differential charges can provide a strong signal to port users to support improvements to environmental outcomes.

Stakeholders proposed that different rates of port charges be set based on the environmental performance of vessels. Examples include the noise performance of a vessel and its operations, accessing shore power at berths where available and the carbon emission performance rating of the vessel. Different charge rates for environmental performance are possible under the Act. However, the clarity of the Act can be improved so that this is clear for port operators and port users (see related **Act Recommendation 8: Vessel environmental performance information**).

Global maritime trade grew by an estimated 3.2 per cent in 2021 to reach 11 billion tons, an improvement compared with a 3.8 per cent decline in 2020. The United Nations Conference on Trade and Development projects global maritime trade to grow by an annual average of 2.1 per cent for the period 2023–2027.<sup>20</sup>

Since 2011, there has been an increase in most forms of vessel activity in Australia's marine waters.<sup>21</sup> Ports in NSW represent a significant proportion of this activity, with over 5,000 commercial vessel visits during 2021–22, although this was a decrease from previous commercial visits due to factors such as COVID restrictions on cruise vessels.<sup>22</sup>

Vessel and port activities have various environmental impacts, including emissions and noise pollution. These impacts are addressed in NSW in a number of different ways, including through legislation such as the *Protection of the Environment Operations Act 1997* and the Commonwealth *Protection of the Seas (Prevention of Pollution from Ships) Act 1983*, as well as through government and industry sustainability targets and plans.

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<sup>20</sup> United Nations Conference on Trade and Development, 2022, *Review of Maritime Transport 2022*, p. xvii

<sup>21</sup> Department of the Environment and Energy, Australia State of the Environment 2016, 2017, p. viii

<sup>22</sup> Port Authority of NSW 2021, *Annual Report 2020/21*, Sydney, NSW, p. 15



## NSW Government environmental sustainability policy

In 2016, the NSW Government announced its long-term objective to achieve net zero emissions by 2050, which was outlined in the NSW Climate Change Policy Framework.<sup>23</sup> The NSW Climate Change Adaption Strategy listed under the framework includes specific actions for the NSW Government to mitigate climate change including enhancing the sustainable use and protection of water and marine resources and pollution prevention and control.<sup>24</sup> The framework aims to maximise the economic, social, and environmental wellbeing of NSW in the context of a changing climate and current and emerging international and national policy settings and actions to address climate change. The NSW Government intends to continue working with the Australian Government and other states and territories in transitioning the transport sector towards net zero emissions.<sup>25</sup>

TfNSW is supporting this target through actions outlined in the NSW Government Net Zero Plan Stage 1: 2020-2030,<sup>26</sup> which has an objective of achieving a 50 per cent reduction in emissions by 2030.<sup>27</sup> TfNSW is also supporting the net zero target through actions in the Freight and Ports Plan 2018-2023. This outlines the Government's priorities to make the freight sector safer, cleaner, and more efficient and to develop a sustainable supply chain that delivers benefits to our environment and continued operations into the future.<sup>28</sup>

## Port environmental performance targets

Measures to improve the environmental performance of vessels that use ports in NSW are consistent with the goal of reducing carbon emissions. Port operators can assist in promoting these changes by providing incentives for incoming commercial vessels to improve environmental practices and performance.

Globally, ports have been working to improve environmental performance, and port operators in NSW have implemented initiatives in support of improved environmental performance. For example:

- The Port Authority has a net zero target and will be installing and supplying shore power in the Bays Port precinct of Sydney Harbour. This involves the development of a landside electricity supply for ships at five berths, powered by 100 per cent certified renewable energy, which is expected to achieve a reduction of up to 14,000 tonnes of CO2 emissions per annum.<sup>29</sup>

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<sup>23</sup> Office of Environment and Heritage 2016, [NSW Climate Change Policy Framework](#), Sydney, NSW, pp. 1-9

<sup>24</sup> Adapt NSW 2022, [NSW Climate Change Adaptation Strategy](#), Sydney, NSW, p. 29

<sup>25</sup> Transport for NSW 2022, [Future Transport Strategy](#), Sydney, NSW, p. 76

<sup>26</sup> Department of Planning, Industry and Environment 2020, [Net Zero Plan Stage 1: 2020-2030](#), pp. 12-37

<sup>27</sup> DPIE 2021, [Net Zero Plan Stage 1: 2020-2030 Implementation Update](#), Sydney, NSW, p. 4

<sup>28</sup> TfNSW 2018, NSW Freight and Ports Plan 2018-2023, Sydney, NSW, p. 11

<sup>29</sup> Port Authority of NSW 2022, Sustainability Plan, [Shore Power](#)

- NSW Ports introduced an environmental incentive scheme for shipping in 2019. The scheme enables qualifying vessels (those on the Environmental Ship Index (ESI) visiting Port Botany or Port Kembla) to receive a financial payment via a rebate on their port charges. The ESI identifies ships that perform better in reducing air emissions than is required under current air emission standards of the International Maritime Organization.<sup>30</sup>
- Port of Newcastle has an Environmental, Social, and Governance Strategy and Sustainability Strategy that seek to address environmental risks in its operations. The port is also a member of the International EcoPorts network, which provides a consistent and globally recognised approach to environmental management in the port sector. This involves initiatives that seek to minimise and offset the port's environmental footprint.<sup>31</sup>

### Port operator charges

The Act covers port charges levied by port operators, including the two private port operators and Port Authority, for key services such as navigation services, site occupation and wharfage. Differential charges can be applied, and this finding clarifies this for port operators and industry.

An example of a differential pricing approach for port charges is the NSW Ports Empty Container Incentive Scheme which applies different rates for empty container wharfage, based on the shipping line's quarterly load and discharge ratio.<sup>32</sup> This scheme applies a price signal to encourage the shipping industry to achieve a balance of imports and exports which aims to avoid congestion in the empty container supply chain in Sydney.

The Act and Regulation outline the specifics of port charges including the calculation methodology and information required to determine these charges. Port operators can waive or refund all or part of the port charges applied.

Under the NSW Government port price monitoring scheme in Part 6 of the Act, the Minister is responsible for monitoring changes to port charges including the introduction of new charges by port operators. The Minister does not regulate or approve port charges.

Examples of how charges could be set for different environmental performance may include factors such as:

- accessing shore power in berths where this infrastructure is available
- the noise performance of a vessel and its operations
- the carbon emission performance rating of the vessel.

**Act Recommendation 8: Vessel environmental performance information** seeks environmental performance information from vessels to support vessel environmental performance monitoring and is aligned with this finding.

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<sup>30</sup> NSW Ports 2020, [Environmental Incentive NSW Ports](#), Sydney, NSW pp 2-3

<sup>31</sup> Port of Newcastle 2019, [Port of Newcastle leads ANZ](#)

<sup>32</sup> NSW Ports 2021, [Port Botany Empty Container Incentive Scheme](#)

Some stakeholders noted the importance of differential charging for improving the environmental performance of vessels and ports and suggested that the matters for which rates were set could be flexible, to encourage innovation and drive positive environmental outcomes in the future. The factors outlined above are not an exhaustive list and other factors may also be relevant to help address environmental sustainability.

Other stakeholders asked whether differential charges were necessary given port operators can already introduce rebate schemes to incentivise better vessel environmental performance. Rebate schemes however are an inflexible way to influence improvements in environmental outcomes for ports because the schemes are voluntary. This means not all vessels may be adequately incentivised to optimise environmental performance.

### Net benefits

- Supports port operator and NSW Government environmental improvement targets and helps improve environmental sustainability and pollution prevention in ports
- Encourages improvements to vessel environmental performance to support a sustainable fleet of vessels.

### 3.4.2 Separation of Port Authority functions

#### **Act Finding 2: Consideration of Port Authority commercial and regulatory functions**

Government could consider Port Authority structure, which includes both commercial and regulatory functions, to determine whether it is appropriate.

Stakeholder feedback included theoretical concerns about the structure of Port Authority and the potential for conflict between its regulatory functions and safety service provision and its commercial functions. Port Authority carries out port safety functions under a Port Safety Operating Licence (PSOL) that is issued by the Minister for the ports of Sydney Harbour, Botany Bay, Newcastle, Port Kembla, Yamba and Eden. Port Authority is also the commercial port operator for Sydney Harbour, Yamba and Eden (see Section 2.1 Ports and Maritime Administration Act for more details). Feedback was provided regarding the process of the Port Authority board appointments with changes suggested.

The Port Authority is a State Owned Corporation (SOC) established in 2014 under the *State Owned Corporations Act 1989* (SOC Act) and its objectives are covered in both the SOC Act and the Act. The operating conditions of SOC, their relationship with relevant Ministers, and the conditions for the employment of a SOC board, are covered by legislation that applies to all SOC in NSW and any changes to those requirements are outside the scope of this Review.

As a SOC, Port Authority has a charter to operate at least as efficiently as a comparable business to maximise the State's investment in the corporation and to promote trade through its facilities.

The functions of Port Authority are unique for a SOC in NSW, as they include both regulatory and commercial functions. Stakeholder feedback did not point to any instances where this structure has caused issues in practice and the Review has not been provided with any evidence of issues. However, the separation of regulatory powers and commercial functions

is common within organisational structures to ensure there are no conflicts between the organisation's responsibilities and drivers.

Structural separation of an entity's regulatory and commercial functions is particularly important where those commercial functions are conducted in competitive markets. The risk, real or perceived, is that the entity will conduct its regulatory functions to favour its own commercial operations and distort markets in its favour to the detriment of competitors. Hence, Clause 4(2) of the intergovernmental Competition Principles Agreement 1995 (in which Governments are referred to as Parties) required:

"Before a Party introduces competition to a sector traditionally supplied by a public monopoly, it will remove from the public monopoly any responsibilities for industry regulation. The Party will re-locate industry regulation functions so as to prevent the former monopolist enjoying a regulatory advantage over its (existing and potential) rivals."<sup>33</sup>

However, Port Authority's commercial functions are monopoly port services – they are not provided in competition to any other entity.

While there are, therefore, few concerns regarding Port Authority's current mix of functions, separating these commercial and regulatory functions should be considered, given that they are likely to involve different expertise and processes.

Any change to the structure of Port Authority and its relevant functions would need to be undertaken in a broader process than this Review. The legislative frameworks that govern SOC's and the Minister's oversight of Port Authority safety functions via the PSOL are appropriate to ensure port safety and the efficient operation of Port Authority landside port facilities. No changes are proposed, but government may choose to consider the structure of this SOC via a suitable process.

## Net benefits

- Consideration of the structure of Port Authority, which was established in 2014, may be appropriate to consider whether regulatory and commercial functions are appropriate for this SOC.

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<sup>33</sup> Competition Principles Agreement – 11 April 1995 (as amended to 13 April 2007), clause 4

### 3.4.3 Pilotage service provision

#### **Act Finding 3: Consider pilotage provision**

The future of pilotage services in NSW should be included in any review of Port Authority functions or structure.

Stakeholder feedback included concerns about having Port Authority as the sole provider of pilotage services for ports in NSW. This concern was linked to Port Authority having both regulatory and commercial functions (as detailed above) and the stakeholder view that this could cause conflict within the organisation in the provision of port services. It was suggested that the introduction of competition in all port related services and specifically in pilotage could provide benefits including expanded service provision, increased choice of pilotage providers for shipping lines, and lower charges for pilotage services.

The concern about potential conflicts of interest for Port Authority was noted by the stakeholder as potentially stifling innovation (for example, innovation in pilotage training), reducing choice for customers, eliminating the constraints on pricing that are expected to result from having competitors and potentially increasing costs. It was noted that the organisation that financially benefits from vessel journeys being conducted under pilotage should not be the organisation that grants exemptions from pilotage.

The Port Authority undertakes the provision of pilotage services under the PSOL issued by the Minister which covers the required safety standards. TfNSW administers the PSOL and implementation of the PSOL is audited annually. The Act also allows the Minister to contract for the provision of pilotage services at any port with private operators.

Alternatives to this self-provision model are:

- Conducting a tender for the provision of pilotage services by a suitably qualified private operator for a specified period of time – a competition for the market approach, and
- Allowing any suitably qualified operator to provide pilotage services – a competition in the market approach.

Pilotage services are critical for maintaining port access by safely guiding vessels into and out of ports where the potential risks from a safety incident to people and port functions are high. Applying either of the two competition models to safety functions such as pilotage is possible, and may provide some benefits but is fraught with difficulty. Appropriate standards for pilotage need to be established, potential providers assessed and conduct continually monitored. There is the risk that competitive pressures on costs will drive compromises in standards that may be difficult to detect.

Experience around Australia in the provision of pilotage is mixed. Brisbane, Botany, Burnie, Adelaide, and Darwin have adopted some form of self-provision. Melbourne and Fremantle have private pilotage operators.<sup>34</sup>

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<sup>34</sup> Productivity Commission 2022, [Inquiry into Australia's Maritime Logistics System Final Report](#), p. 161

The Centre for International Economics (CIE) conducted the National Competition Policy (NCP) Review of the *Ports Corporatisation and Waterways Management Act 1995* as part of the NSW Government's obligations under the Competition Principles Agreement entered into by all members of the Council of Australian Governments in 1995. This agreement required that all legislation that potentially restricts competition be reviewed against the NCP Principles. As it stated at the time:

"In Newcastle and Port Kembla, pilotage is provided by the corporations themselves. In Sydney ports, it is supplied through a private contractor, the contract being with the Minister but having been negotiated through the (Sydney) Ports Corporation. At both Eden and Yamba, pilotage is provided by the [Waterways Authority]."<sup>35</sup>

Following some analysis of the difficulties in applying competitive models in pilotage services, the CIE considered that the appropriate focus should be on oversight of charges associated with these services, and concluded:

"...that whereas a statutory navigation service charge and a pilotage charge are potentially in the public net interest, greater consideration needs to be given to alternative ways of determining them. The review team considers that a preferable alternative would be to retain a statutory basis for these charges but to require more rigorous principles of service charges and regulatory cost recovery to be used in the ways in which they are set."<sup>36</sup>

The CIE review and subsequent response by the NSW Government was endorsed by the National Competition Council as meeting reform implementation commitments:

"The review concluded that net benefits for the community arise from the provisions that allow service providers' control of market power, and the Minister's delegation of port safety functions to the port authorities. The review report also noted that each of the port corporations provides for competitive tendering of its more contestable waterfront services. The Council considers that New South Wales met its CPA clause 5 obligations in relation to this Act."<sup>37</sup>

A further consideration is the possible development of remote pilotage operations. According to the Productivity Commission, there is scope for pilots:

"...to make greater use of technology and autonomous vessels. Some of these technologies are already in use or being trialled in Australia and other countries.

Remote or shore-based pilotage places a pilot ashore so that navigational assistance can be provided from a control room rather than a vessel."<sup>38</sup>

Remote pilotage offers the prospect of substantial cost savings, which are likely to exceed any benefits available from contestable services using current technologies. Remote pilotage

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<sup>35</sup> Centre for International Economics 2002, NCP Review of the Ports Corporatisation and Waterways Management Act, p. 9

<sup>36</sup> Centre for International Economics 2002, NCP Review of the Ports Corporatisation and Waterways Management Act, p. 27

<sup>37</sup> National Competition Council 2003, Assessment Of Governments Progress In Implementing The National Competition Policy And Related Reforms: Volume Two Legislation Review And Reform, p. 2.49

<sup>38</sup> Productivity Commission 2022, [Inquiry into Australia's Maritime Logistics System Final Report](#), p. 380



services would shift the nature of these services in favour of a self-provision model, given that remote pilotage is likely to be conducted within the Harbour master's facilities.

The future of pilotage services in NSW should be included in any review of Port Authority functions referred to above (see **Act Finding 2: Separation of Port Authority functions**). The review should include consideration of the adoption of new technologies including remote pilotage, the way pilotage services are engaged and appropriate oversight of cost recovery through user charges.

### Net benefits

- Consideration of the approach to pilotage service provision could ensure that a modern and efficient approach is in place.

### 3.4.4 National port operation data collection

#### **Act Review Finding 4: National collection of stevedore and ship performance data**

Data collection on stevedore quayside and ship performance and related benchmarking should be undertaken at the national level by the Australian Government.

Stakeholder feedback included the suggestion that public and private entities, including port and terminal operators and government, should be required to regularly publish detailed performance measures and metrics as specified by the NSW Government. The requested data focuses on port quayside performance and includes detailed ship servicing metrics, as well as all port and maritime charges, cargo volumes and cargo values.

The Productivity Commission found that the current approach to measuring Australian container port performance could be enhanced by potentially combining time-based metrics to establish an index of Australian port performance.<sup>39</sup> Data gaps were identified in relation to missing metrics (such as labour metrics and time-based measures), missing information on underlying distributions and a lack of more disaggregated data.

"Productivity Commission Finding 3.1 – The framework for measuring Australian container port performance could be enhanced.

A comprehensive framework for measuring port performance would include data on the time taken to move containers through each of the key steps between ship and port gate. Comparison of these time-based metrics across ports would reveal where operations in a port are relatively inefficient. Other performance measures could then be used to understand why these relative inefficiencies exist. Data on landside and labour productivity would also need to be obtained to enable a comprehensive analysis."<sup>40</sup>

The Productivity Commission noted the Bureau of Infrastructure and Transport Research Economics (BITRE) have already undertaken benchmarking exercises in the past and would

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<sup>39</sup> Productivity Commission 2022, [Inquiry into Australia's Maritime Logistics System Final Report](#), p. 109

<sup>40</sup> Productivity Commission 2022, [Inquiry into Australia's Maritime Logistics System Final Report](#), p. 39

be “well placed to perform a benchmarking analysis”,<sup>41</sup> and noted various other relevant initiatives currently underway to improve the existing port performance framework by both industry and government.

The collection of data and metrics on stevedore and ship performance as well as benchmarking of performance should be undertaken at the national level rather than by State and Territory Governments, to allow a streamlined efficient and consistent approach.

Increased data transparency is covered by **PBLIS Recommendation 1: PBLIS Performance Scheme**, **PBLIS Recommendation 12: Road data transparency**, **PBLIS Recommendation 13: Rail data transparency** and **PBLIS Recommendation 14: Empty container data transparency and efficiency** which together provide a comprehensive approach to collecting and publishing data on containerised freight landside performance for road, rail and empty container parks at Port Botany. This will improve visibility and communications across the supply chain and support safe operations and efficiencies at the port. Improved transparency of the broader NSW freight supply chain would also be covered via a Freight Community System at **PBLIS Recommendation 15: Freight Community System**. State based metrics would complement national improvements to quayside performance information.

### Net benefits

- Enhanced consistency of stevedore quayside and ship performance data by the Australian Government collecting this at the national level through a streamlined approach
- Efficient approach for industry and government via the Australian Government undertaking both the data collection and application of any performance benchmarks.

### 3.4.5 Independent price regulation of port operator charges

#### **Act Finding 5: Independent price regulation of port charges is not suitable**

Changes to the NSW Government port charges price monitoring scheme approach are not required.

Stakeholder feedback on port charges included the expansion of the current NSW Government price monitoring scheme to price regulation where all charges would be reviewed and approved prior to their implementation. It was suggested that this function be undertaken by an independent pricing regulator.

The NSW Government price monitoring scheme was implemented when NSW’s three largest ports (Port Botany, Port Kembla, and Port of Newcastle) were leased to private operators. These arrangements apply to the three leased ports and to Port Authority.

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<sup>41</sup> Productivity Commission 2022, [Inquiry into Australia’s Maritime Logistics System Final Report](#), p. 110

NSW Treasury has previously identified the benefits of the price monitoring scheme as allowing for an effective and limited regulatory approach:

“A key benefit of the scheme is that it is transparent, and gives port users visibility and advance notice of any changes to port prices. The scheme also promotes commercial negotiation in preference to more onerous economic regulation. This enables the Government to identify pricing conduct which may be anti-competitive and deters port operators from engaging in such conduct.”<sup>42</sup>

As outlined in Section 2.1 Ports and Maritime Administration Act above, further measures are available to the Minister and the Government if required in response to a serious problem beyond the influence of current price monitoring arrangements.

Further, major port services would be likely to fall under the aegis of the National Access Regime in Part IIIA of the *Federal Competition and Consumer Act 2010*.<sup>43</sup> A service declared under Part IIIA would enable a user of that service to have disputes in negotiations arbitrated by the Australian Competition and Consumer Commission if a different arbitrator is not agreed between the parties.

The Productivity Commission considered port charges in its recent review and found that there is currently no case for further regulation of prices set by port operators (Finding 5.3). The Productivity Commission also noted current price monitoring arrangements at the ports are designed to “reduce the risk of container ports developing monopolistic behaviour”<sup>44</sup> while still reserving the right to exercise more comprehensive regulatory measures as needed. The Productivity Commission found that “the mechanisms that exist in Queensland, New South Wales and South Australia that enable closer regulatory oversight if concerns arise about ports’ use of their market power appear to be adequate”.<sup>45</sup>

Therefore, there is no case to support amendments to current price oversight arrangements for port services in NSW or to introduce more intrusive forms of regulation.

## Net benefits

- Provides an appropriate level of government port charges oversight and avoids the potential risks and administrative burden of stronger regulatory intervention
- The NSW Government retains the ability to apply closer regulatory oversight if required.

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<sup>42</sup> NSW Treasury 2015, Submission to the National Competition Council: Glencore’s application for Declaration of Shipping Channel Services at Port of Newcastle, p. 10

<sup>43</sup> See *Port of Newcastle Operations Pty Ltd v Australian Competition Tribunal* [2017] FCAFC 124 (16 August 2017). While a subsequent amendment to the declaration criteria at Section 44CA of the *Competition and Consumer Act 2010 (Cth)* means that declaration is only available where it would promote a material increase in competition in a related market compared to terms voluntarily available by the service provider, it remains likely that a major port service provider in NSW would still be liable to declaration if engaging in a substantial anti-competitive abuse of market power.

<sup>44</sup> Productivity Commission 2022, Inquiry into Australia’s Maritime Logistics System Final Report, p. 175

<sup>45</sup> Productivity Commission 2022, Inquiry into Australia’s Maritime Logistics System Final Report, p. 41





INDEPENDENT REVIEW

Ports and Maritime Administration Act 1995  
Port Botany Landside Improvement Strategy

# 4

## Port Botany Landside Improvement Strategy

## 4.1 PBLIS overview

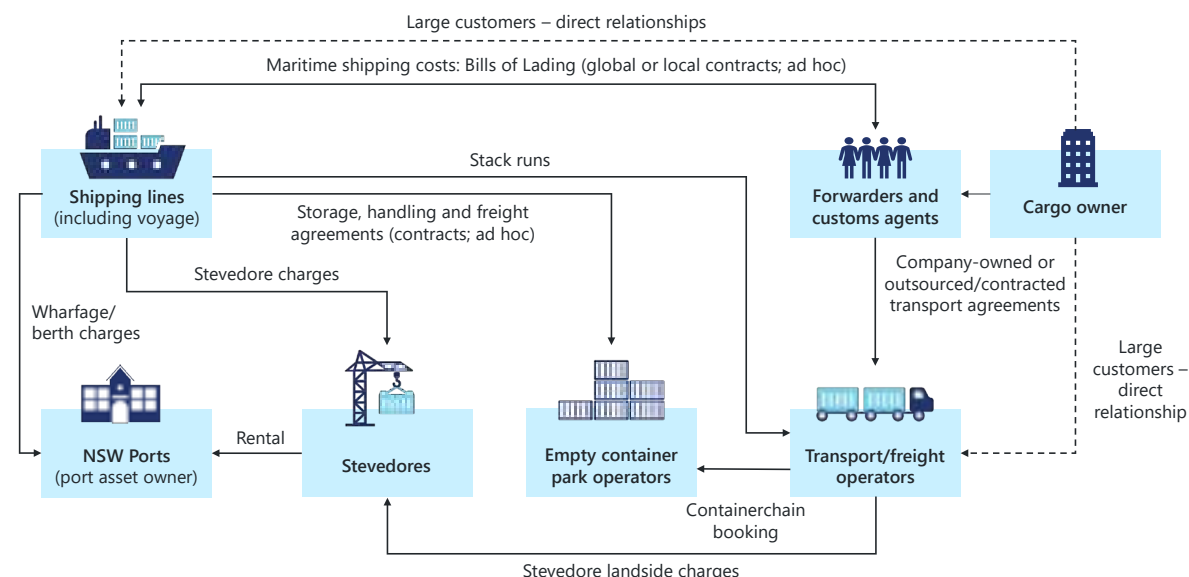
### 4.1.1 Port Botany container supply chain

Port Botany plays an important role in the NSW economy as a key gateway for international trade and contributes \$10.7 billion to NSW Gross State Product annually.<sup>46</sup> The Productivity Commission noted when outlining why port performance matters "...ports play a vital role in linking Australian producers and consumers with world markets. The bulk of Australia's goods trade passes through ports. This included nearly all imports and most exports (both by value and volume). These imported goods include important inputs into Australian production and include many of the goods purchased by Australian consumers."<sup>47</sup>

In 2021-22, more than 2.5 million twenty-foot equivalent units (TEUs)<sup>48</sup> passed through the port. Containerised freight is handled at three container terminals privately operated by stevedores DP World Australia, Patrick Terminals and Hutchison Ports. The stevedores are tenants of the private port operator, NSW Ports (which is also the commercial manager of Port Kembla).

The Port Botany container supply chain includes multiple parties and requires high levels of coordination. Because it is an interconnected supply chain, disruptions in one part have potential flow on effects in other parts. Figure 2 shows the commercial relationships in the Port Botany container supply chain.

**Figure 2: Port Botany container supply chain**



Source: Transport for NSW

<sup>46</sup> NSW Ports 2023, [Port Botany – Australia's premier port](#)

<sup>47</sup> Productivity Commission 2022, [Inquiry into Australia's Maritime Logistics System Final Report](#), p.143

<sup>48</sup> Twenty-foot equivalent unit (TEU) is the standard unit of measurement for shipping containers. One TEU is equivalent to one 20-foot shipping container (dimensions are 20 feet long and 8 feet wide). One 40-foot shipping container is equivalent to two TEUs.

## Shipping lines

Shipping lines own and operate trading vessels for the transportation of freight from one port to another. Around 12 shipping lines provide container freight services to and from Port Botany. They predominantly own the containers, rent them to users, and direct where unpacked containers are to be returned, and charge for late returns to the nominated facility.

Shipping lines deal directly with cargo owners, freight forwarders, customs brokers, stevedores, empty container parks and regulatory agencies. The shipping lines negotiate rates for access to the three stevedores' container terminals on an Australia-wide basis and usually include bundled services for the handling of containers (services with a single stevedore across multiple ports).

## Stevedores

The Port Botany container stevedores provide quayside services to shipping lines and landside services to road and rail operators through the loading and unloading of containerised freight from vessels, trucks and trains. Three stevedores service Port Botany and contract with shipping lines for vessel and related landside services.

On the landside, stevedores service road and rail operators who deliver and collect containers for cargo owners. Stevedores provide three free days of storage on their terminals before daily charges apply. DP World Australia and Patrick Terminals use a vehicle booking system (VBS) service provided by 1-Stop Solutions for access to their container terminals. Hutchison Ports operates a Truck Appointment System VBS for access to its terminal.

## Road

Road operators move containers to and from the port, intermodal terminals and empty container parks on behalf of cargo owners (importers and exporters) or their freight forwarders. There are around 300 road operators servicing Port Botany, with the largest 30 operators moving around 50 per cent of the containers moved by road. Approximately 85 per cent of all containers transported to and from Port Botany are via road carriers, and the rest are moved by rail. Figure 3 below shows the movement of containers to and from Port Botany by road.

## Rail operators

Rail operators move containers by rail between the stevedores and intermodal terminals. Currently five freight rail operators service Port Botany via the Port Botany freight line. Approximately 50 per cent of full export containers handled at Port Botany arrive from regional NSW, and of those, approximately 86 per cent arrive by rail.<sup>49</sup>

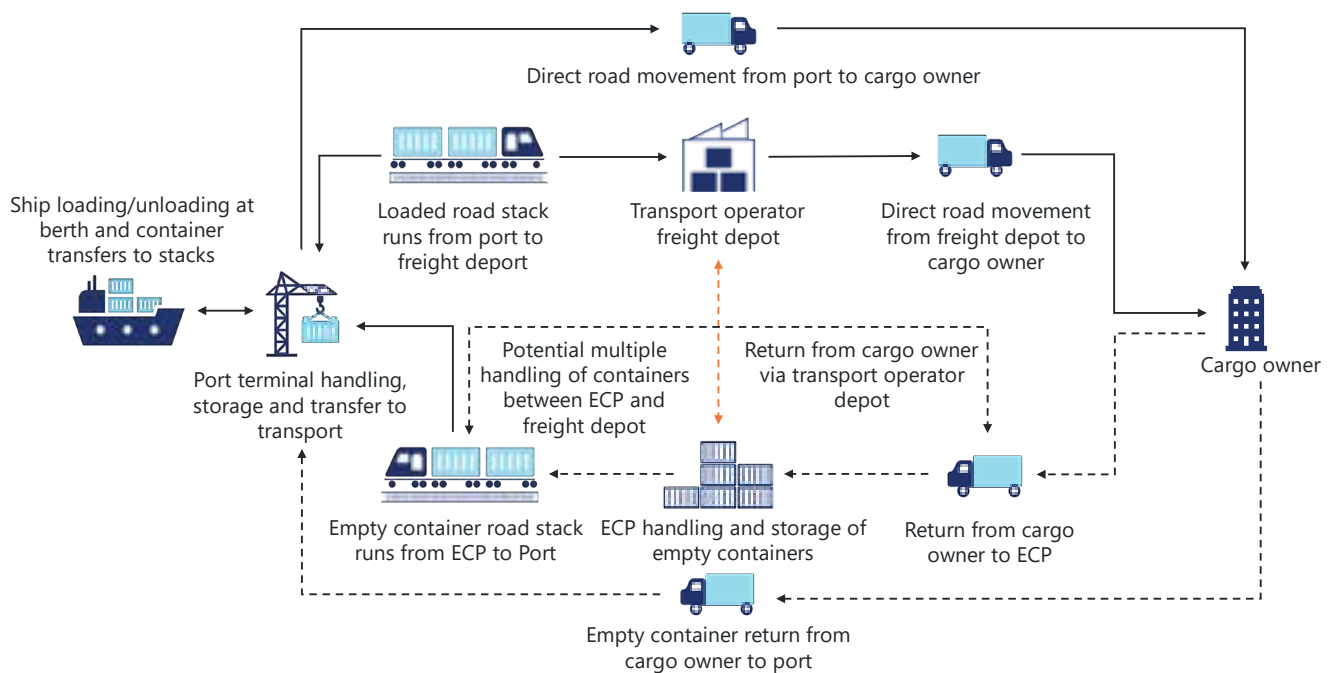
Empty containers are also loaded onto trains from intermodal terminals in Sydney and sent to regional areas of NSW for packing. These containers are then railed back to Port Botany for export. Figure 4 below shows the movement of containers to and from Port Botany by rail.

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<sup>49</sup> NSW Ports 2019, [NSW Ports submission into the Inquiry into impact of Port of Newcastle sale arrangements on public works expenditure in New South Wales](#), Sydney, NSW, p.3

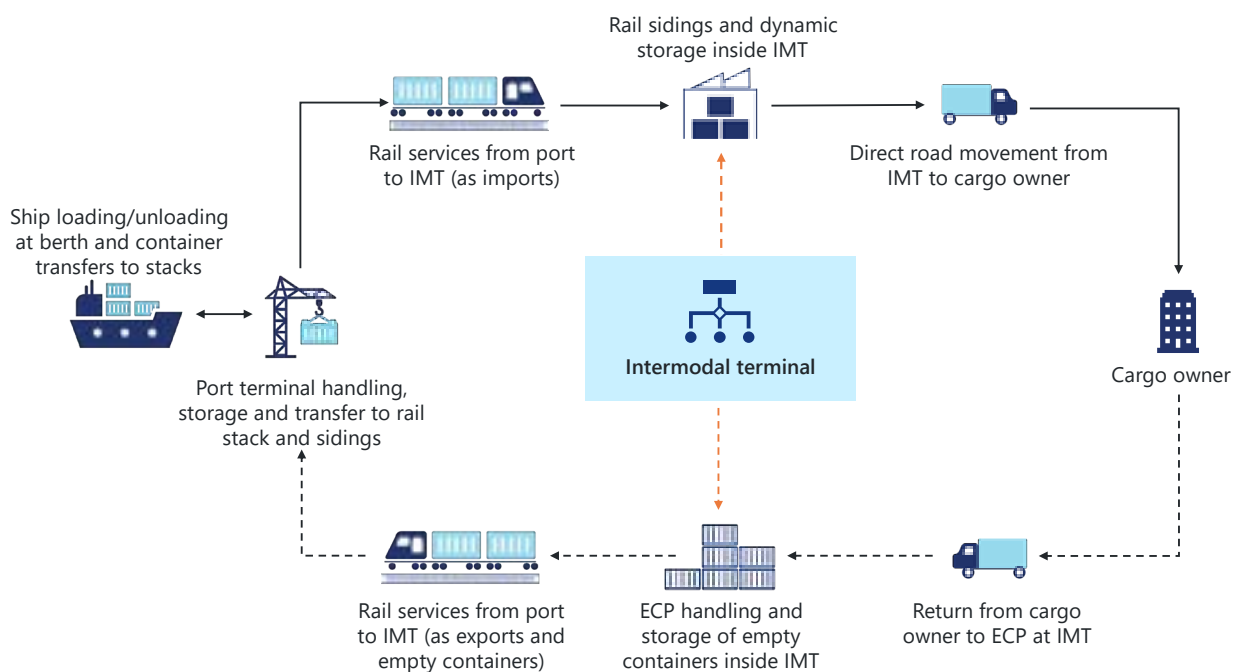


**Figure 3: Port Botany container movements by road**



Source: Transport for NSW

**Figure 4: Port Botany container movements by rail**



Source: Transport for NSW

## Port rail infrastructure providers

Port Botany is the only container port in Australia with on-dock rail facilities at each of its container terminals (where rail lines extend into the stevedore terminals), and it handles the highest volume of containers transported by rail to port in Australia (around 400,000 TEU per year).<sup>50</sup> The stevedore rail facilities are connected to metropolitan and regional intermodal terminals by both a dedicated freight line and the shared passenger (Sydney Trains) network.

There has been significant investment in rail infrastructure at Port Botany. This includes NSW Ports' \$120 million investment in on-dock rail capacity at Patrick Terminals,<sup>51</sup> Patrick Terminals' \$70 million investment in automated rail operating equipment and systems and the duplication of the Port Botany rail line with a \$400 million investment by the Australian Government through the Australian Rail Track Corporation (ARTC).<sup>52</sup>

The Botany Rail Duplication Project duplicates the remaining section of single line track leading to Port Botany, allowing freight to be moved more efficiently and effectively. When completed, the new line will have the capacity to meet the predicted growth in demand for freight to be carried on rail between Port Botany and metropolitan freight intermodal terminals.<sup>53</sup>

## Empty container parks

Empty container parks (ECPs) store empty containers before they are either provided to exporters to pack with goods for export or exported overseas as empty containers. In NSW, when imported freight is unpacked the majority of empty containers are returned to the shipping line's nominated empty container storage facility.

Significantly more containerised goods are imported into NSW than are exported. While some empty containers are used for products exported from NSW, a large volume of empty containers must be stored before they are exported. Some empty container storage facilities also provide container cleaning and repair services. Around 60 per cent of containers exported from Port Botany are empty containers. There are 13 main empty container parks in Sydney, most of which are within the Port Botany precinct or immediate surrounds.

## Forwarders and customs brokers

Freight forwarders and customs brokers market container space and act as agents for exporters and importers and coordinate freight movements on their behalf. This includes engaging with shipping lines to reserve space on ships, organising container pick-ups and deliveries, and arranging for the return of empty containers to terminals as directed by shipping lines. They also organise customs fees and clearance processes through Australian Government agencies.

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<sup>50</sup> NSW Ports 2021, [Major Initiatives – Growth in rail](#)

<sup>51</sup> NSW Ports 2018, [\\$120 million investment to boost rail capacity at Port Botany](#)

<sup>52</sup> Media Release by Minister for Finance, 2020: [Port Botany Rail Duplication Tender Puts Jobs On Track](#)

<sup>53</sup> ARTC 2021, [Botany Rail Duplication -Transporting more freight by rail](#)

## Importers and exporters

Importers and exporters, also known as cargo owners, own the containerised freight (cargo) that is imported or exported through Port Botany. They choose the origin and destination port for transporting their cargo, based on various factors, and are serviced by the port supply chain.

Importers and exporters either deal directly with shipping lines and landside transport operators or contract freight forwarders to arrange the movement of cargo on their behalf. They arrange for their cargo to be transported between the origin and destination ports and require landside transport operators (road and rail) to transport their cargo from a container terminal to a facility for unpacking and delivery, or direct to their premises, and vice versa.

## Intermodal terminals

Intermodal terminals are facilities that provide for the transfer of freight from one transport mode to another, for example, from rail to road. There are a number of intermodal terminals in NSW, with five in the greater Sydney area. They are often located near distribution centres where containerised goods are unpacked and distributed to their final destinations.

## Port operator

NSW Ports is a privately owned company that operates Port Botany (and Port Kembla) under a 99-year lease with the NSW Government. NSW Ports manages the:

- long-term strategic development and planning at the port
- leasing of port land to the stevedores and other port and logistic operators
- shipping access, wharf infrastructure and common user road infrastructure maintenance
- security and safety on common port areas
- landside operations of the multi-user bulk liquids berths.

## Port Authority of New South Wales

Port Authority of New South Wales (Port Authority) is a State Owned Corporation, that has responsibility for the navigation, security and operational safety needs of commercial shipping at Port Botany (and other ports in NSW). Port Authority is also responsible for overseeing the management of dangerous goods at the port and provides harbour masters, marine pilotage and emergency response services.

## Government agencies

- TfNSW sets policy objectives and strategies to improve efficiency to and from NSW's ports and maintains high standards of marine safety and environmental protection. TfNSW implements the Ports and Maritime Administration Act 1995 (the Act) and the Ports and Maritime Administration Regulation 2021 (the Regulation) which includes the Port Botany Landside Improvement Strategy (PBLIS) and the associated Mandatory Standards.

- NSW Treasury has functions as the lessor of Port Botany. The lessee at Port Botany is NSW Ports, which is required to provide information to NSW Treasury including five-year port development plans, 30-year master plans and environmental management plans for approval.
- The Australian Government Border Force is Australia's frontline border law enforcement agency and customs service, facilitating the movement of people and goods across the international border.
- The Department of Agriculture, Fisheries and Forestry (Australian Government) manages biosecurity risks to prevent, respond to, and recover from pests and diseases that threaten the economy and environment.

## PBLIS development

In the early 2000s the freight industry raised concerns with the NSW Government regarding the efficiency of flows of containers into and out of Port Botany and identified stevedore vehicle booking and rail access arrangements as barriers to greater efficiency.<sup>54</sup> The NSW Government referred these matters to the Independent Pricing and Regulatory Tribunal (IPART) to consider.

## IPART Review

IPART examined how road and rail transport operators interacted with stevedores at Port Botany, including services provided and fees charged, as well as the terms and conditions of access to the port. At this time, a VBS had been in place for several years, and prior to this, trucks had been serviced on a first come, first served basis.

The final IPART Report "Reforming Port Botany's links with inland transport", released in March 2008, noted that while the freight logistics supply chain had dealt with growth in container volumes reasonably well, road transporters were still experiencing landside congestion at the port and inefficiencies with using the VBS at the stevedores' terminals.<sup>55</sup> The report made 18 recommendations, including:

- the need for greater transparency in performance reporting and access arrangements, including improvements to communications and information sharing between port users
- an industry-based rail logistics team to improve rail performance, including through non-price incentives to overcome impediments to increased use of rail to transport containers
- price based allocation of truck slots (including an auction system) at the terminals
- performance standards for road and rail operations including clarification of terminal operating rules under the VBS that manages heavy vehicle access to the terminal
- penalties for not meeting slot requirements, linked to the cost of the delay

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<sup>54</sup> Freight Infrastructure Advisory Board 2005, Railing Port Botany's Containers: Proposals to Ease Pressure on Sydney's Roads, Sydney, NSW, pp. 4-10

<sup>55</sup> IPART 2008, Reforming Port Botany's links with inland transport, Sydney, NSW, pp. 1-14

- measures to drive 24-hour seven-day-a-week (24/7) operations at the port to reduce peak-hour congestion.

The 2008 IPART report recommended a two-tiered VBS with different prices and parameters for peak and off-peak times, to help address congestion at Port Botany.<sup>56</sup> This differential pricing approach was proposed to be applied via an auction mechanism with the market driving the price based on demand. IPART's recommendation was for stevedores to independently introduce a two-tiered VBS that included both firm slots and interruptible slots:

- the firm slots would carry a guarantee relating to the time of entry and the time of exit from the terminal
- the interruptible slots would have the same features as current (at the time) VBS slots, including the booking system, prices and penalties
- each stevedore would determine the number of firm and interruptible slots to be provided for each 24-hour day
- the prices for firm slots would be determined by separate descending bid auctions (or Dutch auctions) for each stevedore.

In a Dutch auction, the offer price begins at a high level (a certain dollar amount per firm slot) and then descends in fixed time increments (such as every five seconds), with bidding at any point for one or more slots at the prevailing price level. The auction only stops when either:

1. the number of firm slots bid for at the current price exactly equals the number offered for that hour,
2. the number of firm slots bid for at the current price exceeds the number offered for the first time, or
3. the current price has reached the reserve price.

A number of different outcomes could then arise, depending on which of these scenarios stops the auction. For example, if the price reaches the reserve price (scenario 3), all bidders at the reserve price receive the firm slots they bid for at the reserve price. All unsold firm slots at the reserve price are then converted to interruptible slots and allocated accordingly.<sup>57</sup>

IPART considered that this method of allocation would create peak hour slots with higher service guarantees attracting higher prices which would in turn encourage more off-peak hour bookings, thereby reducing congestion and inefficiency. At the time, industry was not supportive of implementing a Dutch auction system, with price uncertainty and system complexity being the key concern. There was however support for a pricing mechanism to encourage off-peak operations.

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<sup>56</sup> IPART 2008, Reforming Port Botany's links with inland transport, Sydney, NSW, pp. 4-9

<sup>57</sup> IPART 2008, Reforming Port Botany's links with inland transport, Sydney, NSW, p. 166

## NSW Government response

The NSW Government responded to the IPART report by developing PBLIS, which involved a two-phased approach. Phase one featured industry-led improvements which included encouraging voluntary road and rail performance standards and reporting requirements. When phase one did not result in significant improvements to landside efficiency, phase two was implemented in 2010 via regulation.

PBLIS applies regulated operational performance standards to stevedores and carriers at the container terminals in Port Botany, primarily via truck servicing arrangements based on mutual accountability of stevedores and carriers. These servicing arrangements cover how time slots are made available to book, stevedore servicing timeframes (i.e. how long a truck should spend inside the stevedore terminal), slot booking and cancellation rules, minimum slot availability per hour, carrier ability to arrive on time, and other requirements. Requirements are also applied to stevedore rail servicing arrangements including booking charges and cancellation terms, servicing standards and data provision. These requirements are detailed in Part 6 of the Regulation and the supporting Mandatory Standards and directions issued by the Minister (referred to as the PBLIS rules).

The Act allows application of performance standards to ports and their related supply chains to promote their economically efficient operation, including effective investments in infrastructure. PBLIS is a unique arrangement, as other jurisdictions and international ports either do not regulate vehicle or rail servicing at the port landside interface, or where they do it is not to the same extent as under PBLIS.

Other potential regulatory measures were flagged for consideration but not implemented. These included a review of ECPs and detailed regulation of rail performance standards.<sup>58</sup> Rail servicing arrangements including booking charges and cancellation terms were regulated in 2011, to encourage improved performance.

A PBLIS timeline providing an overview of key events is at Appendix 7.

### 4.1.2 PBLIS implementation

PBLIS applies to the landside interface between parties in the container supply chain in relation to their operations at, or in connection with Port Botany. The arrangements are mostly based on performance standards with penalties paid to the impacted industry party if they are not met.

#### Stevedores

PBLIS applies requirements for stevedore container slot bookings, gate procedures and associated operational performance measures. This includes rules for VBSs such as specified truck turnaround times (TTT), truck servicing requirements and the cancellation of bookings and time zones.

A failure to comply with these standards can incur financial penalties payable by the stevedore to the affected carrier. Stevedores are prohibited from introducing or increasing

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<sup>58</sup> This was only to be implemented if rail performance measures through voluntarily agreements with industry did not meet objectives.



charges to recover costs of paying financial penalties under PBLIS. Stevedores are also subject to regulated rail servicing arrangements that include booking charges and cancellation terms and are required to collect, keep and provide truck and rail servicing records and data to TfNSW.

## Carriers

PBLIS requires carriers to comply with stevedore gate procedures, booking cancellation rules, truck arrival times and truck identification information requirements. Stevedores also require truck and trailer configuration details from carriers to safely service the vehicle. Failure by carriers to comply with these requirements can incur penalties under PBLIS.

## Empty container parks

A 2021 amendment to the Regulation allows the Minister to require ECPs to provide operational data to TfNSW. This was introduced in response to stakeholder feedback, including through the TfNSW facilitated Empty Container Working Group. A data direction has not been issued to date but this change to the Regulation provides the potential to obtain consistent and complete data to provide visibility of this part of the supply chain.

## TfNSW administration

The Regulation is implemented by TfNSW. This includes oversight of requirements to ensure that all parties are adhering to the Regulation, for example:

- combining operational, VBS and truck movement data (collected through Automatic Number Plate Recognition (ANPR) technology) to oversee TTTs and truck arrival times
- using invoicing information to reconcile penalties and ensure compliance
- assessing unforeseen event requests by stevedores and transport operators
- assessing and approving slot reduction requests by stevedores
- ensuring that stevedore charges are not introduced or increased to recover the cost of paying financial penalties under PBLIS.

### 4.1.3 Port Botany future growth and requirements

Port Botany plays a major role in NSW's economy as a gateway for international trade and is the State's primary container, bulk liquid and gas port. Port Botany currently handles 99.6 per cent of containers for NSW and 42 per cent of all goods in an average Sydney household are imported in containers via Port Botany.<sup>59</sup>

Port Botany handled over 2.5 million TEUs in 2021-22 and NSW Ports estimates it will handle between 7.5 million and 8.4 million TEUs annually by 2045.<sup>60</sup>

The port's infrastructure can service vessels carrying over 15,000 TEUs. While most container vessels currently calling at Australia are around 5,000 – 6,000 TEUs, container vessel sizes are

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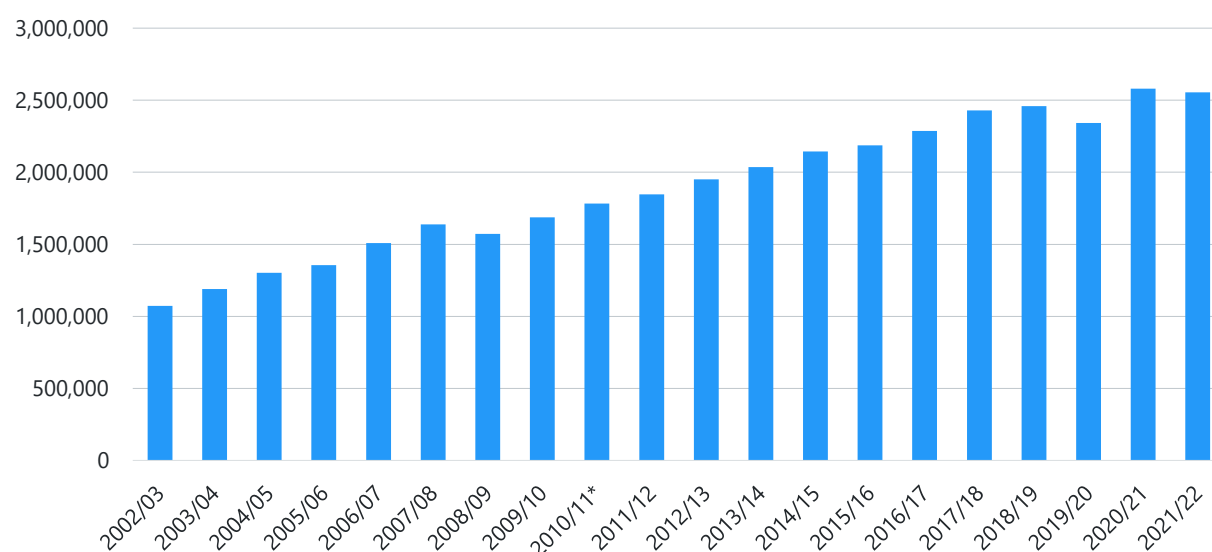
<sup>59</sup> NSW Ports 2021, [Port Botany – Australia's Premier Port](#)

<sup>60</sup> NSW Ports 2015, [Navigating the Future – NSW Ports' 30 Year Masterplan](#), NSW, p. 37

increasing globally and in the Australian market due to the continued increase in the international container freight task and the consolidation of freight by shipping lines to achieve economies of scale.

The Australian Competition and Consumer Commission (ACCC) noted that “the proportion of port calls made by large ships (gross tonnage between 80,000 and 110,000) at Australian container ports has increased from 3.8 per cent in 2018–19 to 14.3 per cent in 2021–22. Stevedores explained to the ACCC that servicing larger ships presents more operational challenges for them and further amplifies the peaks and troughs throughout the container supply chain.”<sup>61</sup>

**Figure 5: Total Port Botany throughput volumes (TEU)**



Source: Transport for NSW - \* notes the commencement of PBLIS in 2011.

An efficient, competitive and sustainable containerised supply chain is necessary to achieve the full operational capacity at Port Botany and to meet the growing freight task in NSW.

### ACCC container stevedoring monitoring

The ACCC monitors the process, costs and profits of container terminal operators at the ports of Adelaide, Brisbane, Burnie, Fremantle, Melbourne and Sydney under Part VIIA of the *Competition and Consumer Act 2010* (Cth). The ACCC reports annually on this monitoring.

In the Container Stevedoring Monitoring Report 2021–22 the ACCC notes the following key industry insights and developments.

- “Significant congestion and delays continued throughout 2021–22, exacerbated by persistent low shipping schedule reliability, increase in the size of ships visiting Australian container ports and labour shortages throughout the entire supply chain. There are signs of improvement, with global container port congestion estimated to have halved between January and August 2022.

<sup>61</sup> ACCC 2022, Container stevedoring monitoring report 2021–22, Canberra, ACT, p. x

- Throughout 2021–22, cargo owners have continued to pay highly elevated freight rates and incur higher costs in using the supply chain. Cargo owners have passed on these costs to Australian consumers through higher prices for imported goods, which has directly contributed to Australia’s recent increase in inflation.
- Since 2019–20, stevedores’ operating profit margins have increased significantly, coinciding with the COVID-19 pandemic. The changed market dynamics due to the pandemic appear to have contributed to less intense price competition between stevedores. The ACCC will continue to monitor stevedores’ charges and financial performance. If profits remain elevated on a sustained basis, we will closely scrutinise whether any structural or behavioural market impediments are contributing to this and whether any further policy or regulatory responses are warranted.
- The current level of regulation at Australian container ports is not adequate. There is high potential for exercise of market power by container ports, through higher than efficient port charges and land rents, to exist undetected due to an insufficient level of regulatory oversight. This in turn creates a lack of credible threat of further regulation.
- Some shipping lines have levied detention fees on cargo owners in circumstances where cargo owners could not return containers on time due to delays to which the shipping lines contributed. Cargo owners in Australia currently do not have adequate protection against such unreasonable practices, resulting in them paying significantly higher amounts of detention fees in 2021–22.
- Reform is needed across the supply chain. Australia needs to bolster its regulation of privatised container ports, repeal Part X of the *Competition and Consumer Act 2010*, address industrial relations issues, develop an enhanced framework for measuring and benchmarking container port productivity, and provide greater protection to cargo owners against unreasonable detention fee practices.”<sup>62</sup>

The ACCC in 2021 raised the following about rail, stating that:

- “There is also potential to achieve greater efficiencies by better integrating rail into the supply chain. Rail is considered to be a more reliable and efficient way to transport large volume of cargo, compared to trucks.... Ports and stevedores in Melbourne and Sydney are making substantial investments to improve access of rail to their respective ports and increase rail market share”.<sup>63</sup>
- “Currently, most freight is carried by trucks. Over the past decade, on average, only around 10% to 12% of the containers entering or leaving the Australian container ports were transported by rail. If the split between market share of rail and trucks continues into 2030, this may double the number of trucks required. This could lead to more congestion on metropolitan roads. There is potential to better integrate rail into the supply chain, to increase its market share to a more sustainable mode split.”<sup>64</sup>

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<sup>62</sup> ACCC 2022, Container stevedoring monitoring report 2021–22, Canberra, ACT, p. viii

<sup>63</sup> ACCC 2021, Container stevedoring monitoring report 2020–21, Canberra, ACT, p. xxii

<sup>64</sup> ACCC 2021, Container stevedoring monitoring report 2020–21, Canberra, ACT, p. 71

The ACCC also noted that Australia has a higher imbalance between imports and exports compared to many overseas markets and that dedicated empty container parks play a greater role in Australia compared to many international ports.<sup>65</sup> While noting longer-term issues related to empty container storage capacity, the ACCC stated that additional empty container park capacity and reconsideration of empty container management may be required to handle increased volumes of containers.<sup>66</sup>



<sup>65</sup> ACCC 2021, *Container stevedoring monitoring report 2020–21*, Canberra, ACT, p. 29

<sup>66</sup> ACCC 2021, *Container stevedoring monitoring report 2020–21*, Canberra, ACT, p. 32

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## 4.2 PBLIS Review findings overview

PBLIS regulates the container stevedore landside servicing of road and rail at NSW's primary container port, Port Botany. PBLIS is supported by non-regulatory measures including the truck marshalling area (TMA) and the TfNSW ANPR camera network, and by the port operator's management of port roads.

PBLIS was introduced to address serious landside port interchange inefficiencies that emerged over 15 years ago and spilled out of the port to create an unacceptable level of road congestion in the port proximity.

The regulatory components of PBLIS are designed to improve the performance of stevedores, road operators and rail operators in the landside exchange of containers by imposing penalties for failure to comply with specified commitments in relation to the loading and unloading of containers. The penalties serve as a form of compensation for adversely affected parties. Penalties imposed on road operators are paid to the relevant stevedore, while penalties imposed on stevedores are paid to the relevant road operator. For rail operators, a rail charge and booking terms and conditions are regulated, but a more detailed regulation is not applied.

A review by IPART of these issues in 2008 found that while the freight logistics supply chain had managed growth in container volumes reasonably well, road operators were still experiencing landside congestion at the port and inefficiencies with using the VBS at the stevedores' terminals.<sup>67</sup> The introduction of a VBS by the stevedores had improved congestion issues:

"Nevertheless, road transporters still experience physical congestion at the stevedores' terminals and 'virtual congestion' in the VBS. Given that further significant growth in the container task is expected over the coming decades, significant changes need to be made now to reduce this congestion and improve the efficiency of the interface between the stevedores and the road transporters."<sup>68</sup>

An imbalance in market power exists within the port operating environment between providers of port services and specifically between stevedores and road carriers. Shipping lines choose which stevedore services their ship, but carriers are not involved in either the choice of shipping line or stevedore for the movement of a container. When a carrier is tasked with the transport of a container to or from a stevedore, the stevedore is effectively a monopolist in relation to that carrier. The Productivity Commission has noted that any associated abuse of that market power could lead to "higher prices for customers, cost complacency by operators and lower levels of innovation in port services".<sup>69</sup>

The NSW Government introduced PBLIS in 2010 to improve service coordination and investment levels at the port landside interface to support high levels of throughput and growth at Port Botany. PBLIS has delivered on this aim and addressed the landside congestion and some of the inefficiency issues that were originally identified. This finding is

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<sup>67</sup> IPART 2008, Reforming Port Botany's links with inland transport, pp. 1-14

<sup>68</sup> IPART 2008, Reforming Port Botany's links with inland transport, p. 2

<sup>69</sup> Productivity Commission 2022, Inquiry into Australia's Maritime Logistics System Final Report, p. 15

supported by industry participants, who agreed that PBLIS has been successful in addressing the port landside congestion issues occurring prior to its introduction.

The Cost Benefit Analysis (CBA) of direct and indirect costs and benefits of PBLIS by Castalia also supports this finding. The CBA outlined that if left to voluntary industry arrangements, it is not expected that industry would address the landside inefficiencies PBLIS was introduced to address. The CBA found the key benefits of PBLIS arise from traffic decongestion and reduced emissions resulting from the removal of heavy vehicles from roads around the port.<sup>70</sup> This is achieved mainly through the provision of the TMA and enforcement of service lines at terminals, and to a lesser extent, parking rules in the port precinct. The net benefits associated with the regulatory components of PBLIS however are less clear.

Further, elements of the PBLIS design are not ideal and require addressing to ensure a future focused approach. Issues with the current PBLIS arrangements include:

- There is nothing in the design of PBLIS that incentivises behaviour that exceeds the benchmarks set in the rules. The rules operate to punish behaviour on the part of stevedores and carriers that fail to meet the relevant benchmarks. This is unlike most economic regulation in Australia and many other countries which is based on the principle of incentive regulation.
- PBLIS was not designed with in-built performance measures or an exit path away from regulation, and there is nothing in its design that assists with determining whether it is still needed.
- The regulatory structure is extremely limited in its flexibility and cannot adapt quickly as the port operating environment changes. This is despite PBLIS being structured as flexibly as the NSW legislative framework allows.
- PBLIS encourages industry parties, and particularly carriers, to increasingly rely on PBLIS to manage industry relationships. This is to the detriment of what might otherwise be ordinary commercial relationships. Carriers tend to rely on PBLIS and TfNSW staff involved in its administration to resolve problems with stevedores, and consequently continually seek more intrusive provisions to discipline stevedores.
- PBLIS requires TfNSW to make decisions on the operational suitability of stevedore and carrier actions, for example whether an occurrence is an unforeseen event or not. Government interventions such as this inevitably risk unintended costs and the chilling of efficient market initiatives. The level of intrusiveness that the PBLIS rules applies to port operations is high and it is apparent that the Regulation is limiting operational innovation and is therefore impacting on commercial outcomes.
- PBLIS imposes high administrative costs on all parties involved.

These design issues must be addressed if any measures are to remain effective in supporting efficient port operations to adapt to future operational needs.

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<sup>70</sup> Castalia 2022, Cost-Benefit Analysis of PBLIS Performance, Sydney, NSW, p. viii



The operating environment of Port Botany has changed considerably since PBLIS was introduced thirteen years ago. Changes include:

- Competition in stevedore services at Port Botany has increased with the entry of the third terminal operated by Hutchison Ports in 2014.
- Container volumes have grown substantially from 1.9 million TEU in 2010 to over 2.5 million TEU in 2021-22<sup>71</sup> with this forecast to more than triple by 2045. These containers are also being shipped by larger vessels with more container exchanges per ship visit, exacerbating the increase in terminal congestion resulting from the overall higher volumes.
- Information technologies relevant for the ports and maritime sectors have developed substantially.
- Significant private and public investment in port freight infrastructure and other freight network upgrades have been completed or are underway, including:
  - NSW Ports' \$120 million investment in 'on-dock' rail capacity at Patrick Terminals<sup>72</sup>
  - Patrick Terminals' \$70 million investment in automated rail operating equipment and systems
  - The duplication of the Port Botany rail line with a \$400 million investment by the Australian Government through ARTC<sup>73</sup>
  - NSW Government investments in road infrastructure in Sydney and across NSW.

The increased demands on stevedores from growing container volumes, exchange sizes and competitive pressures have provided an incentive to improve the efficiency of landside operations (in addition to PBLIS). The issues PBLIS was implemented to address have however not been eliminated entirely, as when pressures arise, stevedores are likely to preference servicing the quayside over the landside.

The Productivity Commission found that existing regulatory settings were insufficient to deal with the potential abuse of market power by stevedores in their relationships with transport operators (both road and rail) and it has recommended the implementation of a mandatory industry code under the oversight of the ACCC to scrutinise future landside charge increases. This was not a commentary on the effectiveness of PBLIS, as it addressed all landside charges at a national level with a particular focus on terminal access charges (TACs).<sup>74</sup> Nonetheless, the proposed code would provide some oversight of the service charges that PBLIS applies to<sup>75</sup> and would, in the absence of PBLIS, likely provide some of the discipline on stevedores that the PBLIS approach achieves.

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<sup>71</sup> Source: Sydney Ports Corporation and TfNSW data

<sup>72</sup> NSW Ports 2018, [\\$120 million investment to boost rail capacity at Port Botany](#)

<sup>73</sup> Media Release by Minister for Finance, 2020: [Port Botany Rail Duplication Tender Puts Jobs On Track](#)

<sup>74</sup> Productivity Commission 2022, [Inquiry into Australia's Maritime Logistics System Final Report](#), p. 19

<sup>75</sup> Under PBLIS stevedores are required to report to the NSW Government on changes to charges to facilitate an assessment that they are not undermining PBLIS penalties and the application of storage charges is regulated.

Given these key findings: that there have been a number of important changes to the landside environment that have likely alleviated some of the problems that PBLIS was designed to address; that the design and operation of PBLIS does not include any evaluation framework or measure of whether the regulation remains necessary; and that the industry code proposed by the Productivity Commission will help to address some of these issues – it is difficult to evaluate the size of the problem that exists today and that will remain when the ACCC code is operational. The Review of PBLIS has therefore considered a range of options for how to best manage the landside interface into the future, recognising that PBLIS is not suitable to continue unchanged, and that it can be substantially improved.

The Review recommendations are selected for their ability to:

- support or contribute to overall port efficiency
- streamline or modernise existing regulatory arrangements, ensuring the approach allows port operations flexibility to evolve
- reduce administrative complexity and/or burden.

Consideration has also been given to the level of government market intervention required and the ability of government or industry to implement the Recommendations. The suitability of the recommended approach for the expected future ports environment has also been a key consideration.

Two options considered were assessed as not suitable. These are:

- Retain PBLIS with no changes – while PBLIS has delivered benefits by addressing inefficiency at the port landside interface, this option is not suitable, as a number of improvements to the current PBLIS arrangements have been identified.
- The complete removal of PBLIS, following this Review – leaving the management of the landside interface solely to the market has been considered and is not suitable at this time.

The Review makes 21 Recommendations to secure an effective port operating environment for container management at Port Botany into the future, with three Findings about proposed options that are not recommended for implementation. The Recommendations are designed as a package to achieve the best outcomes for the port.

The centrepiece Recommendation is to provide for the transition of the current PBLIS rules to a regulated scheme that is more consistent with the principles of incentive-based regulation and is designed to reduce the administrative burden on stevedores and road operators while promoting improved port efficiency.

The scheme would achieve this by transitioning from focusing on penalising individual instances of poor performance by stevedores and road operators, in favour of promoting the overall efficiency of landside operations. The scheme is underpinned by ongoing transparent performance monitoring to ensure performance is maintained and improved, and with the ability to reinstate the PBLIS rules if required.

Ten detailed amendments to the PBLIS regulatory arrangements are recommended to improve the operation of PBLIS in the meantime, prior to the completion of the transition to the incentive-based scheme.

Finally, 10 Recommendations are also made to improve:

- the availability of data on container movements
- the management of traffic within the port
- rail operations.







INDEPENDENT REVIEW

Ports and Maritime Administration Act 1995

Port Botany Landside Improvement Strategy

# 5

## PBLIS Recommendations and Findings

## PBLIS Recommendations and Findings

The Review Options Paper proposed 23 options for changes to PBLIS. Stakeholders were then consulted on the options and further consideration was given to understand the impacts and benefits.

The Review makes 21 Recommendations for changes to PBLIS, which incorporate changes proposed in the Review Options Paper, further consideration and development of those options and additional changes. The Recommendations cover four areas relevant for containerised freight movements at Port Botany:

- Port road interface
- Data transparency
- Port access
- Port rail.

Three PBLIS Findings are also provided where options proposed are not recommended for progression.

PBLIS Recommendations	
Port road interface	
1	<b><i>PBLIS Performance Scheme</i></b> PBLIS Performance Scheme
	<b><i>Key PBLIS changes</i></b>
2	Change carrier cancellation rules to take or pay
3	Facilitate no booking until discharge
4	Staggered time zone commencement
5	Differential pricing of time zones
	<b><i>Other PBLIS changes</i></b>
6	Remove the broad power for regulating stevedore charges
7	Apply late penalties per truck trip rather than per container
8	Apply unforeseen events to terminal sections
9	Update penalty rates by the Consumer Price Index
10	Remove large and small carrier classifications
11	Remove TfNSW approval for stevedore import and export slot allocation
Data transparency	
12	Road data transparency
13	Rail data transparency
14	Empty container data transparency and efficiency
15	Freight Community System
Port access	
16	Second truck marshalling area
17	Certified transport operator access
18	Engage NSW Ports as a service provider to administer elements of PBLIS, truck marshalling area and TfNSW camera network

Port rail	
19	Remove regulated rail servicing arrangements
20	Improve governance frameworks to align public infrastructure managers with the port rail task
21	Examine future rail options
PBLIS Findings	
1	Investigate options for stevedore impacted trucks
2	Points system
3	Oversight of access arrangements





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## 5.1 Port road interface

Since 2010, PBLIS has regulated the container stevedore landside servicing of road and rail at NSW's primary container port, Port Botany. The Regulation is supported by non-regulatory measures, the truck marshalling area (TMA) and the TfNSW Automatic Number Plate Recognition (ANPR) camera network. These measures are also supported by the port operator's management of port roads.

The regulatory components of PBLIS are intended to improve the performance of stevedores, road operators and rail operators in the landside exchange of containers by imposing penalties for non-compliance with specified commitments in relation to the loading and unloading of containers.

The Regulation predominantly applies rules enforced by penalties to the road landside interface. Penalties imposed on road operators are paid to the relevant stevedore, while penalties imposed on stevedores are paid to the relevant road operator. These penalties serve as a form of compensation to the adversely affected party.

### Port operating environment

In the 13 years that PBLIS has been in operation there have been a number of key changes in the Port Botany operating environment, including:

- Competition in stevedore services at Port Botany has increased with the entry of the third terminal operated by Hutchison Ports in 2014.
- Container volumes have grown substantially from 1.9 million TEU in 2010 to over 2.5 million TEU in 2021-22<sup>76</sup> and this growth is expected to continue. These containers are also being shipped by larger vessels with more container exchanges per ship visit, exacerbating the increase in terminal congestion resulting from the overall higher volumes.
- Information technologies relevant for the ports and maritime sectors have developed substantially.
- Significant private and public investment in port freight infrastructure and other freight network upgrades have been completed or are underway.

### Port performance under PBLIS rules

Existing PBLIS performance measures are inferred from the parameters of the PBLIS rules which are detailed in Part 6 of the Regulation and the supporting Mandatory Standards and directions issued by the Minister.

These performance measures show how the road landside interface has performed over time, including key indicators such as truck turnaround times (TTT), booking efficiency measures and on-time truck arrivals. Efficiency in port landside operations can be indicated by shorter TTT, on-time truck arrivals, increased density of containers per truck (i.e. more

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<sup>76</sup> Source: Sydney Ports Corporation and TfNSW data

than one container per trip) and dual runs (delivering an export container and picking up an import container on a single trip).

External factors such as Sydney traffic conditions and weather events (i.e. truck and ship arrival delays) can impact on landside performance.

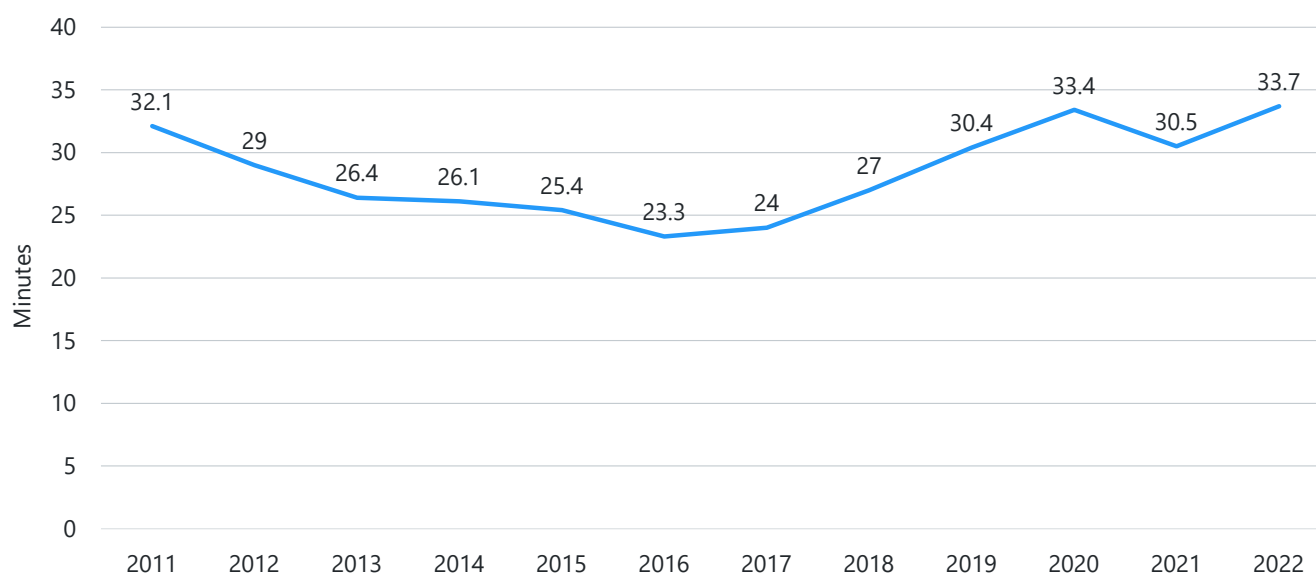
Port performance prior to PBLIS implementation can only be based on industry trials (refer to historical timeline in Appendix 7) and data from the Bureau of Infrastructure and Transport Research Economics (BITRE). Data presented here is for PBLIS truck trips only so does not include container movements that occur outside of PBLIS such as stack runs.

See Section 5.8 Port Rail for details of Port Botany rail performance.

### Truck turnaround time

TTT is one of the main performance measures used to indicate efficiency at the port. The PBLIS rules set a regulated TTT for stevedores, and if stevedores exceed set times they are required to pay a penalty to the relevant road operator. A shorter time can indicate less congestion and delays in the terminal and port precinct. The time taken to service a truck also depends on the number of containers serviced on one trip.

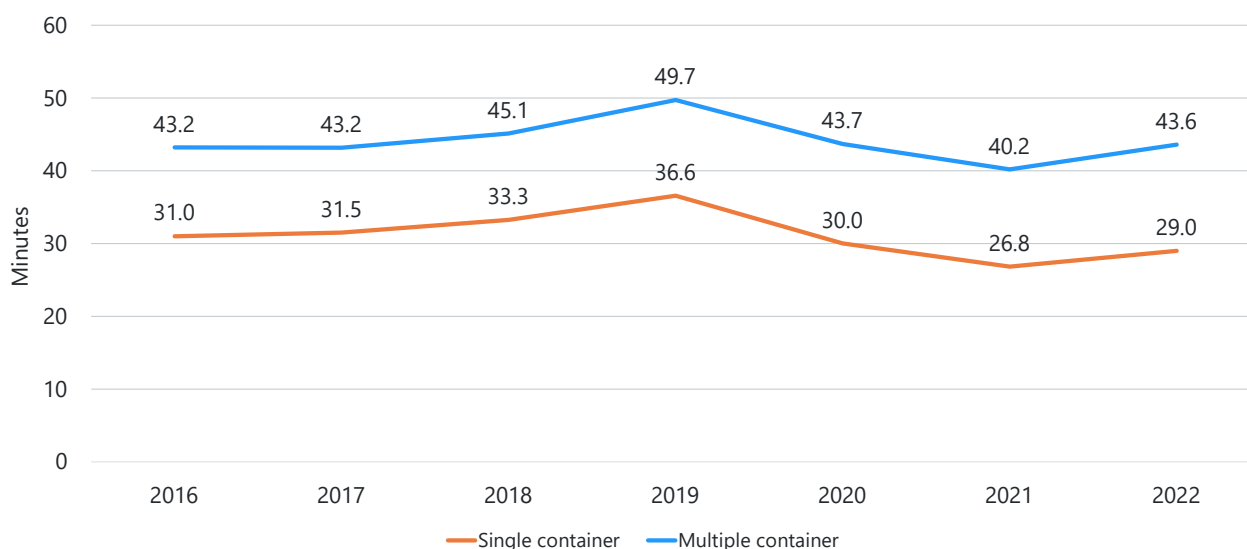
**Figure 6: Aggregated stevedore average truck turnaround time**



Source: Transport for NSW

The average TTT for all stevedores for all truck trips is shown in Figure 6 above. Figure 7 below separates single container trips from multiple container trips that carry two or more containers, to show the average TTT for all stevedores for these trips. Average TTT for single container trips over the past three years has been between 26.8 and 30 minutes with multiple container trips taking an additional 12 to 14 minutes.

**Figure 7: Aggregated stevedore average TTT for single and multiple container trips**

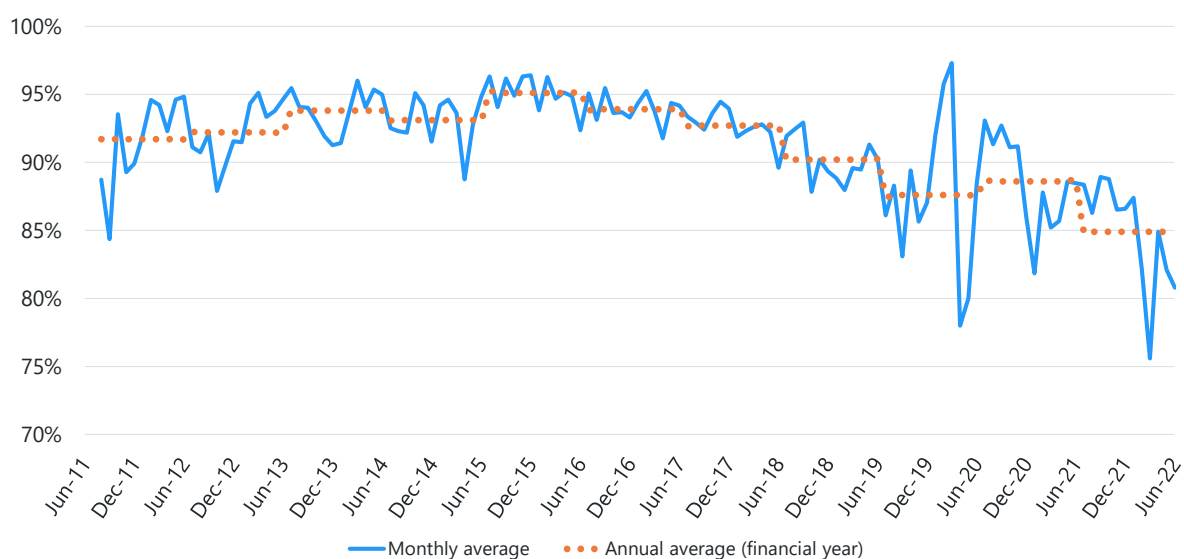


Source: Transport for NSW

### Stevedore service levels

Stevedore service level is a measure of the percentage of trucks that stevedores' service within the specified time frame under PBLIS (the TTT) which allows 45 minutes for one container and an extra 20 minutes for each additional container. Figure 8 shows aggregated stevedore service levels over the past 10 years. In 2020, disruptions were experienced at Port Botany which stakeholders have attributed to a number of factors, including trade fluctuations as a result of the COVID-19 pandemic, flow-on effects of weather events and industrial relations actions.

**Figure 8: Monthly stevedore service levels**

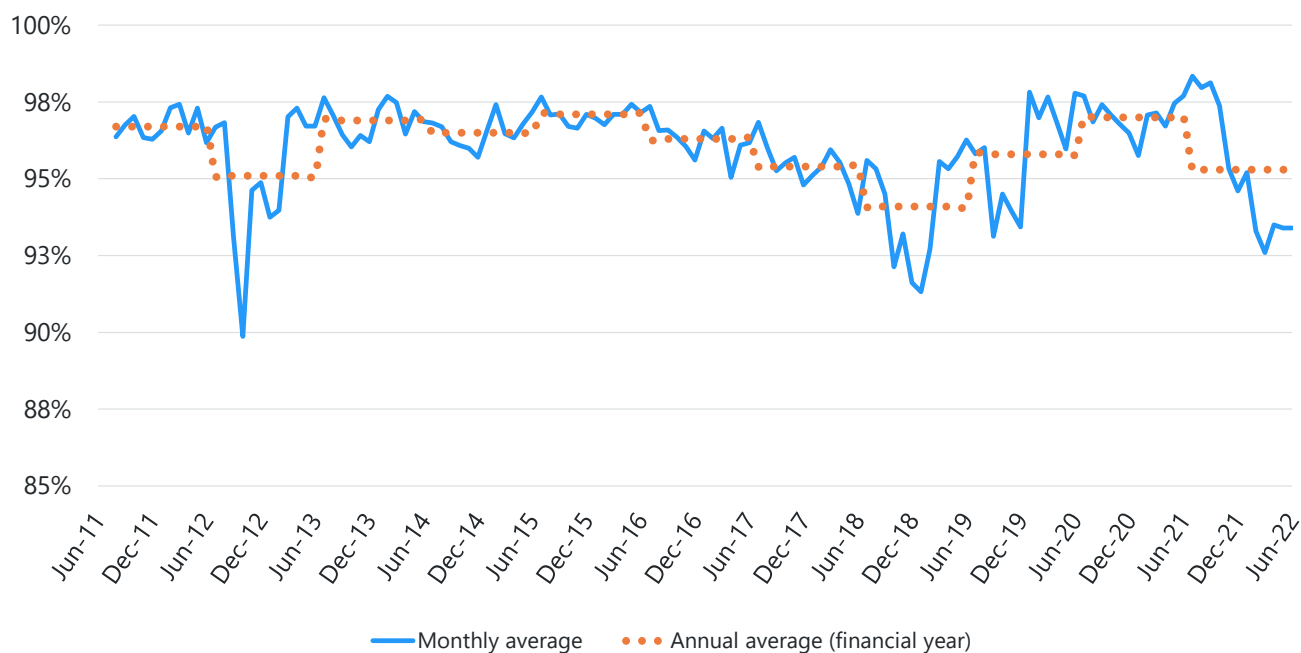


Source: Transport for NSW

## Carrier service levels

Figure 9 shows the aggregated service level for road carriers based on arrival at the terminal for the designated time zone with the appropriate truck configuration for the booked containers. Early or late arrivals including no-shows are recorded as a failure. There has been a relatively consistent level of service by carriers since PBLIS commenced. Carriers have indicated that traffic congestion, empty container park performance and stevedore delays can impact their service levels along with other factors.

**Figure 9: Monthly aggregated average carrier service levels**

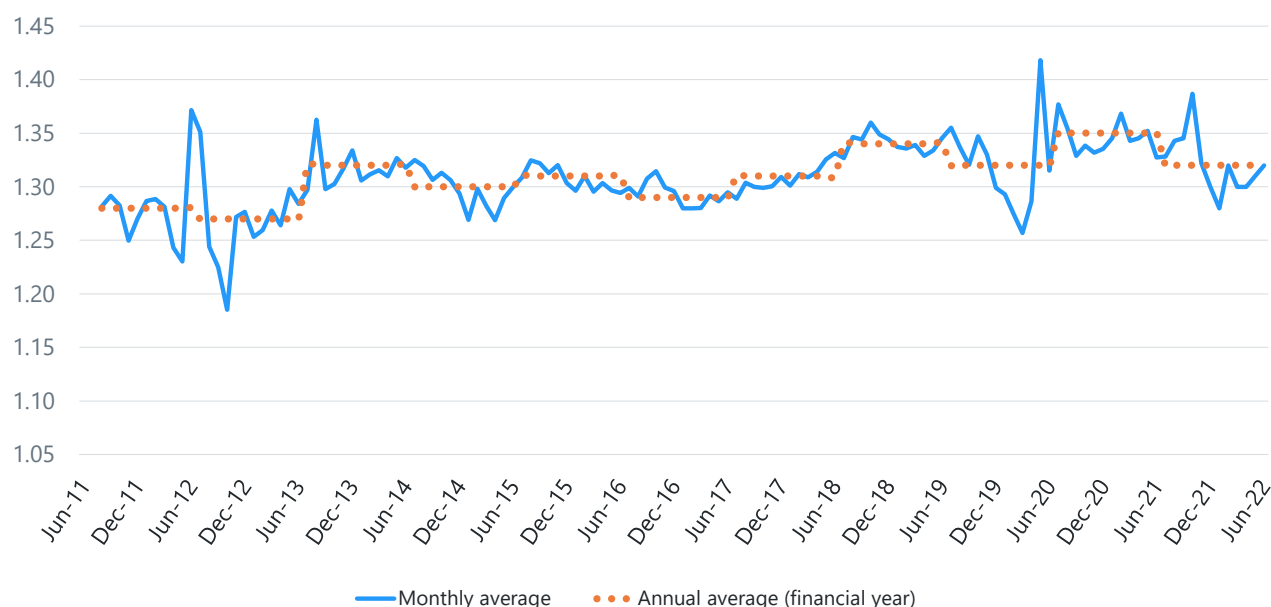


Source: Transport for NSW

## Container density

Another indicator of performance at Port Botany is container density. This is a measure of how many containers are being serviced on each truck per trip to a stevedore. The higher the density, the fewer truck trips required to complete the container task at the port, which means a reduction in truck trips to the port. Figure 10 shows that truck density has only seen a very small increase since 2011.

**Figure 10: Average container density per truck**

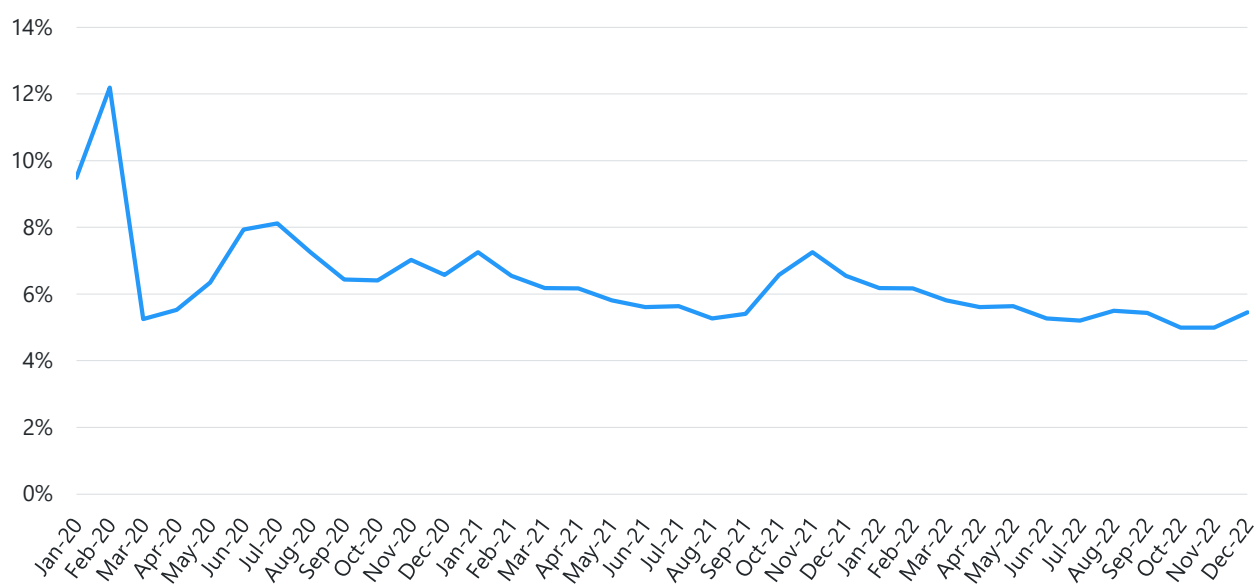


Source: Transport for NSW

## Dual runs

Dual runs are where a truck drops off one or more containers for export and then picks up one or more import containers. Servicing import and export containers on a single truck means fewer truck trips are required to service the same number of containers. Dual runs can lead to more efficient operations by the stevedores, as additional containers serviced on each truck takes less time compared to servicing the same number of containers from different trucks. Figure 11 shows the percentage of trucks performing dual runs at Port Botany over the past three years (note this information is not available for previous years as a different IT system was used at the time).

**Figure 11: Dual runs at Port Botany**

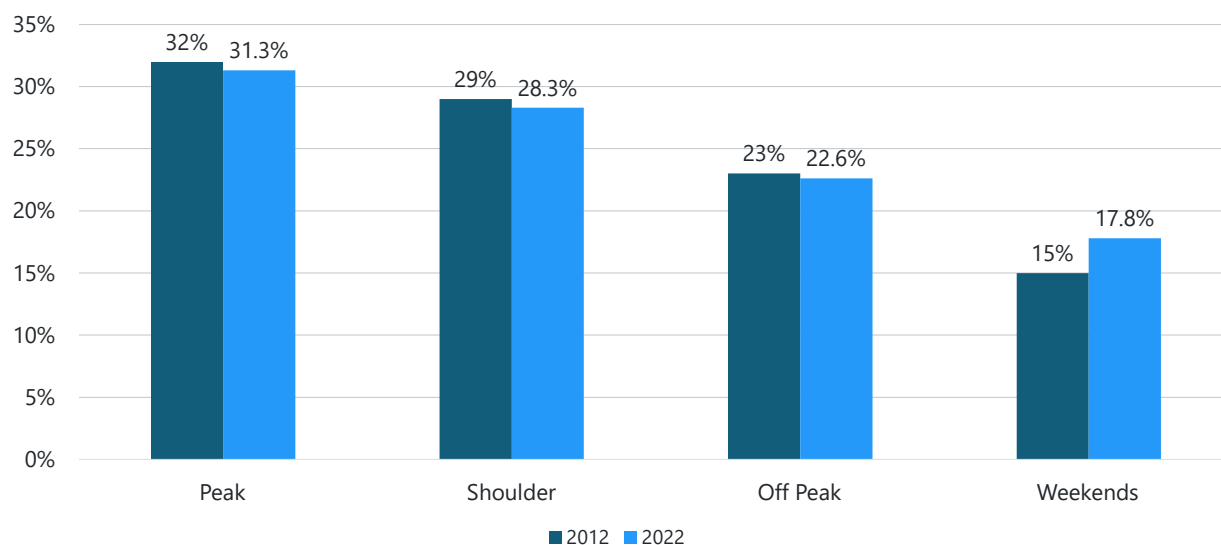


Source: Transport for NSW

## Truck spread

Truck spread measures the percentage of containers that are serviced within defined time periods throughout the week. Prior to PBLIS, peak and shoulder time zones made up approximately 75 per cent of all containers serviced – weekdays from 5.00am to 11.00pm. The spread of trucks to more 24/7 operation did improve after PBLIS was introduced, increasing to around 60 per cent in 2012. However, Figure 12 below shows that weekend operations since then have only seen a small increase since the initial improvement.

**Figure 12: Truck spread at Port Botany**



Source: Transport for NSW

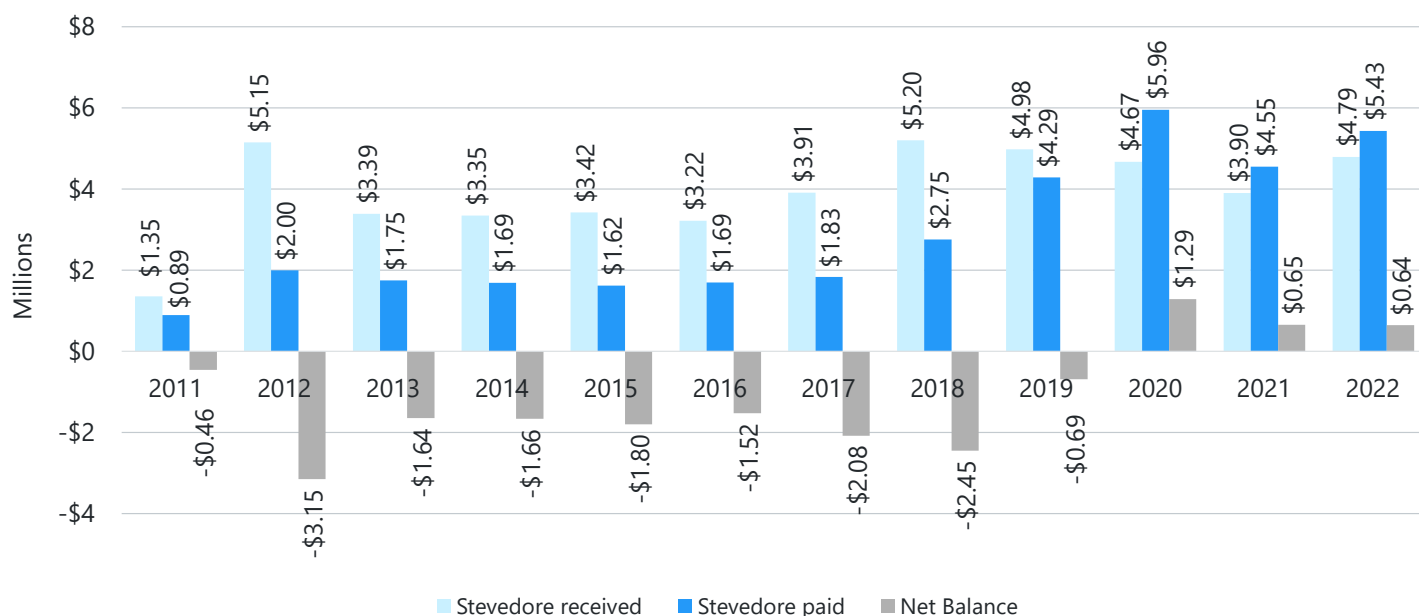
## PBLIS penalties

The PBLIS rules are enforced through reciprocal penalties. For example, stevedores pay penalties to road operators for failure to comply with the performance standards such as the TTT exceeding the prescribed times. Road operators pay penalties to the stevedores for failure to comply with the relevant performance standards such as arriving outside of a booking window. The penalties are invoiced by the stevedores from their VBS systems under a self-invoicing approach. TfNSW oversees this process to ensure penalties are applied accurately and that any disputes are resolved.

Figure 13 shows the total value of invoices paid and received by stevedores since 2011 for not adhering to the PBLIS rules. The light blue bars show the penalties that stevedores have received from road operators; the dark blue bars show how much stevedores have paid out to road operators; and the grey bars show the net balance for stevedores. A grey bar that falls below the line shows that the stevedore has received more in penalties than they have paid out. In the last three years, the grey bars remain above the line as overall stevedores have paid out more penalties than received, unlike the preceding nine years.



**Figure 13: PBLIS penalties – paid, received and net balance**



Source: Transport for NSW

## PBLIS Regulation

As outlined in Section 4.1 PBLIS Overview above, the NSW Government introduced PBLIS in 2010 to improve service coordination and investment levels at the port landside interface to support high levels of throughput and cater for growth at Port Botany. PBLIS has delivered on this aim and addressed the landside congestion and some of the inefficiency issues that were originally identified.

The CBA supports this, outlining that if left to voluntary industry arrangements, it is not expected that industry would address the landside inefficiencies PBLIS was introduced to address. The CBA found the key benefits of PBLIS arise from traffic decongestion and reduced emissions resulting from the removal of heavy vehicles from roads around the port.<sup>77</sup> This is achieved mainly through the provision of the TMA and enforcement of service lines at terminals and to a lesser extent, parking rules in the port precinct. The net benefits associated with the regulatory components of PBLIS however are less clear.

Further, elements of the PBLIS design are sub-optimal and require addressing to ensure a future focused approach. The Review makes 11 Recommendations for the port road interface to secure an effective operating environment at Port Botany into the future.

The centrepiece Recommendation provides for the transition of the current PBLIS regulatory regime to a scheme that is more consistent with the principles of incentive-based regulation and is designed to reduce administrative burden on stevedores and road operators, while promoting improved port efficiency.

The PBLIS Performance Scheme seeks to achieve this by transitioning from a focus on penalising individual instances of poor performance by stevedores and road operators, to a

<sup>77</sup> Castalia 2022, Cost-Benefit Analysis of PBLIS Performance, Sydney, NSW, p. viii

focus on promoting the overall efficiency of landside operations. The scheme is underpinned by ongoing transparent performance monitoring to ensure performance is maintained and improved, with the ability to reinstate the current PBLIS rules if required.

Ten amendments to the PBLIS rules are recommended to improve the operation of PBLIS in the time prior to the completion of the transition to the Performance Scheme. These include:

- Four changes that are mostly voluntary, are suitable to be applied while the Regulation is in place and would also likely be retained once operators have transitioned to the Performance Scheme – these include take or pay truck slot booking rules, no booking until discharge, staggered time zone commencement and differential pricing of time zones.
- Six changes are to current regulatory requirements and are relevant while the existing PBLIS rules remain in place – these include to remove the broad stevedore charges regulation power, apply late penalties per truck rather than per container, allow unforeseen events to be applied to terminal sections, update penalty amounts by CPI backdated from 2010, remove the small and large carrier classifications and remove the TfNSW role in relation to stevedore import or export slot allocation.

## **Stakeholder feedback**

Stakeholder feedback provided during the Review is detailed in the relevant Recommendations. Overall, stakeholders agreed that there should be changes to PBLIS but proposed different directions with some supporting the full removal of the Regulation and others seeking to strengthen the existing PBLIS rules and apply additional rules.

Stakeholders who supported retaining the PBLIS rules and sought to strengthen the regulatory obligations applied to stevedores also proposed a number of changes. The key feedback provided by these stakeholders that is not covered in specific PBLIS Recommendations is detailed below, along with the Review Findings on these issues and the explanation of why these proposals have not been recommended.

### **Increased truck slots**

The PBLIS rules set the current minimum number of slots at 54 per hour (note this is applied as an average across the week) which was increased from 50 in 2015. Some stakeholders proposed the number of booking slots that stevedores are required to make available per hour be increased to 85, suggesting that this increase is in line with the overall rate of growth in container volumes at the port since PBLIS was introduced.

It was requested that an annual review of this slot number be undertaken, in collaboration between road operators and stevedores, based on projected container volumes. Some stakeholders also questioned whether the allocation of PBLIS slots between import and export containers was aligned with current volumes of each.

The proposed increase to 85 slots per hour is not recommended as:

- The utilisation of booking slots in off-peak periods has increased over time, but there remain un-used slots across all time zones and particularly during off-peak and weekend times. While the port is not operating at consistent rates across all time zones, an increase to the minimum number of slots per hour would increase

congestion in peak times and likely increase truck servicing times. It would also not encourage the use of off-peak time zones.

- Improvements to support slot availability, including to improve the booking process and remove un-used slots are addressed in **PBLIS Recommendation 2: Change carrier cancellation rules to take or pay**, **PBLIS Recommendation 3: Facilitate no booking until discharge** and **PBLIS Recommendation 5: Differential pricing of time zones**.

### *Apply stevedore performance standards to stack runs*

Stack runs operate entirely outside of the PBLIS rules and provide efficient access for some operators to move large volumes of containers through the port. This approach assists terminal container turnover and large ship exchanges to the benefit of all parties – the stevedore is assured of efficient container turn-over in the terminal, while large road operators can access large volumes which the PBLIS booking rules do not effectively accommodate, and demand on the PBLIS booking system is relieved for other road operators.

Stack runs are used for full and empty containers at all times of the day. Stevedores can locate all import containers for one road operator in one part of the terminal and then load trucks with the closest container. This is unlike under PBLIS, where specific containers are booked for pick up. Road operators shuttle the containers to their yard and transport them on to the final destination. Stack run operations are agreed between the stevedore and road operator, including the container numbers, timeframes and number of trucks involved.

Feedback about stack runs also included that they reinforced single way loading when they were set up to move containers only in or out. Other stakeholders noted that dual running stack runs had been trialled but were not found to suit container demand.

Some carriers who operate stack runs suggested that they be brought into PBLIS so that penalties for stevedore delays in servicing can be applied. These stakeholders claimed that stack runs can be delayed in favour of PBLIS trucks so that stevedores can avoid a PBLIS TTT penalty.

This proposal is not recommended as:

- The use of stack runs is an important efficiency measure for the port and the PBLIS rules approach is too rigid and would undermine the efficiency that a stack run provides which ensures that terminals can handle the increasing vessel turnover size resulting from the trend of shipping lines using larger vessels.

### *Higher Productivity Vehicles and truck turnaround times*

Higher Productivity Vehicles (HPVs) have become a more regular feature of port container transport in recent years. Feedback from some stakeholders is that HPVs can cause delays in stevedore terminals if drivers are not handling the trucks efficiently (particularly in instances where reversing is required) and there are concerns that this is impacting terminal performance and efficiency. Some stakeholders requested that an increase to the TTT be considered due to the increased use of HPVs.

This proposal is not recommended as:

- HPVs provide increased efficiency, performance and safety outcomes and will continue to be an increasing feature of the NSW road freight task
- HPVs can carry more containers therefore allowing higher density loading and reduced port trips – supporting overall port-wide efficiency.

### *Vessel schedule changes*

The number of vessel schedule changes has increased in recent years due to the supply chain disruptions from the COVID-19 pandemic. Once a vessel that usually operates on a continuous route (which is common for container ships servicing Australia) is off schedule it can be difficult to return to its usual timing. This can cause vessel bunching where a number of vessels arrive at a stevedore at one time, which can lead to larger container exchanges and potentially congestion in the stevedore terminal.

Stakeholders that raised this issue were concerned about the impact on carriers, freight forwarders and customs brokers due to the disruption to their transport planning and scheduling processes and noted this could increase costs for the domestic market.

The solution proposed was to expand the PBLIS penalties to apply a penalty to the international shipping lines that access Port Botany when they arrive off schedule. It was also proposed that the Regulation be extended to cover how stevedores advertise the availability of vessels and containers to address instances of unproductive trips to the port.

The Productivity Commission noted that vessels missing windows has increased markedly over the past three years since the start of the COVID-19 pandemic. This leads to a number of issues as vessels running off schedule requires stevedores to alter their operations to service late arrivals (including allocation of labour changes) and vessels must wait for the next available berth, which can result in longer anchorage times. As vessels typically visit multiple Australian ports, “the effects of ships arriving off schedule cascades through to subsequent ports, creating a perception of inefficiency across ports”.<sup>78</sup>

The Productivity Commission also noted that public access to detailed data on shipping schedules and windows, which is not currently publicly available, would allow “an assessment of short or long-term trends in the dependability of ships servicing Australian ports”.<sup>79</sup>

Rescheduling issues faced by landside operators as a result of changing ship arrivals are linked to the current truck slot booking approach where bookings are made based on expected ship arrival and container unloading times. **PBLIS Recommendation 3: Facilitate no booking until discharge** addresses the need to reschedule slots by making import containers available once they have been unloaded from the ship. **PBLIS Recommendation 15: Freight Community System** could further support landside scheduling by providing easy access to information on ship arrivals to all relevant parties.

### *Country carriers*

Some stakeholders requested different arrangements be regulated for country carriers to provide them with leniency outside of the PBLIS rules, such as if they are late arriving for a

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<sup>78</sup> Productivity Commission 2022, [Inquiry into Australia’s Maritime Logistics System Final Report](#), p. 112

<sup>79</sup> Productivity Commission 2022, [Inquiry into Australia’s Maritime Logistics System Final Report](#), p. 113

truck slot. PBLIS requires carriers comply with gate procedures, booking cancellations, truck arrival times and truck identification information requirements.

Stakeholder advice is that some stevedores have informal arrangements with country carriers who originate from non-metropolitan areas, where they are provided leniency in the application of penalties. They requested that this be formalised to ensure a consistent approach. There have also been times when TMA access has been provided to country carriers who arrive early for time zones, when capacity is available. TMA capacity is usually impacted by Sydney traffic conditions.

This proposal is not recommended as:

- All carriers negotiate Sydney traffic to access the port and the border of where country carriers would begin and metropolitan carriers ends would be difficult to justify
- The application of criteria would also be difficult to define as metropolitan-based carriers can transport containers to and from regional areas, as well as country-based carriers
- The approach would not support overall port efficiency.

### ***Road congestion***

Stakeholder feedback included that the PBLIS rules be expanded to cover landside congestion, particularly non-container truck traffic on or near port roads. It was also suggested that the introduction of container truck only lanes could ensure faster evacuation of containers to and from the port.

This proposal would need to be considered in further detail in an appropriate forum given the breadth of the application of this proposal which is outside the scope of the Review.





# Enhancing PBLIS: Performance Scheme

## 5.1.1 PBLIS Performance Scheme

### **PBLIS Recommendation 1: PBLIS Performance Scheme**

Introduce (via a managed transition process) a regulated performance-based incentive scheme for the stevedore and road interface that rewards efficient performance of stevedores and road operators, and provides flexibility to support innovation in landside operations. Monitoring will provide transparency of ongoing landside performance. Government should retain the potential to re-introduce the current, prescriptive PBLIS rules if port performance deteriorates.

A managed transition process is provided to shift from the current prescriptive PBLIS rules to a less prescriptive approach that incentivises performance improvements and removes regulatory barriers to innovation in landside operations. Stevedores and road operators can transition to the scheme over a minimum two-year period by meeting and maintaining set performance standards.

The current PBLIS rules are based on performance standards that do not all align with overall port efficiency, and there are a number of important efficiency measures that PBLIS does not appropriately incentivise. The PBLIS Performance Scheme benchmarks are selected to drive a focus towards overall port efficiency measures and promote improvements to performance. It is expected that it may take some time (likely longer than the minimum two years) for all stevedores and carriers to transition to the Performance Scheme permanently. This transition period will allow time for carriers and stevedores to adjust to changes in the operating environment.

This Recommendation was developed from PBLIS Option C17 which proposed removing the Regulation entirely and leaving industry to manage the landside interface through commercial relationships, maintaining ongoing monitoring but without performance regulation. This is the approach taken in other jurisdictions in Australia where these stevedores also operate.

However, it has been found that to drive ongoing port efficiency improvements some regulatory control is required, via a less prescriptive approach, to ensure that flexibility is increased, and innovation and responsiveness are facilitated. This would ensure that performance levels are improved under the Performance Scheme and that government regulatory intervention in the port landside interface remains effective.

Government should retain the potential to re-introduce the current prescriptive PBLIS rules, should port performance deteriorate.



## PBLIS rules

As detailed in Section 4.2 PBLIS Review findings overview above, the PBLIS rules have delivered on the aim of improving service coordination and increasing investment levels at the port landside interface, and catering for growth in container volumes. However, the port operating environment has changed since 2010 and requires a different approach to facilitate continued efficiency improvements. Also, there are issues with the design of the PBLIS rules that need to be addressed.

Issues with the current PBLIS arrangements include:

- There is nothing in the design of PBLIS that incentivises behaviour that exceeds the minimum benchmarks set in the rules. The rules operate to punish behaviour on the part of stevedores and carriers that fail to meet the relevant benchmarks. This is unlike most economic regulation in Australia and many other countries which is based on the principle of incentive regulation.
- PBLIS was not designed with inbuilt performance benchmark levels that would demonstrate whether the strategy has been effective and whether prescriptive regulation is no longer necessary.
- The regulatory structure is extremely limited in its flexibility and cannot adapt quickly as the port operating environment changes. This is despite PBLIS being structured as flexibly as the NSW Government legislative framework allows.
- PBLIS encourages industry parties, and particularly carriers, to increasingly rely on PBLIS to manage industry relationships. This is detrimental to what might otherwise be ordinary commercial relationships. Carriers tend to rely on PBLIS and associated TfNSW administrative staff to resolve problems with stevedores and consequently continually seek more intrusive provisions to discipline stevedores.
- PBLIS imposes high administrative costs on all parties involved.

These design issues must be addressed if measures are to be effective in supporting efficient port operations to adapt to future operational needs.

In addition to the issues outlined above, the specific PBLIS rules are not designed to support and promote some important port-wide operational efficiency measures, including:

- Container density – the PBLIS rules for the slot booking process, in particular the approach of slot drops that result in the mad minute<sup>80</sup> contributes to difficulties with booking multiple slots to handle more than one container per trip.
- Dual running – it appears from current levels of dual running to individual stevedores that the PBLIS rules may not be supporting an increase in these movements, noting that data on overall port dual running is not complete as there is currently no data on trucks that visit empty container parks or multiple stevedores on one trip.

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<sup>80</sup> The current booking method results in what is colloquially known as the mad minute which is administratively inefficient. Slots for a 24-hour period are released two days prior and carriers compete simultaneously to book slots at their preferred times.

- 24/7 operations – while weeknight operations are relatively well used, weekends remain at significantly lower use rates with a strong preference remaining for weekday access.

As container volumes continue to grow, increasing the efficiency of each truck trip to the port (the number of containers handled in each direction) will be an important contributor to effectively managing these volumes.

The Regulation is a strong government intervention that requires considerable administrative effort by both industry (stevedores and road operators in particular) and government. While the PBLIS regulatory structure provides as much flexibility as is possible, government regulation by its nature is inherently rigid. The strict requirements that appropriately govern regulation amendment processes mean that making any changes takes a long time, which stifles operational responsiveness and innovation.

The process for changing the Mandatory Standards (the most flexible part of the PBLIS rules) requires appropriate industry consultation and review of proposed changes, followed by a written order from the Minister, gazettal of that order (official government notification), publishing of the updated standards, the amendments and a consolidated version, and written notice to relevant operators from the Minister. This process can take a minimum of six months, or longer if changes are contested.

Amendments to the PBLIS rules can also require changes to industry operating systems (and government systems) which are costly and time consuming. While costs to change systems outside of PBLIS would not be eliminated, the time taken to change operational practices would be significantly reduced in a more minimal regulatory approach supporting the trialling and implementation of new operational practices.

Importantly, the high administrative effort associated with PBLIS, that stakeholders agreed is not ideal, cannot be addressed without the removal of the detailed PBLIS rules, that are enforced by reciprocal penalties. While rules apply to each truck trip and a potential penalty is required to be determined, the administrative effort involved cannot be reduced. See **PBLIS Finding 2: Points system** for details of the Review consideration of approaches such as a points system which investigated ways to reduce the administrative effort of the PBLIS rules.

## International and Australian examples

PBLIS is unique to Port Botany and there are no arrangements that apply a similarly high a level of government regulation in other container terminals in Australia or internationally. Examples covered in the Port Comparison Research that include some regulation, but not to the same extent as under PBLIS, are:

- The Port of Manila in the Philippines, where government regulation requires that stevedores use a VBS and mandates its rules, which include booking zones and differential fees (however the private terminal operators choose which fees apply to different time zones), and requires the use of a pre-paid payment system for the VBS.<sup>81</sup>

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<sup>81</sup> Advisian 2022, PBLIS Comparison Study, Sydney, NSW, p. 22

- The Port of Valencia in Spain also has some regulation to provide carriers with compensation in the event of stevedore delays – the compensation system applies for a truck delayed within the terminal gates for more than 75 minutes (based on length of the delay) and each terminal is responsible for its implementation. However, there is no active government or port operator oversight role, and carriers are reportedly often unhappy with the outcome.<sup>82</sup>

It is preferable wherever possible for government to not intervene in private markets, to avoid unintended consequences such as impeding market flexibility or driving inefficient behaviours. Ports in other jurisdictions in Australia operate effectively without a regulated landside interface, such as the Port of Melbourne which handles the largest volume of containers in Australia.<sup>83</sup> Notably, since the introduction of PBLIS in 2010 at Port Botany, this approach has not been replicated elsewhere.

To facilitate landside performance, the Port of Melbourne encourages more efficient operations, such as dual runs. However, it is left to the terminals to design and implement systems to accommodate this.<sup>84</sup> For example the three stevedore terminals operate different booking systems as they have full flexibility to design and evolve their operational processes as required to service their container task.

### **PBLIS rules operation**

The Regulation is based on performance rules that are enforced via reciprocal penalties. Road operators that fail to meet a performance rule pay a penalty to the relevant stevedore, and when stevedores fail to meet a performance rule, they pay a penalty to the relevant road operator. These penalties serve as a form of compensation to the adversely affected party.

The Deloitte Access Economics PBLIS industry behavioural research (PBLIS Behavioural Research) found the rigidity of the PBLIS rules has entrenched some outdated systems and practices in the port landside interface. Importantly it was found that the PBLIS financial penalties disincentivise stevedores and road operators from operating collaboratively or trying new operational approaches that might improve or replace inefficient methods (for example by innovating and adopting new technology).<sup>85</sup>

Many of the PBLIS rules are the result of regulating operating practices in place at the time of implementation and considered in the 2010 port operating context. Stevedores reported in the PBLIS Behavioural Research that while PBLIS had a positive impact on the overall efficiency of the port at the outset, operational changes have been required in their landside operations regardless to manage the greater throughput now required from growing volumes at the port.<sup>86</sup>

The CBA found that the total benefits of PBLIS in 2021 were \$19.4 million with the majority of this coming from the non-regulatory elements of PBLIS. The TMA was an important contributor by bringing over \$8 million of these benefits, while \$10.9 million came from the

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<sup>82</sup> Advisian 2022, PBLIS Comparison Study, Sydney, NSW, p. 163

<sup>83</sup> Advisian 2022, PBLIS Comparison Study, Sydney, NSW, p. 103

<sup>84</sup> Advisian 2022, PBLIS Comparison Study, Sydney, NSW, p. 107

<sup>85</sup> Deloitte Access Economics 2022, PBLIS Industry Behavioural Research, Sydney, NSW, p. 31

<sup>86</sup> Deloitte Access Economics 2022, PBLIS Industry Behavioural Research, Sydney, NSW, p. 51

road service lines, cameras and enforcing parking rules, and only \$0.38 million was derived from the Mandatory Standards and associated penalties.<sup>87</sup>

The CBA takes a forward-looking approach considering what the situation would look like if key parts of PBLIS were abolished starting now. The on-the-ground reality is the continuation of the existing PBLIS intervention unchanged, while the counterfactual is modifying or abolishing it – “In other words, instead of asking how the world has changed with PBLIS, the report asks how it would change from now if PBLIS overall, or its components, were abolished. Castalia considers such a forward-looking analysis appropriate for a review of a long-established intervention since the policy choices available now are not the same as when the implementation of PBLIS was being contemplated.”<sup>88</sup>

Given the success of PBLIS in addressing congestion issues and the market power imbalance in the relationships between participants (where there is a reluctance to collaborate), a shift from the PBLIS rules to the Performance Scheme would require assurance that prior behaviours would not recur. For this reason, the Performance Scheme should be implemented via regulation, with the ability to re-introduce the PBLIS rules retained in case performance issues re-emerge.

These measures will ensure the market is suitably incentivised to maintain and improve the efficiency of the port landside interface, while benefiting from the reduced administrative effort and increased flexibility of operating without the PBLIS rules.

## **PBLIS Performance Scheme**

The PBLIS Performance Scheme requires regulation covering the following areas:

- Performance benchmarks including Target Benchmark and Minimum Benchmark levels for the selected performance areas applied to stevedores and carriers.
- Data provision requirements for stevedores and carriers with performance against the benchmarks and additional measures published to increase transparency – commercially sensitive information would be considered and appropriately handled.
- Transition process (see below) to cover when the current PBLIS rules apply and when the Performance Scheme applies to stevedores and carriers. The ability to reintroduce the PBLIS rules is retained.

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<sup>87</sup> Castalia 2022, Cost-Benefit Analysis of PBLIS Performance, Sydney, NSW, p. ix

<sup>88</sup> Castalia 2022, Cost-Benefit Analysis of PBLIS Performance, Sydney, NSW, p. 10

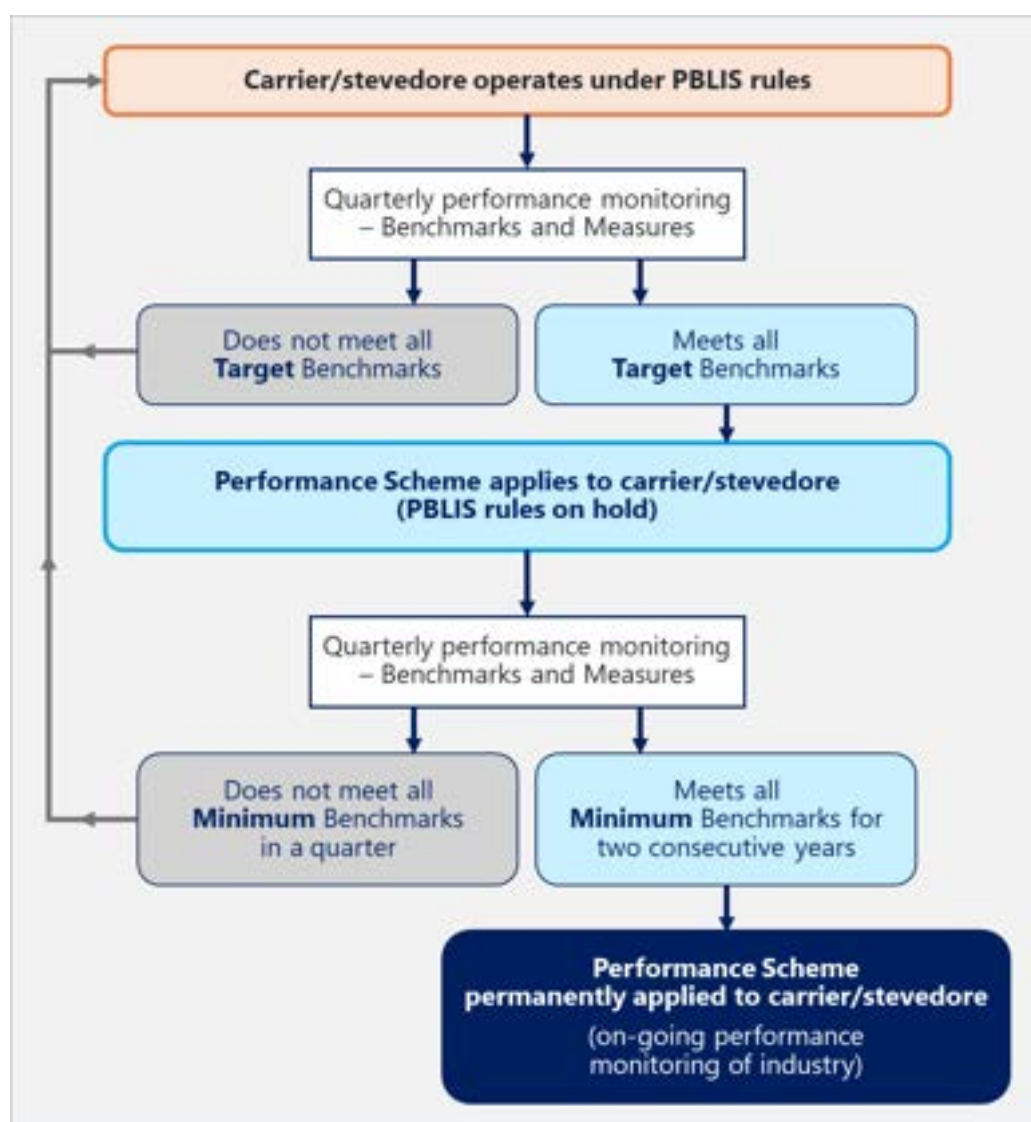
## Transition process

The Performance Scheme implementation includes a minimum two-year transition process (see Figure 14 below) which would be triggered by stevedores and carriers meeting Target Benchmarks and then maintaining performance levels by meeting Minimum Benchmarks (to allow for temporary fluctuations in performance levels). Specific targets would be set for both carriers and stevedores and would include the following:

- Performance against the Target Benchmarks and Minimum Benchmarks for stevedores and carriers measured and published each quarter.
- Where a stevedore Target Benchmarks are not met, the stevedore would continue to operate under PBLIS rules, and the payment of penalties would continue.
- Where stevedore Target Benchmarks are met, the stevedore would commence operating in the Performance Scheme. This means the PBLIS rules would cease to apply – including the reciprocal penalty arrangements for stevedores and carriers accessing that terminal.
  - The stevedore is required to continue to meet the Minimum Benchmarks each quarter – if performance is not maintained appropriately then the PBLIS rules would recommence for that stevedore.
- Where a carrier has met the carrier Target Benchmarks that carrier would cease to pay penalties to all stevedores.
  - If the stevedore was operating under the PBLIS rules, then they would still be required to make any penalty payments to the carrier.
  - If the stevedore was operating under the Performance Scheme, then no PBLIS penalties would apply for either carriers or stevedores, irrespective of carrier performance, although a stevedore would be able to introduce carrier incentive charges in place of penalties.
  - The carrier is required to continue to meet the Minimum Benchmarks each quarter – if performance is not maintained appropriately then the PBLIS rules would recommence for that carrier.

The Performance Scheme operating scenarios during the transition process are outlined in Figure 15 below. When a stevedore or carrier has commenced operating in the Performance Scheme and has continued to meet the Minimum Benchmarks in each quarter for a two-year period, then this would become permanent. However, if a stevedore or carrier fails to meet the Minimum Benchmarks in a quarter, prior to it becoming permanent, then the two-year transition process would restart. To facilitate this, until the transition to the Performance Scheme is permanent, the stevedore would retain the systems required to reinstate the PBLIS rules.

**Figure 14: Performance Scheme carrier and stevedore transition process**



**Figure 15: Performance Scheme transition operating scenarios**

	<b>Carrier in PBLIS</b>	<b>Carrier in Performance Scheme</b>
<b>Stevedore in PBLIS</b>	PBLIS rules and penalties apply to the stevedore and carrier – landside interface operations regulated by PBLIS rules	PBLIS rules and penalties apply to the stevedore – landside interface operations regulated by PBLIS rules Carriers are not required to pay penalties to the stevedore but continue to receive penalty payments from the stevedore
<b>Stevedore in Performance Scheme</b>	No PBLIS rules and penalties apply to carriers and stevedore Stevedore is able to determine landside interface operations including potentially introducing carrier incentive charges Carrier does not pay PBLIS penalties	No PBLIS rules and penalties apply to carriers and stevedore Stevedore is able to determine landside interface operations including potentially introducing carrier incentive charges Carrier does not pay PBLIS penalties



## Performance benchmarks

The PBLIS Performance Scheme sets stevedore and carrier benchmarks to drive individual operator performance and enhance overall port performance. These benchmarks will show comparative performance levels across stevedores and carriers, revealing best practice levels and incentivising enhanced performance. The benchmarks should be measured and published each quarter and used to facilitate the Performance Scheme transition process, rewarding good performance and tracking ongoing performance levels.

The Target Benchmarks are set at the best practice level – which may require some stevedores and carriers to lift performance, and the Minimum Benchmarks accommodate fluctuations in performance. The levels are set appropriately for each benchmark, considering the current performance and opportunities for improvement. The four stevedore benchmarks and three carrier benchmarks are the key performance areas that support port-wide efficiency.

Stevedore Benchmarks	Target Benchmark	Minimum Benchmark
<b>1. Average TTT during peak</b>		
<b>1A Single containers</b>	25 minutes or less	28 minutes or less
<b>1B Double containers</b>	40 minutes or less	43 minutes or less
<b>2. Average truck density</b>	1.5 containers	1.4 containers
<b>3. Percentage of trucks not serviced during peak</b>	1%	4%
<b>4. Percentage of containers moved during off-peak and weekends</b>	50%	40%

Carrier Benchmarks	Target Benchmark	Minimum Benchmark
<b>1. Average on time arrival</b>	96%	93%
<b>2. Average slot bookings used</b>	97%	93%
<b>3. Percentage of trucks not serviced due to carrier</b>	0.1%	0.2%

In addition to the benchmarks a number of performance measures should also be monitored and published, to provide information about other contributors to port efficiency over time. Four stevedore measures and three carrier measures are selected.

Stevedore Measures
1. Average TTT for three or more container trips
2. Average percentage of dual runs
3. Percentage of containers moved during weekends
4. Average percentage of slots used during peak

The carrier measures provide port efficiency information at an aggregated level but are not suitable to benchmark at the individual carrier level, as improvements are not required for each individual carrier. In taking this approach it is recognised that carriers operate under different models and with different truck fleets. For example:

- for increased 24/7 port access it is not required that all carriers operate across all time zones, just that the proportion of overall carrier off-peak access increases
- for truck density, carrier fleet structure is relevant and business requirements and fleet turnover timeframes are relevant factors.

#### **Carrier Measures**

1. Average container density for carriers
2. Percentage of containers moved by time of week
  - 2A Percentage of containers moved during off-peak and weekends
  - 2B Percentage of containers moved during peak

Some of the data available for the Review is not a complete data set. This includes incomplete data on stack run movements that occur outside of PBLIS, all transshipment containers (that are unloaded from a vessel and loaded onto another vessel), out of gauge cargo (too large to fit fully into a container) and dangerous goods which are also processed outside of PBLIS, as they are required to meet specific restrictions including timeframes at the port.

Consultation with industry should be undertaken on the benchmark levels which may lead to refinement. Data gaps will also need to be addressed to support implementation. However, after this process the benchmarks should be set and remain unchanged during the transition process to the Performance Scheme.

The Review has analysed current port access levels and has applied a time of week split based on current peak use which is:

- Peak - Monday to Friday between 05:00 and 16:59
- Off-Peak - Monday to Friday between 17:00 and 04:59 (including Monday 00:00 to 04:59 and Friday 17:00 to Saturday 00:00)
- Weekends - Saturday 00:01 until Sunday 23:59.

## Stevedore Benchmarks

### Stevedore Benchmark 1 – Average truck turnaround time (TTT) during peak for single and double container trips

#### 1A Single container TTT during peak

- Target Benchmark: 25 minutes or less
- Minimum Benchmark: 28 minutes or less

#### 1B Double container TTT during peak

- Target Benchmark: 40 minutes or less
- Minimum Benchmark: 43 minutes or less

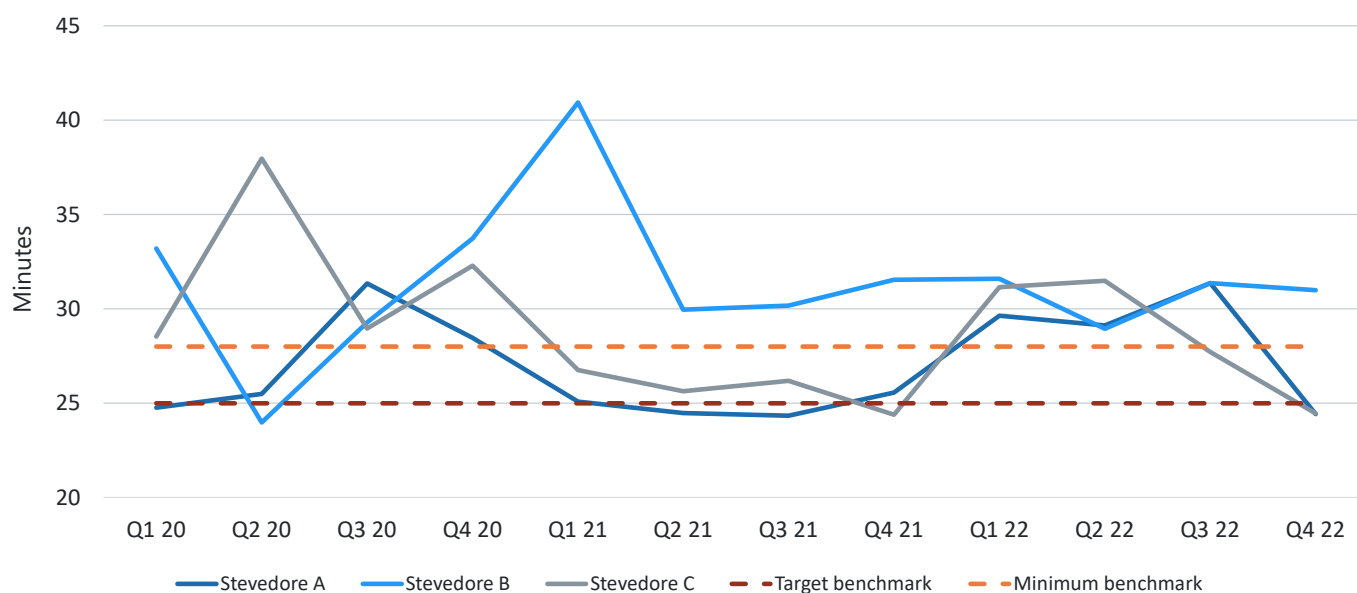
A key performance measure for stevedore landside truck servicing is TTT, which is the time taken by a stevedore to process trucks by loading and/or unloading containers. A shorter time indicates efficient servicing by a stevedore and reduced congestion at the terminal.

The TTT commences at the stevedore entry gate and finishes once all containers have been serviced for the truck (loaded or unloaded). It does not include the time used for trucks moving over 'weigh in motion' scales or the processing of paperwork. In the event there is a queue leading up to the stevedore's entry gate, the TTT measure starts when the truck arrives in the queue, measured by TfNSW ANPR cameras.

To provide an accurate TTT benchmark, single and double container truck trips are measured separately. In addition, given the high variability of servicing demand over a week, measuring the peak period TTT provides a clearer picture of terminal servicing efficiency.

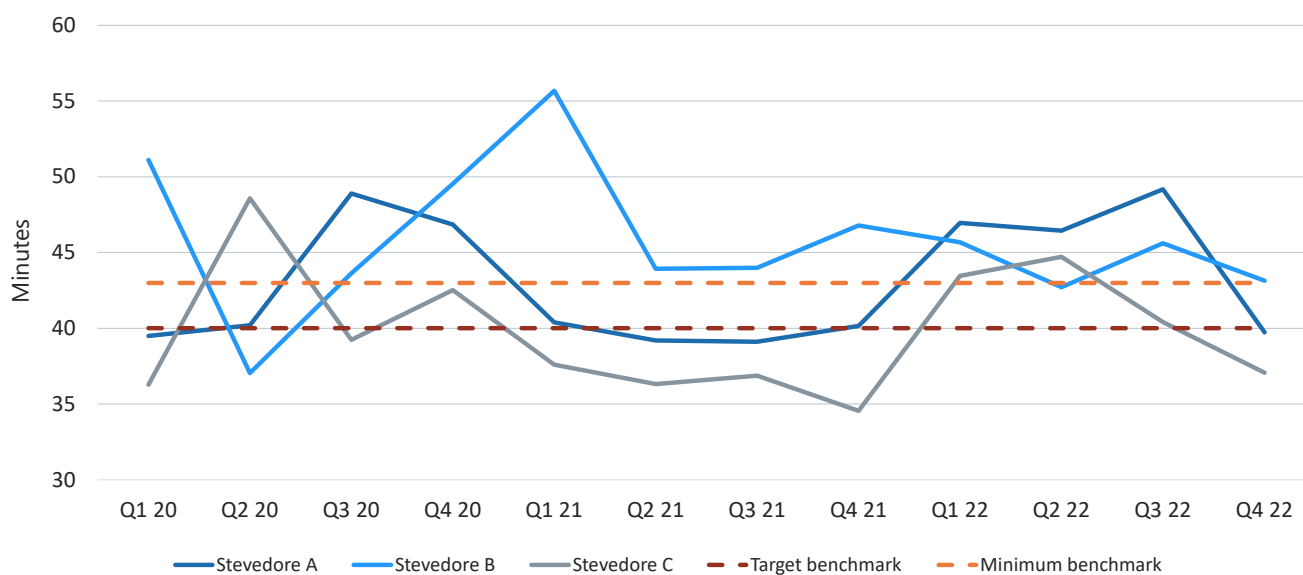
Stevedore Benchmark 1	Target Benchmark	Minimum Benchmark
1A - Average TTT during peak for single container trips	25 minutes or less	28 minutes or less
1B - Average TTT during peak for double container trips	40 minutes or less	43 minutes or less

**Figure 16: Single container TTT during peak – Stevedore Benchmark 1A**



Source: Transport for NSW

**Figure 17: Double container TTT during peak – Stevedore Benchmark 1B**



Source: Transport for NSW

### Stevedore Measure 1 - Average TTT for three or more container trips

Given the current low rates of trips carrying three or more containers, an average benchmark is not applied, but these movements should be measured to provide transparency of rates of use and trends.

### Stevedore Benchmark 2 – Average truck density

- Target Benchmark: 1.5 containers per truck
- Minimum Benchmark: 1.4 containers per truck

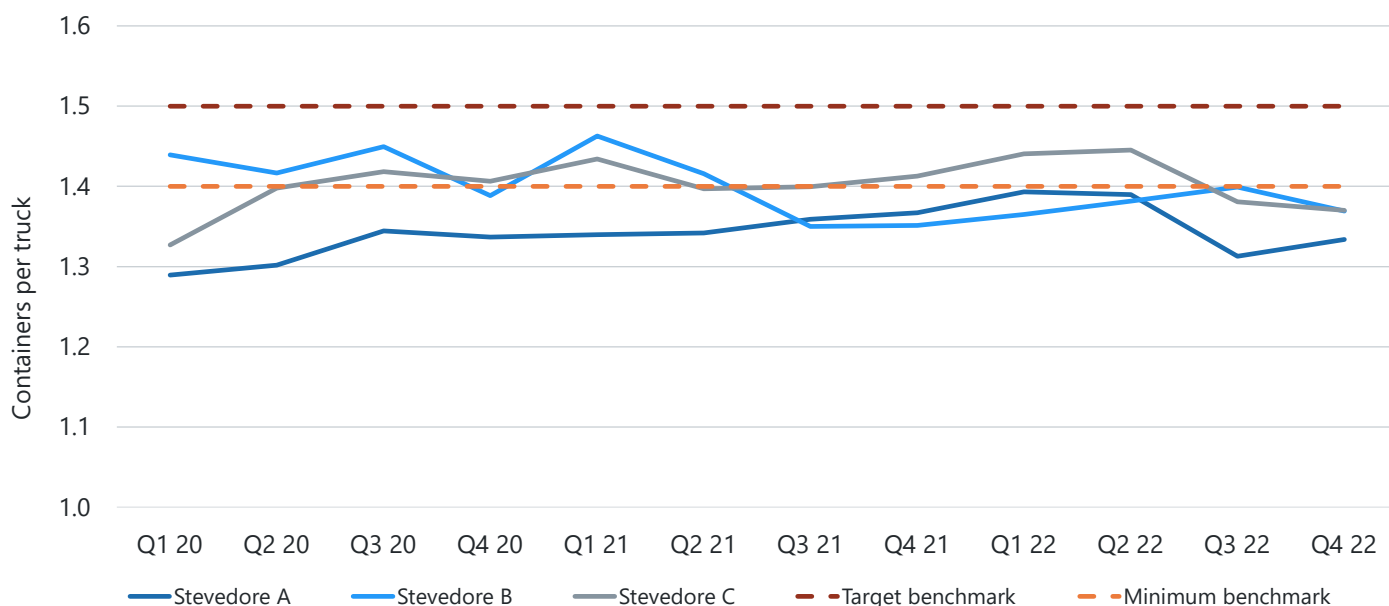
Truck or container density refers to the number of containers moved per truck trip, to or from the stevedore. Moving multiple containers per trip can indicate efficient truck use and less truck trips overall to the port. Another density measure includes delivering a container to a stevedore and then picking up a container (or multiple containers) on one trip, referred to as dual running. It is noted that trucks are required to meet weight limits and when carrying heavy containers can be at full capacity carrying a single container.

Where possible, the movement of multiple containers per trip offers efficiency benefits for both the stevedore through servicing less trucks, and the road operator through reducing the number of trips to the port. This also has the broader benefits of reducing traffic on roads within the port precinct and across the Sydney road network. A complete density measure would also consider trucks carrying multiple containers to or from the port, where they are accessing different stevedores or empty container parks.

The truck density benchmark measures the average number of containers being serviced on each truck trip to a stevedore terminal. As road operators are responsible for scheduling truck trips it may be argued that stevedores are not able to influence density. However, stevedores control their booking systems and can ensure that bookings for multiple containers and dual running are available and user friendly, and they control terminal operational practices that can support density.

Stevedore Benchmark 2	Target Benchmark	Minimum Benchmark
Average truck density	1.5	1.4

**Figure 18: Average number of containers per truck – Stevedore Benchmark 2**

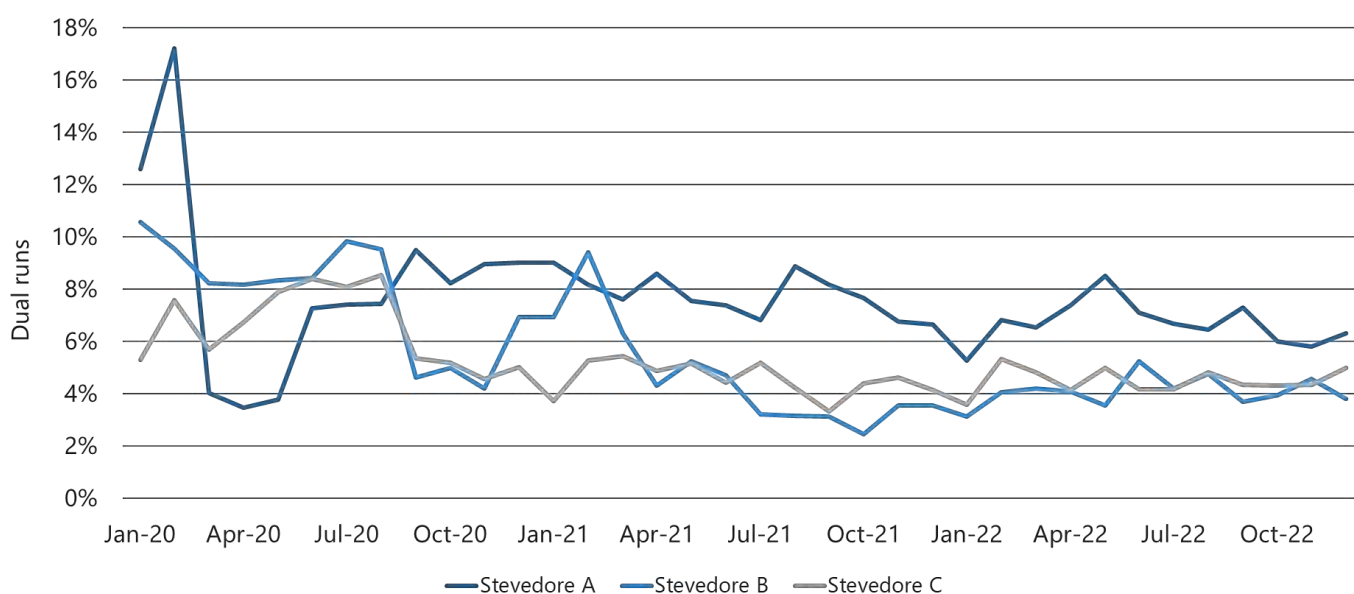


Source: Transport for NSW

### Stevedore Measure 2 – Average dual runs

Dual runs are where a truck delivers a container to the stevedore and also picks up a container on the same trip, reducing truck movements into the terminal and to the port. Currently these movements are not a high proportion of overall trips. This performance should be tracked to understand trends.

**Figure 19: Average percentage of dual runs – Stevedore Measure 2**



Source: Transport for NSW



### Stevedore Benchmark 3 – Percentage of trucks not serviced during peak

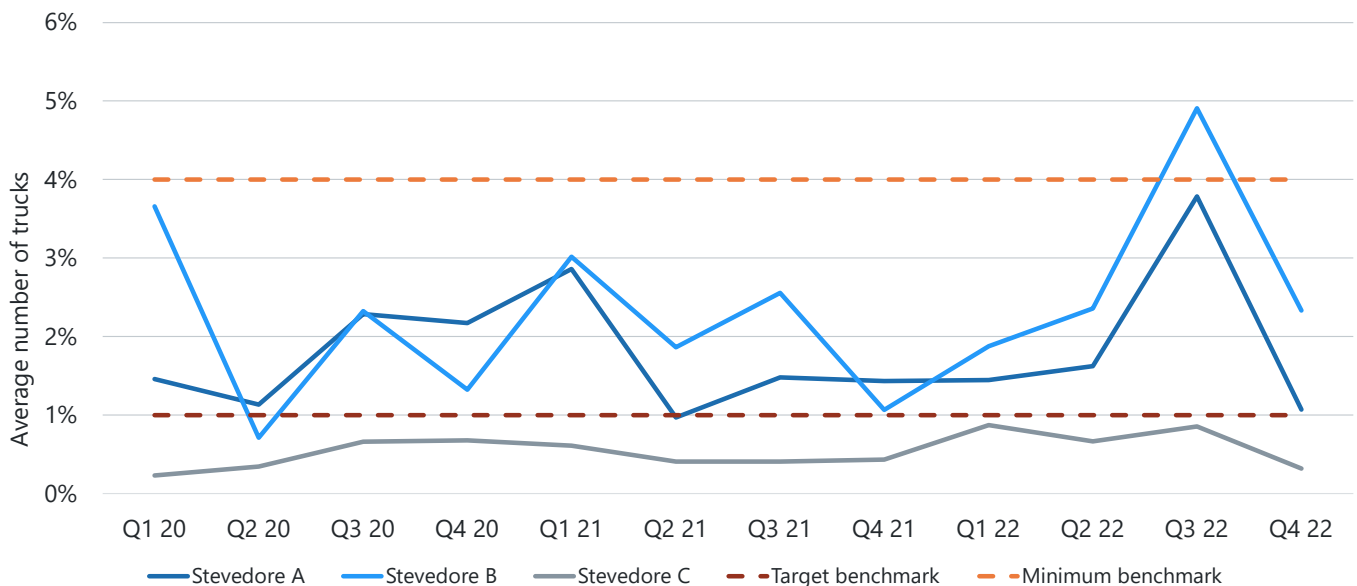
- Target Benchmark: under 1%
- Minimum Benchmark: 4%

When a truck arrives at a stevedore and is unable to be serviced this could be the result of something that is considered either the stevedores' or the carriers' responsibility (see **Carrier Benchmark 3 - Percentage of trucks not serviced due to carrier** below). Instances that are considered a stevedore responsibility under PBLIS include equipment breakdowns, shipping line container holds, weather events (prior to cancelling time zones as an unforeseen event), lost containers (when their location in the stevedore terminal is not known) and industrial relations matters. In these instances a PBLIS penalty is applied to the stevedore and is paid to the impacted carrier.

This performance benchmark provides an indication of how well the stevedore is managing the terminal. Measuring this during peak times, when the terminal is operating at the highest level, contributes to understanding the overall terminal performance level.

Stevedore Benchmark 3	Target Benchmark	Minimum Benchmark
Percentage of trucks not serviced during peak	1%	4%

**Figure 20: Percentage of trucks not serviced during peak – Stevedore Benchmark 3**



Source: Transport for NSW

#### **Stevedore Benchmark 4 – Percentage of containers moved during off-peak and weekends**

- Target Benchmark: 50% during off-peak and weekends
- Minimum Benchmark: 40% during off-peak and weekends

Truck spread measures the percentage of containers that are serviced within defined time periods throughout the week. Prior to PBLIS, peak and shoulder weekday time zones (between 5.00am and 11.00pm) made up approximately 75 per cent of all containers serviced. A shift in truck access to a more 24/7 spread did improve after PBLIS was introduced, with peak weekday access decreasing to around 60 per cent in 2012. Weekend operations (Saturday 5.00am to Monday 5.00am) have shown a small increase since then but the overall truck spread has not changed much since that initial improvement.

The CBA found there has been a limited shift towards 24/7 port logistics chain operations, noting that factors outside of the port, such as local council regulations and the working hours of other parties in the supply chain, contribute to significant demand for peak hour slots.<sup>89</sup>

Encouraging a more consistent spread of landside access demand, by incentivising and facilitating increased off-peak port use, can spread demand for stevedore servicing. This smoothing of demand would reduce peaks and support consistent servicing effort for stevedores, supporting their ability to service trucks in consistent timeframes, and therefore reduce truck queuing. This benefits road operators who are less likely to be delayed, and stevedores who can manage terminal operating effort to a consistent demand level.

The Review Recommendations include measures to support 24/7 port access such as differential pricing of landside truck slots at Port Botany to encourage increased access to the port in off-peak times. The CBA suggests "shifting to a 24/7 operating port could result in some businesses and their supply chains extending their business hours to accommodate deliveries."<sup>90</sup>

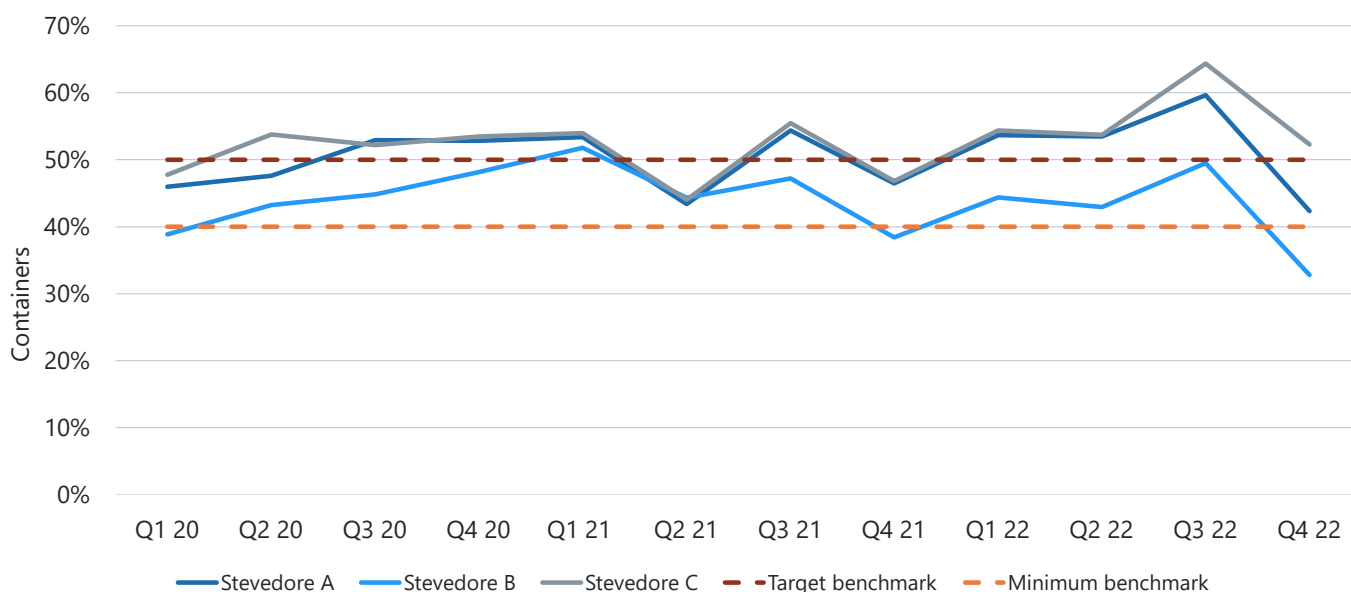
Analysis of port access data applies a peak weekday of 5am to 5pm in line with current port access peaks (previous analysis applied different time splits). The combined off-peak (weeknights 5pm to weekdays 5am) and weekends (Saturday and Sunday) periods are showing steady rates for the stevedores of around 40 to 50 per cent of total volumes but the weekends are utilised at a much lower rate. The combined off-peak and weekends benchmark accommodates the low rates of weekends use and is set to encourage an overall shift to increase access in these off-peak periods.

<b>Stevedore Benchmark 4</b>	<b>Target Benchmark</b>	<b>Minimum Benchmark</b>
<b>Percentage of containers moved during off-peak and weekends</b>	50% during off-peak	40% during off-peak

<sup>89</sup> Castalia 2022, Cost-Benefit Analysis of PBLIS Performance, Sydney, NSW, p. 23

<sup>90</sup> Castalia 2022, Cost-Benefit Analysis of PBLIS Performance, Sydney, NSW, p. 35

**Figure 21: Percentage of containers moved during off-peak and weekends – Stevedore Benchmark 4**

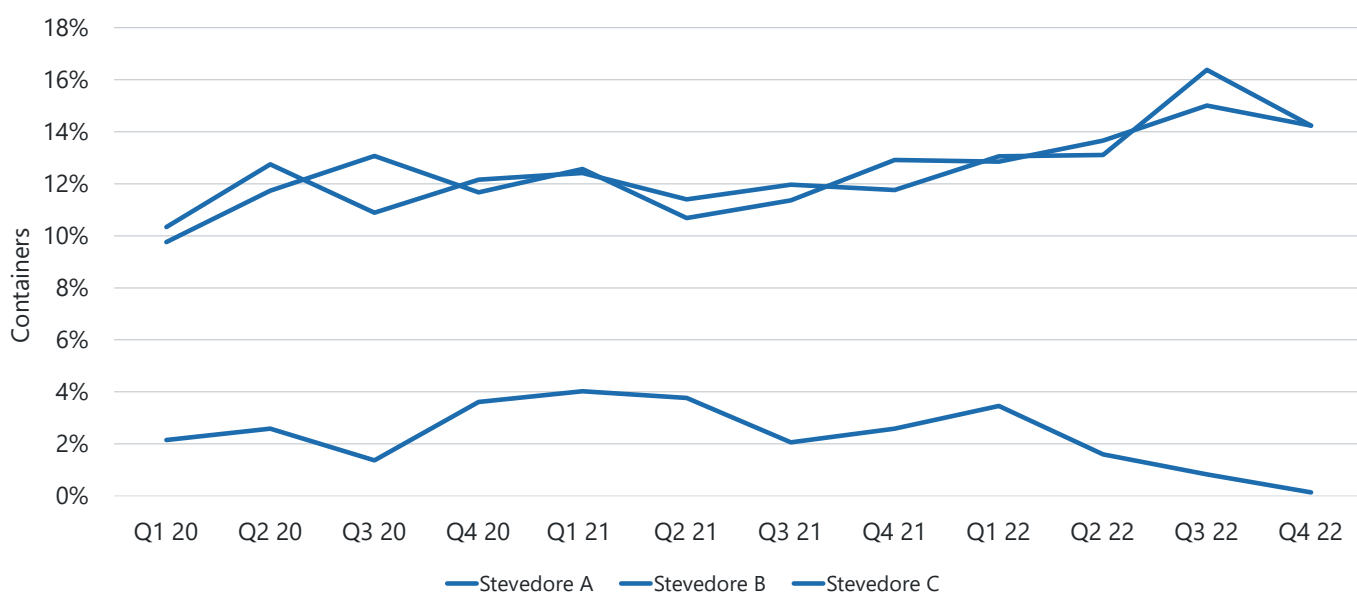


Source: Transport for NSW

### Stevedore Measure 3 – Containers moved during weekends

While a combined off-peak and weekends benchmark is suitable, it will also be useful to measure the rates of weekend port access as this is currently the least used time of the week.

**Figure 22: Percentage of containers moved during weekends – Stevedore Measure 3**



Source: Transport for NSW

#### **Stevedore Measure 4 – Average percentage of slots used during peak**

This performance measure shows the percentage of available slots used during peak periods. Un-used slots are not necessarily a negative outcome and to ensure no perverse outcomes a benchmark is not applied. However, there is very high demand for truck slots during the peak weekday time zones and carrier feedback is consistent that they have difficulty accessing the number of slots they would like to during this time. Therefore, un-used slots in peak times are more likely a result of operational reasons and booking system usability, rather than a lack of carrier demand and can provide important operational insights.

Currently under the PBLIS rules stevedores are required to make a minimum of 54 slots available for each time zone (averaged across the week to accommodate different operating models). Some stevedores also use stack runs (outside of the PBLIS rules), which provide bulk access to containers for some carriers in addition to the PBLIS slots to meet operational requirements.

Due to the complexity of factors that are relevant to slot allocation and use, not all categories of slot use are included in this measure.

For this stevedore performance measure, used slots in a time zone include:

- The number of slots booked and then used for a truck trip whether the truck arrives on time or is a late arrival (but still within the PBLIS service arrival timeframe).

Un-used slots for this measure include:

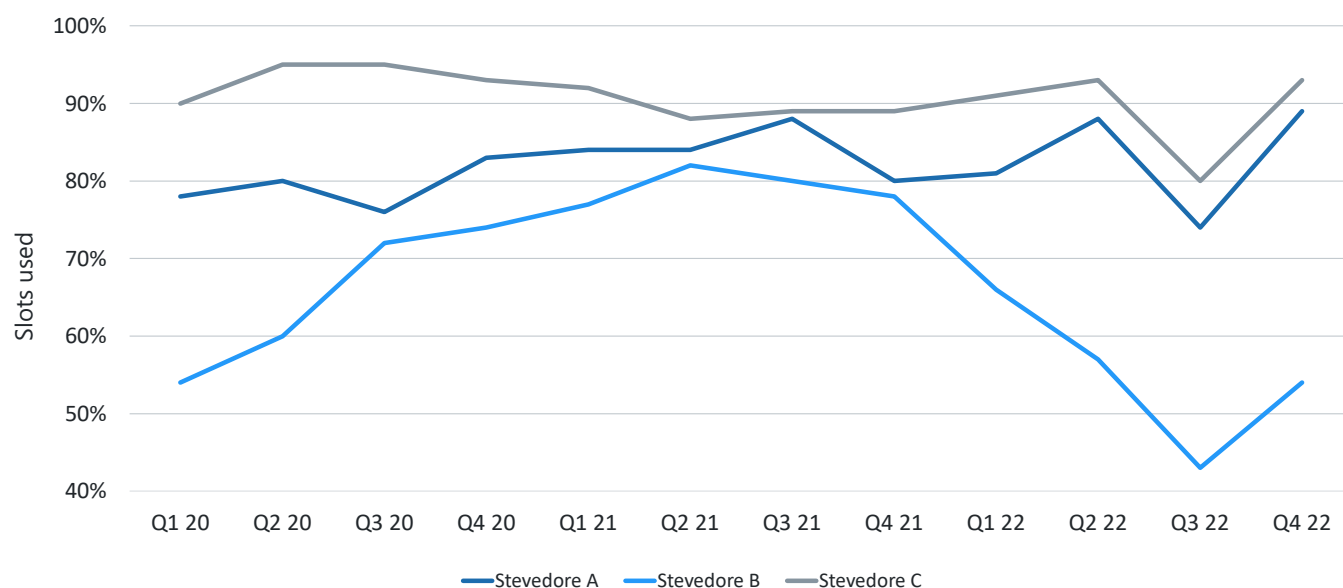
- Available slots that were never booked by a carrier – while the allocation of extra slots is not a negative, this is covered to capture slots allocated to either imports or exports during peak times that are not required to meet demand.
- Cancelled slots when a stevedore cancels a booked slot for reasons such as the container not being available (PBLIS penalty applies).
- Withdrawn slots by stevedore prior to being booked by a carrier.

Data that is not included as part of this measure, as these are the result of carrier decision making:

- No-shows when a carrier does not arrive for the time zone (PBLIS penalty is applied) – this can be the result of unexpected circumstances meaning the carrier cannot use the slot, or carriers who make bookings and then do not return slots they know they won't use (slot hoarding).
- Listed slots which are booked and then returned in line with the PBLIS rules but have not been re-booked by another carrier, potentially because the rules allow returns close to the slot time without penalty. Listed slots can also occur when vessel schedules change and containers expected to be available are delayed.

A small number of un-used slots is an expected operational outcome, but larger numbers can be an indication of un-used capacity at the terminal, including issues such as slot hoarding by carriers.

**Figure 23: Average slots used during peak – Stevedore measure 4**



Source: Transport for NSW

## Carrier Benchmarks

Over 300 container carriers of varying sizes access the port each year. The carrier benchmarks will be applied to each individual carrier and published. In order to illustrate PBLIS performance levels across the carriers, and manage the large volume of data, the carriers are divided into large, medium and small groups and 2021 data is used.

The large category includes carriers that move more than 5,000 containers per year, medium carriers between 1,000 and 5,000 containers per year and small carriers under 1,000 containers per year. In 2021 the large category includes 35 carriers, medium 83 and small 207, with 325 carriers in total. That year the large carrier group moved 64 per cent of total volumes, the medium group 27 per cent and the small group 9 per cent.

For the avoidance of any confusion, these carrier size groups are being used to illustrate current performance levels only, they are not relevant for the Performance Scheme. Note also that this data set is not a complete reflection of port container movements as it does not include all stack runs and some other container movements. Complete data is required to implement the Performance Scheme.

### Carrier Benchmark 1 – Average on time arrival all time periods

- Target Benchmark: 96%
- Minimum Benchmark: 93%

Carrier on-time arrival (also referred to as carrier service level) is when a truck arrives on time for a booking with the appropriate truck configuration for the booked container/s. Carriers considered to have not arrived on time include those that arrive late and incur a late arrival penalty but are still serviced by the stevedore during the extended arrival period (30 minutes after the end of the time zone) and no-shows that do not arrive for a booking. The

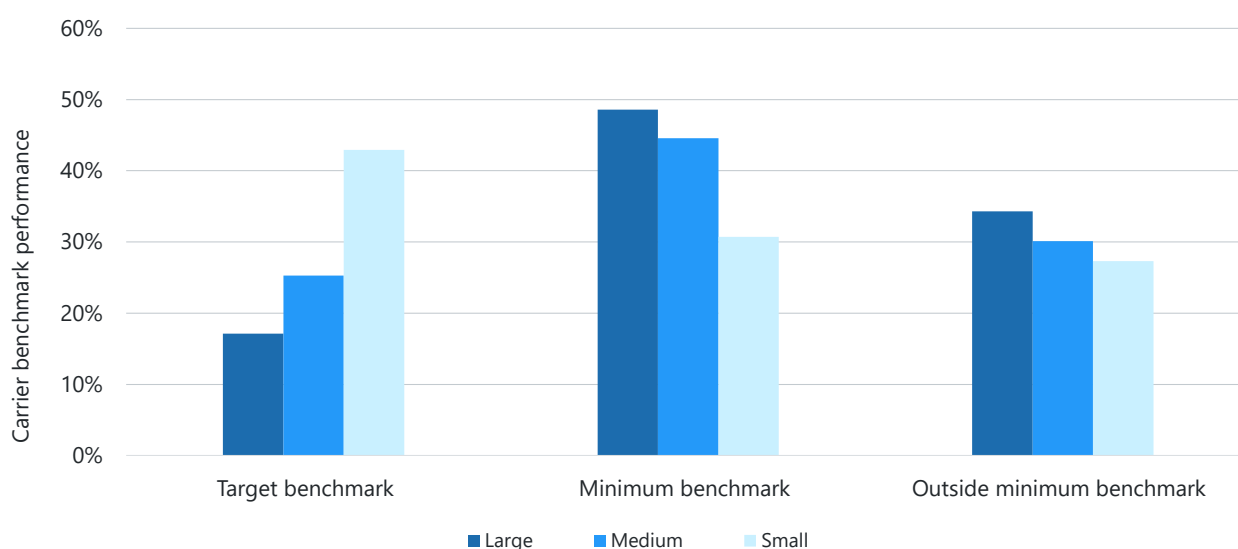
percentage of on time arrivals demonstrates the carriers' ability to comply with the one hour time frame for arrival at the terminal.

Carrier scheduling is usually arranged to arrive on time to ensure the truck is serviced by the stevedore and to avoid a PBLIS penalty. Trucks that arrive after the extended arrival period after the end of the time zone do not have to be serviced by the stevedore. Various factors including traffic congestion and performance in other parts of the supply chain (such as empty container parks and stevedore delays on a prior trip) can contribute to the arrival time performance of a carrier.

Carrier Benchmark 1	Target Benchmark	Minimum Benchmark
Average on time arrival	96%	93%

Example analysis using 2021 carrier on time arrival data shows the percentage of carriers in each group that meet the Target and Minimum Benchmarks, and those that are outside of the benchmarks.

**Figure 24: Average carrier on-time arrival – Carrier Benchmark 1**



Source: Transport for NSW

Carrier group	Meets Target Benchmark 1 96%	Meets Minimum Benchmark 1 93%	Does not meet Minimum Benchmark 1	Total
Large	17	13	5	35
Medium	52	14	17	83
Small	133	41	33	207



## Carrier Benchmark 2 – Average slot bookings used

- Target Benchmark: 97%
- Minimum Benchmark: 93%

This performance measure shows how many slots a carrier books that result in a truck trip to the port. There is high demand for truck slots during weekdays and carrier feedback is consistent that they have difficulty accessing the number of slots they would like to during this peak time. Un-used slots in peak times likely indicates issues with the booking system rules or usability and carrier behaviour, rather than a lack of carrier demand.

Currently under the PBLIS rules stevedores are required to make a minimum of 54 slots available for each time zone in a day (averaged across the week to accommodate different operating models). Some stevedores also use stack runs (outside of the PBLIS rules), which provide bulk access to containers for some carriers, as well as PBLIS slots to meet operational requirements.

Under the PBLIS rules, road operators can book more slots than they need which may be done to ensure they have the slots to meet requirements, because the rules allow for the return of slots. However, this approach is at the cost of overall efficiency, as the ability to cancel slots creates administrative complexity for carriers who must constantly monitor the VBS to know if additional slots have been returned to the system. This can lead to under-utilisation of slots as road operators struggle to adjust operations at short notice and are disincentivised due to potential penalties applying.

Overbooking of slots is not unique to Port Botany but the PBLIS rules may exacerbate the issue given the inflexibility of arrangements. It is clear that a number of no-show slot outcomes are due to carriers not returning slots they did not plan to use.

For this performance benchmark used slots includes:

- The number of slots booked and then used for a truck trip whether the truck arrives on time or is a late arrival (but still within the PBLIS service arrival timeframe).

Un-used slots for this performance benchmark include:

- No-shows when a carrier does not arrive for the time zone (PBLIS penalty is applied) – this can be the result of unexpected circumstances meaning the carrier cannot use the slot, or carriers who make bookings and then do not return slots they know they will not use.
- Listed slots which are booked and then returned in line with the PBLIS rules but have not been re-booked by another carrier potentially because the rules allow returns close to the slot time.

Not included in this benchmark are:

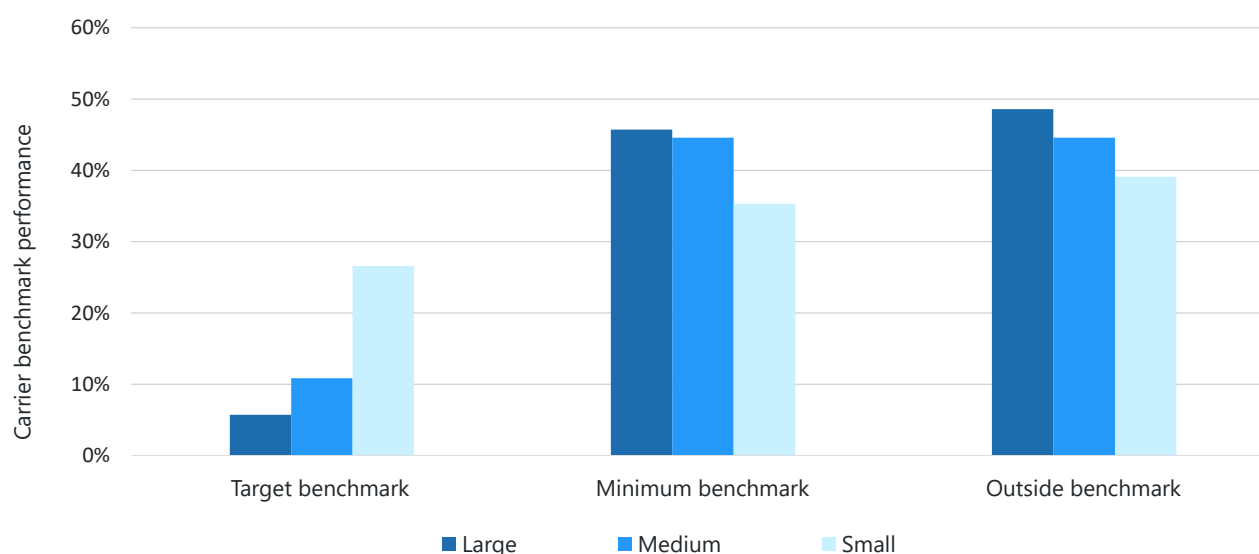
- Available slots that were never booked by a carrier.
- Cancelled slots when a stevedore cancels a slot for reasons such as the container not being available (PBLIS penalty applies).
- Slots withdrawn by a stevedore prior to being booked by a carrier.

A small number of un-used carrier bookings is an expected operational outcome, but larger numbers can be an indication of inefficiencies such as slot hoarding.

Carrier Benchmark 2	Target Benchmark	Minimum Benchmark
Average slot bookings used	97%	93%

Example analysis using 2021 carrier slot booking data shows the percentage of carriers in each group that meet the Target and Minimum Benchmarks.

**Figure 25: Average slot booking used – Carrier Benchmark 2**



Source: Transport for NSW

Carrier group	Meets Target Benchmark 2 97%	Meets Minimum Benchmark 2 93%	Does not meet Minimum Benchmark 2	Total
Large	2	16	17	35
Medium	9	37	37	83
Small	55	71	84	207

#### Carrier Benchmark 3 – Trucks not serviced (due to carrier)

- Target Benchmark: 0.1%
- Minimum Benchmark: 0.2%

When a truck arrives at a stevedore and is unable to be serviced this could be the result of something that is considered either the stevedores' (see **Stevedore Benchmark 4 - Average percentage of slots used during peak** above) or the carriers' responsibility. Instances that are considered the carriers' responsibility include the wrong truck configuration for the

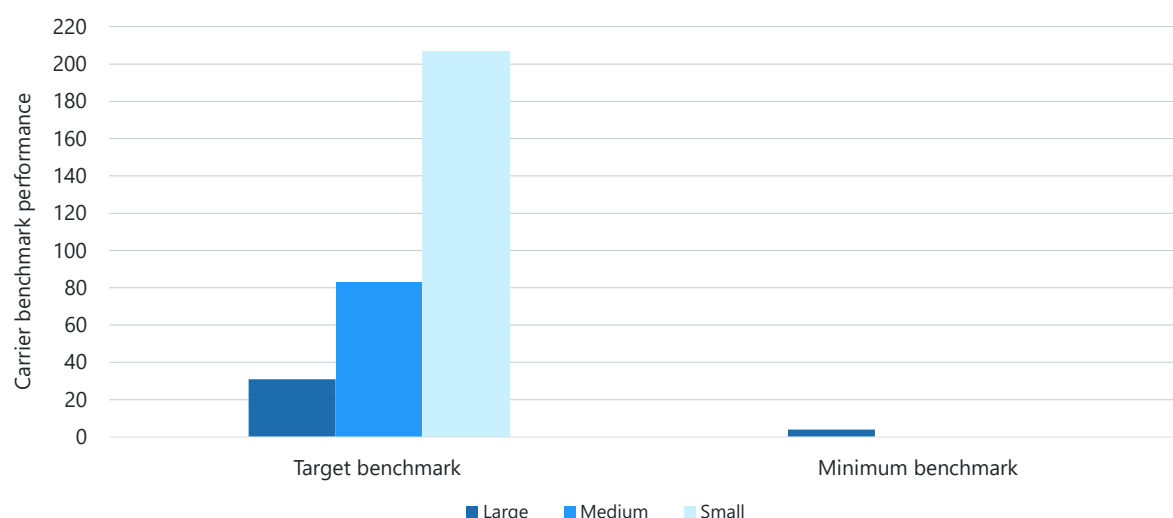
booking or another truck access issue. In these instances a PBLIS penalty is applied to the carrier and is paid to the impacted stevedore.

This performance benchmark provides an indication of how reliable the carrier is at arriving at the stevedore and being able to be serviced.

<b>Carrier Benchmark 3</b>	<b>Target Benchmark</b>	<b>Minimum Benchmark</b>
<b>Percentage of trucks not serviced due to carrier</b>	0.1%	0.2%

Example analysis using 2021 carrier slot booking data shows the percentage of carriers in each group that meet the Target and Minimum Benchmarks.

**Figure 26: Average trucks not serviced – Carrier Benchmark 3**



Source: Transport for NSW

<b>Carrier group</b>	<b>Meets Target Benchmark 3</b>	<b>Meets Minimum Benchmark 3</b>	<b>Does not meet Minimum Benchmark 3</b>	<b>Total</b>
<b>Large</b>	31	4	0	35
<b>Medium</b>	83	0	0	83
<b>Small</b>	207	0	0	207

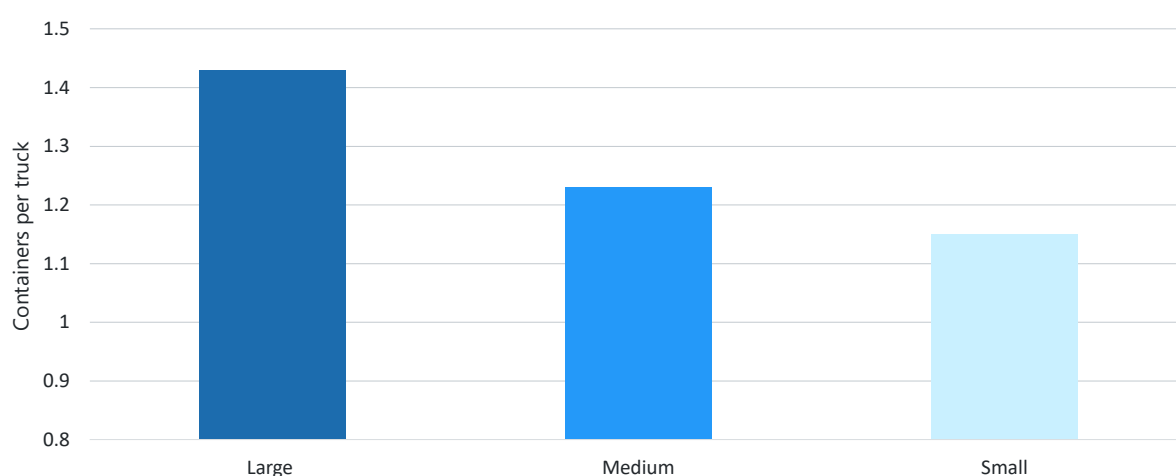
### **Carrier Measure 1 – Average number of containers per truck**

Truck or container density refers to the number of containers moved per truck trip, to or from the stevedore. Moving multiple containers per trip indicates efficient truck use and less truck trips overall to the port. It is noted that trucks are required to meet weight limits and when carrying heavy containers can be at full capacity carrying a single container.

Where possible, the movement of multiple containers per trip offers efficiency benefits for both the stevedore through servicing less trucks and the road operator through reducing the number of trips to the port. This also has the broader benefits of reducing traffic on roads within the port precinct and across Sydney's road network.

A performance benchmark for container density is applied to stevedores. However, for road operators it is recognised that density is closely related to fleet composition (size and specifications of trucks) and this may not be able to be adjusted in the short term or suit all business models. However, it is an important measure and information should be provided to track container density.

**Figure 27: Average container density for carriers – Carrier Measure 1**



Source: Transport for NSW

In 2021 carrier density data shows that seven carriers had an average truck density of more than two containers and 31 carriers had an average density of 1.5 to 1.99 containers, meaning that a proportion of their trips are carrying two or more containers. The majority of carriers also made some trips that carry more than one container but mostly handled one per trip.

### Carrier Measure 2 – Proportion of container movements by time of week

Truck spread measures the percentage of containers that are serviced within defined time periods throughout the week and is considered in detail in **Stevedore Benchmark 2 – Average truck density** above. The CBA found there has been a limited shift towards 24/7 port logistics chain operations, noting that factors outside of the port, such as local council regulations and the working hours of other parties in the supply chain, contribute to significant demand for peak hour slots.<sup>91</sup>

Encouraging a more consistent spread of landside access demand, by incentivising and facilitating increased off-peak port use, can spread demand for stevedore servicing. This

<sup>91</sup> Castalia 2022, Cost-Benefit Analysis of PBLIS Performance, Sydney, NSW, p. 23

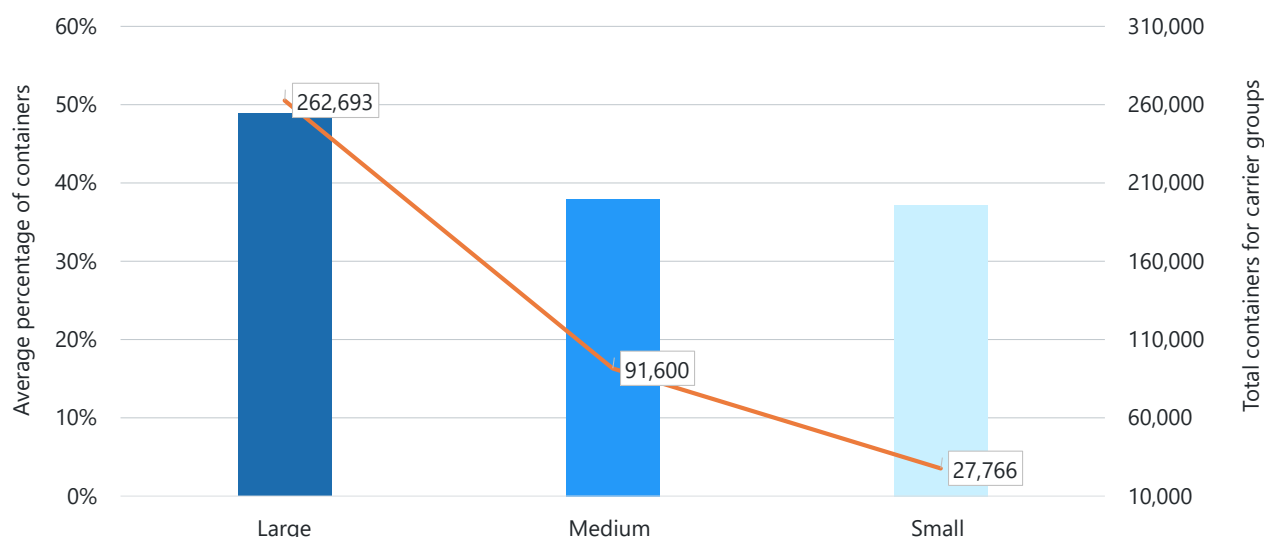
smoothing of demand would reduce peaks and support consistent servicing effort for stevedores, supporting their ability to service trucks in consistent timeframes and therefore reduce truck queuing. This benefits carriers who are less likely to be delayed and stevedores who can manage terminal effort to a consistent demand level.

The Review Recommendations include measures to support 24/7 port access such as differential pricing of landside truck slots at Port Botany to encourage increased access to the port in off-peak times. The CBA suggests "shifting to a 24/7 operating port could result in some businesses and their supply chains extending their business hours to accommodate deliveries."

The proportion of each carriers' container volumes that are moved during off-peak and weekends should be measured but a benchmark is not applied as not all carriers are required to operate across all times, to achieve overall port efficiencies. Carriers' peak port access should also be measured to ensure all carriers are covered. Some carriers operate exclusively during off-peak times, while others move the majority of their containers during peak times and some operate throughout the week.

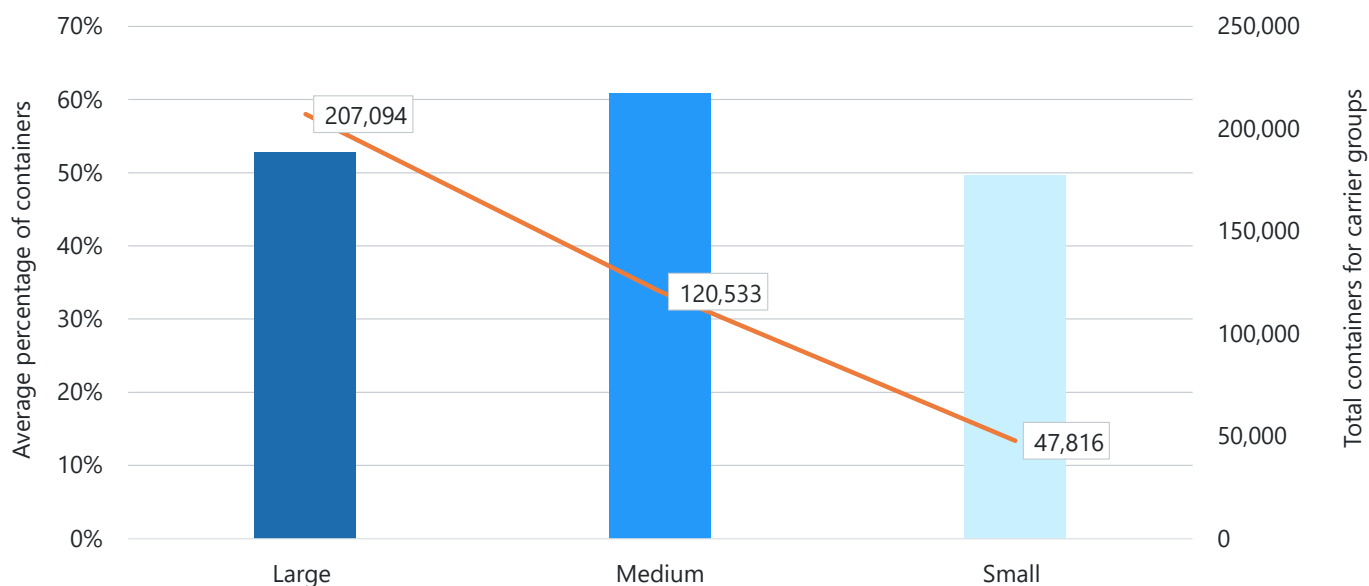
Due to the large volume of carrier data, 2021 data is used below as an example of this measure. The two graphs below show the average percentage of total carrier container volumes moved by time of week, separated into each carrier size group. For example, the medium carriers collectively moved a total of 91,600 containers during off-peak and weekend time zones, and on average the containers handled during this time represented around 38 per cent of total container volumes.

**Figure 28: Proportion of containers moved during off-peak and weekends – Carrier Measure**



Source: Transport for NSW

**Figure 29: Proportion of containers moved during peak – Carrier Measure 2B**



Source: Transport for NSW

### Stakeholder feedback

The Performance Scheme has been informed by feedback provided on PBLIS Option C17, which proposed transitioning away from the PBLIS rules to a non-regulated approach and other relevant feedback. Stakeholder feedback on removing the Regulation entirely was either strongly supportive of or strongly opposed to this option.

Stakeholders that supported removing the PBLIS rules raised the high costs involved with its administration, the rigidity of the regulatory approach, and that improvements to landside operational performance are not possible under the Regulation, because of the level of specificity of the details and the complicated and lengthy process required to implement any changes. It was also raised that terminals in other ports operate efficiently without the need for government regulation.

Stakeholders that supported retaining the PBLIS rules noted the approach has been effective in reducing congestion and has assisted in creating more procedural fairness for road operators. These stakeholders in many instances sought to hold stevedores to increased requirements by strengthening PBLIS requirements. Concerns were raised that moving away from PBLIS may result in performance standards at the port deteriorating and the issues PBLIS was designed to address reoccurring. The removal of the regulation that governs the balance of power between stevedores and road operators was a key concern, due to fears that this would provide stevedores with unconstrained power at the port landside interface.

Some stakeholders who supported retaining or strengthening PBLIS were nonetheless conscious of the high administrative burden and expressed support for arrangements which would both lower this burden and avoid the risk of congestion problems re-emerging.



### ***Other relevant feedback provided***

Some stakeholders that supported retaining the Regulation noted they present a complex set of detailed rules and that there can be a lack of awareness of the obligations by some road operators. To address this it was suggested TfNSW implement an education program to explain the PBLIS rules, the respective obligations of all parties and their operational application, and that this be open to all stakeholders.

This proposal has not been recommended as the introduction of an enhanced Performance Scheme and resultant transition away from the current PBLIS rules means that a specific education program on the PBLIS rules is not required as they will not be used in the long-term. TfNSW staff are available to explain the rules while they remain in place, and appropriate information on new requirements, like the Performance Scheme, are part of any regulatory change process and would be facilitated.

It was also suggested that PBLIS be retained but that it undergoes a full review every year to ensure it incorporates the latest technology and addresses any new and increasing costs or inefficiencies in the port supply chain.

The Performance Scheme is designed to better facilitate the introduction of new technology and support adaptation to emerging issues, as the arrangement provides significantly more flexibility than is available under the PBLIS rules. Appropriate review cycles should be applied to the Performance Scheme regulation in line with the Better Regulation Principles.

### **Net benefits**

- Incentivises performance improvements instead of penalising poor performance to support ongoing improvements in port-wide efficiency
- Increases flexibility for landside interface management to support innovation and faster adaptation to market changes and unanticipated events
- Significantly reduces administrative effort for industry, including for stevedores and transport operators, allowing these resources to be used in other parts of their business
- Reduces administrative effort for government by reducing PBLIS rules implementation effort.

## Key PBLIS changes

### 5.1.2 Take or pay carrier cancellations

#### **PBLIS Recommendation 2: Change carrier cancellation rules to take or pay**

Change the slot booking notice period and cancellation rules for carriers to a take or pay arrangement.

Carriers can currently cancel a slot booking up to 24 hours prior to the commencement of the time zone (Section 8 of the Mandatory Standards) without financial penalty. To cancel a booking, carriers must re-list the slot so it is available to be booked by another carrier.

A penalty is applied however if the slot is re-listed between 24 and 12 hours prior to the time zone and it is not re-booked by a carrier. A penalty is also applied if a slot is cancelled within 12 hours of the time zone (Section 9 of the Mandatory Standards). The penalty for carrier booking cancellations is \$50, plus the stevedore booking fee for the cancelled booking (Section 53(3) of the Regulation).

This means carriers can potentially hold bookings that are not needed and re-list them without penalty up to 24 hours prior to the commencement of the time zone (referred to as slot hoarding). This can result in wasted bookings if the slots are re-listed too late for another carrier to utilise them, which contributes to landside operational inefficiency.

Changing the carrier cancellation rules to a take or pay type arrangement provides a stronger incentive for carriers to reduce or eliminate slot hoarding compared with the current booking arrangements. Under this take or pay approach a carrier would incur a penalty for any booking re-listed up to 12 hours prior to the start of the time zone when the slot is not re-booked by another carrier.

This would effectively remove the free period through which a carrier can retain a booking up to 24 hours before the time zone starts and return it to the system without risk of penalty should it not be booked by another carrier.

This recommendation is designed to help address slot hoarding and is complemented by **PBLIS Recommendation 3: Facilitate no booking until discharge** which targets the mad minute<sup>92</sup>, together addressing the key inefficiencies with the existing booking approach.

#### **Stakeholder feedback**

Stakeholders that supported a take or pay approach noted it would simplify the current booking system for all parties and drive improvements in overall port efficiency through a reduction in slot hoarding. Stakeholders noted that certainty regarding service requirements and minimising unutilised slots creates efficiencies for stevedore operations through effective allocation of labour and equipment.

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<sup>92</sup> The current booking method results in what is colloquially known as the mad minute which is administratively inefficient. Slots for a 24-hour period are released two days prior and carriers compete simultaneously to book slots at their preferred times.

Stakeholders that did not support this approach provided the following feedback:

- That more leniency be provided for carrier cancellations, such as through reducing the cancellation timeframe without a penalty from 24 hours to 12 hours before the time zone commences
- That slot hoarding may not be occurring and that suggestions of slot hoarding do not take into account lulls in the number of vessels
- That it is not cost effective to hoard slots and that stevedores are reducing import slots during peak times.

Other feedback noted that this proposal should not be considered in isolation and that a holistic approach should be used to determine whether slot hoarding is a result of the way the current VBS is designed with designated slot drops and the subsequent mad minute giving carriers limited opportunities to obtain preferred slot bookings and leading them to take slots where they can.

An alternative stakeholder-proposed approach is a demand/supply model where carriers identify all import containers requiring collection upon vessel discharge along with their level of slot demand for export receivals. The VBS then applies rules related to carrier performance, volumes handled, and working hours indicated to then automatically allocate slots across the available operating time zones. Stakeholder expectation is that this approach would remove the mad minute and better align slot allocation with actual carrier need.

Other recommendations to address slot hoarding and the mad minute are covered in **PBLIS Recommendation 3: Facilitate no booking until discharge.**

### Net benefits

- Reduces instances of slot hoarding by setting a stronger price signal that encourages carriers to not overbook slots
- Supports efficient and equitable access to slots by increasing their availability
- Enables better planning and efficiency for carriers by increasing early slot availability and reduces their need to monitor for when slots are returned close to the start of time zones.

### 5.1.3 No booking until discharge

#### **PBLIS Recommendation 3: Facilitate no booking until discharge**

Enable stevedores to voluntarily implement a no booking until discharge system that allows container pick up booking once the import container has been discharged from the vessel.

A VBS is a system used by stevedore terminals to manage carrier bookings for container pickup and delivery. The VBS at Port Botany provides one-hour slots for truck arrivals to collect or deliver one container, with adjacent slots booked for collecting or delivering multiple containers per trip.

Currently the PBLIS rules require slots to be released by stevedores for booking at least two working days in advance. The free storage days provided before daily storage fees are

charged for imports are also covered and these arrangements reflect the operational processes in place when PBLIS was developed.<sup>93</sup>

Stevedores at Port Botany provide three days of free storage for containers unloaded from vessels in the terminal, commencing on the day all containers are unloaded from the vessel, which means road operators can access up to four free days of storage. Daily storage fees are applied after that time to incentivise carriers to pick up containers as soon as possible.

Carriers aim to pick up containers as soon as possible to provide their customers access to their goods and to avoid paying storage fees. Stevedores are incentivised to ensure containers can be removed from terminals as soon as possible to avoid terminal congestion and maintain efficient operations.

Carriers currently book slots based on when the container is expected to be available for pickup (estimated from the ship arrival schedule) or when it is scheduled to be delivered to the port for export. Under the current PBLIS rules, carriers can cancel slots 24 hours prior to the allocated time without penalty. They can also cancel slots without penalty between 24 hours and 12 hours prior to the slot time, provided another carrier books the slot after it is returned to the system.

There is very high demand for slots in peak time zones (weekdays, during the day), with more availability in off-peak times.

### **Mad minute and slot hoarding**

The current booking method results in what is colloquially known as the mad minute. This occurs when slots for a 24-hour period are released two days prior and carriers compete simultaneously to book slots at their preferred times. This is administratively inefficient as it results in overbooking of slots and gives rise to the practice known as slot hoarding, where carriers hold slots until the very last moment before a penalty applies. The practice of booking more slots than are required arises from carriers' wanting to accommodate potential ship scheduling changes and operational needs, with unneeded slots subsequently cancelled.

The current carrier booking cancellation rules<sup>94</sup> can mean slots in peak times are not used, as other carriers may not be able to take up released slots at short notice (between 24-12 hours before the start of the time zone). Some slots are also booked and not returned to the system despite not being required.

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<sup>93</sup> A working day is a day during which stevedore truck services were performed, or available to be performed for 12 time zones or more, under the Mandatory Standards.

<sup>94</sup> Bookings can be cancelled by re-listing in the booking system. Re-listing 24 hours before the time zone, or between 24 and 12 hours before the time zone if another carrier takes up the slot, does not incur a penalty.

The PBLIS Behavioural Research shows that PBLIS has not been effective at reducing slot hoarding, noting:

- Road operators book more slots than they need to mitigate risks and ensure they have the slots needed to meet operational requirements at the cost of overall port efficiency
- Overbooking of slots is not unique to Port Botany and it cannot be suggested PBLIS is responsible for this behaviour, although it may exacerbate it
- The ability to cancel slots creates administrative complexity as road operators must constantly monitor the VBS to check if additional slots have been returned to the system
- Operators are disincentivised to take up newly available slots due to potential penalties that apply within this short window of time. This results in under-utilisation of slots as road operators struggle to adjust operations at short notice.<sup>95</sup>

The current VBS systems used at Port Botany are not transparent and lack clarity regarding the total volume of slots allocated for each time zone, their booking status and automatic notifications for carriers. A more transparent and user-friendly booking system would support improved industry relationships by providing information about booking availability for carriers and reducing the administrative effort for users.

## Stack runs

Stevedores also provide a stack run option for carriers to move large volumes of containers. Stack runs are arranged based on a commitment by the road operator to move a set number of containers over a specified time period, usually a number of hours. Road operators are provided with any container destined for them, rather than specifying which container they want to pick up, as occurs under PBLIS.

These containers are staged through the road operator's yard where they are unloaded from the stack run truck and are then delivered to the customer on another truck trip. This differs from road operators who pick up specific containers from the port and deliver them direct to a customer.

Stack runs provide a means of addressing slot booking system issues that would make these movements difficult to schedule. These are serviced outside of the PBLIS rules, and therefore entirely avoid the mad minute booking process and PBLIS penalties.

As noted in the PBLIS Behavioural Research, efficiencies gained using stack runs can be negatively impacted by the focus on truck movements under PBLIS. Road operators reported that "stevedores often reassign resources from stack runs towards PBLIS trucks, therefore reducing the efficiency of stack runs and Direct Return Empties".<sup>96</sup>

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<sup>95</sup> Deloitte 2022, PBLIS Industry Behavioural Research, Sydney, NSW, p. 24

<sup>96</sup> Deloitte 2022, PBLIS Industry Behavioural Research, Sydney, NSW, p. 47

## Port of Melbourne

Stakeholder feedback about the approaches to slot booking systems at the three Port of Melbourne stevedores DP World, Patrick Terminals and VICT (Victoria International Container Terminal) was that they use different methods, or different combinations of methods. These include the following approaches:

- PBLIS type approach where slots are released most days and carriers compete at the same time to make bookings during the mad minute
- No booking until discharge which allows bookings only when the container is unloaded from the vessel and therefore avoids the mad minute (see detail below)
- Stack runs which exist outside of slot booking systems and allow for operational efficiencies when moving large volumes of full or empty containers – operators make an arrangement with the stevedore that usually covers the number of containers, number of trucks and time period
- Bulk runs approach which involves carriers notifying a stevedore in advance of the import containers for pick up. The stevedore then pre allocates the required truck slots. These carriers are able to avoid the mad minute booking process.

### No booking before discharge approach

Stevedores should be able to voluntarily implement a no booking until discharge system at Port Botany. This approach was not anticipated when the Mandatory Standards were drafted, and amendments are required to accommodate this.

Examples of this approach in other ports are detailed in the Port Comparison Research and include VICT at the Port of Melbourne, DP World at the Port of Brisbane, and at the two terminals at the Port of Manila that use the 1-stop VBS Advanced Booking system.<sup>97</sup>

Under this system, the container must have been discharged at the terminal (i.e. been unloaded from the vessel) before it can be booked for pick up. This means that import containers become available for booking over the time it takes to unload the entire vessel, not all at one time (as occurs under the current slot release booking method).

- In preparation for container pick up under the Advanced Booking system, pre-planning can occur for all parties. The carrier can upload a list of upcoming import and export containers to the booking portal and then monitor the status of the import containers at the terminal (for example, expected time to be landed, if a container has been landed, and which module a landed container is placed in).
- The carrier can attach additional information to the container such as a group code. This can be useful if some containers are all going to the same destination or need to be collected first.
- The terminal can see the information uploaded by the carrier and can use this to locate containers which have been grouped in one part of their terminal, to allow loading from a single module.

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<sup>97</sup> 1-Stop is a port logistics IT provider and their VBS 'Advanced Bookings' module is in use at several ports globally and in Australia, including VICT in Melbourne and DP World in Brisbane.



- The terminal can submit the estimated time of discharge for containers to the VBS. For registered containers, this information will appear in the carrier's container list, indicating when they will likely be able to book the container to a slot.

All of these processes have the potential to be automatically advised via alerts from the VBS. The carrier can book a container directly to an available slot when containers are discharged, and depending on slot availability, the carrier can choose to pick up multiple containers within a single module at the same time or also drop off containers on the same trip to maximise productivity.

In Melbourne, VICT submits estimated times of discharge for import containers to the VBS every 30 minutes, indicating to carriers when they will likely be able to book their containers to a slot. Advanced notice is also provided by DP World in Brisbane.<sup>98</sup> Both terminals currently provide three free days of storage, but with varying starting times. At VICT, if the container is unloaded before 6.00am, free storage starts that day, and if after 6.00am, it starts the next day. At DP World in Brisbane, the free storage days start the day after vessel arrival.

Stakeholders have advised that a best pick function has recently been introduced at VICT. Under this approach, when a carrier has booked multiple containers the stevedore system can automatically suggest another container destined for that carrier that is more conveniently located (e.g. closer location in the same stack) and the carrier can choose to accept it, with both parties benefiting from more efficient service.

This booking approach can support efficient stevedore operations, particularly those with automated equipment such as stacking cranes and module split yards with dedicated equipment, and more generally, by potentially reducing double handling of containers and by allowing better planning of where to place containers in their terminal.

A benefit for carriers is that they only book slots when the containers are available and not in expectation of when the containers will be ready. This reduces wasted slots and avoids slot hoarding and rescheduling. Early notification of expected discharge times also supports equitable carrier access to slots. In Brisbane, no issues with the availability of slots after landing in the yard were reported.

A potential disadvantage for carriers in a busy terminal is that once a container has been discharged, a booking slot may not be immediately available, especially in peak periods, as containers released earlier are likely to have already been booked in. This could mean that the time between the container being ready and the next available slot is longer than preferred.

Another disadvantage might be the removal of the flexibility that exists in the current system where slots are booked based on preferred time zones rather than specific containers. At present, if a container is not available for collection it can be swapped for another anywhere in the terminal, or a higher priority container can be swapped for a container that was previously booked.<sup>99</sup>

It is expected however that the overall efficiency benefits for carriers would outweigh any disadvantages.

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<sup>98</sup> Advisian 2022, PBLIS Comparison Study, Sydney, NSW, p. 15

<sup>99</sup> Advisian 2022, PBLIS Comparison Study, Sydney, NSW, p. 14

This recommendation is designed to target the mad minute and address slot hoarding. It is complemented by **PBLIS Recommendation 2: Change carrier cancellation rules to take or pay** which will also address slot hoarding, together addressing the key inefficiencies with the existing booking approach.

### Stakeholder feedback

Stakeholders that supported the introduction of a no booking before discharge approach noted it would improve efficiency for both carriers and stevedores. Stakeholders also pointed out that the experience of this system in other Australian ports reduced unnecessary carrier trips for import containers and improved slot utilisation.

Other feedback included:

- That this approach should be considered as part of a broader analysis of better arrangements for slot bookings, including potentially at a national level.
- That a more detailed assessment of costs should be considered, including whether any additional costs would be passed onto road operators.
- That this approach would eliminate slot waste and meant that the two-tiered (A and B Class) approach to carriers would not be required.
- Feedback was also provided that slot demand for a carrier can vary between vessels and that the current slot booking system can limit carriers' ability to scale up for increased demand or achieve maximum utilisation of their road transport equipment.

Stakeholders also noted that stack runs are currently required to supplement the operation of PBLIS arrangements under the current VBS system, as without them the current system would be unlikely to cope with slot demand. Stakeholders expected the no booking before discharge approach would reduce this need by better aligning slots with container demand.

An alternative stakeholder-proposed approach is a demand/supply model where carriers identify all import containers requiring collection upon vessel discharge, and their level of slot demand for export receivals. The VBS then applies rules related to carrier performance, volumes handled and working hours indicated to then automatically allocate slots across the available operating time zones. Stakeholder expectation is that this approach would remove the mad minute and better align slot allocation with actual carrier need.

Stakeholder feedback about the experience in other ports included that the three terminals at the Port of Melbourne have different booking systems. It was noted that some of the approaches in place there had beneficial efficiency outcomes. Challenges were noted, as carriers needing to know how to manage their requirements under the different systems.

Some stakeholders raised concerns about the no booking until discharge approach and proposed solutions for these concerns including:

- That the change may result in a delay in being able to book a slot on the first free storage day of availability. They recommended that any implementation of this approach consider ways to preserve the current amount of free storage days provided to carriers.

- The need to review the VBS and booking rules to better accommodate multiple containers and two-way loading. They noted it may be more difficult for carriers to book an import slot if they need to wait until the box is unloaded, while export slots can be booked well in advance, potentially affecting the ability to maximise truck utilisation through two-way loading.
- That if containers are made available for booking when discharged, this may occur during times a carrier is not operating (e.g. during the night for carriers that do not operate 24/7 or who have coordination staff working during weekday 9-5 business hours).

Other stakeholders wanted to better understand the rationale for moving to no booking before discharge. Some noted differences in the markets between Port Botany and other ports – including differences in VICT and DP World Brisbane’s approaches to container grouping, dual runs and notification systems for vessel arrival and container discharge.

In the Mandatory Standards, a working day is a day during which stevedore truck services were performed, or available to be performed, for 12 time zones or more. This definition is relevant to PBLIS rules such as when slots are released for booking and the application of storage charges. Some stakeholders requested changes to the working day application, with feedback provided that weekends and public holidays should be free from any slot drops so that road operators don’t need to make bookings on those days.

### **Net benefits**

- Improves slot booking efficiency by targeting the mad minute, where carriers compete simultaneously for slots by releasing slots in a staggered way as ships are unloaded. Booking process efficiency could be further enhanced by implementing technology that provides automatic notifications of container availability and pre-loaded slot preferences which could be allocated based on a best available basis
- Improves transport operator scheduling efficiency by removing slot hoarding as carriers can book containers that are available when they are unloaded, removing the practice of over-booking and then cancelling slots later
- Improves stevedore terminal efficiency by facilitating better pre-planning for container locations and reducing double handling
- Reduces administrative effort for carriers by removing the need for continual monitoring of the VBS to check for slots that other operators return to the system, and also removes the need for rescheduling import collections when vessel times change.

## 5.1.4 Staggered time zones

### PBLIS Recommendation 4: Staggered time zone commencement

Facilitate the optional commencement of truck servicing time zones every half hour instead of every hour.

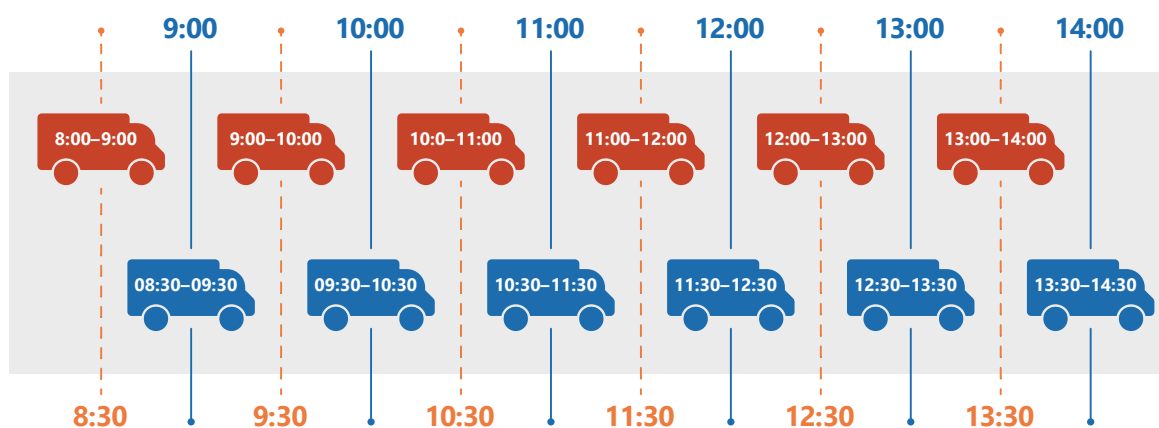
Stevedore terminals currently allocate 60-minute time zones for truck bookings which commence every hour. Trucks can arrive at any time within their booked time zone and once they arrive, the stevedore servicing TTT timeframes commence (45 minutes TTT for one container and an additional 20 minutes for each additional container).

Truck operators ensuring they meet their time zone can result in large numbers of trucks arriving at the start of time zones, which causes truck queues waiting to enter the terminal and congestion inside the terminal. This peak in servicing demand is then followed by lower demand in the second half of the time zone, with fewer trucks arriving. Average truck arrivals, as advised by a stevedore, show that 50 per cent of trucks arrive in the first 15 minutes of the time zone. The remaining 50 per cent are then spread over the next 45 minutes of the time zone, decreasing significantly towards the end.

Given the strong incentives for trucks to arrive at the start of the time zone, staggering the commencement is expected to reduce the size of truck peaks and result in a more even spread of vehicles to be serviced across the time zone, reducing congestion and benefiting road operators and stevedores.

This recommendation would require an update of the Mandatory Standards to allow time zones to commence every half hour, but would not change the 60-minute length of each time zone or the number of slots released each day. Stevedores would have the option to continue the current practice of releasing time zones each hour. Commencing time zones every half hour would result in trucks booking a slot, for example, in a 9.00am to 10.00am time zone or a 9.30am to 10.30am time zone, as shown below.

**Figure 30: Staggered time zones commencing every 30 minutes**



Source: Transport for NSW

## Stakeholder feedback

In May 2022, TfNSW consulted with industry (separately to this Review) on the proposal to change the Mandatory Standards to allow the release of truck servicing time zones every half hour. Consideration of this change was commenced in advance of finalising this Review, so the efficiency benefits for stevedores and road operators could be realised sooner, and to minimise any impacts of current construction at the port. However, as this change has not been finalised, it was raised by stakeholders in this Review.

Stakeholders acknowledged there were congestion issues at the start of the 60-minute time zones and that the benefits of reducing this congestion were apparent. Concerns were raised by transport operators regarding the impact this change would have on other requirements under the Mandatory Standards. These concerns have been considered and addressed where possible:

- In relation to the three free days storage period, a time zone that commences at 11.30pm would be considered to be included on that day, even if the truck arrives in the second half of the time zone, avoiding the application of storage fees in those instances.
- Other issues raised have been investigated in detail and are not able to be accommodated, as either the costs outweigh the benefits due to the systems changes required (manifesting across three subsequent times zones rather than two), or they are outside the scope of the Mandatory Standards (functionality of the stevedore VBS for transport operator bookings). While the operationality of the stevedore VBS is out of scope of the regulation, recommendations are made to improve the slot booking approach and address issues raised. These are **Recommendation 2: Change carrier cancellation rules to take or pay** and **Recommendation 3: Facilitate no booking until discharge** to address slot hoarding and the mad minute.

## Net benefits

- Improves port landside road efficiency by smoothing out truck arrivals to support improved stevedore operations by reducing demand peaks.

### 5.1.5 Differential pricing

#### PBLIS Recommendation 5: Differential pricing of time zones

Stevedores should consider applying different prices to truck time zones to encourage 24/7 landside port access.

Stevedores at Port Botany currently price landside fees at the port equally across all time zones. Adopting a differential pricing model would encourage a more consistent spread of landside access demand by incentivising increased off-peak port use. This smoothing of demand would reduce peaks and support consistent servicing effort for stevedores supporting their ability to service trucks in consistent timeframes, and therefore reduce truck queuing.

Differential pricing is an approach where prices for the same product or service differ based on factors that drive demand, such as time of purchase or use. This approach is also called

flexible pricing or variable pricing. There are various methods for applying differential pricing, including setting charges at different rates (e.g. for peak and off-peak times) and market mechanisms such as auctions, which allow the market to determine different prices according to conditions and varying demand.

The CBA found there has been a limited shift towards 24/7 port logistics chain operations, noting that factors outside of the port, such as local council regulations and the working hours of other parties in the supply chain, contribute to significant demand for peak hour slots.<sup>100</sup>

The introduction of differential pricing of landside truck slots at Port Botany, with peak periods priced higher than off-peak periods, would encourage increased access to the port in off-peak times and support 24/7 landside operations. The CBA suggests “shifting to a 24/7 operating port could result in some businesses and their supply chains extending their business hours to accommodate deliveries.”<sup>101</sup>

It is expected that the application of a differential pricing approach would be revenue neutral (not result in significant changes to overall revenue), as it would likely involve a combination of higher pricing for peak period slots, offset by discounted pricing for off-peak slots. This is because stevedores already operate 24/7 (or 24/6) and there is significant off-peak capacity available before there is any upward pressure on costs.

There are no regulatory barriers to the application of differential pricing. Voluntary adoption by stevedores of a differential pricing approach is encouraged.

### **International examples of differential pricing**

The Port Comparison Research detailed how differential pricing for truck slot times is used in the Ports of Los Angeles and Long Beach in the United States, the Port of Manila in the Philippines and the Port of Tauranga in New Zealand.

The Ports of Los Angeles and Long Beach apply an additional fee for port access during peak periods, which helps to decrease congestion during peak hours. This fee is provided to terminals to cover the cost of operating the landside interface in off-peak periods. The Port of Tauranga applies peak and off-peak rates to its landside container handling fees.

The Port of Manila operates a differential pricing approach where the two terminal operators allocate four categories of slots differently throughout the day and across the week. They include different prices, free slots in off peak times and rebates on Sundays. An additional incentive is provided for bookings that include both an export/import. Rebates are credited to the transport operators pre-paid account after each transaction is completed.

The Port Comparison Research also noted that VICT in Melbourne had consulted with industry on a differential pricing model where weekend slots would be offered at a discounted rate to encourage off-peak bookings. The feedback indicated it was unlikely that the discount they offered would be a high enough incentive.<sup>102</sup>

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<sup>100</sup> Castalia 2022, Cost-Benefit Analysis of PBLIS Performance, Sydney, NSW, p. 23

<sup>101</sup> Castalia 2022, Cost-Benefit Analysis of PBLIS Performance, Sydney, NSW, p. 35

<sup>102</sup> Advisian 2022, PBLIS Comparison Study, Sydney, NSW, p. 120



Implementing an auction method would be complex to develop and implement between relevant industry parties, with measures to prevent manipulation of an auction market also needing to be considered. Considering the current level of market maturity, the relationships between parties in the supply chain, and the potential for manipulation, an auction approach is not recommended.

### Stakeholder feedback

Stakeholders that supported a voluntary differential pricing approach noted:

- The potential benefits of reduced congestion by improving truck spread across the 24-hour period.
- That broader supply chain behaviour (where other businesses do not operate 24/7) might outweigh any cost differential and limit the effect of these measures.
- The incentive would be appreciated by road operators that are already operating in off-peak times in support for their efforts to support a 24/7 port.

Stakeholders that did not support a differential pricing approach noted:

- Concerns that it would lead to higher prices during peak times.
- Other parts of the supply chain (e.g. empty container parks and intermodal terminals (IMTs)) that operate 9-5 on weekdays limit carriers' ability to access the port in off-peak times, particularly those without capacity to stage containers and that the port should accommodate this.
- The potential for off-peak times to become congested.
- Some smaller operators may have limited capacity to move to 24/7 operations, for example, due to heavy vehicle fatigue management requirements or the cost of labour (overtime rates) and that it may be difficult to source labour at night and on weekends.
- Concerns about full-capacity 24/7 port operations negatively impacting on residents around the port.

An alternative to differential pricing proposed by stakeholders was to apply different penalty rates as a method for incentivising truck spread throughout each day and during the week. They proposed heavier penalties be applied during peak times and reduced penalties for night-time operations, to incentivise increased use of night-time capacity. However, as penalties are not incurred for all truck events, unlike differential prices, this is unlikely to have a significant impact on influencing landside access behaviour.

Stakeholders also noted that a two-tiered VBS (with different prices and parameters for peak and off-peak times) had been previously contemplated in the 2008 IPART Report but was at the time considered overly complex.<sup>103</sup>

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<sup>103</sup> IPART 2008, Reforming Port Botany's links with inland transport, Sydney, NSW, pp. 141-144

## Net benefits

- Encourages increased off-peak port access to support full capacity 24/7 port operations
- Smooths landside demand, reducing servicing delays in peak periods to improve overall port productivity and efficiency
- Encourages innovation, as price signals may encourage transport operators and other businesses to consider changes to operations to access the port in off-peak times
- Expected revenue-neutral outcome, as higher revenue from landside servicing during peak times should fund off-peak discounts and support resourcing of off-peak times
- Improves utilisation of stevedore landside infrastructure in off-peak times.



## Other PBLIS changes

### 5.1.6 Remove broad stevedore charges regulation power

#### **PBLIS Recommendation 6: Remove the broad power for regulating stevedore charges**

Remove the broad Regulation power for regulating stevedore charges, and remove associated PBLIS stevedore charge notification and government assessment requirements.

Stevedore charges are applied to landside transport operators and passed on to cargo owners. This represents a recent shift in the charging structure of stevedores nationally, as charges were previously predominantly applied quayside (to ships), but are now also applied to landside transport operators. Stevedore charges on the landside are passed through to cargo customers and can have administration charges applied. Depending on payment terms, this can have a cash flow impact on transport operators until they are paid by their customers (cargo owners).

Neither transport operators nor cargo owners directly determine which stevedore will handle a container at the port. Cargo owners contract directly with shipping lines, and shipping lines choose the stevedore they use, so transport operators are unable to choose a stevedore with lower charges or negotiate their own individual terms of access. The Productivity Commission has noted “from the perspective of both cargo owners and transport operators, each container terminal operator is a monopolist in the supply of landside container handling services.”<sup>104</sup>

National Voluntary Guidelines (NVG) for Landside Stevedore Charges were developed by the National Transport Commission and endorsed by the NSW Government in April 2022. The NVGs establish clear and consistent notification protocols for changes to charges levied on transport operators by stevedores. They have been adopted by the stevedores and the states and territories and require landside charges to be changed no more than once a year, with notices to be provided to industry 60 days and 30 days prior to a proposed change, along with a rationale for price increases.

#### **Productivity Commission Inquiry**

The Productivity Commission completed an Inquiry Report, *Lifting productivity at Australia’s container ports: between water, wharf and warehouse* published in January 2023 which considered stevedore charges and found that stevedores “have significant market power over landside operators and have exercised it since at least 2017.”<sup>105</sup> It also found that there are limitations to the National Voluntary Guidelines because “uptake is not guaranteed and container terminal operators that do take part may not strictly adhere to them.”<sup>106</sup>

The Productivity Commission has recommended a national response to ensure regulatory consistency for container terminal operators as most operate in multiple jurisdictions and

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<sup>104</sup> Productivity Commission 2022, *Inquiry into Australia’s Maritime Logistics System Final Report*, p. 198

<sup>105</sup> Productivity Commission 2022, *Inquiry into Australia’s Maritime Logistics System Final Report*, p. 181

<sup>106</sup> Productivity Commission 2022, *Inquiry into Australia’s Maritime Logistics System Final Report*, p. 207

because the state and territory governments individually are not positioned to implement or enforce a national code. It is also noted that the “ACCC as a regulator (with enforcement capabilities) already monitors container terminal operators through a direction from the Treasurer and has developed knowledge and understanding of the maritime logistics system”.<sup>107</sup>

The ACCC monitors the process, costs, and profits of container terminal operators at the ports of Adelaide, Brisbane, Burnie, Fremantle, Melbourne and Sydney, under Part VIIA of the *Competition and Consumer Act 2010* (Cth). The ACCC reports annually on this monitoring.

The Productivity Commission has recommended that:

“Treasury should develop a mandatory container terminal operator code that would be administered and enforced by the ACCC. The code should include that:

- all landside fees should only be changed once a year, with container terminal operators required to simultaneously notify a regulator of planned changes
- the ACCC should have the authority to reject increases if it considers them to be unjustified
- if an increase is rejected, an operator cannot propose an alternative change in a charge
- the ACCC’s decision of whether an increase is justified should use 1 December 2022 as the baseline
- the ACCC should collect any metrics it needs to form a view on whether proposed increases are reasonable, for example on the level of revenue raised by an operator from incentive-based fees and on landside performance (only metrics that do not reflect an operator’s commercial position should be made public)
- there should be an annual report to transport ministers and the Treasurer which includes analysis of any unintended consequences of the regulatory regime
- consideration be given to any penalties that might be required to support enforcement of the obligations under the code
- The code should be evaluated after a period of five years by an independent body.”<sup>108</sup>

The Productivity Commission has confirmed the NSW Government position, outlined in the submission to the Productivity Commission Maritime Inquiry at Appendix 8, that stevedore charges should be considered at the national level, not by the jurisdictions individually.

### **Broad power to regulate stevedore charges**

In line with the Better Regulation principles and the Productivity Commission’s recommended regulatory approach of considering these charges at the national level, the Regulation should be updated to remove the broad power for the Minister to regulate

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<sup>107</sup> Productivity Commission 2022, *Inquiry into Australia’s Maritime Logistics System Final Report*, p. 219

<sup>108</sup> Productivity Commission 2022, *Inquiry into Australia’s Maritime Logistics System Final Report*, p. 43

stevedore charges under Section 62 of the Regulation, limiting it to only the applications required.

In addition to stevedore charges being a national matter, the existing responsibilities assigned to TfNSW under the current framework are not suitable. When the NSW Government regulates private sector prices, this responsibility is usually provided to IPART, which has various functions including being the independent pricing regulator for water, energy, public transport and local government. While IPART is a NSW Government agency, it operates independently from government and its considerations focus on:

- protecting consumers from unreasonable price increases
- improving providers' efficiency and service quality
- encouraging competition
- protecting the environment
- ensuring that regulated service providers remain financially viable.

Importantly, when regulating prices, a pricing regulator has full visibility of business costs, builds detailed benchmarking cost models and sets prices at a rate that ensures appropriate returns for the business as well as reasonable prices for customers.

TfNSW is not a pricing regulator and does not have full visibility of all the costs across the supply chain. TfNSW is therefore not an appropriate agency to administer the regulation of stevedore charges. In line with the Better Regulation Principles, government should act only when the impact of that action is properly understood through considering the costs and benefits (using all available data) of a range of options, including non-regulatory options. Government action should also be effective and proportional.

The primary purpose of these provisions was to ensure PBLIS penalties paid by stevedores were not recovered via other landside charges. TfNSW is tasked with verifying this is not the case. The regulation provisions, however, have proven not to be fit for purpose for this verification process.

Changes in the structure of stevedore charges have resulted in landside charges now significantly outweighing any potential recovery of PBLIS penalties, rendering the latter impossible to judge. The existing provisions lack the sophistication, powers to access data and other appropriate powers necessary to make judgements about the nature and extent of cost recovery on the landside. Further, developing and conducting comprehensive price oversight measures is unlikely to be justifiable on a cost-benefit basis given the limited nature of the problem.

Accordingly, PBLIS should not retain a power that is not appropriate to be exercised by the NSW Government. Removing this broad power provides clarity of government responsibilities and provides certainty for industry that price regulation will not be applied in this way.

The removal of this power would not have an adverse impact on the implementation of PBLIS, for the following reasons:

- To date this power has not been used to regulate stevedore carrier charges (see **PBLIS Recommendation 19: Remove regulated rail servicing arrangements** for

details on rail charges regulation) and, despite increases to stevedore landside charges since its commencement, PBLIS remains effective.

- The total value of stevedore charges now exceeds the value of the PBLIS penalties stevedores pay, yet the incentives for stevedores to meet PBLIS performance standards to avoid penalties remains in place. This is because it is in the stevedore's interests to maximise profit by reducing the penalties incurred under PBLIS for poor performance, regardless of whether they have effectively recovered the costs of those penalties via their charges.
- As noted above, the charges are applied consistently at a national level demonstrating they are not linked to PBLIS penalties.

### **PBLIS charges notification and assessment process**

PBLIS includes a requirement for stevedores to notify TfNSW of planned increases to charges or the introduction of new charges. TfNSW is then required to undertake an assessment of the charge, to ensure that they are not being made by stevedores for the purpose of recovering the cost of paying PBLIS penalties. The Minister (and TfNSW) does not approve stevedore charges.

When PBLIS was introduced, landside fees were minimal, with stevedores earning revenue primarily from shipping lines. Booking fees of between \$5-\$11 were subsequently introduced.<sup>109</sup> Stevedore landside fees now include the following:<sup>110</sup>

- booking fees of between \$31-\$48 per container
- terminal access charges (TACs) of between \$115-\$160 per container
- annual booking registration fees of between \$209-\$248 per account
- side loader fees of between \$71-\$80 per trailer or truck and long vehicle fees of up to \$57 per truck
- mis-declaration fees of up to \$274 per truck and weight amendment fees (Pondus) of up to \$260 per container,<sup>111</sup> and
- various other charges.

The ACCC, in its 2021-22 monitoring report, noted that while "the largest component of stevedoring revenue comes for quayside charges to shipping lines",<sup>112</sup> the balance of revenue has changed over time. "In the first 10 years of the ACCC's monitoring, stevedores recovered an average of 87% of their revenue through quayside charges to shipping lines. By 2021-22, this had fallen to 59%, with the incumbent stevedores recovering 41% of their revenue through landside charges to transport operators."<sup>113</sup> The charge assessment requirement in PBLIS was included to address the concern that stevedores could potentially

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<sup>109</sup> ACCC [Container stevedoring monitoring report 2020-21](#), p. 52

<sup>110</sup> Full lists of landside charges for each stevedore are available on their respective websites. Charges listed are current as at April 2023.

<sup>111</sup> Applied by Patrick Terminals

<sup>112</sup> ACCC [Container stevedoring monitoring report 2020-21](#), p. 31

<sup>113</sup> ACCC, [Container stevedoring monitoring report 2020-21](#), p. 36



recoup the cost of any PBLIS penalties via applying or increasing landside charges, and therefore undermine the penalty framework.

However, TfNSW does not have insight into stevedores' business costs in the same way a pricing regulator does when they regulate prices, and therefore has no ability to effectively consider the rationale provided for changes to charges or new charges to assess whether they are for the purpose of recouping PBLIS penalties.

Because a nationally consistent industry and government notification process is now in place via the NVGs and the Productivity Commission proposed mandatory national code, the PBLIS requirements to notify the NSW Government of changes to charges under the Regulation are not required.

The overall stevedore charging structure is now considerably different from 2010 when PBLIS was introduced. Stevedore landside charges revenue is now much greater than the value of penalties paid under PBLIS. To illustrate this at a high level, the three stevedores at Port Botany paid over \$4 million in PBLIS penalties in 2021<sup>114</sup> while stevedores' landside revenue from across the five major container ports in Australia was \$771 million in 2021-22, of which \$406 million was from TACs.<sup>115</sup>

### **Retain PBLIS storage charges and VBS fee requirements**

The Mandatory Standards applies provisions for how stevedore storage charges are applied and ensure VBS fees do not duplicate PBLIS penalties (Sections 17 and 18 of the Mandatory Standards). The Minister's power to regulate charges would continue to cover these provisions. This change would apply a narrow and specific scope to the existing broad power to regulate stevedore charges under Section 62 of the Regulation.

### **Stakeholder feedback**

Some stakeholders have raised significant concerns about landside stevedore charges since their implementation in NSW from 2017. In line with the NSW Government position on stevedore charges, which was communicated to industry prior to the Review, specific consideration of stevedore charges outside of the current regulations and notification requirements was noted as being out of scope for this Review.

During consultation, some stakeholders, while noting the matter was out of scope, reiterated concerns with stevedore charges and requested government intervention, including suggesting capping or setting stevedore charge amounts, the removal of specific stevedore charges, and determining to which parties in the supply chain these charges could be applied. It was also suggested that the regulation of storage days cover additional days for containers that are held for customs or biosecurity checks.

Some stakeholders considered that the NVGs provide a sufficient and consistent notification process and expressed support for the removal of the power for regulating stevedore charges at the state level. Other stakeholders expressed support for the proposed removal of

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<sup>114</sup> Source: TfNSW data

<sup>115</sup> ACCC, Container stevedoring monitoring report 2021-22, p. 63

power at the state level but recommended that the NVG process should be mandated by the NSW Government.

Other feedback included that government should not intervene in the market and that the regulated rail charge should also be removed (refer to **PBLIS Recommendation 19: Remove regulated rail servicing arrangements**), and that all charge rates and performance reporting should be left to industry to determine.

### Net benefits

- Reduces administrative effort for all participants
- Provides certainty for all participants that the NSW Government will not intervene in stevedore charges and reduces the risk of market distortion resulting from regulatory intervention
- Ensures administrative processes for setting stevedore charges are consistent nationally under the National Voluntary Guidelines by removing NSW-specific requirements
- Improves legislative clarity by removing a power that is not appropriate for a government agency that is not a pricing regulator.

## 5.1.7 Late penalties per truck trip

### **PBLIS Recommendation 7: Apply late penalties per truck trip rather than per container**

Apply PBLIS late arrival penalties per truck trip rather than per container.

The penalty structure in PBLIS for late truck arrivals may be a deterrent to trucks carrying multiple containers on one trip. Currently a truck that arrives late for a booking at the stevedore terminal could incur a \$50 or \$100 late arrival penalty per booking (per container) under PBLIS (Section 54 of the Regulation), as below:

- \$50 (per container) for a truck that arrives after the end of the time zone but before the end of the extended arrival period (30 minutes after the end of the time zone) and the stevedore permits entry to the terminal
- \$100 (per container) for a truck that arrives after the end of the time zone but before the end of the extended arrival period and the stevedore denies entry to the terminal
- \$100 (per container) for a truck that arrives after the end of the time zone and after the end of the extended arrival period, regardless of whether the stevedore permits entry to the terminal.

This means trucks delivering and picking up multiple containers can incur multiple \$50 or \$100 penalties on one trip. For example, on the upper end of the scale, an A Double truck could incur up to eight penalties for being ten minutes late for the booked time zone. This is assuming four 20-foot export containers were to be dropped off, and four 20-foot import containers were intended to be picked up. This results in a \$400 penalty if the truck is permitted entry to the terminal. Extended late penalties where the truck arrives after the

extended arrival period (30 minutes after the end of the time zone) could result in \$800 of penalties as well as the truck not being serviced at all.

Container density<sup>116</sup> at Port Botany has not increased significantly while PBLIS has been in place. This is noted in the CBA, which outlines that container densities have only increased by 5.6 per cent between 2011 and 2021 (annual averages).<sup>117</sup>

The PBLIS Behavioural Research also notes that the complexity of higher container density trips (for example, multiple pick-up and drop-off locations) and the strong financial incentives for on-time arrival creates a situation where low-density trips are seen by road carriers as being more beneficial. The report also notes “combined with the broader trend of more containers moving through the port this necessarily means that PBLIS has increased the total number of trips to the port and has shifted operations more strongly towards direct trips and staged deliveries to reduce complexity.”<sup>118</sup>

The potential for incurring multiple late arrival penalties may be creating a disincentive to utilise trucks with higher capacity and therefore is not supporting overall port supply chain efficiency.

This issue is of relevance for PBLIS in the circumstance where a truck has been held up by a stevedore on a previous trip with the result being that the truck is late for the next stevedore, or when a truck’s late arrival is caused by a delay at another supply chain facility. To avoid the potential for large penalties, trucks may avoid transporting multiple containers or visiting multiple stevedores or other facilities on one trip to the port.

Applying late arrival penalties per truck rather than per booking would reduce potential penalties for transport operators with multiple containers on each truck and support increased container density, leading to less port truck trips overall. The benefits of less truck trips include reduced congestion in the port and increased truck operator and stevedore efficiency by reducing the number of trucks entering the terminal relative to the number of containers serviced.

It is noted that where a truck carrying multiple containers is late, the impact on the stevedore may be higher compared to a single container truck if their resources are allocated on a container basis. However, the overall benefits for port efficiency over the long term would mitigate this potential impact through supporting broader port efficiency improvements.

This change is not able to address all factors relevant for increasing container density. The nature of the container task, with a larger number of imports than exports and empty containers returned to other locations, means that not all trips to stevedore terminals are suited to multiple containers or dual running. The heavy weight of some containers also means that truck weight limits are reached for a single container.

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<sup>116</sup> Container density is a measure of how many containers are being serviced on each truck per trip to the stevedore terminal. The higher the number of containers per trip, the fewer truck trips required to complete the container task, which means a reduction in trucks on the road.

<sup>117</sup> Castalia 2022, Cost-Benefit Analysis of PBLIS Performance, Sydney, NSW, p. 24

<sup>118</sup> Deloitte Access Economics 2022, PBLIS Industry Behavioural Research, Sydney, NSW, p. 18

## Stakeholder feedback

This change was supported by a number of stakeholders, as it would encourage good behaviour and efficiency at Port Botany. These stakeholders noted that incentives were needed across the PBLIS arrangements to support container backloading and the use of High Productivity Vehicles (HPV).

Concerns were also raised that it could discourage the timely arrival of transport operators carrying more than one container.

## Net benefits

- Reduces penalties for trucks carrying multiple containers, which could encourage the transport of multiple containers per trip and therefore reduce the number of total truck trips to the port
- Enables stevedores to service more containers from fewer trucks, supporting terminal efficiency by decreasing the number of trucks entering the terminal relative to the number of containers serviced, and benefitting port-wide efficiency
- Supports the use of HPVs that have better safety and efficiency performance, benefitting both the port and broader NSW freight networks
- Reduces port congestion and environmental impact by minimising vehicle movements.

### 5.1.8 Unforeseen event terminal sections

#### **PBLIS Recommendation 8: Apply unforeseen events to terminal sections**

Increase flexibility in stevedore unforeseen event application to allow partial closure of a stevedore terminal for an impacted time zone, instead of the whole terminal during that time zone.

PBLIS currently allows a stevedore to cancel one or more time zones due to an unforeseen event (Section 14.4 of the Mandatory Standards), for example, due to a significant unexpected weather event. This cancellation of a time zone applies to the entire stevedore terminal.

Applying a stevedore unforeseen event to part of the terminal would allow partial closure of a stevedore terminal for an impacted time zone. This would allow the remainder of the terminal to continue operating and therefore have less impact on the movement of containers. When a stevedore is dealing with an unexpected incident impacting terminal operations and their focus is appropriately on returning the terminal to full capacity, any related administrative process should be as streamlined as possible.

This change would complement the recent amendment to the Mandatory Standards, effective from 1 September 2021, that allows a stevedore to designate sub-sections in their terminals. This change was designed to improve operational efficiency by dispersing the truck servicing task within the stevedore terminal. This provides the opportunity for stevedores to release slots by terminal section (TfNSW must approve the designations initiated by a stevedore, after appropriate industry consultation). Enabling unforeseen events

to be applied to sub-sections of the terminal would complement this change and ensure consistent consideration of terminal sub-sections in the PBLIS rules.

Performance requirements such as on-time running and TTT would remain in place for parties and containers not affected by the unforeseen event.

### Stakeholder feedback

This change was broadly supported by stakeholders, and information on the costs and effort required for changing systems to implement this change was queried. Stevedore operating systems would need to be updated to apply sections to their terminals, and TfNSW monitoring systems would also require changes. This would be considered when a stevedore seeks to implement this recommendation.

Other related feedback suggested greater transparency and oversight of unforeseen events be provided, including publicly available information on TfNSW oversight. This was raised because of the subjective judgement that may occur when deciding whether an event is considered unforeseen under the PBLIS rules.

Some stakeholders also recommended an increase to the notice period for unforeseen events and improved communication with carriers and drivers when these events occur. Under the Mandatory Standards, a stevedore must provide notice to TfNSW of unforeseen events including detailed particulars, such as the circumstances around the unforeseen event, the predicted impacts of it and a forecast of when it will end, no later than 60 minutes after it occurs, and inform carriers and drivers in a service line of impacts on them.

### Net benefits

- Reduces the impact of unforeseen event slot cancellations on road operators and stevedores by limiting the affected area of a stevedore terminal where possible. This allows port users not affected by the unforeseen event to continue operational functions such as on-time running and TTTs
- Increases port resilience by reducing pressure on the supply chain caused by delays and rescheduling and reduces the impact and recovery time from an unforeseen event
- Reduces truck queuing and decreases the time taken for trucks to be serviced at the port, improving overall truck processing times.

#### 5.1.9 Update penalty rates by CPI

##### **PBLIS Recommendation 9: Update penalty rates by Consumer Price Index (CPI)**

Backdate PBLIS penalty rates by CPI from 2010 and apply ongoing annual CPI increases.

The PBLIS arrangements are based on performance standards with a two-way, or reciprocal, penalty system. Stevedores pay penalties to carriers for failure to comply with stevedore performance standards (such as exceeding TTT, failure to meet truck servicing requirements, and cancellations), and carriers pay penalties to stevedores for failing to meet relevant performance standards (such as early or late arrivals and booking cancellations).

Under Part 6 of the Regulation, the penalties are either \$50 or \$100 (and may include the booking fee as well) for not meeting stevedore and carrier performance standards, and \$25 per 15 minutes for stevedores exceeding TTT. The penalties are invoiced by the stevedores from their VBS systems under a self-invoicing approach. TfNSW oversees this process to ensure penalties are applied accurately and that any disputes are resolved.

The penalty amounts have not changed since their introduction in 2011. At that time, the penalty amounts were assessed as being appropriate to provide the necessary incentives and disincentives to influence performance improvement in the port landside interface. Since 2011, factors such as inflation, changes to operating costs and other supply chain impacts may mean the current penalty amounts do not adequately incentivise efficient performance to the extent that they did when PBLIS was introduced.

The CBA notes that as a proportion of total booking slots, penalised slots (bookings related to a breach of the Mandatory Standards) have increased slightly since 2011, and that this may indicate that parties have incorporated the costs of penalties into their cost of doing business. The CBA further notes that this “may also indicate that the dollar values of the penalties are not enough of a deterrent to change behaviour.”<sup>119</sup>

Consistent with the Better Regulation Principles, government action should be effective and proportional. The need to ensure the dollar value of penalties are sufficient to act as a deterrent must be balanced against the impacts on industry. The recommended increase addresses this balance and addresses the currency of the PBLIS penalties which have remained static since its introduction, and updates them appropriately by backdating annual CPI increases from 2011 (see Figure 31). Penalties should then be increased by CPI on an annual basis. Increasing penalties in this way would strengthen the effectiveness of incentives and disincentives on performance and updates this part of the PBLIS rules

**Figure 31: PBLIS penalties with backdated annual CPI increases**

PBLIS penalty reason	Current rate	CPI increase <sup>120</sup>
<ul style="list-style-type: none"> <li>Exceeding TTT (per 15 minutes)</li> </ul>	\$25	\$35
<ul style="list-style-type: none"> <li>Carrier cancellation of booking</li> <li>Early/late arrival by carrier if stevedore permits entry</li> <li>Stevedore cancellation of time zone with sufficient notice</li> </ul>	\$50	\$65
<ul style="list-style-type: none"> <li>Early/late arrival by carrier</li> <li>Non-service caused by fault of carrier</li> <li>Stevedore failure or refusal to perform truck servicing</li> <li>Stevedore cancellation of booking</li> <li>Stevedore cancellation of time zone without sufficient notice</li> </ul>	\$100	\$130

<sup>119</sup> Castalia 2022, Cost-Benefit Analysis of PBLIS Performance, Sydney, NSW, p. 21

<sup>120</sup> Current penalty amounts increased by the Australian CPI rate annually from 2011 to 2022 and rounded up to the nearest \$5.



## Stakeholder feedback

A number of stakeholders provided feedback that the current penalties should be reviewed. Suggested changes included the recommended approach of annual increases in line with CPI backdated from commencement, increases to some penalties only, the introduction of new penalties, CPI increases to administration fees also and higher penalties during peak times.

Some stakeholders suggested that CPI increases are too small to influence behaviour and that any changes should consider overall costs of freight transport operations, which are noted as having increased by more than CPI.

## Net benefits

- Strengthens the effectiveness of the penalty regime and maintains its future effectiveness by ensuring the penalty amount remains relevant
- Updates this part of PBLIS in line with the requirements of Better Regulation principles to maintain legislation currency.



### 5.1.10 Remove carrier classifications

#### **PBLIS Recommendation 10: Remove large and small carrier classifications**

Remove the option for stevedores to separate carriers into Large Carriers (Class B carriers) and Small Carriers (Class A carriers) for the purpose of releasing slots.

Section 15.1 of the Mandatory Standards gives stevedores the option to allocate half the total number of slots per hour for large carriers and half for small carriers. Under Section 29 of the Mandatory Standards, large carriers are those carriers that have completed the highest number of bookings and collectively completed bookings for half of the minimum number of slots in a quarter calendar year, with small carriers representing the remainder. Currently, two stevedores implement this split.

This approach was introduced with the intent of ensuring that large operators could access the number of slots they required and that operators with smaller businesses could compete to book slots using only similar sized carriers. The 50/50 split applied at two of the stevedores is broadly reflective of the market split between large carriers servicing large volume customers and smaller ones that generally service smaller volume customers. Carriers do at times change from being classified as a small or large operator and the classes are considered on a quarterly basis.

Stevedores also apply varying booking limits to each carrier class, with conditions such as the number of bookings that can be made at one time and limits to the numbers of bookings per time zone. These requirements can make it difficult for carriers to scale up when they have an increased demand for a specific vessel.

This practice is not suitable in the current port operating environment as it does not support overall efficiency in port operations. A carrier may shift between classes within a quarter calendar year and could therefore be unfairly restricted in accessing slots under booking approaches that allow carriers to book different numbers of slots at once, depending on the carrier class. Additionally, to efficiently move cargo through the port, either group of carriers may need access to more than 50 per cent of the minimum number of slots at different times. The structure of this approach lacks flexibility in its application, that could impact operational efficiencies.

This Recommendation is aligned with **Recommendation 2: Change carrier cancellation rules to take or pay** and **Recommendation 3: Facilitate no booking until discharge** which are designed to address the current slot booking and use inefficiencies that result from the slot release approach.

#### **Stakeholder feedback**

Stakeholders that were supportive of removing carrier classifications noted that the separation between small and large carriers is limiting for some road operators, because they were in some instances reluctant to take on additional work that may impact their ability to book within the small carrier category once that workload changed. Slot demand for a carrier can vary between vessels and the current slot booking system can limit carrier ability to scale up for increased demand or potentially get maximum utilisation of their road transport equipment.

Stakeholders commented that the use of stack runs, which operate outside of PBLIS and are used by some large carriers to move high volumes of containers, removes the need for carrier class separations. This is because these carriers are ensured the level of port access required for moving large amounts of full and empty containers.

Feedback was also provided that removing this would likely increase slot availability for smaller carriers.

Support from other stakeholders was provided in the context of other complementary design changes to the slot booking approach that remove the mad minute, including allocating sufficient slots per time zone and implementing a no booking until discharge approach to match slot availability with demand.

Stakeholders that were not supportive raised concerns with the removal of carrier classifications, as this could impact on the ability of large carriers to access slots required if they were competing with large numbers of small carriers to book slots. Others suggested this change would increase the propensity to hoard slots without the cargo demand to support and negatively impact slot utilisation.

It was also suggested that smaller carriers should be given easier access to premium booking slots (peak times), as they operate across fewer hours when compared to larger carriers.

### Net benefits

- Increases flexibility for road operators by removing artificial distortions in the booking system, so they can access the slots needed to support overall port efficiency
- Simplifies the booking system to support full utilisation of slots.

#### 5.1.11 Remove import/export allocation approval

##### **PBLIS Recommendation 11: Remove TfNSW approval for stevedore import and export slot allocation**

Remove the requirement for TfNSW to approve the stevedore import and export slot allocation.

The allocation and release of slots by stevedores is currently regulated under the PBLIS rules. These requirements include specifications such as the minimum number of slots to be released per hour (Section 15.1 of the Mandatory Standards) and a requirement that TfNSW approve a stevedore's determination of the division of the minimum number of slots between import containers and export containers.

This requirement in the Mandatory Standards should be removed because TfNSW is not a terminal operator and this is an operational matter. Stevedores should be able to allocate these slots efficiently without regulation.

**PBLIS Recommendation 1: PBLIS Performance Scheme** and **PBLIS Recommendation 12: Road data transparency** includes providing quarterly performance monitoring of specified benchmarks and measures. This includes transparency of the allocation of import and export slots and their use by carriers.



## Stakeholder feedback

Some stakeholders have raised the concern that stevedores appear to allocate more export slots than are required under PBLIS, meaning that as import slot demand is generally higher all these slots are booked while export slots in the same time zone end up un-used.

## Net benefits

- Removes the risk of regulatory intervention causing distortions in the market by intervening in operational matters
- Modernises and updates the PBLIS rules.



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## 5.2 Data transparency

The Productivity Commission has noted that “technology, information and innovation are critical to achieving a supply chain that is efficient (maximises the collective wellbeing of the members of the community), productive (sees maximal growth in output from changes to inputs) and resilient (continues to function when exposed to shocks and adapts to changes).”<sup>121</sup>

Data technologies and innovation in international trade and freight services have developed remarkably over the past two decades, but in many respects, freight container movements have failed to keep pace with these developments. While this is a global issue and ideally amenable to international solutions, there is much that can be done at the local level in relation to container movements into and out of Port Botany that would improve data transparency and the efficiency of those movements without compromising any future international solutions. This section provides recommendations to implement these improvements in relation to Port Botany container movements.

Information is produced through the gathering and analysis of raw data generated by activity within a production process. Access to accurate and timely information can enable businesses and governments to identify where performance in the maritime logistics system can be improved.

However, while greater transparency generally enhances efficiency, there can be risks associated with information sharing, particularly in relation to privacy, security, and competition concerns. For example, a unilateral disclosure of pricing intentions to competitors or the publication of information about scheduling or capacity of truck movements would clearly pose risks to competition. Information can also be proprietary to a firm, forming part of its intellectual property. Any failure to respect the confidentiality of such information can undermine its value and dampen incentives for future investment.

Opportunities exist to improve port efficiency by enhancing the availability of data without risking confidentiality or commercial outcomes. For example, key data reporting obligations and processes at Port Botany are inconsistent and incomplete, with the CBA noting there was no consistent data to analyse long-term developments of traffic movements around the port. Reporting by stevedore terminals on truck and rail servicing only provides part of the picture, and there is no visibility of the performance of empty container facilities.

Government and industry should collaborate to work towards the creation of an interoperable data approach that improves transparency and streamlines processes and systems. The Productivity Commission noted “there may be a role for government in facilitating common data definitions and interoperability standards” to improve transparency and productivity at ports.<sup>122</sup>

Data collected and shared with government and industry through secure gateways, will address security and privacy safeguard concerns and be easily accessible to all users in the supply chain. Data interface systems that complement existing private systems by drawing

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<sup>121</sup> Productivity Commission 2022, [Inquiry into Australia's Maritime Logistics System Final Report](#), p. 376

<sup>122</sup> Productivity Commission 2022, [Inquiry into Australia's Maritime Logistics System Final Report](#), p. 50

on, filling in gaps and improving access to those private systems will ensure proprietary interests are not compromised and private systems are not crowded out.

## 5.2.1 Road data transparency

### **PBLIS Recommendation 12: Road data transparency**

Increase the information publicly available on stevedore truck servicing and carrier performance, and improve data provided to government.

Currently there is limited public visibility of container stevedore truck servicing data at Port Botany. While TfNSW publishes some data on the NSW Open Data portal,<sup>123</sup> this is limited in its scope and is aggregated, meaning individual stevedore and road operator performance is not visible.

Live TTT information for each stevedore is available on signage at the port, and live performance information for the past 24 hours for each stevedore is available to port users via a secure website, giving them visibility of information on the current operating conditions at the port. This performance information is not provided publicly however and long-term trend data is not available to users.

The Productivity Commission in its recent inquiry noted that the value of data lies in analysis where it is used to provide performance insights and guide decision making, finding that “for the maritime logistics system, data analysis has the potential to provide a range of benefits for individual operators and the overall functioning of the supply chain.”<sup>124</sup> The Productivity Commission pointed to the benefits of analysis for long-term investment planning for both businesses and government:

“The availability of high-quality, organised data can enable businesses to develop detailed key performance indicators, which they can then use to identify areas of underperformance and opportunities to improve efficiency. Governments, meanwhile, can analyse aggregated data to create an evidence base for policy at the local, state and national level. Visibility on cargo between port gate and destinations, for example, has the potential to allow governments to assess the impact that transporting cargo is having on Australia’s road and rail networks and consequently factor that impact into future infrastructure planning and investment decisions.”<sup>125</sup>

TfNSW receives relatively comprehensive stevedore landside servicing data under the Regulation, which is used to oversight the Regulation requirements and informs government about stevedore and road operator landside performance. However, there are some data gaps such as stack runs that occur outside of PBLIS where data is not provided consistently across the three stevedores. Comprehensive stack run data should be included in the data provision requirements.

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<sup>123</sup> Transport for NSW, [Open Data – Freight Data](#)

<sup>124</sup> Productivity Commission 2022, [Inquiry into Australia’s Maritime Logistics System Final Report](#), p. 398

<sup>125</sup> Productivity Commission 2022, [Inquiry into Australia’s Maritime Logistics System Final Report](#), p. 398



Data transparency will support port efficiency by facilitating a shared understanding of operational performance for all stakeholders, increasing data analysis insight potential for industry. Increasing the information available publicly on stevedore and carrier performance would provide greater visibility for industry of this part of the port supply chain, removing any ambiguity or misunderstandings and supporting improved industry relationships, such as by providing information on truck slot availability for bookings, truck slot use and TTT.

Enhancing the data provided to government will better inform long-term strategic planning for the freight supply chain by providing an improved understanding of where constraints and opportunities exist. This would be sourced from the data already available in stevedore systems, and so would not add an additional administrative burden.

This recommendation, along with related recommendations will increase data visibility across the port supply chain to provide a comprehensive understanding of containerised freight movements in NSW. These include:

- **PBLIS Recommendation 1: PBLIS Performance Scheme** a performance scheme which establishes a comprehensive set of stevedore and carrier performance benchmarks and measures, and makes this data publicly available
- **PBLIS Recommendation 13: Rail data transparency** to increase rail performance data transparency
- **PBLIS Recommendation 14: Empty container data transparency and efficiency** to implement empty container storage facility performance data transparency and ensure empty container redirection information is provided in an appropriate electronic format
- **Act Recommendation 10: Vessel manifest information and data formats** to strengthen vessel manifest information requirements and information sharing mechanisms to support quality information provision and efficient data sharing with port operators and the NSW Government.

In the future a Freight Community System (see **PBLIS Recommendation 15: Freight Community System**) could host this data, which would be available in real time.

Data that would be made public to support the Performance Scheme at Port Botany see **PBLIS Recommendation 1: PBLIS Performance Scheme** for each stevedore would include:

- Average Truck Turnaround Time (TTT) for the different container volume trips
- Average truck density
- Percentage of trucks not serviced
- Percentage of containers moved, including stack runs, by time of week
- Dual run rates
- Booking slot use.

For each road operator data made public would include:

- Average truck on time arrival
- Percentage of slot bookings used
- Percentage of trucks not serviced due to the carrier
- Average truck density

- Percentage of containers moved by time of week.

Consideration would be given to what information is suitable to make public, ensuring commercial information is not compromised, while providing as much transparency as possible. For example, data would not include total container volumes for stevedores or road operators.

## Stakeholder feedback

Stakeholder support for increased road data availability noted there are gaps in the data currently available and that these gaps should be resolved. Stakeholders were supportive of a consistent framework that aligns with Australian Government data classifications, noting that increasing the quality of road data available would support efficiency and decision making across the port.

Stakeholders also noted that expanding beyond the commonly used measures such as TTT to look at other metrics such as truck density and two-way running could support efforts to optimise road transport efficiency at the port.

It was also noted that wherever possible data should be generated and collected automatically and electronically rather than manually. For example, hundreds of trucks are serviced at each container stevedore every day with this data automatically collected by stevedore VBS systems.

Some stakeholders, while not opposed to increased data provision, suggested data should be provided voluntarily, as is the case with the empty container management data already provided to the Empty Container Working Group (ECWG) by industry, rather than being required by regulation. In line with the NSW Government's Better Regulation Principles, regulation should only be introduced when voluntary measures prove ineffective. It was noted however that data provided to the ECWG has been provided voluntarily by some empty container storage facilities, but it has not been provided comprehensively and consistently.

Stakeholders that were opposed to providing further data publicly raised concerns that this action may result in additional costs for stevedores and would impact on their existing systems and processes. The concern was also raised that it may lead to unintended consequences, such as undermining the adoption of market led technology solutions. The provision of extensive data to the NSW Government under PBLIS was also noted as being sufficient.

## Net benefits

- Improves industry relationships through facilitating a culture of transparency and openness, and removing misunderstandings and assumptions based on anecdotal evidence
- Improves port road performance by providing industry with better data to analyse trends and promote collaboration and innovation across the freight supply chain
- Informs better decision making by improving the data available for government to support analysis of supply chain performance, including any issues and restrictions on productivity, and inform long-term planning and investment in the freight network.

## 5.2.2 Rail data transparency

### **PBLIS Recommendation 13: Rail data transparency**

Provide detailed information on stevedore rail window and rail operator performance to industry, make data publicly available, and encourage visible container tracking.

Currently there is no visibility of detailed rail data, such as rail window bookings or utilisation, available publicly or for industry. TfNSW receives data on port rail servicing (not in real time) from the three stevedores via a data direction from the Minister under the Regulation, and this data is also provided to the port operator, NSW Ports.

Aggregated monthly rail volumes and mode share (and limited information about rail paths) at the port are published on the NSW Freight data hub. The NSW Government Open Data website includes further monthly aggregated information including train arrival numbers and stevedore rail servicing (container lifts per hour). More detailed information is not publicly available.

A centralised coordinated booking approach is not offered for booking rail windows at the port, so rail operators interact individually with the stevedores. This is explored further in **PBLIS Recommendation 21: Examine future rail options.**

As detailed in **PBLIS Recommendation 12: Road data transparency** above, the Productivity Commission in its recent inquiry has noted that the value of data lies in analysis where it is used to provide performance insights and guide decision making for both business and government.<sup>126</sup>

Data transparency will support port efficiency by facilitating a shared understanding of operational performance for all stakeholders. Increasing the information available publicly about stevedore and rail operator performance will provide greater visibility of this part of the port supply chain for industry, removing ambiguity or misunderstandings and supporting improved industry relationships.

One example is information on rail window availability for bookings, rail window utilisation, and servicing performance. Rail window booking and usage data is particularly important given the coordination challenges faced by rail operators who are required to navigate across multiple networks for access to and from the port.

Rail data provided to government informs long-term strategic planning for the freight supply chain. It improves understanding of constraints, and where opportunities exist to best support supply chain efficiency. This data can be sourced from existing operational information that is available in stevedore systems to avoid unnecessary administrative burden.

Industry would benefit from rail data being made publicly available, as it would deliver greater transparency for the supply chain of the rail window schedule and bookings, as well as stevedore and rail operator performance. Rail operators would simultaneously have access to the same information on window availability and cargo owners would have better information about rail services to inform their transport mode choice. Consideration would

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<sup>126</sup> Productivity Commission 2022, *Inquiry into Australia's Maritime Logistics System Final Report*, p. 398

be given to commercially sensitive information. For example, providing information on the booking status of a window would not include details of which rail operator has booked it.

Provision of rail container tracking data is another important voluntary measure that would improve visibility for cargo owners regarding the location and status of rail containers across the supply chain. Currently rail container location information is not made readily available to the level of other transportation methods, such as the road transport industry, where customers are often provided with up-to-date information on the location of their goods. Meeting rail customers' expectations for transparency of their goods' location would improve the service offering and support demand for rail transport.

Published data should include the rail window schedule for each stevedore (the windows available, booked and used, but not which rail operator was accessing each window - given the small number of rail operators revealing detailed schedule information could reveal commercially sensitive information by indicating their market share) and performance of stevedore rail servicing (TEU per window unloaded/loaded, time taken to service a train, and container schedule achieved). For rail operators their average number of containers per stevedore window and information on reliability should be provided.

This recommendation, along with related recommendations, propose increased data visibility across the port supply chain to provide a comprehensive understanding of containerised freight movements in NSW. These include:

- **PBLIS Recommendation 1: PBLIS Performance Scheme** a performance scheme which establishes a comprehensive set of stevedore and carrier performance benchmarks and makes this data publicly available
- **PBLIS Recommendation 12: Road data transparency** to increase road performance data transparency
- **PBLIS Recommendation 14: Empty container data transparency and efficiency** to implement empty container storage facility performance data transparency and ensure empty container redirection information is provided in an appropriate electronic format
- **Act Recommendation 10: Vessel manifest information and data formats** to strengthen vessel manifest information requirements and information sharing mechanisms to support quality information provision and efficient data sharing with port operators and the NSW Government.

In the future, a Freight Community System (FCS) (see **PBLIS Recommendation 15: Freight Community System**) could host this data, which would be available in real time. This could provide rail performance data in the same way TTT performance is provided for road servicing. Industry could provide rail container tracking information to a Freight Community System to support customer demand for improved transparency of container status.

See Section 5.8 for further recommendations relevant for the Port Botany container rail task.

### Stakeholder feedback

Stakeholders offered strong support for providing detailed data that would increase the visibility of rail performance at the port – including on available rail windows, rail window schedules, rail window utilisation, and both stevedore and rail operator performance.

Stakeholders supported this being provided on a public website to encourage improved performance. There was also support for information on rail container tracking to improve the rail service offering to cargo owners.

Feedback included that in situations where goods are moved by rail close to the port but are unable to be serviced (for example if the train is delayed and misses the rail window) and are then unloaded at an IMT and moved the final distance by road, that these containers should be accurately reflected in the data.

Stakeholders that did not support increased visibility of rail performance questioned how useful the data would be, noting that various parties in the supply chain already share rail data in some form. While industry parties directly involved in the rail task have access to some information, consistent and transparent information will ensure that all parties have access to the same information at the same time. This could improve utilisation of existing rail infrastructure and future investments.

Ensuring commercially sensitive information is handled appropriately was also raised as a concern. The small number of rail operators means the suitability of making information publicly available is an important consideration. Given the value of data for effective industry and government long-term planning, consideration should be given to what information is suitable to make public, to ensure commercial information is not compromised, while still providing transparency wherever possible.

### **Net benefits**

- Improves rail operator planning through transparency of rail window booking and use – providing information where possible to offset the coordination complexity for these operators who navigate across multiple networks for access to and from the port
- Improves industry relationships through facilitating a culture of transparency and openness, and removing misunderstandings and assumptions based on anecdotal evidence
- Potentially increases use of rail for containerised freight movements by improving the information available for cargo owners and providing a service that is as visible as road via the use of container tracking
- Improves port rail performance by providing industry with the data required to analyse trends and promote collaboration and innovation across the freight supply chain
- Better informs decision making by increasing the data available to government to support analysis of supply chain performance, including any issues and restrictions on productivity, to inform long-term planning and investment in the freight rail network.

### 5.2.3 Empty container data transparency

#### **PBLIS Recommendation 14: Empty container data transparency and efficiency**

Require empty container storage facility data and make suitable data publicly available, and require empty container redirections be provided in an appropriate electronic format.

Empty container storage facilities, or empty container parks (ECPs), provide storage for empty containers before they are either provided to exporters to pack with goods for export, or exported overseas as empty containers. In NSW when imported freight is unpacked, the majority of empty containers (which are owned by the shipping lines) are required to be returned to the ECP nominated by the shipping line within a specified timeframe.

A key driver of inefficiencies in the management of empty containers is the large trade imbalance in NSW. Full import containers at Port Botany exceed full export containers by a ratio of 2.5 to 1, resulting in a surplus of empty containers. Around 60 per cent of containers exported from Port Botany are empty. Demand for 20-foot and 40-foot containers also differs between markets, with exports predominantly seeking 20-foot containers and a lot of imports arriving in 40-foot containers.

There are 13 main ECPs in Sydney, most of which are within or close to the Port Botany precinct. At times, the ECPs at Port Botany can become full, leading to issues for transport operators trying to return empty containers to the ECP they're directed to by shipping lines.

The PBLIS Behavioural Research noted challenges with the operation of ECPs, including that they only operate during the day and may be closed on weekends. Road operators are hesitant to access ECPs on their way to a stevedore slot (e.g. drop off an empty container at an ECP and then pick up a full container at a stevedore on one trip to the port) unless TTT and reliability within the empty container storage facilities are improved, which would reduce the risk of a PBLIS penalty for a late arrival.<sup>127</sup>

There is currently no visibility of ECP performance, as data is not collected by government or made publicly available by ECPs. Support for expanding data collection to include empty container storage facilities was noted in the PBLIS Behavioural Research as being important to improve overall supply chain visibility.<sup>128</sup>

#### **Empty Container Working Group**

In 2020, a range of factors impacted empty container flows in Sydney, including COVID-19 pandemic related trade fluctuations, bad weather events, and industrial disputes at Port Botany. In response, an Empty Container Working Group (ECWG) was convened by TfNSW as a temporary measure on the understanding that if the group was unable to identify effective industry-led voluntary solutions then government would explore regulatory options.

Established in July 2020 by TfNSW, the ECWG includes representatives from shipping lines, stevedores, ECP operators, road transport operators, and key freight industry groups. The ECWG enabled a number of effective initiatives to improve empty container supply chain efficiency, including an initial provision of data by participants. However, complete and

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<sup>127</sup> Deloitte Access Economics 2022, PBLIS Industry Behavioural Research, Sydney, NSW, p. 42

<sup>128</sup> Deloitte Access Economics 2022, PBLIS Industry Behavioural Research, Sydney, NSW, p. 11



consistent data is not available, as it is not provided consistently by the ECPs who attend the ECWG, and there are other ECPs who are not involved in the ECWG.

The ECWG has however enabled a number of effective responses, including:

- supporting an exemption to the Three Ports SEPP<sup>129</sup> to increase container stacking heights in the Port Botany area
- increasing the use of electronic delivery orders (EDO) for redirections
- facilitating discussions between supply chain members to improve evacuation rates and empty container storage capacity
- extending empty container park operating hours to maximise efficiency
- increasing booking window adherence for deliveries to empty container parks to reduce delays for road operators from congestion
- improving the use of direct return empty capacity at stevedore terminals
- investigating alternative empty container storage facilities in Greater Sydney.

In 2021, the empty container congestion problem eased as shipping lines evacuated large numbers of empty containers. Volumes at ECPs reduced to more operationally efficient levels and the load/discharge ratio for Port Botany has consistently been close to 1 (a balanced load/discharge ratio) since then. Following strong support from industry stakeholders, the ECWG has now transitioned to an ongoing forum.

### **NSW Ports Empty Container Incentive Scheme**

The NSW Ports Empty Container Incentive Scheme (ECIS) commenced 1 July 2021, with the wharfage charge for empty exports set at different rates and applied based on the shipping lines' individual load/discharge ratio (the balance of full or empty imports unloaded at Port Botany versus the number of exports of full or empty containers). Introducing the scheme NSW Ports advised:

"NSW Ports has also incurred substantial costs in addressing empty container supply chain issues, including a \$4 million investment in 2020 in additional empty container capacity at Port Botany and ongoing costs to safely manage trucks queuing at Port Botany waiting to access congested empty container parks. In addition, NSW Ports has committed a further \$16.7 million to develop additional empty container capacity at Port Botany in the next 24 months. Developing additional empty container storage capacity on scarce port land is not sustainable in the long term, as the volume of empty containers is forecast to grow. Reducing the time that empty containers remain in Sydney is key to catering for NSW's growing trade volumes."<sup>130</sup>

NSW Ports notes that the target load/discharge ratio has been set at 0.98 which "recognises that a proportion of imported containers may be retired or repurposed, instead of being exported, and that there is a level of empty container storage available in Sydney."<sup>131</sup> In the

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<sup>129</sup> [State Environmental Planning Policy \(Three Ports\) 2013](#)

<sup>130</sup> NSW Ports 2021, [Port Botany Empty Container Incentive Scheme](#)

<sup>131</sup> NSW Ports 2022, [Empty Container Incentive Scheme update | NSW Ports](#)

first six months of the scheme the load/discharge ratio was 0.99 which compared to 0.95 for the same period in the prior year, 2020.

The scheme is reported to be achieving its objectives with NSW Ports advising that approximately 40 per cent of shipping lines from July to September 2021 exceeding the target ratio of 0.98 and 60 per cent from October to December 2021 (these shipping lines paid discounted wharfage rates as a result). "At the same time, shipping lines handled increased volumes of export full containers. From July 2021 to December 2021, there was a 16.5% increase in the export of full containers, compared with the previous year."<sup>132</sup>

In September 2022 when providing an update on a new empty container park development at the port, NSW Ports advised it would provide "an additional 6,000 TEU of empty container storage capacity, adding about 10% extra capacity to Sydney's supply". It would also use "the latest technology, including paperless processing, to make truck movements safer and more productive and will feature sustainability initiatives such as rainwater harvesting and solar panels for power supply".<sup>133</sup>

### Empty container data regulation

Section 108 of the Regulation (introduced on 1 September 2021) allows the Minister to require empty container storage facilities to provide operational performance data to TfNSW. This amendment was introduced in response to stakeholder feedback, but a data direction has not been issued to date. Data provision should be required to create visibility of this part of the supply chain and provide a port-wide understanding of Port Botany container movements.

Some stakeholders have suggested that ECPs be regulated in line with the PBLIS approach to road servicing at the stevedores. At the time PBLIS was implemented in 2010, it was expected that empty container parks may be subsequently brought into the Regulation. This approach however has not been implemented and is not appropriate as industry solutions are available and are being successfully implemented. The drivers for empty container storage challenges also have different characteristics to the issues addressed by PBLIS in 2010 and would not be effectively addressed by a PBLIS style regulatory intervention.

As detailed in **PBLIS Recommendation 12: Road data transparency** above, the Productivity Commission in its recent inquiry has noted that the value of data lies in analysis where it is used to provide performance insights and guide decision making for both business and government.<sup>134</sup>

Data transparency will support port efficiency by facilitating a shared understanding of operational performance for all stakeholders, thereby increasing data analysis insight potential for industry. Providing information publicly on empty container movements would fill a key data gap and provide visibility for industry and government of this part of the port supply chain. This would remove any ambiguity or misunderstandings to support improved industry relationships. Consideration would be given to commercially sensitive information when determining what data to publish.

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<sup>132</sup> NSW Ports 2022, [Empty Container Incentive Scheme update](#) | NSW Ports

<sup>133</sup> NSW Ports 2022, [Significant Extra Empty Container Storage Capacity for Port Botany](#) | NSW Ports

<sup>134</sup> Productivity Commission 2022, [Inquiry into Australia's Maritime Logistics System Final Report](#), p. 398

Empty container storage data provided to government will inform long-term strategic planning for the freight supply chain by improving understanding of where constraints and opportunities exist to best support supply chain efficiency. This data can be sourced from existing operational information in ECP operator systems to avoid unnecessary administrative burden.

This recommendation, along with related recommendations, together propose increased data visibility across the port supply chain, to provide a comprehensive understanding of containerised freight movements in NSW. These include:

- **PBLIS Recommendation 1: PBLIS Performance Scheme** a performance scheme which establishes a comprehensive set of stevedore and carrier performance benchmarks and makes this data publicly available
- **PBLIS Recommendation 12: Road data transparency** to increase road performance data transparency
- **PBLIS Recommendation 13: Rail data transparency** to increase rail performance data transparency
- **Act Recommendation 10: Vessel manifest information and data formats** to strengthen vessel manifest information requirements and information sharing mechanisms to support quality information provision and efficient data sharing with port operators and the NSW Government.

In the future, a Freight Community System (see **PBLIS Recommendation 15: Freight Community System**) could host this data, which would ideally be available in real time.

### Electronic systems requirement

The use of electronic systems at ECPs and connections between the IT systems of individual parks could be improved (voluntarily) to enhance the efficiency of the port supply chain. There is also a reliance on manual processes for some parts of the empty container supply chain, including some shipping lines that do not use electronic delivery orders (EDOs) for the redirection of empty container returns (when the ECP that the road operator is directed to return the container to when the goods are unloaded changes) and their use should be required.

Manual redirections involve notifications provided via a number of emails. These are general emails which require road operators to manually scan through lists of container return locations, to determine where to return specific containers for each shipping line. Given the constrained capacity in ECPs in the port precinct and the preference of shipping lines to store empty containers near the port, there can be significant numbers of redirections provided with limited notice, particularly in peak times as ECPs become full.

This can result in trucks finding out about redirections after they have already arrived at the originally specified ECP. Redirections can also result in invoices from the original ECP for booking cancellations, leading to further manual administration to process transport operator requests for credit notes for cancelled slots.

While the ECWG has resulted in the increased use of EDOs by shipping lines, these are not used comprehensively. Given the importance of these movements and potential benefits for overall port efficiency by improving trip planning reliability for road operators and to

facilitate dual running<sup>135</sup> where possible, the use of EDOs would streamline this flow of information and reduce administrative effort.

## Stakeholder feedback

Stakeholder support for regulating the provision and publication of empty container storage data noted that this would ensure consistent data to inform analysis of inefficiencies and current and future issues. This would assist industry to implement non-government solutions to these issues. Stakeholders also noted that the impact on ECPs would be minimal, as it would access existing booking information.

Other stakeholders supported engagement through the ECWG with the voluntary provision of appropriate data but did not support the mandatory provision of data. As outlined above, the voluntary approach through the ECWG has not proven successful in obtaining complete and consistent data. Other stakeholders did not support the public provision of data.

Stakeholders noted that requiring shipping lines to provide Electronic Import Delivery Orders (EIDO) to ECP booking service providers to facilitate improvements to redirections was important to support supply chain efficiency. Stakeholders also raised the value of real time messaging for truck drivers, to notify them of changes to operating conditions at the port, such as any delays or changes to empty container return locations.

Some stakeholders supported the provision of data being required but proposed that ECPs also be brought under PBLIS or a similar scheme with penalties applied to performance standards. The use of different operational software between the stevedores and ECPs was also noted as adding to inefficiencies impacting the ability of carriers to maximise port-wide two-way loading. Another contributing factor was the limited operational hours of ECPs compared to stevedores who operate 24/7.

Other stakeholders advised against PBLIS style regulation. This was to allow ECPs to retain flexibility and avoid inefficiencies, especially if the resultant stricter adherence to meeting booking times at ECPs to avoid a penalty resulted in transport operators building in more buffer time overall.

Stakeholder feedback also included:

- information on operational issues faced by road operators when returning empty containers
- the suggestion that opening the TMA to trucks accessing empty container parks and then calling them forward could smooth arrivals and avoid congestion on roads
- that ECPs be required to operate 24/7 to increase accessibility for road operators
- the voluntary enabling of data sharing across industry systems to connect different parties in the supply chain.

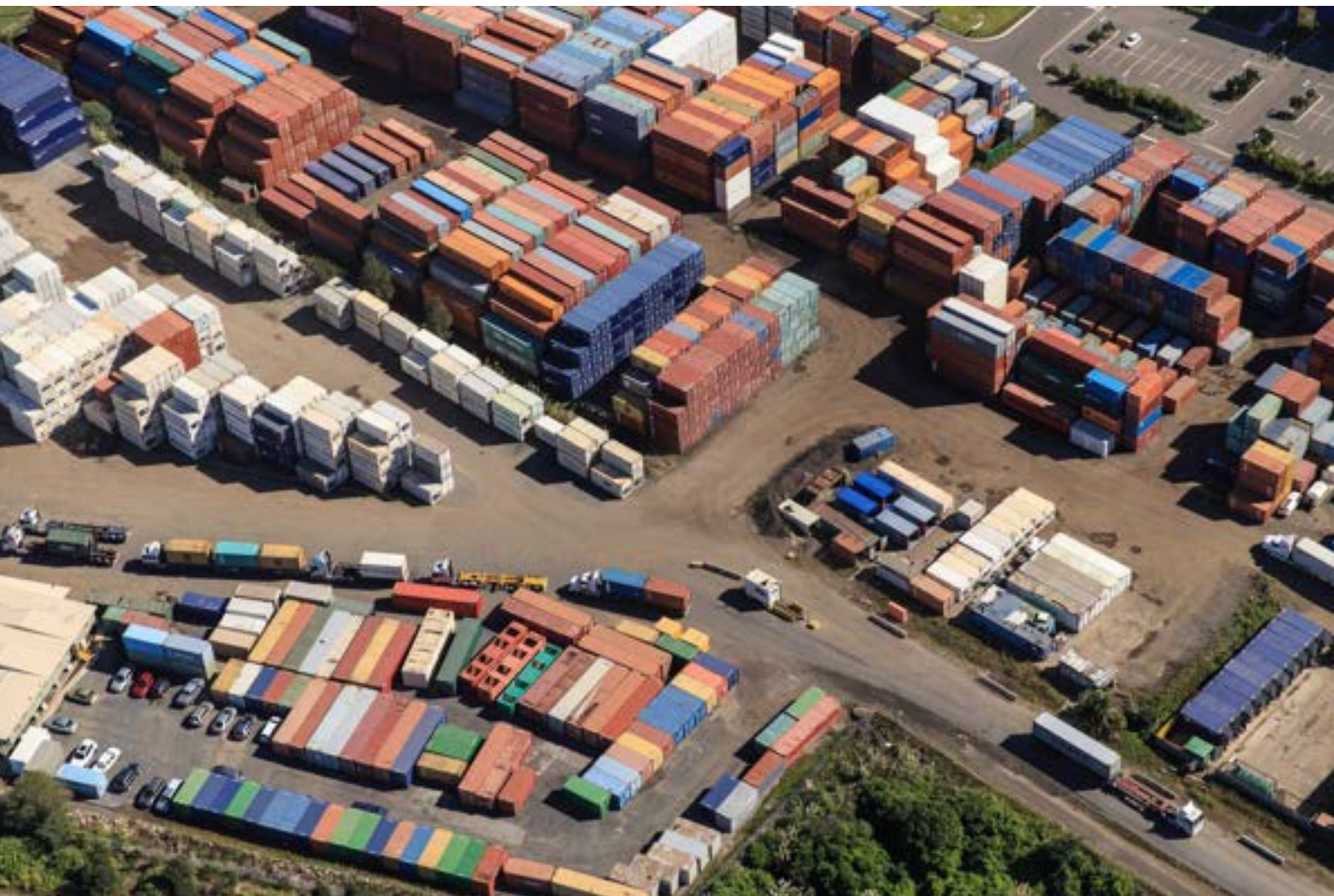
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<sup>135</sup> Dual running occurs when import and export containers are serviced by a single truck, by delivering one or more export containers and picking up one or more import containers on the same trip. This means fewer truck trips to the port are required to service the same amount of containers.



## Net benefits

- Improves industry relationships through facilitating a culture of transparency and openness, and removing misunderstandings and assumptions based on anecdotal evidence
- Improves port efficiency by addressing operational inefficiency from not using an appropriate electronic format for empty container redirections
- Improves efficiency through providing industry with the data required to analyse trends and promote collaboration and innovation across the freight supply chain
- Better informs decision making by increasing the data available for government to support analysis of supply chain performance, including any issues and restrictions on productivity, and informs long-term planning and investment in the freight network.



## 5.2.4 Freight Community System

### **PBLIS Recommendation 15: Freight Community System (FCS)**

Progress development of a FCS Strategic Business Case and, if positive, develop a phased implementation plan to proceed as a high priority.

A Freight Community System (FCS) is an electronic platform that enables freight network supply chain businesses to exchange information rapidly and securely with other businesses through a single interface to facilitate commercial interactions. These systems are typically open electronic platforms that are independent of established supply chain interests, enabling trusted end-to-end visibility of the supply chain supported by appropriate governance, regulatory, and funding arrangements.

In addition to facilitating commercial interactions a FCS also provides the opportunity to host publicly available information in one location, supporting industry analysis and the potential for insights into supply chain operations.

A FCS would improve data sharing, exchange and storage for freight movements in NSW. It would not replace existing privately provided business IT systems, but would access data from them under appropriate controls, along with other relevant systems, to provide access via an overarching single IT system. Users can log in to the FCS to access all the information they require in one location, removing the need to log in to multiple systems and replacing email and other communication methods.

This world-leading capability would provide a digital infrastructure backbone to existing hard infrastructure assets and future investments and enable industry collaboration to optimise freight movements in Australia.

As outlined by the Productivity Commission, the value of data lies in analysis which “sees data used to provide performance insights and guide decision making” – and for the maritime logistics system – “data analysis can help optimise freight routes and schedules, ensuring that more cargo can flow uninterrupted. For example, using real-time geospatial and logistical data can help landside freight operators prepare for handling incoming and outgoing cargo and plan efficient routes.”<sup>136</sup>

The Productivity Commission also noted there “is a clear role for government to foster interoperability within the maritime logistics system as a means of improving the efficiency of data exchange, particularly through its existing presence in border security and port regulatory roles.”<sup>137</sup> When discussing the issue of data siloing the Productivity Commission has noted Australian and State Government initiatives that commit to releasing non-sensitive maritime freight data by default, and a range of measures including the TfNSW proposed FCS which will improve the collection and publishing of data.<sup>138</sup>

The Productivity Commission also notes the costs involved with data sharing by government agencies, the improvement to systems in which stakeholders interact with government, and

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<sup>136</sup> Productivity Commission 2022, [Inquiry into Australia's Maritime Logistics System Final Report](#), p. 398

<sup>137</sup> Productivity Commission 2022, [Inquiry into Australia's Maritime Logistics System Final Report](#), p. 407

<sup>138</sup> Productivity Commission 2022, [Inquiry into Australia's Maritime Logistics System Final Report](#), p. 402



the indirect benefits of improving national data infrastructure to improve industry practices, and that these measures would need to provide adequate public benefits to justify their investment.<sup>139</sup>

The Productivity Commission pointed to the current VBS systems and other systems in operation at stevedore and empty container facilities. It concluded that creating an entirely new national government run Port Community System (PCS) system to replace them “may only add further administrative cost for users in the maritime ICT landscape”.<sup>140</sup> The proposed FCS approach in NSW would not replace any existing business systems but would securely and appropriately source data from these systems.

It is expected that implementation of an effective and comprehensive FCS that delivers the benefits possible to the freight industry and the people of NSW will need further consideration as to whether it would need to be a regulated system. A FCS works when it is comprehensive and all relevant information is included. Characteristics of the freight industry that mean a regulated approach may be required include:

- The adversarial nature of the relationships in some parts of industry, where competing commercial interests create a lack of trust and collaboration
- That some parties derive benefits from the lack of transparency
- That data may be currently owned by commercial parties who provide access at a cost and may not support increasing access.

The NSW Government is likely to be the only entity capable of implementing a FCS given the costs involved, the level of trust required that does not exist between commercial competitors and because the benefits would flow across the NSW economy and society. The system would need to be designed to reduce any administrative burden and utilise existing systems and data sources to feed into an overarching FCS, in order to ensure it is an efficiency improvement for industry and not a time-consuming intervention.

Delivery of a complex system of this scale and scope is likely to require a long lead with significant development and maintenance costs. It is therefore important to ensure that it can be delivered in phases. Industry involvement in the final design of a FCS would be important to ensure that the realised benefits match expectations.

The benefit of a FCS includes allowing public and private stakeholders to optimise, manage, and automate port and logistics processes by facilitating commercial interactions between supply chain participants. Australian container freight supply chains are currently impacted by inefficiencies due to fragmented multi-party transactions, inadequate information sharing, and variable IT use. Typical challenges include:

- Container movements can require 120 separate transactions, with up to half having data items unnecessarily repeated (often manually) which increases error rates
- Supply chain participants communicate through multiple channels and interact with multiple proprietary IT systems via multiple screens

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<sup>139</sup> Productivity Commission 2022, [Inquiry into Australia's Maritime Logistics System Final Report](#), p. 402

<sup>140</sup> Productivity Commission 2022, [Inquiry into Australia's Maritime Logistics System Final Report](#), p. 407

- Issue identification is reactive, not predictive, and is exacerbated by limited visibility of container identifiers and cargo at many stages across the supply chain.

## FCS Strategic Business Case

In 2019, TfNSW commissioned a scoping study to explore the feasibility of a PCS for NSW to enhance data exchange between port freight businesses. While significant benefits were identified that could be realised for the port sector alone, the scoping study highlighted that the freight supply chain is interconnected and encompasses road, rail, air, and intermodal terminals.

Following consistent feedback from government and industry stakeholders, TfNSW recognised that developing a PCS in isolation to other modes could see it miss significant opportunities to improve the efficiency of freight overall. The need for a system to integrate with other government systems as well as interstate movements was also recognised. It was for these reasons that the PCS initiative was expanded to a FCS.

Consultation with industry and government in 2021 to support the development of the Strategic Business Case for a FCS confirmed that data sharing between NSW freight businesses faced various issues. Addressing these issues could support the efficient functioning of the NSW supply chain and reduce the costs of doing business. These issues include:

- **Complex, manual, and duplicative business-to-business freight processes:** Freight sector processes which are used to generate and record business-to-business transaction data are often low-tech and manually intensive for many freight businesses. These processes are slow and often duplicated, leading to inefficiencies, risk of error and add additional costs to trade which can undermine international competitiveness.
- **Lack of common data standards and methods for exchanging commercial freight data:** There is no standard language for communication between parties in the supply chain network, resulting in inefficiencies from the interpretation of different data formats. There is also no commonly accepted method for exchanging freight data, which is passed across various modes such as emails and phone-calls, necessitating ongoing monitoring and increasing the potential for errors.
- **Competing freight sector interests and information asymmetries:** Businesses have developed systems and processes to serve their own activities. Consequently, data tends to sit in commercial silos. Inefficiencies are common, including information asymmetries and in some instances, are used for commercial gain. This is an issue for government, as the lack of visibility within the supply chain impedes the identification of bottlenecks in the network.
- **Current freight business technology systems vary in maturity:** The variation in maturity and sophistication of systems has resulted in a range of incompatible functionalities and capabilities. This makes strategic planning difficult as data is not always accessible or stored in a coordinated, usable format.

The Strategic Business Case reviews have been completed and next steps for the project are currently being determined.<sup>141</sup>

### International examples

The Port Comparison Research found that – “All the European ports investigated had a Port Community System (PCS). The services offered depends on the engagement from stakeholders and the integrations to the platform. Some services may be accessed through the PCS or separately. The PCS is primarily used for the exchange of information between all parties within the port supply chain. The availability of real-time information about container status and congestion levels (Valencia) has improved the ability of road operators to plan trips to the port. Only the Port of Rotterdam and the Port of Valencia had their respective [truck] booking systems integrated into the PCS. Sharing information through the PCS allows the maximum reuse of information and has reduced the number of communications required among stakeholders by providing a single location for all documentation including to the Harbour Master and Customs.”<sup>142</sup>

Ports in Europe investigated included the Port of Valencia (3 terminals and 5.4 million TEU per annum), Port of Rotterdam (5 terminals and 14.3 million TEU per annum) and the Port of Antwerp (5 terminals and 12 million TEU per annum).

### Port of Valencia PCS example

The PCS at the Port of Valencia was developed by the port operator to provide a technological platform to streamline and facilitate the operating processes in the port community. The Port Comparison Research notes, “any company can participate in the development and implementation of services. Propriety systems can be integrated with the platform.”<sup>143</sup>

For road operators the PCS is used for planning port arrivals. A driver registers the data for their visit to the port to determine if there are any delays at the terminal. A real time connection to cameras at the port is also provided, so they can estimate the level of congestion on the roads outside and inside the port. Other services of the PCS include:

- Port Operations – A single location for all documentation required by the PAV itself and other official bodies such as the Harbourmaster’s office and Customs.
- Inland Transport – Enables agents involved in the road transport of goods to compile and manage transport orders including cargo acceptance and delivery orders required to transport goods inside the port premises. The platform also provides agents with notifications of the delivery and receipt of containers at the terminal or depot.
- Customs – Allows shipping agents to present and amend import and export cargo manifests directly to the PAV and the Spanish State Tax Agency.
- Track and Trace – The Cargo Tracking service allows users to obtain track and trace information of their shipments, such as the status of their cargo, transshipments carried

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<sup>141</sup> TfNSW 2021, [Freight Community System](#)

<sup>142</sup> Advisian 2022, PBLIS Comparison Study, Sydney, NSW, p. 15

<sup>143</sup> Advisian 2022, PBLIS Comparison Study, Sydney, NSW, p. 61

out and/or documents processed. The platform also enables users to integrate this information into their systems to present it to their customers.

- Integration – Companies handling large volumes of shipping documents prefer to transmit the corresponding data through a direct integration of their management systems, saving the time needed to copy and reintroduce the data in their systems. Development of the PCS is undertaken to continue to integrate with third party systems.

Some future improvements to the PCS at Port of Valencia are planned:

- An alert system in the PCS application. At present, the application does not allow for instant notification of incidents. Currently, communication to stakeholders involved in port activities are made by email and in some cases by text messaging groups. An instant alert system would allow drivers to be informed of any problems and/or delays in real time. The system has been developed and is about to be implemented.
- VBS – The working groups are analysing and discussing the failures that led to the rejection of the system in the first implementation attempt. The aim is to improve the previous version and to re-propose a VBS in the medium term.

### **Stakeholder feedback**

Stakeholder feedback included strong support for a FCS to increase transparency and support the efficiency and sustainability of the port supply chain. Support was also provided for the sharing of data to improve the efficient operation of Port Botany. Support for the NSW Government's development of a robust business case using a staged implementation plan for a FCS was noted, along with the potential for this system to be developed at the national level. The inclusion of customs processes was also noted as important.

Stakeholders also raised the value of real time messaging for truck drivers as a way of notifying them of changes to operating conditions at the port, such as any delays or changes to empty container return locations.

Other stakeholder feedback included support for a FCS if it facilitated the shift away from the PBLIS rules to a non-penalty based de-regulated port landside improvement strategy. Some stakeholders also wanted to see the final business case details when complete before deciding on their position, and were interested specifically in how implementation would be funded.

Some stakeholders that did not support the FCS reserved their decision until more information was available. Others expressed opposition to the proposal and raised concerns about:

- A FCS duplicating existing systems and increasing administrative complexity as well as the risk of compromising confidentiality of commercial data
- The potential for this approach to lead to regulation across broad datasets and the concern that this could undermine the adoption of market led technology solutions
- Who would pay for this system.

## Net benefits

- Increases the visibility of cargo information through a user-friendly data accessibility method to support efficient business operations
- Reduces administrative effort for freight businesses by providing:
  - A single location for all relevant information managed under appropriate confidentiality arrangements
  - Real time updates to information, e.g., container status and congestion levels
  - Reduced communication effort between supply chain participants as communication channels are centralised and automated.
- Potential lower costs of goods for consumers, higher returns for exporters, and freight business benefits as efficiency gains delivered in national container supply chains are shared throughout the supply chain.





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## 5.3 Port access

Ports are the trade gateways to the world, providing the key connection for the NSW and Australian economies to the international freight supply chain. The Productivity Commission outlines that “the efficiency and dependability of Australian ports affect the cost of importing and exporting goods, and, consequently, play a role in determining the international competitiveness of many Australian businesses in global markets and the cost of goods purchased by Australian households. The performance of Australian ports ultimately affects the living standards of all Australians.”<sup>144</sup>

The effective management of the port landside interface facilitates the connection to the NSW supply chain and managing port roads effectively is an important part of this task. Road traffic rules applied elsewhere in the State are not applicable inside port areas with port operators responsible for managing these roads. Appropriately managed road access at the port supports the efficient movement of freight in and out of the port precinct.

To support port access management by the port and terminal operators a number of the international ports investigated have “government regulations around the requirement to use a VBS and/or environmentally friendly engines”<sup>145</sup> for trucks accessing ports. The Port Comparison Research outlined how, “in North America all the investigated ports require carriers operating into and out of their container terminals to be licenced with the port. The original licence requirement was an initiative to direct carriers to use cleaner diesel engines. This has been expanded to require access through scheduling of bookings to address congestion.”<sup>146</sup>

Since 2010 PBLIS has regulated the container stevedore landside servicing of trucks and trains at Port Botany. The regulation which primarily applies rules enforced by reciprocal penalties to stevedore and road operators, is supported by non-regulatory measures. These include the truck marshalling area (TMA) and the TfNSW ANPR camera network with these measures supported by the port operator’s management of port roads.

The CBA found that the total benefits of PBLIS in 2021 were \$19.4 million. The TMA was an important contributor by bringing over \$8 million of these benefits, \$10.9 million was from the road service lines, cameras and enforcing parking rules and only \$0.38 million was derived from the PBLIS rules and associated penalties in 2021.<sup>147</sup>

This section considers how best to manage port road access to support the efficient operation of the landside interface by considering whether: a second truck marshalling area is required; implementing a streamlined road operator port access certification scheme and; engaging NSW Ports to administer elements of PBLIS, the TMA and TfNSW camera network as a service provider.

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<sup>144</sup> Productivity Commission 2022, [Inquiry into Australia’s Maritime Logistics System Final Report](#), p. 93

<sup>145</sup> Advisian 2022, PBLIS Comparison Study, Sydney, NSW, p. 14

<sup>146</sup> Advisian 2022, PBLIS Comparison Study, Sydney, NSW, p. 14

<sup>147</sup> Castalia 2022, Cost-Benefit Analysis of PBLIS Performance, Sydney, NSW, p. 43



### 5.3.1 Truck marshalling area

#### **PBLIS Recommendation 16: Second truck marshalling area**

Investigate the need and timing for a second truck marshalling area (TMA) and, if required, consider options for its development.

Following the commencement of PBLIS, a TMA was established off Bumborah Point Road at Port Botany in 2012 to support landside operations by providing a safe parking area for trucks that arrive early for a booked time zone at the stevedore terminals. Parking or queueing in and around the port precinct is prohibited and can incur parking fines, while vehicles arriving early to a stevedore risk incurring a PBLIS penalty. The TMA currently allows trucks to park for up to one hour prior to the booked stevedore slot.

The CBA found that the TMA has played a major role in reducing congestion around the port precinct and surrounding roads and provided more than \$8 million of benefits in 2021.<sup>148</sup> The TMA has also contributed to a reduction in vehicle congestion at stevedore terminal in-gates, and a reduction in illegal truck parking and queueing in the port precinct and on the roads approaching Port Botany. It supports carriers to manage their fleet and bookings effectively, provides additional capacity for the queuing of early arrival trucks and for incident management, including stevedore unforeseen events.<sup>149</sup> There have also been times when TMA access has been provided to country carriers who arrive early for time zones, when capacity permits. TMA capacity is usually impacted by Sydney traffic conditions.

Stevedores do open time zones early when possible, and trucks that have arrived at the TMA are allowed into the terminal early, with the TMA management staggering the departure of the early trucks to the stevedore terminal.

Both the CBA and the PBLIS Behavioural Research note there is unused capacity at the TMA, with the PBLIS Behavioural Research specifying that while the TMA is being used for early arrivals by some carriers prior to their time zone opening, it is typically underutilised once the next time zone is opened.<sup>150</sup> Both reports also note that some carriers still choose to park outside the port precinct (on roads adjacent to the port) rather than use the TMA.

Reasons for trucks parking on roads surrounding the port instead of the TMA include the TMA reaching full capacity on a few occasions, the one-hour time limit at the TMA, Hutchison and Patrick Terminals being located further from the TMA than the DP World terminal, and that some trucks are waiting to enter other facilities, such as transport operator and empty container yards, rather than a stevedore terminal.<sup>151</sup>

A second TMA in another location in the Port Botany precinct may help address some reasons for trucks continuing to park on roads instead of at the TMA. It may also be required in the future as container volumes grow and the port road transport task increases. Allowing TMA access to trucks accessing empty container parks and then calling them forward could

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<sup>148</sup> Castalia 2022, Cost-Benefit Analysis of PBLIS Performance, Sydney, NSW, p. viii

<sup>149</sup> Deloitte Access Economics 2022, PBLIS Industry Behavioural Research, Sydney, NSW, p. 6

<sup>150</sup> Deloitte Access Economics 2022, PBLIS Industry Behavioural Research, Sydney, NSW, p. 45

<sup>151</sup> Castalia 2022, Cost-Benefit Analysis of PBLIS Performance, Sydney, NSW, p. 18

smooth arrivals to these facilities and avoid congestion on roads – the operational opportunities and benefits of this should be considered by TfNSW and industry.

A possible location of the second TMA closer to the Patrick and Hutchison terminals could reduce travel distances within the port precinct for early arriving trucks accessing those terminals, creating potential reductions in congestion on roads surrounding the port precinct. It would also provide greater flexibility for carriers to manage their fleet.

### **International and Australian examples of parking facilities near ports**

The Port Comparison Research outlines various parking and truck marshalling arrangements at the Port of Rotterdam, Port of Antwerp, Fremantle Port and the Port of Brisbane. The report notes the Port of Rotterdam has multiple parking and amenity (restrooms, restaurants etc) facilities around the port that can be used for a fee. They are well utilised, with an occupancy rate of over 80 per cent. The Port of Antwerp (handles 12 million TEU per year) provides a 210-space parking facility in the port and is constructing additional parking areas at strategic locations in the port area.

At the Port of Brisbane, Patrick Terminals leases a nearby parcel of land at the port where trucks can wait until they are called to proceed to the terminal, leading to very low occurrences of queuing at the terminal.

The Fremantle Port Authority operates a congestion management system in conjunction with a 60 bay TMA that can be activated by a stevedore if congestion is occurring. At its Fremantle terminal, DP World is currently also developing a TMA within their terminal boundary. The congestion management system is not intended to be used as a general traffic management system.<sup>152</sup>

### **Stakeholder feedback**

A number of stakeholders suggested there is a need for a second TMA and that it should be located closer to the Patrick and Hutchison terminals.

Other stakeholders suggested that a second TMA be considered after further assessment of the utilisation of the current TMA. Feedback was also provided on the operation of the current TMA, which included that trucks should be released from the TMA prior to commencement of time zones to reduce time lost in transit.

Opportunities to use any surplus capacity in the existing TMA for staging of non-container bulk liquid trucks should be examined, and for use by trucks carrying dangerous goods. This use however is likely to raise issues with dangerous goods regulations which limit the concentration of these potentially hazardous goods in one location.

It was also raised that trucks accessing ECPs be permitted to use the TMA to smooth ECP arrivals, given the limited areas of opportunity for trucks to legally queue on Port Botany roads.

Consideration of any impacts of a second TMA on residents near the port should also be considered.

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<sup>152</sup> Advisian 2022, PBLIS Comparison Study, Sydney, NSW, p. 19

## Net benefits

- Reduces travel distance (about 2.5 kilometres) for early arriving trucks accessing the Patrick and Hutchison terminals, which potentially reduces congestion on roads in and around the port precinct
- Improves routing flexibility and fleet management opportunities for carriers to support operator efficiency
- Enables earlier truck processing when stevedores request early trucks from TMAs prior to time zone commencement, supporting terminal and port efficiency
- Reduces the likelihood of trucks parking in residential and industrial or commercial areas outside of the port precinct while waiting for a time slot, improving amenity for local businesses and residents.



### 5.3.2 Certified transport operator access

#### **PBLIS Recommendation 17: Certified transport operator access**

Introduce a certification requirement for container transport road operators at Port Botany.

Internationally, a number of ports apply a certification or licensing requirement to road operators to grant port access. This gives the port operator a level of oversight and control over the trucks servicing the port task. At Port Botany there is no port specific certification or licencing requirement for truck fleets engaged in the container transport task.

The aim of the certification approach is to support port efficiency and encourage and facilitate professional performance levels across all operators. The current and increasing container volumes handled at Port Botany will continue to require many trucks to access the port every day and this scheme supports this essential freight task.

The Port Botany container freight task is significant, with around 270 road operators involved in the movement of over 2.5 million containers in 2021-22 by road, which is 99.6 per cent of all containers in NSW. As well as the three container stevedores, empty container parks and transport operator facilities are also located in the port precinct.

Container trucks also interact with trucks servicing the multi-user bulk liquid facility operated by NSW Ports, the largest common user bulk facility in Australia, handling 0.9 million Revenue Tonnes of bulk gas and 4.4 million Revenue Tonnes of bulk liquids in 2021-22, as well as trucks providing services for break bulk and other traffic in the port including Port Authority, Australian Customs and Border Force, TfNSW, other freight businesses and the general public.

Introducing this requirement would support port efficiency by ensuring road operators meet professional standards appropriate for this essential freight task and would facilitate comprehensive oversight of port truck movements. It would also support flexibility across the supply chain by recognising subcontractors working for a transport operator.

The certification would provide a unique port access identifier for each road operator and would be automatically granted to road operators, who would not be required to meet any specific requirements. This certification would not duplicate any other existing registration, certification, or licensing requirements that road operators are required to comply with under State and Australian Government legislation.

To implement this access certification scheme, existing schemes would be investigated to determine opportunities to use an existing scheme for this purpose, such as NHVR accreditation, NSW Government licensing, and the three container stevedore registration systems. This would limit additional administrative effort for both industry and government.

A single port-wide identifier for road operators engaged in the container transport task provides a number of functions for managing truck access in the port precinct and facilitating improvements to the port supply chain. These include:

- A single identifier would support implementation of the Performance Scheme (**PBLIS Recommendation 1: PBLIS Performance Scheme**) by providing a single port-wide list of container road operators

- Facilitate the collation of port-wide truck movement information by attaching the road operator identifier to empty container park data as well as stevedore truck servicing data (**PBLIS Recommendation 12: Road data transparency** and **PBLIS Recommendation 14: Empty container data transparency and efficiency**)
- Support the introduction of a Freight Community System (**PBLIS Recommendation 15: Freight Community System**) in the future
- Support port operator management of the port by providing the ability for port access to be revoked if performance in the port precinct was not maintained at an appropriate standard, for example in line with port operator directions (e.g. not obeying port traffic rules).

The NSW Government would be responsible for this regulated scheme. It is not within the scope of the NHVR to manage access to stevedore terminals or port roads, as this is managed by the NSW Government, the stevedores, and the port operator.

Evidence has not been found for the need to apply this access certification requirement to bulk liquid trucks accessing Port Botany, but this may be considered in future.

### International examples

The Port Comparison Research outlines a number of international ports that apply truck licensing systems. Internationally these systems are usually designed to encourage greater use of more modern, efficient, safer and environmentally friendly truck fleets, and also to require the use of port-related technology such as a VBS and GPS tracking. Examples are outlined below, along with the relative size of the container task for each port, in TEU per annum.<sup>153</sup>

#### *Vancouver (Canada) 3.5 million TEU*

The Canadian Federal Government introduced a Truck Licensing System (TLS) for all Canadian port authorities. Two key elements at Vancouver are the use of access agreements (requiring truck registration and the use of VBS) and a rolling truck age program (requiring trucks to be less than 10 years old). Long-haul trucks can enter the port with an advanced registration and are not required to use the VBS.

Other key initiatives at the Port of Vancouver require the use of GPS on all port licensed trucks. Only carriers with five or more trucks are eligible for registration under the TLS. These programs have resulted in a reduction in the number of registered carrier companies accessing the port from 2,000 to 85.

#### *Ports of Los Angeles and Long Beach (United States) 9.2 million TEU, 8.1 million TEU*

Port registration and licenses are required for carriers to operate within the port precinct. The Clean Truck Program requires carriers to replace older trucks working at the ports. To obtain a port license, a carrier must meet several obligations including being equipped with a Radio-Frequency Identification (RFID) tag or other technological identification method provided by the port, using a VBS and abiding by clean truck regulations. The clean truck

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<sup>153</sup> Advisian 2022, PBLIS Comparison Study, Sydney, NSW, p. 39

program and the registration requirements have resulted in only the larger carriers having access to the ports.

### ***Northwest Seaport Alliance Ports of Seattle and Tacoma (United States) 3.3 million TEU***

The Northwest Seaport Alliance Clean Truck Program requires a port license for access, vehicles with engines less than 10 years old, all trucks be equipped with a RFID tag and that all bookings are made through the VBS. The alliance is offering a USD \$10,000 grant to registered carriers to upgrade their engines to meet the Clean Truck Program guidelines.

### ***New York and New Jersey (United States) (7.6 million TEU)***

The Port Authority of New York and New Jersey requires all trucks accessing the terminals to be registered with the port. Requirements for registration are a valid identification card, commercial driver's licence, insurance and driver registration with the Port Authority of New York and New Jersey. Truck engines must also be less than 10 years old.

### ***Rotterdam (Netherlands) (14.3 million TEU)***

The port, local government and Ministry of Infrastructure introduced the Maasvlakte Air Quality Agreement 2008, which created access requirements to enter Maasvlakte (the area of the port with the deep-sea container terminals) to improve the air quality in the local area. Trucks that enter this area are subject to additional requirements for registration, including fitting of an engine less than seven years old and rated to required emission standards.

In many of the international examples of port access certification approaches environmental improvements to port truck fleets has been a driver of the certification approach. The scheme recommended however does not include environmental performance requirements, as environmental truck performance standards are not within the scope of the Act.

## **Stakeholder feedback**

Stakeholder support for the introduction of transport operator certification noted that it could provide a range of benefits to assist with improved port operational and environmental performance as well as potentially increasing truck utilisation. It was also noted as being a broader port initiative that would need to be supported by government and the port road manager NSW Ports. Stakeholders also noted that other countries offer registration benefits for moving to an environmentally friendly modern fleet.

Other stakeholders were concerned about a certification scheme adding complexity and an additional layer to the current safety and environmental regulations already in place in Australia. The National Heavy Vehicle Regulator (NHVR) is responsible for truck safety, design, and performance standards, and it was suggested that its role not be duplicated and that any port certification model be addressed nationally by the NHVR, with potential regulatory policy development through the National Transport Commission (NTC).<sup>154</sup>

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<sup>154</sup> The National Transport Commission is an Australian Government statutory body that leads national land transport reform across all Australian jurisdictions with the aim to improve safety, productivity, environmental outcomes and regulatory efficiency.



Stakeholder feedback included concerns that certification could negatively impact road operator viability by adding additional requirements and that in the current operating environment of truck driver shortages that this could potentially lessen competition and choice for shippers.

It was also noted that creating a barrier to new operators entering the market should be avoided and that any restrictions on transport operators should not negatively impact port efficiency. Some stakeholders also felt it was important to maintain a balance between large and small carriers at the port.

### Net benefits

- Supports adherence to and enforcement of port operator directions for port traffic management (see **Act Recommendation 5: Enforcement of private port operator directions** for further details) by making this a condition of the licence, with repeat breaches of port operator directions possibly resulting in the licence being suspended or revoked
- Facilitates the implementation of the PBLIS Performance Scheme by consolidating a single list of relevant transport operators, and in future, supporting the implementation of a Freight Community System (see **PBLIS Recommendation 15: Freight Community System**)
- Potentially enables greater flexibility across the supply chain by recognising subcontractors working for an operator.

### 5.3.3 NSW Ports administration

#### **PBLIS Recommendation 18: Engage NSW Ports as a service provider to administer elements of PBLIS, truck marshalling area and TfNSW camera network**

Engage NSW Ports to administer PBLIS, and manage the TMA and the TfNSW ANPR camera networks as a service provider to TfNSW with the NSW Government (TfNSW) retaining responsibility for and control of the Act, Regulation and Mandatory Standards.

When PBLIS was established, Sydney Ports Corporation was responsible for implementing the regulation, along with the strategic planning and operational management of Port Botany. Following the lease of the port to the private operator (NSW Ports), the functions that remained with government were allocated to the Port Authority of NSW (primarily port safety and the cruise business) or TfNSW, which was allocated the implementation of the PBLIS rules.

TfNSW has oversight of the PBLIS requirements and ensures all parties are adhering to the Regulation. Activities that TfNSW undertakes on a regular basis include:

- Collating operational VBS data from the stevedores and independent truck movement data (collected through Automated Number Plate Recognition (ANPR) technology) to oversee PBLIS requirements such as TTT and truck arrival times
- Checking invoicing information, vessel servicing data, and container dwell times to reconcile storage and penalties and ensure compliance

- Assessing and approving unforeseen event requests by stevedores and transport operators
- Assessing and approving slot reductions (for planned maintenance known in advance prior to booking) or booking cancellations (unexpected issues that occur after booking but prior to slots commencing) requests by stevedores.

TfNSW provides data on PBLIS performance and other port related data to NSW Ports.

TfNSW also operates the TMA and the network of ANPR cameras in the port precinct. As outlined in **PBLIS Recommendation 16: Second truck marshalling area**, the TMA was constructed to support landside operations by providing a safe parking area for trucks that arrive early for a booking at the stevedore terminals. The ANPR cameras are used to verify stevedore compliance with truck turnaround times, and in the instance of queues outside the stevedore terminal, to accurately record truck arrival times, as well as for other purposes such as observing general traffic flows.

The administration of PBLIS requires detailed understanding and oversight of the operations of the port landside logistics supply chain. Due to its highly operational nature, the administration of PBLIS would be more appropriately undertaken, as a service provider, by the port operator NSW Ports given its strong focus on port operational efficiency and relationship with port users.

NSW Ports is a privately owned company that operates Port Botany (and Port Kembla) under a 99-year lease with the NSW Government and is responsible for:

- long-term strategic development and planning at the port
- leasing port land to the stevedores and other port and logistic operators
- shipping access, wharf infrastructure and common user road infrastructure maintenance
- security and safety on common port areas
- operating control of the multi-user bulk liquids berths at Port Botany.

As the port operator, NSW Ports is uniquely positioned and incentivised to improve overall port efficiency to achieve the best outcome for the freight industry and for NSW. NSW Ports' strong commercial incentive to maximise the value of the port by increasing all trade volumes, including container volume throughput, will support ongoing efficiency improvements. This is because:

- NSW Ports earns revenue from container wharfage (which is calculated per container) and therefore has an interest in growing these volumes
- Increased efficiency in the use of existing infrastructure both supports growing container volumes and could delay the need for future infrastructure investment for parties in the supply chain including the port operator.

Shifting this responsibility to the private sector would mitigate potential inefficiencies in the oversight of PBLIS being undertaken by the NSW Government, which is not an operational party in the port landside supply chain. It would allow benefits from aligning the port operator's long-term planning to achieve overall port efficiencies with a comprehensive understanding of the ongoing implementation of the PBLIS arrangements. It is expected that

it would also support improved communication and collaboration between all parties in the supply chain.

NSW Ports would be engaged as a service provider to manage the implementation of the PBLIS rules and TfNSW would also contract NSW Ports, to manage the TMA and ANPR cameras. NSW Ports has a clear incentive to ensure overall efficiency and productivity at the port and is better placed to administer PBLIS given its roles of managing the port, being the sub-lessor of port land to the stevedores and providing landside access to the port as the road manager for private port roads. This means the private port operator has necessary levers in place to understand and influence port landside efficiency.

Under this framework, TfNSW retains responsibility for the Act, Regulation and Mandatory Standards, as it is the role of government to administer legislation, and this cannot be shifted to a private entity company. This means that all regulatory changes would remain the responsibility of TfNSW. NSW Ports would provide data and information to TfNSW and TfNSW would audit NSW Ports' implementation of PBLIS. Advice to the Minister on PBLIS and port efficiency remains the responsibility of TfNSW.

NSW Ports staff could be authorised by TfNSW to enforce the PBLIS requirements, including issuing penalty infringement notices (or PINs, which are 'on the spot' fines) for breaches of requirements to support effective implementation of PBLIS (note this is similar to **Act Recommendation 5: Enforcement of private port operator directions** which strengthens the enforcement of private port operator directions, including traffic control at the port). These PINs are different to the reciprocal penalties that the stevedores and road operators pay each other under the PBLIS rules and are for breaching requirements under the Regulation (which to date have not been required).

## Stakeholder feedback

A large number of stakeholders were strongly opposed to NSW Ports being responsible for PBLIS administration, preferring that it remain with TfNSW. These stakeholders raised concerns that NSW Ports as the port operator may have conflicting interests that make it unsuitable to administer PBLIS. These included the landlord and tenant relationship between the port operator and the stevedores.

Limited stakeholder support was also provided for NSW Ports being engaged to administer PBLIS under appropriate arrangements with the NSW Government.

## Net benefits

- Improves efficiency in the administration of PBLIS by building on existing relationships between the port operator and port stakeholders, and benefits from the operational experience and 'on the ground' positioning of NSW Ports
- Supports the port operator to apply a whole-of-port approach to its port management through direct access to the TfNSW Port Botany ANPR camera network and the operational experience of managing PBLIS and the TMA
- Supports increased interactions between the port operator and all parties in the port supply chain which could drive innovative approaches and improve collaboration
- Provides comprehensive oversight of PBLIS implementation by separating operational implementation (NSW Ports) from the audit of these functions (TfNSW).

## 5.4 Port rail

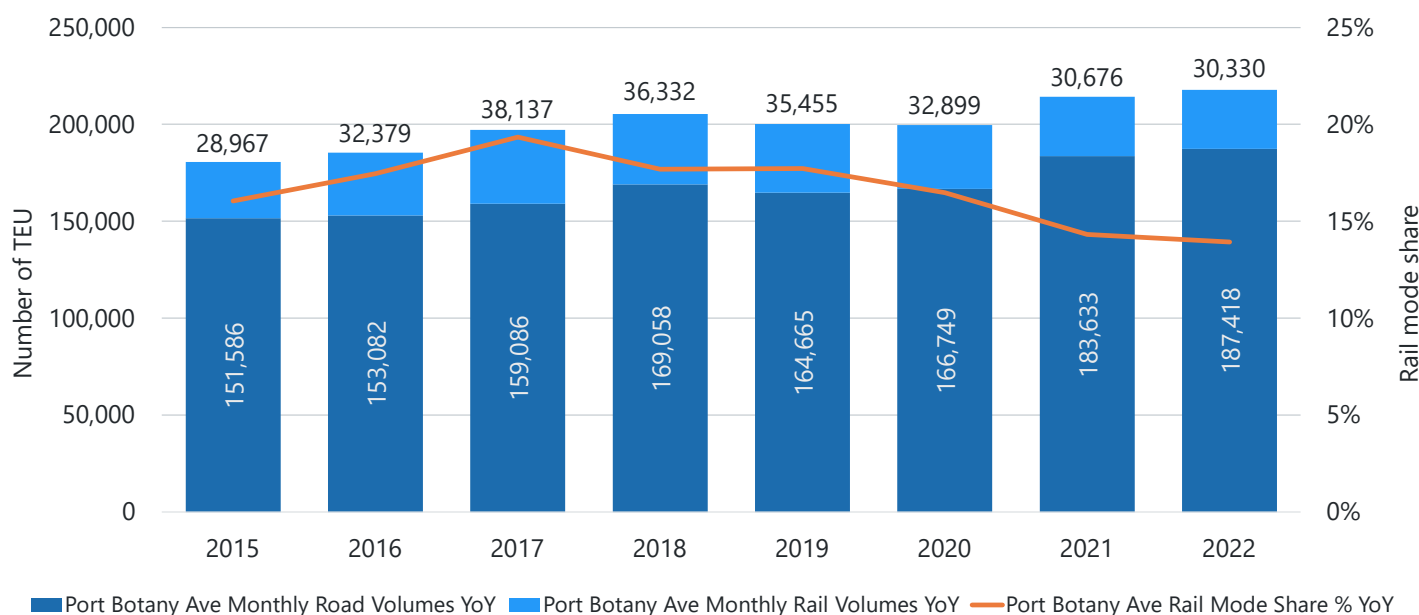
Under the Act, the Minister can regulate the provision of rail servicing by the stevedores at Port Botany. This also extends to other parts of the port related supply chain such as empty container storage facilities and intermodal terminals (IMTs). It does not extend to the operation of any railway outside a port or supply chain facility.

Given the connected and inflexible nature of rail networks, analysing the performance of rail at Port Botany cannot effectively be considered in isolation of the broader rail networks that connect to the port. Importantly, it is recognised that addressing any performance issues inside the port gate requires also addressing issues outside the port, to achieve overall rail performance. Other information and commentary on the broader network is provided to support the recommendations and inform stakeholders of the full considerations of the Review.

### Rail performance

Over the past decade, rail volumes at Port Botany have not grown at the same rate as road and have declined in recent years. Rail container volumes were increasing and mode share reached almost 20 per cent in 2017. However, since then both rail volumes and rail mode share have decreased (see Figure 32). This graph shows the average monthly TEU volumes transported each year and the percentage of those containers transported by rail compared to road, which is known as the rail mode share. In 2022 average monthly road volumes were 187,418 TEU and average monthly rail volumes were 30,330 TEU. This represents a rail mode share of 14 per cent.

**Figure 32: Port Botany mode share**



Source: Transport for NSW

NSW Ports forecasts container volumes at Port Botany will reach between 7.5 million TEU and 8.4 million TEU when the port is at full capacity, and it has a target to move 3 million TEU via rail per year by 2045.<sup>155</sup> To reach a total of 7.5 million TEU with 3 million TEU on rail this would therefore require 4.5 million TEU to be moved on road.

The total volume at Port Botany in 2021-22 was 2.55 million TEU, of which 350,000 TEU was on rail and 2.2 million TEU was on road. Rail mode share at Port Botany is currently around 14 per cent of total volumes. To reach the forecast of 7.5 million TEU at the port and considering the target of 3 million TEU on rail, this would require 40 per cent rail mode at Port Botany.

The causes of the recent decline in rail mode share are complex, but a prevailing factor appears to be a lack of coordination among the many public and private organisations that make up the Port Botany supply chain. This has been a long-standing observation and in 2008, IPART noted:

“For any supply chain to function well, the activities at each of the functional stages in the chain must be coordinated. In vertically integrated supply chains, the command-and-control structure imposed by a corporation provides coordination. However, in a vertically separated supply chain like the container freight supply chain at Port Botany, market interactions shape the decisions participants take at each functional stage of the chain.”<sup>156</sup>

Vertically separated supply chains<sup>157</sup> can present considerable coordination challenges. These can result in excessive costs and mis-matched or under-utilised resources. IPART went on to note that “all these symptoms of failed coordination can be observed at Port Botany.”<sup>158</sup>

Responses such as PBLIS have sought to address similar issues on the road interface at the port. Previous efforts to improve coordination of rail included the establishment of the Rail Operations Control Centre (ROCC) by Sydney Ports Corporation to improve coordination of rail operations within the port precinct and the establishment of the Cargo Movement Coordination Centre (CMCC) by TfNSW in 2014 to implement PBLIS.

However, coordination challenges for rail across the supply chain still appear to be significant and are likely to be the product of a series of decisions made by both governments and industry over recent decades. Ideally, in such circumstances, industry-led responses would address the coordination issues, either through contractual, or voluntary arrangements, or through mergers or acquisitions. The fact that such solutions have not emerged suggests that there may be characteristics or impediments in the port rail supply chain that hinder effective market-led responses.

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<sup>155</sup> NSW Ports 2015, Navigating the Future: NSW Ports 30 Year Master Plan, Sydney, NSW, p. 5

<sup>156</sup> IPART 2008, ‘Reforming Port Botany’s links with inland transport’, p. 112

<sup>157</sup> Vertically separated supply chains involve multiple organisations owning and operating different parts of the supply chain. For comparison, vertically integrated supply chains are when the same organisation owns and operates the entire supply chain – for example a mine with a privately owned railway and port.

<sup>158</sup> IPART 2008, ‘Reforming Port Botany’s links with inland transport’, p. 112

Some of these factors may include:

- The extent of vertical separation of the port rail supply chain generating a possibly atypical and inefficient number of interfaces between different organisations
- The mix of public (Sydney Trains and the ARTC) and private sector entities in the supply chain constraining commercial consolidation, and/or the development of voluntary cooperation arrangements
- The objectives of the public sector entities appear to not be well aligned to the port rail task. The Sydney Trains and ARTC managed networks are essential infrastructure for making port rail function effectively. However, Sydney Trains' core business is providing commuter passenger services, and the ARTC was established by the Australian and mainland State Governments<sup>159</sup> to improve and grow the interstate rail task. The port rail task, once outside the port gate, does not therefore have the benefit of market-reflective ownership of rail infrastructure, meaning it is a peripheral rather than a central activity for ARTC and Sydney Trains.

## Current initiatives

While the coordination problems are significant, a number of initiatives, decisions, and processes are underway that may increase rail efficiency at the port, by providing new incentives for improved coordination inside and outside the port gate. These initiatives are a mix of actions by government and industry, and include:

### Initiatives inside the port gate

- NSW Ports' \$120 million investment in on-dock rail capacity at Patrick Terminals<sup>160</sup>
- Patrick Terminals' \$70 million investment in automated rail operating equipment and systems
- NSW Ports plans to subsequently invest in on-dock rail at the other two stevedores with the aim that all three stevedores will have capacity for one million TEU per year.

### Initiatives outside the port gate

- Duplication of the Port Botany rail line with a \$400 million investment by the Australian Government through the ARTC,<sup>161</sup> which is expected to increase capacity for freight movement on the Botany Line from the current average of about 20 trains per day (per direction) up to about 45 trains per day (per direction) by 2030.
- The development of a Freight Level of Service (FLOS) by TfNSW to provide a clearer specification of port rail service needs to Sydney Trains, and for this to be reflected in both TfNSW's development of an Outcomes-Based Timetable Design Specification<sup>162</sup>,

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<sup>159</sup> The ARTC was established by the Commonwealth under the *Corporations Act 2001* (Cth) following agreements with NSW, VIC, QLD, WA, and SA. ARTC does not operate in TAS, ACT or NT.

<sup>160</sup> NSW Ports 2018, [\\$120 million investment to boost rail capacity at Port Botany](#)

<sup>161</sup> Media Release by Minister for Finance 2020: [Port Botany Rail Duplication Tender Puts Jobs On Track](#)

<sup>162</sup> IPART Review of NSW Rail Access Undertaking 2023, [TfNSW submission](#), p. 16



to inform the development of the Standard Working Timetable (SWTT), and through its service contract with Sydney Train's network.<sup>163</sup>

- An established dialogue between the NSW and Australian Governments on how ARTC managed infrastructure in NSW can be better utilised to improve regional and port movements, as well as interstate traffic. This includes such considerations as:<sup>164</sup>
  - new network performance outcomes, including network standards
  - effective reporting mechanisms on asset and operational issues
  - appropriate governance arrangements to ensure coordination of performance
  - sharing of data to facilitate operational performance outcomes.

These investments and processes, if effectively leveraged, should result in a more coordinated, integrated and appealing freight rail service offering to the market. While the supply chain may continue to have high levels of vertical separation, the benefits of a more vertically integrated supply chain (for example, increased command and control) can possibly be simulated through commercial (contractual) agreements between supply chain participants, without the need for excessive government intervention.

Some stakeholders raised the possibility of extending PBLIS type regulatory interventions to cover rail. However, regulatory intervention by government is premature while these initiatives, agreements and infrastructure are being implemented and have yet to mature. Consistent with the Better Regulation Principles, a regulatory intervention should only be pursued after non-regulatory, market-based, commercial or cooperative approaches have been given a reasonable opportunity to work.

In line with these principles, there is an additional condition under the Act that before any government intervention in the operation of services and facilities in the port related supply chain takes place, the Minister must be satisfied that such action will promote economic efficiency, and not constrain the private port operator functions.

A PBLIS style government intervention in port rail management is not recommended. However, when the current industry investments mature and the rail governance initiatives underway are in place, if the right environment for industry led solutions is not present, and other policy initiatives to facilitate improved coordination prove ineffective, then the government retains the ability to intervene in the market (via the Act) through regulatory approaches.

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<sup>163</sup> TfNSW is responsible for the development of the Standard Working Timetable (SWTT). The SWTT documents all of the train paths that are planned for operation on the network. This includes passenger rail services as well as mandatory and timetabled freight paths. Sydney Trains is responsible for maintaining the Sydney Trains network and manages the day-to-day movement of trains. Sydney Trains also manages the creation of the Daily Working Timetable (DWTT). The DWTT is created three days in advance of the day of operation and is the result of adding ad hoc freight paths (paths not included in the SWTT), possessions for maintenance and special events to the information contained in the SWTT. TfNSW states its service level expectations from Sydney Trains, for both passenger and freight services, through the development of the SWTT, and through its services contract with Sydney Trains - the Rail Operations Agreement.

<sup>164</sup> The Commonwealth of Australia and the State of New South Wales, 2018, Bilateral Agreement in Relation to Inland Rail

This section includes rail recommendations that are consistent with the Better Regulation principles to encourage industry-led approaches to market problems. **PBLIS**

**Recommendation 13: Rail data transparency** also provides a number of benefits for rail operations including improved rail operator planning through transparency of rail window booking and use to offset the coordination complexity for these operators who navigate across multiple networks for access to and from the port.

### Stakeholder feedback

Stakeholder feedback was strongly aligned in the view that rail at the port could be better utilised. Various issues were raised and suggestions to address some of these issues were provided, including:

- The significant cost and time required to navigate different train path rules, operating arrangements, and different fixed and variable access fees between each rail infrastructure manager. A seamless end-to-end arrangement with single rail paths through the ARTC and Sydney Trains networks to the port was suggested as being the most beneficial change that would assist freight rail efficiency.
- Various forms of government financial incentives were suggested – including short term incentives to reduce the cost of rail, port user charges applied to road users to fund rail infrastructure, and incentives for regional trains to deliver containers to IMTs outside the port and avoid long trains that require splitting up at the port.
- Some stakeholders suggested that PBLIS discourages the use of rail because it encourages stevedores to service trucks over rail, to avoid PBLIS penalties.

Some stakeholders suggested that PBLIS be applied to rail in a similar manner to how it is applied to stevedore road servicing, while others advised against this approach. The NSW Government responded to the 2008 IPART report by developing PBLIS which was implemented in 2010. At the time it was anticipated that rail and empty container parks may also be brought into the Regulation, but this was not subsequently undertaken.

Stakeholders also suggested that the (re)establishment of a rail coordinating forum similar to the Port Botany Rail Optimisation Group and the Rail Freight Industry Group be implemented. The current TfNSW facilitated road and rail consultative forum is the Port, Logistics and Transport Taskforce (PTLT).



## 5.4.1 Remove rail regulation

### **PBLIS Recommendation 19: Remove regulated rail servicing arrangements**

Remove the regulation of stevedore rail servicing arrangements to allow stevedores to set charges and service terms as appropriate.

In 2010 stevedore rail servicing arrangements including booking charges and cancellation terms, were regulated via a price cap in response to a planned increases in charges. Following further consideration in 2011 (including a cost-benefit analysis), a regulated charging structure that covers lift rates and booking cancellation terms was implemented. The regulation applied to the two stevedores operating at the time, Patrick Terminals and DP World, and was applied to Hutchison in 2014 when the terminal commenced operations.

The regulation was intended to encourage increased stevedore lifts per hour and ensure rail was not disadvantaged against road container transport, to support continued growth in rail use at the port.

The regulation applies a \$540 rail servicing charge for the first 60 minutes with a guarantee of 36 container lifts which equates to a minimum of \$15 per container. Where more than 36 container lifts are completed in the hour, the additional containers are charged at \$30 per container (in addition to the \$540 charge). Where less than 36 lifts are performed and containers were available, the charge of \$540 is decreased by \$30 per container not serviced. This structure was intended to encourage rail operators to arrive with 36 or more containers per one hour rail window<sup>165</sup> and for stevedores to be incentivised to lift more than 36 containers per hour. The arrangement also includes provisions for each 15-minute period after the initial 60 minutes and for the carrying forward to the rail operators' next service of any negative balance a stevedore may owe.

Cancellation terms for bookings are included, with rail operators charged at a specified rate if they cancel within 48 hours prior to the window start time. If the stevedore cancels the window within 48 hours of its commencement, they are required to not charge the rail operator for that window and to charge the next equivalent window provided to the rail operator at a reduced rate.

Other stevedore charges applied to road and rail operators have changed since this regulation was applied in 2011. Terminal access charges have been applied equally to both road and rail containers and the booking fees and ancillary charges for truck servicing have changed. The rail servicing charge is the only stevedore charge that is regulated and has remained unchanged since 2011. Terminal access charges and road operator charges are not regulated.

The regulation of rail servicing arrangements has not proven effective at supporting continued growth in rail use. Around 14 per cent of containers entering or leaving Port Botany were transported by rail in 2021-22. While mode share reached a peak of 19 per cent in 2017, it has since declined (see Figure 32 above).<sup>166</sup>

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<sup>165</sup> Rail window is the period of time allocated for a stevedore to service a container train at their terminal

<sup>166</sup> Source: TfNSW data

The PBLIS Behavioural Research identified that the low cost of window bookings, cancellation rules, and the difficulty in finding a window which aligns with rail paths across the network, contributes to slot hoarding (booking and holding more rail windows than needed) by rail operators, including booking windows at all three stevedore terminals simultaneously.<sup>167</sup>

The significant investment by the port operator and current and planned stevedore investment in on-dock rail capacity, shows that there are strong incentives to increase the use of rail at Port Botany. Stevedores will be incentivised to fully utilise any increased rail capacity, to maximise profits and achieve an appropriate return on the investment. Along with other decisions and processes underway to improve freight rail access to Port Botany, increased use of rail in the future is expected. Regulated rail fees, lift rate specifications and cancellation rules are not required and could impede productivity and efficiency gains from these investments by limiting operational improvements.

The Better Regulation principles require that government regulation only occur where clearly necessary and when non-regulatory approaches have been reasonably pursued first. Regulations are also required to be simplified, modernised and repealed where suitable. In line with these principles, the regulation of rail servicing fees at Port Botany has been found to not be suitable and should be removed. Removal of the regulated rail charging structure, cancellation rules, and rail service fee will support industry to manage rail servicing efficiently and support better utilisation of current and new rail infrastructure.

The Productivity Commission has recommended a federal mandatory industry code for stevedore landside charges to be developed by the Commonwealth Treasury and administered and enforced by the ACCC. The proposed industry code would require landside charges to change no more than once per year; set out notification and reporting requirements; provide the regulator with the power to reject unjustified increases; allow collection of metrics to determine reasonability; allow consideration of penalties to enforce the regime; require review after five years by an independent body; and if the exercise of market power is still a concern, allow a stronger regulatory response to be considered.<sup>168</sup>

## Stakeholder feedback

Stakeholder feedback included support for the removal of the rail servicing regulation, with the current rail booking fee structure considered to be an outdated model that is not achieving the intended outcomes. Some stakeholders proposed maintaining performance safeguards and pricing through voluntary industry self-management when the regulation is removed.

Stakeholders also proposed that the NSW Government consider incentives for stevedores to fully utilise rail capacity without the need for regulation of rail charges.

Other stakeholders supported retaining the regulated rail charge and servicing arrangements. Concerns were raised that without regulation an increase in charges would occur with no improvements to service levels. A particular concern was that this could increase costs for regional exporters and impact their competitiveness in international

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<sup>167</sup> Deloitte Access Economics 2022, PBLIS Industry Behavioural Research, Sydney, NSW, p. 33

<sup>168</sup> Productivity Commission 2022, [Inquiry into Australia's Maritime Logistics System Final Report](#), p. 19

markets. It was suggested that any fee increases and changes to access be considered only when improvement to operational service levels is delivered.

### Net benefits

- Removes impediments to industry investment in rail to expand capacity at Port Botany
- Increases flexibility by allowing industry to innovate and set operational parameters as appropriate and to revise as required to support improved efficiency.

## 5.4.2 Improve rail governance frameworks

### **PBLIS Recommendation 20: Improve governance frameworks to align public infrastructure managers with the port rail task**

Ensure public rail infrastructure managers (Sydney Trains and ARTC) requirements are appropriately aligned with the port rail task.

Coordination problems outside the port gate often centre on the challenges of continuity across the ARTC and Sydney Trains managed networks for port trains. ARTC manages the Metropolitan Freight Network (MFN) which is the dedicated rail freight network that services Port Botany. Over 80 per cent of import containers through Port Botany are delivered within a 40 kilometres radius of the port. Most IMTs servicing the rail component of this task can only be reached by accessing the Sydney Trains managed network.

The dependency on the shared passenger (Sydney Trains) network for the rail freight task is anticipated to decrease over time, as more dedicated freight infrastructure is delivered (for example, the completed Southern Sydney Freight Line (SSFL), and the planned Western Sydney Freight Line (WSFL), with new IMTs being directly serviced by this infrastructure (the Moorebank IMT and the planned Mamre Road IMT).

However, for the foreseeable future, the Sydney Trains managed network will be essential for the port rail task. This means port operations will be dependent on an effective interface between the ARTC and Sydney Trains networks, and therefore on better aligning these two organisations with that task.

### Better governance to improve rail coordination

#### ***A Freight Level of Service (FLOS) for Sydney Trains***

Sydney Trains' core business is passenger service operations. It is also the most congested network in the port rail supply chain with the fewest options for port train movements. Determining what level of service Sydney Trains can achieve for the port rail task is therefore a foundational element of what the total supply chain can deliver.

By utilising and strengthening the purchaser-provider model under which TfNSW is required to operate (under the *Transport Administration Act 1988*), TfNSW (as purchaser) is developing a clearer specification to Sydney Trains (as provider) of its service level expectations for the Port Botany freight rail task, with this being reflected in both the

Standard Working Timetable (SWTT) and in the service contract between TfNSW and Sydney Trains (the Rail Operations Agreement).

The FLOS will establish clearer governance arrangements and is intended to provide greater surety that rail pathing and performance for port rail services will be available on the Sydney Trains network to contribute to the NSW Government's 28 per cent mode share target for Port Botany.<sup>169</sup> Through this process, TfNSW will specify more clearly to Sydney Trains the important role it plays in the port rail task, to meet NSW Government rail freight objectives.

### ***A Freight Level of Service for ARTC***

Current lease arrangements with the ARTC require TfNSW and the ARTC to develop a minimum service level agreement for port related rail capacity on the MFN.

A specified level of service for port rail on the more constrained Sydney Trains managed network is a key enabler for a complementary level of service on the ARTC managed MFN network. Such arrangements are intended to provide a more seamless experience for above-rail operators. Such coordinating instruments offer an improved opportunity to maximise the Australian Government's investments in port rail infrastructure, such as the duplication of the Port Botany line and industry's on-dock rail investments.

With such back-to-back agreements in place for the track managers, ARTC and Sydney Trains, this may provide sufficient surety to industry to allow the development of complementary arrangements between the commercial/private organisations in the supply chain.

Consultation was part of the process for developing the initial version of the FLOS. Additional consultation processes will likely form an ongoing part of the new approach. As outlined in the NSW Government submission to the IPART review of the NSW Rail Access Undertaking, "TfNSW is currently engaging with rail operators on an enhanced SWTT development model which is designed to:

1. improve customer (passenger and non-passenger service) outcome articulation and understanding of rail operator requirements as the foundation for SWTT development;
2. improve engagement with all rail operators throughout the SWTT development lifecycle, from phase 0 (pre-strategic business case) to phase 6 (business as usual delivery and performance evaluation);
3. improve assessment and transparency of SWTT options through the introduction of a balanced scorecard and external assurance to inform prioritisation and decision making; and
4. improve SWTT reliability and repeatability to deliver greater consistency in the delivery of services and provision of pathing allocations."<sup>170</sup>

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<sup>169</sup> TfNSW 2018, [NSW Freight and Ports Plan 2018-2023](#) - Rail share (road v rail mode share) for freight moved to and from Port Botany increased to 28 per cent or 930,000 Twenty-foot Equivalent Unit (TEU) by 2021.

<sup>170</sup> IPART Review of NSW Rail Access Undertaking 2023, [TfNSW submission](#), p. 16



Future versions of the FLOS will occur with major iterations of the SWTT. These will provide additional opportunities to align policy directions with industry requirements, such as two-way loading.

### Stakeholder feedback

Stakeholders cited the difficulties of moving containers by rail to Port Botany and the significant cost and time required to navigate different train path rules, operating arrangements, and different fixed and variable access fees between each rail infrastructure manager. A seamless end-to-end arrangement with single rail paths through the ARTC and Sydney Trains networks to the port was suggested as being the most beneficial change that would assist freight rail efficiency.

Stakeholders supported the proposed FLOS measures to improve the reliability and access for freight rail through the metropolitan network to the port, noting that it could resolve current issues and that it has the potential to increase the number of containers transported by rail. Some stakeholders requested that FLOS arrangements be made in consultation with industry stakeholders. Stakeholders also suggested the FLOS agreements be structured to incentivise efficient rail operations and encourage two-way loading of trains at the port.

Government financial incentives were also suggested to support a mode shift program, with programs operating in Victoria and Western Australia noted as examples.

Legislative change to ensure that freight rail is accommodated along with passenger services was also suggested.

### Net benefits

- Optimises coordination and alignment through clearer policy direction to Sydney Trains and ARTC on their respective roles in the port rail task, which will support better coordination and alignment across both networks with the needs of the port supply chain, and improve the efficiency of port rail movements
- Provides surety for the freight rail industry that a defined level of port rail pathing and performance for port rail services will be available through ARTC and Sydney Trains networks, which will support industry confidence and future planning.



### 5.4.3 Future rail options

#### **PBLIS Recommendation 21: Examine future rail options**

As rail investments mature, consider further options for improving the interface and/or coordination between supply chain participants and functions.

As rail investments mature, further options should be considered for improving the interface and/or coordination between rail supply chain participants and functions, including:

- a. Develop more unified train planning for port trains – further to the arrangements under **PBLIS Recommendation 20: Improve governance frameworks to align public infrastructure managers with the port rail task**, consider developing requirements for an optimised train plan for port rail operations
- b. Examine the benefits of a 600 metre standard length for port shuttles – consider adopting a common train standard for port rail operations on the metropolitan network between IMTs and the port
- c. Examine other delivery models for future port rail operations – opportunities for assessment of other operational models for the port rail task, with the development of the business case for the Western Sydney Freight Line providing one opportunity
- d. Encourage voluntary arrangements between private sector participants to improve rail coordination in the port-rail supply chain.

These options are outlined below.

#### **21A - Develop more unified train planning for port trains**

Assuming a fictional vertically integrated organisation (as noted by IPART in its assessment of the problems in the supply chain) was providing the command-and-control structures to coordinate the Port Botany supply chain, a central train planning unit within that structure would be responsible for developing an optimised train plan and schedule. This would provide the basis for delivery of the required service level by a real-time operational area responsible for day-to-day rail operations (such as staffing of fleet, maintaining, configuring, and running trains and train control).

No central train planning unit exists in the current disaggregated Port Botany supply chain. Rather, the functions are undertaken separately by different organisations. This means that the linear continuity for a port train movement depends on information sharing and effective relationships between different organisations to manage the planning interface.

To improve current arrangements, a more formalised coordination process for developing an optimised train plan for the Port Botany rail task could be considered. As indicated in TfNSW's submission to IPART's Review of Rail Access arrangements in NSW, this could be one of the responses that could be facilitated by principles issued by the Minister, in the case of directing Sydney Trains to be involved in such a process,<sup>171</sup> and/or through commercial (contractual) and voluntary agreements between the supply chain participants that place

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<sup>171</sup> IPART Review of NSW Rail Access Undertaking 2023, [TfNSW submission](#), p.13.

mutual obligations on the various parties to collaboratively develop an optimised train plan. Under this approach, criteria, performance metrics and timetable rules would need to be clearly stated to guide the train plan development processes.

Such collaborations would still need to be largely referenced off the operational constraints of the Sydney Trains network. This reflects that the Sydney Trains managed network is the most constrained network in the Port Botany supply chain, but is still essential to effective port rail operations (see **PBLIS Recommendation 20: Improve governance frameworks to align public infrastructure managers with the port rail task**) and is therefore the logical starting place for developing an optimised train plan for the port rail task.

The development of a FLOS for the Sydney Trains Network can help specify and define the desired service level required *within* the Sydney Trains network. However, practically all port freight rail journeys commence or end *outside* the Sydney Trains network. Effective train planning therefore requires close coordination with the port train planning processes occurring off the Sydney Trains Network. This includes the ARTC managed MFN, and rail management within the port gate. Regional trains travelling to the port provide an additional interface with the Country Rail Network managed by UGL Regional Linx.

Through future FLOS cycles, which would occur when significant changes to the SWTT were being planned, the mechanism would be in place to reflect the optimised train plan in the SWTT, and subsequently in the complementary back-to-back agreements with other network managers and organisations that manage the rail task within the port gate.

A suggestion raised by a number of stakeholders is to implement the Hunter Valley Coal Chain Coordinator (HVCCC) model for Port Botany. While there is merit in improving planning mechanisms to bring supply chain participants together, there are a number of characteristics of the Port Botany supply chain that indicate any attempt to establish a formal HVCC approach for Port Botany rail by the NSW Government would be difficult. This is because:

1. The HVCC was an industry-led development that saw the supply chain participants agree to maximise the export throughput of coal for all participants. There were strong commercial incentives for the supply chain participants to move a high value task at optimum efficiency.
2. Interaction of the Hunter Valley coal task with passenger services is much less significant than for the Port Botany rail task. Passenger services do not therefore act as a significant constraint on rail freight operations, nor is there the need to ensure that a network optimised and managed for passenger service provision is integrated into the freight supply chain task.
3. The use of trucks to move coal to the Port of Newcastle is in many instances not a viable economic option and rail dominates the transport task for the Hunter Valley coal task because it is a lower cost transport method. This allows scaled solutions and additional certainty that investments in rail infrastructure will be used. In contrast, the Port Botany task is dominated by truck movements i.e. rail is subject to extensive intermodal competition.
4. Almost all the rail infrastructure required for the HVCC is under the management of the ARTC. For the Port Botany rail task, there are three infrastructure managers – the ARTC, Sydney Trains and for regional trains, UGL Regional Linx.

5. Coal is a fully commercial task, in that coal revenue funds the infrastructure. This gives the coal mine owners significant power to require optimised throughput from rail operations, both above and below rail. Rail infrastructure for the Port Botany task remains largely government (Australian and NSW) funded.
6. The HVCC focus is comparatively simple in that it is optimised to move a single export task in one direction and to one consolidation point – the Port of Newcastle. The Port Botany task, by comparison, is largely an import task, with containers moving to dispersed land-side destinations.

The preferred approach is therefore to use contractual and voluntary arrangements with and between the supply chain participants to improve coordination. These could be supplemented by directions from the NSW Government to the organisations that are under its direct control. As noted above, should these mechanisms not provide the desired improvement in the supply chain, then the government retains the ability to intervene in the market (via the Act) with regulatory approaches.

### Stakeholder feedback

Some stakeholder feedback supported a centralised collaboration forum including the relevant parties.

Other stakeholders suggested the NSW Government should consider establishing a supply chain coordinator resembling the Hunter Valley Coal Chain (HVCC). It was also proposed that the NSW Government directly manage the equitable allocation of port stevedore windows to rail providers and regional exporters.

### Net benefits

- Simulates a centralised train planning function for the Port Botany rail task to facilitate more seamless rail paths, leading to better coordination of port access across the ARTC, Sydney Trains, and port interfaces.

### 21B - Examine the benefits of a 600 metre standard length for port shuttles

The FLOS agreements and voluntary arrangements (outlined in **PBLIS Recommendation 20: Improve governance frameworks to align public infrastructure managers with the port rail task** and **PBLIS Recommendation 21D: Examine future rail options**) could be further supported by changes in the current configuration of trains. This reflects that improving optimisation and coordination in a large technical physical system such as the rail components of the supply chain often requires standardisation of physical assets as well as processes and procedures.

Moving to a standardised 600 metre train length (from current lengths of up to and over 1,200 metres) for port rail operations could increase the likelihood of more disciplined and optimised rail operations. NSW Ports' investment in rail sidings at the port at this length was selected on the basis that it would reduce splitting and shunting of trains, enabling trains to be turned around faster.

A further enhancement to operational practices would be that each 600 metre train run could be dedicated to a particular stevedore. This would eliminate the current practice of complicated on-dock train movements that occurs when trains are manoeuvred sequentially

to serve more than one stevedore. A standard train length would also allow better scheduling and management of the interaction of port shuttles with passenger services on the densely trafficked shared network.

NSW Ports' current investment in on-dock rail infrastructure includes four 600 metre long rail sidings at the Patrick Terminals. Adopting this train length across the supply chain would maximise the utility of these investments and provide an important reference for future investments by other supply chain participants.

There is no current consideration of restricting regional trains from running at current lengths from the regions to metropolitan Sydney. However, there could be a transition point beyond which dedicated 600 metre shuttles would operate for the final metropolitan leg to port. This would be based on the benefits of such an approach resulting in significant broader economic benefits, through having an optimised network.

There may therefore be an economic business case for government to consider ways to minimise the commercial impacts of any such change on regional exporters. This would need to be examined by the NSW Government.

Longer trains would still form an important part of the port rail task during an expected extended transitional process to a 600 metre standard. Potentially some 1,200 metre train operations could also remain part of the new operational model. However, this would be dependent upon industry consultation and detailed operational analysis to determine if the additional operational flexibility would be detrimental to the system benefits of having a uniform 600 metre standard.

## **Stakeholder feedback**

Stakeholders that were supportive of this approach pointed to the improved efficiency benefits at the port from single stevedore destination 600 metre shuttles as they could operate without requiring the time-consuming splitting and shunting of trains. The ability for stevedores to operate without scheduling windows on a continuous rail servicing cycle was also raised as a potential efficiency measure.

Other stakeholders were concerned about regional exports being potentially disadvantaged through the costs of additional lifts at metropolitan IMTs if they were prevented from taking longer than 600 metre trains all the way to the port. They noted that export trains from the regions are not commercially viable at lengths less than 1,200 metres and suggested this approach not be implemented unless regional exporters are compensated accordingly via a government subsidy arrangement.

## **Net benefits**

- Allows optimisation of the current and future infrastructure and assets that make up the port supply chain
- Enables better scheduling and management of the interaction of port shuttles with passenger services on the densely trafficked shared network, as 600 metre trains fit better within Sydney Trains' current timetable scheduling and real-time operational constraints.

## 21C - Examine other delivery models for future port rail operations

The two options outlined above are based on alignment of contractual and operational standards as mechanisms to simulate a more vertically integrated command and control structure for elements of the supply chain. While this is one method to improve coordination, there remains the option to actually increase the level of vertical integration for rail operations in the supply chain to help address coordination issues.

The current structure of rail operations for the port rail task involves different organisations managing below and above rail operations. The public policy rationale for such a structure is based on the economic theory of separating and regulating the monopoly (below-rail) infrastructure and encouraging the development of competition among above rail service providers.

However, there are specific characteristics of the port rail interface at Port Botany which raise a question as to whether this is the most appropriate model for the port rail interface. These characteristics include:

- The fact that an increase in rail use is being sought for policy reasons, such as easing urban congestion
- The short-haul nature of the task, in Port Botany 80 per cent of all import containers are moved no further than 40 km from Port Botany<sup>172</sup>
- The challenges of the interface with the passenger network in the context of passenger priority and the physical location of Port Botany.

Competition can take several forms. The current policy framework seeks to optimise competition within the market by facilitating competition among above-rail operators. However, the efficiency benefits from competition are possibly already being largely achieved through competition from an adaptive and agile road sector. For some parts of the Port Botany rail tasks, competition for the market, through mechanisms such as a public tender, may be the better approach for allowing rail to maximise its natural benefits of scale, and possibly reduce the level of subsidies or support needed from public funding.

The WSFL is a potentially city-shaping infrastructure investment, based on extending the dedicated freight network that currently services the port (the MFN and SSFL) to the Mamre Road Precinct (approximately 40 km west of the Sydney CBD). The freight line also connects to the Main West Line, allowing segregation of the freight and passenger services. The line is a significant investment that likely needs a scaled response from industry to allow it to be utilised to the extent that justifies the investment.

The development and consideration of possible operational models for the WSFL is one mechanism through which market structure options for this task can be examined in more depth, through a detailed analysis.

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<sup>172</sup> KPMG 2019, Quay conclusions: Finding the best choices for additional port capacity in NSW report for NSW Ports, p. 7



Currently a Strategic Business Case for the WSFL is being prepared by TfNSW. The primary purpose of this is to undertake a needs and options analysis and to identify the critical requirements for inclusion in a Final Business Case. An initial analysis of operational models for the Mamre Road IMT and the WSFL is part of this process. Should the project progress to preparation of a Final Business Case, a thorough consideration of delivery and operational models will occur.

### **Stakeholder feedback**

Feedback from stakeholders included support for progressing the WSFL development and it was suggested that the WSFL business case consider the value of this infrastructure for delivering improved freight rail access to Port Botany.

Stakeholder feedback also included the recommendation that the WSFL not become a private line or exclude rail users. As this recommendation refers to future work, some stakeholder feedback was that it is unclear what is intended by the references to vertical integration throughout this recommendation. These stakeholders noted that consideration of vertical integration should be considered in the context of the current and future freight rail network in NSW, and current modes of operation.

### **Net Benefits**

- Allows for the identification of the most efficient and effective approach to delivering the port rail task
- Provides the opportunity for a thorough assessment of other operational models that may help address ongoing coordination and scale challenges for rail in the supply chain.

### **21D - Encourage voluntary arrangements between private sector participants to improve rail coordination**

Seamless rail paths through the network to the port would provide efficient rail access. To facilitate both inside the port and outside the port coordination, all service arrangements need to be aligned. A rail operator could then obtain a train path through both the ARTC and Sydney Trains networks as well as an aligned rail window at the port.

#### ***Current coordination issues inside the port gate***

As Sydney Trains and the ARTC are government owned, improved coordination across both networks for port traffic can be viewed as a largely intergovernmental discussion, informed by consultation with stakeholders. However, improving coordination issues inside the port gate is largely dependent upon effective arrangements between private sector organisations. Current coordination problems include:

- No co-ordination between stevedore booking systems with bookings for rail windows frequently made across all three stevedores for the same time, resulting in unused capacity that is not made available for other rail operators.
- Rail operators retaining bookings for higher volumes than needed, in case of future need (as the price of paying for a window is less than the cost of losing a window), delivering partially full trains to the port.

- Regulated rail booking arrangements allow operators to cancel bookings at the last minute (48 hours from the window commencement) when it is too late for another operator to utilise the window.
- Shortage of windows available to be booked, and at the same time, an underutilisation of windows, leading to inefficiency that impacts the take up of rail by transport operators and cargo owners.
- Regional trains generally bring containers for export to the port, but do not back-load with import containers. The splitting and shunting of long regional trains into multiple terminals can take up window capacity at the port and impacts lift time. This impacts overall port efficiency and productivity, as well as the total number of windows available.<sup>173</sup> Similarly trains collecting import containers are generally travelling to the port empty and are only loaded when leaving the port, and therefore are not fully utilising potential capacity.

### *Improving rail efficiency within and across the port gate*

The large investments by the stevedores and NSW Ports in rail facilities mean that greater commercial benefits are likely to be realised through coordinated optimisation of on-dock rail operations. If these incentives can be complemented by better governance arrangements between ARTC and Sydney Trains (see **PBLIS Recommendation 20: Improve governance frameworks to align public infrastructure managers with the port rail task**), then the current static and hard distinction between train paths and rail windows can begin to shift towards a more dynamic and seamless approach.

A possible voluntary arrangement between NSW Ports and the stevedores could include, for example, on-dock operational practices and performance requirements. The voluntary arrangements could also address the current problem of rail window hoarding by avoiding simultaneous bookings across the three stevedores. This would increase the availability of windows and facilitate a coordinated approach to the management of any daily scheduling changes that can result from delays on the broader network or at the port.

As the private port operator, NSW Ports is well placed and appropriately incentivised to take a leading role in these arrangements. These voluntary arrangements could include service standards such as minimum container numbers per train and stevedore service levels.

Authorisation by the ACCC under Part IIIA of the *Competition and Consumer Act 2010* (Cth) may be required depending on the nature and terms of any voluntary arrangement.

The combination of improved governance frameworks through FLOS agreements between TfNSW and Sydney Trains and ARTC and a voluntary (or commercial) on-dock agreement between NSW Ports and the stevedores (which could expand to include TfNSW and/or ARTC if required) provides an opportunity for the realisation of a more integrated and coordinated rail product from the port to IMTs in Greater Sydney.

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<sup>173</sup> Deloitte Access Economics 2022, PBLIS Industry Behavioural Research, Sydney, NSW, pp. 33-41

## Stakeholder feedback

Stakeholder feedback included support for voluntary co-ordination measures to improve rail operations inside the port, noting that this should be in addition to the improvements to governance frameworks for the rail networks outside the port to improve overall rail efficiency. As part of this approach, the central allocation and management of windows was suggested, with NSW Ports noted as a potential facilitator.

Some stakeholders raised concerns that a voluntary approach may not deliver increased efficiencies, reduce costs, or address the effects of issues outside the port gate that result in missing rail windows. Solutions suggested included a centralised process to coordinate rail path access and windows allocation managed by government or the Hunter Valley Coal Chain Co-ordinator industry collaboration model.

## Net benefits

- Allows the coordination benefits of a more unified management structure to be achieved by closely aligning the service requirements across the various agreements both outside and inside the port.



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## 5.5 PBLIS Review Findings

The Review Options Paper included 23 options relating to PBLIS for further consideration, including seeking stakeholder feedback. The review has found that three of the options are not recommended for implementation. Two were presented without a definitive proposal for implementation due to certain challenges and further consideration has not resolved these issues. Another option is not recommended as other PBLIS Recommendations have addressed the issues raised.

### 5.5.1 Stevedore impacted trucks

#### **PBLIS Finding 1: Investigate options for stevedore impacted trucks – PBLIS Option A2**

Not recommended

Options for a port-wide approach for stevedore impacted trucks has been considered and is not recommended.

The cost of developing a port-wide approach to stevedore impacted trucks would exceed the benefits of its application. The port-wide stevedore impacted trucks option also poses implementation challenges as there is currently no connected IT communications system between stevedores that would enable them to notify each other of which trucks are stevedore impacted trucks. The costs of implementing such a system would outweigh the benefits.

The extension of the current individual stevedore impacted truck penalty arrangements to 24/7 is also not recommended as both this and the port-wide options are not required to support the PBLIS Performance Scheme.

#### **Individual stevedore impacted trucks arrangements**

Currently, there are PBLIS arrangements in place for trucks affected by the failure of a stevedore to service the truck within the TTT (referred to as stevedore impacted trucks). Under Section 11 of the Mandatory Standards, if such an incident occurs between 4.00pm and 4.00am on a weekday or during a weekend, the carrier of the affected truck is not penalised for being late for subsequent bookings at the same stevedore.

This ensures that road carriers are not unfairly penalised for late arrivals resulting from a previous failure to service by the stevedore during off-peak periods. It is also intended to incentivise off-peak port utilisation.

However, the current arrangements relating to stevedore impacted trucks do not have port-wide application, which means that they do not extend to situations where the truck is late for a booking at a different stevedore's terminal. For example, if a truck is held up at stevedore A, they could receive a payment of \$100 for a failure to service that truck. If because of that failure the truck is late for a subsequent booking at stevedore B, the carrier will receive up to a \$400 penalty from stevedore B (depending on the number of containers). The net result is that the truck has not been compensated for the original delay at stevedore A. Further, if the carrier had booked multiple slots at stevedore B, they could incur a \$100 penalty for each booking.

Stakeholder feedback included support for extending the current penalty exemption to 24 hours a day, 7 days a week. Other stakeholders suggested that the current exemption be removed altogether to reduce the administrative effort involved for all parties.

### Port-wide stevedore impacted trucks

A detailed option for taking a port wide approach to address stevedore impacted trucks was not proposed in the Review Options Paper as there are a number of operational barriers and complications still to be resolved. The key barrier is that the three Port Botany stevedore IT systems are not currently connected, and this would be needed to implement a port-wide approach.

However, as this approach was raised by a number of stakeholders during the first consultation process, further feedback was sought. However, no practical options for addressing the complications were identified.

### Stakeholder feedback

Stakeholders that were not supportive raised concerns about the level of complexity and the increase in administrative time and effort required to implement a port-wide approach, which would benefit a relatively small number of impacted trucks.

Some stakeholders that supported a port-wide approach also suggested the application of penalties for late arrivals due to delays caused by third parties (such as empty container parks or distribution centres). Empty container parks are not subject to regulation of their booking arrangements, and this has not been recommended (see **Recommendation 14: Empty container data transparency and efficiency** for the Review findings on empty container parks). Distribution centres are also not regulated.

## 5.5.2 Points systems

### PBLIS Finding 2: Points system – PBLIS Option B10

Not recommended

Applying penalties and/or booking fees via a points system has been considered and is not recommended.

The option proposed included examples of how a points system could work but did not include a defined proposal, as there were a number of challenges with this approach. Further consideration and consultation was undertaken but the design of a points system solution that would decrease the administrative complexity and effort involved with PBLIS for all parties has not been resolved. This is because the structure of PBLIS requires individual consideration of each truck event to determine whether the rules have been met by the transport operator and stevedore, and individual consideration when a penalty is contested.

There are around 2,000 potential individual truck movements per day at each stevedore. While the application of a points system to replace penalties or booking fees could potentially reduce invoicing frequency, it would not reduce overall administrative effort of reconciling contested penalties.

Under PBLIS, regular penalty payments are made between stevedores and carriers (when penalties are incurred) and carriers pay fees to access the terminals to the stevedores. The Review has considered whether an alternate system to administer stevedore fees and PBLIS penalties could simplify or reduce the effort involved in this transfer of funds between parties.

Examples of other approaches and systems considered include those suggested by stakeholders:

- A Port of Manila style points system
- A demerit points approach with quarterly or half-yearly performance reconciliation of payments between parties
- Monthly reconciliation of penalties between parties.

### Stakeholder feedback

Some stakeholders supported or acknowledged potential benefits of a points system, noting that it would require further investigation and consideration. It was also suggested there would be benefits from replacing the current financial penalty system and the time-consuming invoicing cycle with a system of performance reviews conducted over a longer periodic timeframe. The Performance Scheme (**PBLIS Recommendation 1: PBLIS Performance Scheme**) applies a longer-term performance review approach, where stevedore and carrier performance is considered each quarter.

Other stakeholders did not support the points system option because of the additional administrative burden it could impose and because of concerns that tangible benefits for the effort involved were not evident.

Feedback on the Port of Manila points system model included concerns that advanced purchase of points would provide the stevedore with an additional interest benefit that the carriers lose if not compensated, and that under this option users may have less control or ability to appeal or consult over penalties imposed with reconciliation occurring further from the event.

The Review provided the below examples of other systems or approaches for consideration. However, as a system has not been found where the benefits outweigh the effort or challenges involved, a points system is not recommended.

### Port of Manila points system

The Port of Manila<sup>174</sup> in the Philippines has two international container terminals – Manila International Container Terminal and Asian Terminals Inc – and handled 3.1 million TEU in 2020, split evenly between imports and exports. A points system operates which utilises the pre-purchase of points that are used to book truck slots and pay late arrival fees.<sup>175</sup>

A VBS was implemented in 2014 by the terminal operators, the Philippine Port Authority (government) and port stakeholders as a collaborative solution to address road congestion

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<sup>174</sup> The Port of Manila uses an 'Advanced Booking' system.

<sup>175</sup> Advisian 2022, PBLIS Comparison Study, Sydney, NSW, pp. 85-102



in the city, maximise efficiency of the delivery and collection of containers, enhance the terminal operating guidelines and standardise fees.

Road congestion in Manila has been an issue for more than a decade, and a portion of this congestion can be attributed to trucks travelling to and from the port. Various traffic bans were introduced to reduce congestion, including for trucks on certain days and times. The introduction of the VBS and associated Points Payment System (PPS) aimed to further encourage greater use by carriers of medium and low demand periods during the week.

- Each booking zone is one hour and is assigned one of four demand categories covering high, medium, and low demand periods across the time of day and day of week. Each demand category has different rules and fees. Medium and high demand zones incur a fee, while for other off-peak demand zones the booking is free or provide users with a rebate to incentive their use.
- The financial value of the points is clear – with one point equivalent to one Philippine Peso.
- Points are purchased in advance of making bookings, removing the need for stevedores to invoice for each booking or late arrival fee.

Stakeholder feedback on this system when the PPS was introduced was that it was generally positively received, with the below specified:

- The point system has simplified the transaction processes in the VBS with points easily purchased through various methods. The increased transparency the VBS and PPS provide to fee rates and payment transactions is an improvement.
- Concerns from some that buying points in advance via the VBS provided the port with an additional interest benefit that the users wouldn't receive.
- When the PPS was introduced, some criticism was received as users did not have control over penalties imposed through the PPS. For example, if a truck fails to show up or arrives late after its booked appointment, the system automatically deducts the penalty for the no-show without consultation with the user.
- The terminal can waive fees for late arrivals or no shows. It is understood that active communication between the terminal operator and the carriers when one or the other is having delays has been critical to managing the landside operations efficiently.

A carrier must have sufficient points in their account before a booking can be created. An account may go into a negative balance if late fees are applied. However, the account would need to be in credit prior to new bookings being made.

### **Periodic reconciliation of penalties between parties**

The payment of penalties could be reduced in frequency by applying a period reconciliation approach. For example, penalties could be reconciled on a monthly or quarterly basis with relevant parties only transferring the balance required to be paid.

This would reduce the invoicing of penalties and therefore the flow of funds between parties. However, it would not reduce the administrative effort of determining whether a penalty is owed.

## Demerit points approach with periodic reconciliation

A demerit points style system could be applied to transport operators and stevedores. The performance of individual container terminals could be compared with the on-time performance of individual transport operators against the demerit points incurred at quarterly or half-yearly intervals. Ultimately, such a system could still involve a financial penalty payment between the parties.

A challenge of this approach is that all users may face issues with engaging on penalties imposed if a penalty is disputed or when reconciliation occurs further from the event. It is more effective for all parties if these considerations are undertaken closer to the event when circumstances are more recent.

### 5.5.3 Oversight of access arrangements

#### **PBLIS Finding 3: Oversight of access arrangements – PBLIS Option C18**

Not recommended

Providing regulatory oversight of industry access arrangements to support the transition away from PBLIS has been considered and is not recommended.

The oversight of access arrangements option was designed to support the process of transitioning away from PBLIS, as proposed in PBLIS Option C17. This approach has now been revised into **PBLIS Recommendation 1: PBLIS Performance Scheme**. As the Performance Scheme includes the retention of regulation, the application of performance benchmarks and a managed transition process supported by ongoing performance monitoring, the oversight of access arrangements is not required.

#### Option considered

In addition to PBLIS Option C17, oversight of the commercial contractual arrangements between stevedores and road operators that would replace the PBLIS rules was considered to support the transition process. This was intended to introduce appropriate arrangements to ensure equitable access to the port.

Prior to the introduction of PBLIS, comprehensive contractual arrangements between stevedores and road operators were either not in place or were not adhered to. As outlined by the ACCC, stevedores now have “standard agreements with truck operators for access to their terminal. These agreements allow truck operators to access stevedore’s terminal on standard terms and conditions. Truck operators do not have the option of negotiating their own individual terms of access (including prices).”<sup>176</sup>

While standard commercial arrangements are in place between the stevedores and road operators, PBLIS in many ways substitutes the need for commercial contractual arrangements via applying detailed rules for road operator access and stevedore servicing. Without the PBLIS rules, the operating terms between these industry parties would be more relevant.

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<sup>176</sup> ACCC Container stevedoring monitoring report – 2021-22, p8

In this option, each stevedore would consult with road operators before submitting its standard form agreement to an appropriate entity, or independent organisation such as a pricing regulator (possibly IPART or the ACCC), for approval.

The agreement would include, at a minimum, provisions on:

- A VBS system and arrangements for booking slots
- Obligations on the stevedore to service trucks in accordance with slot bookings
- Obligations on road operators to meet commitments for bookings
- Any remedies, including compensation for breaches of these obligations by either party
- A dispute resolution process.

Approval of an agreement would mean that the agreement solely governed port land-side arrangements and PBLIS would not apply to the operations of that stevedore. Until such approval, PBLIS would continue to apply to operations by a stevedore.

The agreement would be subject to review after five years. A process would also be available for a stevedore to submit amendments to the agreement from time to time. Approved agreements could differ between stevedores depending on their individual circumstances. However, the approving agency should consider the costs imposed on transport operators having to deal with different systems.

This approach would seek to use a standard form contract to regulate the relationship between the parties, rather than regulating the specific operating details as PBLIS currently does. It also has the potential to influence the cultural environment and encourage a more collaborative approach.

Under the current PBLIS rules, which is based on a high level of regulatory intervention, resolution of any issues is often considered by stakeholders to be government's responsibility. This may impede drivers of industry collaboration and reinforce combative relationships between industry parties.

Over time, if this proposed approach was found to be effective, the level of prescription in these arrangements could be reduced reflecting improved co-operation between stevedores and road operators.

### **Stakeholder feedback**

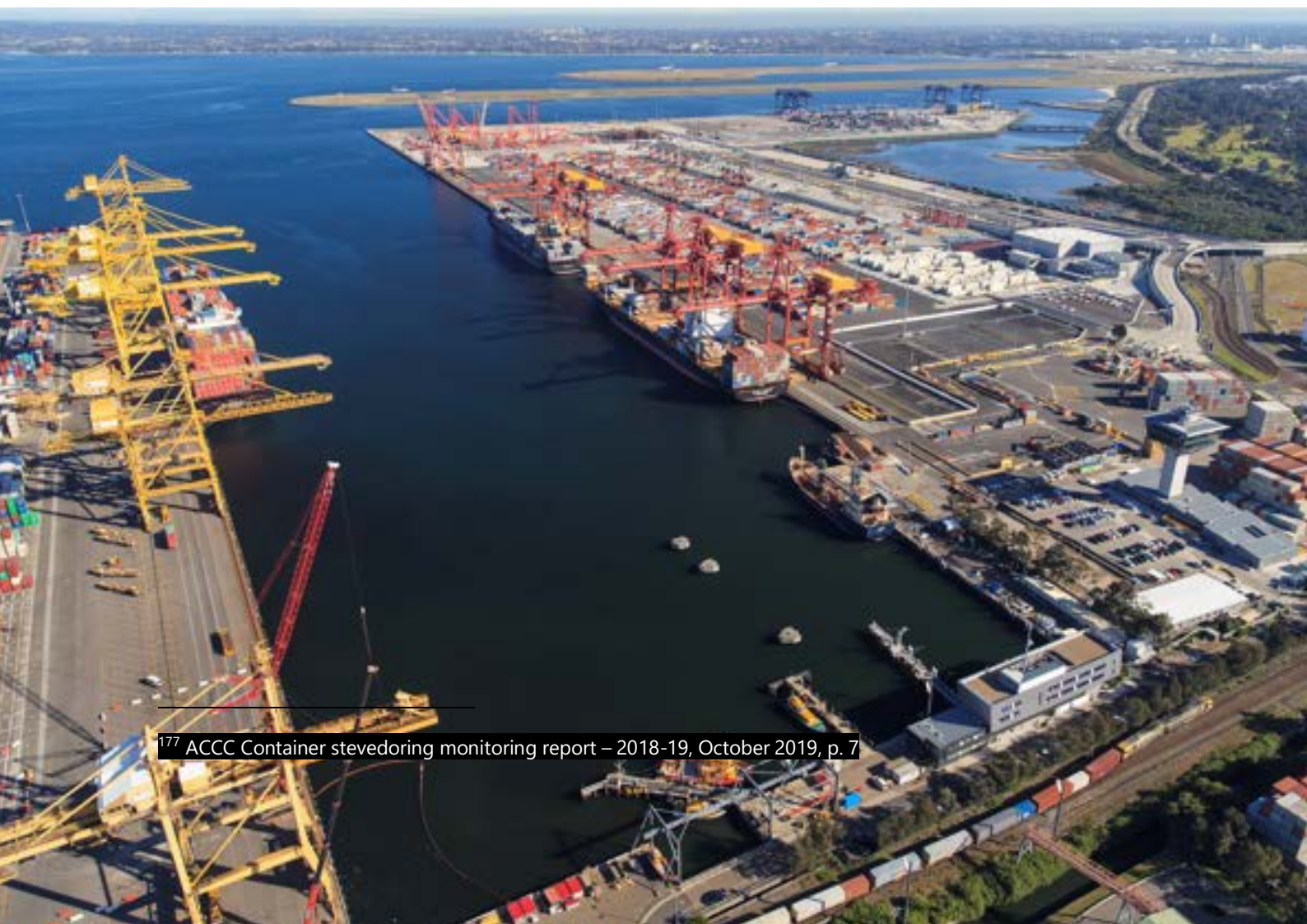
Stakeholder support for this option included for its implementation irrespective of the other reforms that are proposed, with the suggestion that oversight of access arrangements be implemented as part of any ongoing regulatory system, not just to support the transition away from regulation as proposed in the Review Options Paper.

Other stakeholders supported this as a mechanism to facilitate the transition away from the Regulation, but not in an ongoing context.

Stakeholders that didn't support this option raised concerns including that it would result in unnecessary administrative effort and suggested oversight of access arrangements should instead be managed by existing government regulatory bodies such as the ACCC. The view was also conveyed that while standard form contracts for terminal access exist across

Australia, what PBLIS has achieved in NSW is a balancing of the commercial power between parties.

Stakeholder feedback was also provided that the existing stevedore access agreements should be covered by the PBLIS rules, including the process for their development, agreement and amendment. The ACCC has responsibility for stevedore contract terms, noting that it “worked with several container stevedores to remove terms from contracts that we considered were likely to be ‘unfair’ under the Australian Consumer Law. In April 2019, the ACCC announced that DP World, Hutchison and VICT had agreed to remove or amend terms in contracts for landside transport operators.”<sup>177</sup>



<sup>177</sup> ACCC Container stevedoring monitoring report – 2018-19, October 2019, p. 7





Source: Port Authority of NSW

INDEPENDENT REVIEW  
**Ports and Maritime Administration Act 1995**  
**Port Botany Landside Improvement Strategy**

# 6

## Appendices

## Abbreviations

<b>ACCC</b>	Australian Competition and Consumer Commission
<b>Act</b>	Ports and Maritime Administration Act 1995
<b>ANPR</b>	Automatic Number Plate Recognition
<b>ARTC</b>	Australian Rail Track Corporation
<b>BITRE</b>	Bureau of Infrastructure and Transport Research Economics, Australian Government
<b>CBA</b>	Cost Benefit Analysis
<b>Cth</b>	Commonwealth
<b>DPIE</b>	Department of Planning, Industry and Environment
<b>ECP</b>	Empty container park
<b>EDI</b>	Electronic Data Interchange
<b>EDO / EIDO</b>	Electronic Delivery Order / Electronic Import Delivery Order
<b>ECWG</b>	Empty Container Working Group
<b>FCS</b>	Freight Community System
<b>FTAC</b>	Freight Transport Advisory Council
<b>IMT</b>	Intermodal terminal
<b>IPART</b>	Independent Pricing and Regulatory Tribunal
<b>MAC</b>	Maritime Advisory Council
<b>MFN</b>	Metropolitan Freight Network
<b>PBLIS</b>	Port Botany Landside Improvement Strategy
<b>PCS</b>	Port Community System
<b>PSOL</b>	Port Safety Operating Licence
<b>PTLT</b>	Port Transport and Logistics Taskforce
<b>Regulation</b>	Ports and Maritime Administration Regulation 2021
<b>SOC</b>	State Owned Corporation
<b>SOC Act</b>	State Owned Corporations Act 1989
<b>TAC</b>	Terminal access charge
<b>TEU</b>	Twenty-foot equivalent unit



## Glossary

<b>ANPR</b>	Automatic Number Plate Recognition technology is used in camera technology at the port to track truck movements.
<b>Carrier</b>	Transport operator that moves freight via trucks, also known as a road operator.
<b>Container density</b>	A measure of how many shipping containers are being carried on each truck per trip to the stevedore terminal.
<b>Review Discussion Paper</b>	The Independent Review of the Act and PBLIS Discussion Paper was published in December 2021.
<b>Dual runs</b>	When import and export shipping containers are serviced by a truck by delivering one or more export containers and picking up one or more import containers on the same trip.
<b>Empty container park</b>	Empty container parks (also known as empty container storage facilities) provide storage facilities for empty containers before they are either provided to exporters to pack with goods for export or exported overseas as empty containers.
<b>ECWG</b>	The Empty Container Working Group (facilitated by TfNSW) includes representatives from shipping lines, stevedores, empty container park operators, road transport operators and key freight industry groups.
<b>Freight Transport Advisory Council</b>	The Freight Transport Advisory Council (FTAC) provides strategic advice to the NSW Government on freight transport strategies, policies, and projects in NSW. The Council also provides a link between the Minister for Regional Transport and Roads and the freight transport sector.
<b>IMT</b>	An Intermodal Terminal is a facility which allows for the exchange of containers between rail and road.
<b>IPART</b>	The NSW Independent Pricing and Regulatory Tribunal is the independent pricing regulator for water, energy, transport and local government.
<b>Mad minute</b>	The current container booking approach for truck slots results in what is colloquially known as the mad minute. Slots for a 24-hour period are released two days prior at a specified time and carriers compete simultaneously to book slots at their preferred times.
<b>Mandatory Standards</b>	The Port Botany Landside Operations Mandatory Standards under Part 6 of the Ports and Maritime Administration Regulation 2021.

<b>Marine legislation</b>	<i>Ports and Maritime Administration Act 1995, Marine Safety Act 1998, Marine Pollution Act 2012</i> and the regulations and other instruments made under any of those Acts, as well as any other Act prescribed by those regulations.
<b>Minister</b>	The relevant NSW Minister that administers the Act.
<b>Mode share</b>	The relative proportions of containers transported to and from the port by road and rail.
<b>Review Options Paper</b>	The Independent Review of the Act and PBLIS Options Paper was published in June 2022.
<b>Port Authority</b>	Port Authority of New South Wales is a statutory State Owned Corporation.
<b>PSOL</b>	The Port Safety Operating Licence is issued to the Port Authority by the Minister under the Act.
<b>PTLT</b>	The Port Transport and Logistics Taskforce is the TfNSW facilitated industry consultative forum that includes representatives of businesses or associations with a significant presence or interest in the operation of Port Botany.
<b>Productivity Commission</b>	Australian Government Productivity Commission
<b>Rail window</b>	The period of time allocated by a stevedore to service a container train at their terminal.
<b>Regulation</b>	Ports and Maritime Administration Regulation 2021
<b>Road operator</b>	Transport operator that moves freight via trucks, also known as a carrier.
<b>Slot drop</b>	The release of truck slots by a stevedore via their VBS, for carriers to book access to the stevedore terminals.
<b>Slot hoarding</b>	Where carriers hold slots until the last moment before a penalty applies to accommodate potential ship scheduling changes and operational needs, and then cancel the ones they don't need, or don't cancel slots that are not required.
<b>Stevedore</b>	Terminal operators that provide quayside and landside services through the handling of containerised freight from vessels, trucks and trains.
<b>TEU</b>	A twenty-foot equivalent unit (TEU) is the standard unit of measurement for shipping containers. One TEU is equivalent to one 20-

	<p>foot shipping container (dimensions are 20 feet long and 8 feet wide). One 40-foot shipping container is equivalent to two TEUs.</p>
<p><b>Unforeseen Event</b></p>	<p>An unforeseen event is defined in the Mandatory Standards Schedule 1 Dictionary and is an event which could not be reasonably anticipated or controlled by a road carrier or stevedore and impacts their ability to meet the PBLIS rules. Delays caused by Unforeseen Events are not penalised under the PBLIS rules.</p>
<p><b>Waterways Fund</b></p>	<p>Established under Part 4 of the Act and administered by TfNSW, the Waterways Fund can only be used for specific purposes in accordance with the Act.</p>

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## Biography – Ed Willett

Mr Ed Willett was announced as Independent Reviewer of the *Ports and Maritime Administration Act 1995* (the Act) and Port Botany Landside Improvement Strategy (PBLIS) review, on 12 November 2021.

Ed Willett has more than 30 years' experience in competition policy and economic regulation and has held the role of Associate Commissioner of the Papua New Guinea Independent Consumer and Competition Commission since 2015.

Ed Willett's previous experience includes:

- Member of the NSW Independent Pricing and Regulatory Tribunal (IPART) where he led work developing IPART's regulation of energy networks and on the NSW Energy Savings Scheme
- Commissioner of the Australian Competition and Consumer Commission (ACCC), where he led work, in particular, on Telstra's structural separation arrangements, significant determinations on Telstra's fixed line network and mobile termination charges, arrangements for the migration of customers onto the National Broadband Network (NBN) and NBN Co's special access undertaking
- Inaugural Member of the Australian Energy Regulator
- Inaugural Executive Director of the National Competition Council
- Led Industry Commission (now the Productivity Commission) input into the National Competition Policy (Hilmer) Review
- Led stakeholder consultation in the New Zealand Review of the Telecommunications Act.

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## Appendix 1 – PBLIS Cost Benefit Analysis

### Summary – Castalia February 2022, Cost-Benefit Analysis of Port Botany Landside Improvement Strategy (PBLIS) Performance – Report to Transport for NSW

Castalia Limited was engaged by TfNSW to conduct a CBA of the performance of PBLIS since its introduction. The outcome of the CBA is the qualitative and quantitative estimation of direct and indirect economic, social and environmental costs and benefits of PBLIS, focusing on the impacts on road freight carriers, stevedores, cargo owners, and government.

Analysis of a counterfactual scenario (a hypothetical scenario in which the various PBLIS components are abolished) provides additional visibility of what the containerised freight supply chain would look like without PBLIS, assuming parallel developments in the sector. In taking this approach the CBA takes a forward-looking approach considering what the situation would look like if key parts of PBLIS were abolished starting now. The on the ground situation is the continuation of the existing PBLIS intervention unchanged, while the counterfactual is modifying or abolishing it.

#### Main findings of the CBA

The key benefit of PBLIS arises from traffic decongestion and reduced emissions resulting from the removal of heavy vehicles from roads around the port. This is achieved mainly through the provision of the truck marshalling area (TMA) and enforcement of service lines at terminals and, to a lesser extent, parking rules in the port precinct.

Efficiency benefits for port operations (as proxies for declines in truck turnaround time (TTT)) are unlikely to be material. The pattern of changes in TTTs below the PBLIS Mandatory Standard thresholds indicates that TTTs are more likely to be driven by the commercial incentives of the stevedores than by policy interventions.

Direct costs include spending on program administration, investment in the TMA, and investment in the IT systems and street cameras. In the event that PBLIS was no longer implemented then existing IT and camera assets would represent sunk costs with no alternative use. Hence, the report assumes that going forward, the relevant capital cost is any ongoing investment required to maintain and replace the existing technology assets. By contrast, the land under the TMA has alternative use, and hence there is an ongoing opportunity cost to keeping that land for the TMA. The report was not able to identify the indirect material costs of PBLIS.

The sensitivity analysis indicates that under all scenarios, the benefits of PBLIS over the 10-year assessment period exceed costs. The results are sensitive to assumptions about future traffic growth and the discount rate to be applied. In general, allowing for the obvious margin of error involved in undertaking analysis of hypothetical counterfactuals, the report concludes that the Benefit-Cost Ratio (BCR) of the PBLIS program is between 2 and 3.<sup>178</sup>

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<sup>178</sup> A BCR value greater than 1 indicates that the benefits of an action or investment exceed the costs involved.

## CBA results of the PBLIS program 2021-2031

Discount rate	BCR	Net Benefit
3%	2.96	\$159,752,191
7%	2.52	\$104,457,418
10%	1.91	\$55,836,020

Analysis of the hypothetical scenarios shows that the more impactful interventions under PBLIS are the introduction of the Mandatory Standards and penalties, and the construction of the TMA. If left to voluntary industry dynamics, the report does not envision stakeholders would fully and voluntarily self-correct the landside inefficiencies that PBLIS was introduced to address.

Notwithstanding these issues, it is highly probable that stakeholders would negotiate and adopt alternative or similar solutions to that of PBLIS. For example, it is probable that stevedores would price discriminate to regulate high peak hour demand (by introducing some type of peak point pricing). Street parking rules and enforcement is another logical solution that would likely materialise without PBLIS. Given the high degree of market power that stevedores enjoy, it is possible that they would introduce measures to improve their own efficiencies, possibly at the expense of road carriers and the remainder of the supply chain.

However, evidence from the historical behaviour of stevedores suggests there would be no incentive to significantly worsen TTTs given inherent economic incentives to stay competitive and efficient. If stevedores do exceed the regulatory threshold for servicing, they would not have to compensate the road carriers as required under PBLIS. Hence, while Castalia does not expect the average TTTs to deteriorate, there may be some shifting of stevedore inefficiencies to the road carriers.

**Access the full report on the TfNSW website – [Castalia February 2022, Cost-Benefit Analysis of Port Botany Landside Improvement Strategy \(PBLIS\) Performance – Report to Transport for NSW](#)**



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## Appendix 2 – PBLIS Port Comparison Research

### Summary – Advisian May 2022, PBLIS Comparison Study Landside Container Management, Report to Transport for NSW

Advisian Worley Group was engaged to undertake a comparative analysis of:

- International approaches to government regulation of landside container management at key cargo ports of relevance for the PBLIS Review
- Approaches in Australia and New Zealand for managing the landside container interface at cargo ports
- Operational experience over the past decade, particularly relating to landside transport.

The following key questions were considered as part of this study:

- Are port landside interface performance measures available?
- Is government involved in the establishment, oversight, or management of the port landside interface via regulation, lease arrangements, or another method, or is it managed by industry?
- Analysis of any regulatory frameworks, their structures, and performance outcomes
- What has the landside operational practice and experience been over the past decade?

The ports investigated were:

- Australia: Port of Brisbane, Port of Fremantle, and Port of Melbourne
- New Zealand: Port of Auckland, Port of Tauranga, and Port of Lyttleton
- North America: Port of Los Angeles, Port of Long Beach, Port of Vancouver, Port of New York and New Jersey and Northwest Seaport Alliance – Ports of Seattle and Tacoma
- Europe: Port of Antwerp, Port of Valencia, and Port of Rotterdam
- Asia: Port of Manila.

The overall findings of the study, as outlined in the Executive Summary of the Advisian Report, are reproduced below:<sup>179</sup>

#### Performance measures

Most ports have publicly available landside interface performance measures. These are live for some terminals, while others are provided on a historical basis. Data is usually collected directly by the terminal.

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<sup>179</sup> Graphs and tables included in the Executive Summary are not reproduced here and can be found on pages 11-24 of the Port Comparison Report.

The most common landside metric used to assess performance is the TTT (measured from gate entry to last container movement or gate exit). It is common for a terminal or port operator to share the real-time TTT metric on their website along with camera footage of the gates, and in some cases the wait time at each gate is also available.

In Australia and NZ, port level data (performance and cargo information) is self-reported by terminals to the government. This is replicated in Melbourne at a terminal level with voluntary reporting to Freight Victoria. Additionally, Freight Victoria has introduced a voluntary pricing protocol (process around price changes) that all the terminals have accepted, which has resulted in greater transparency for industry. A similar system is being considered at the national level.<sup>180</sup>

## **Government regulation**

Some ports have government regulations or requirements from the landlord port operator regarding the landside interface. This generally relates to the requirement to use a vehicle booking system (VBS) and/or environmentally friendly engines. This however can vary significantly based on the country or port.

In North America, all the investigated ports require carriers operating into and out of their container terminals to be licensed with the port. The original licence requirement was an initiative to direct trucking companies to use cleaner diesel engines. This has been expanded to require access through scheduling of bookings to address congestion. The result has been a decrease in the number of companies servicing the ports due to these requirements and associated compliance costs.

The management of the operations are generally left to terminal operators with port operators and regulators preferring to facilitate infrastructure improvement rather than be involved with regulating levels of service. Only at the Port of Valencia is regulation in place that provides carriers with compensation in the event of delays. However, this regulation has no government oversight, leaving the terminal operators to self-manage their compliance, with carriers often being unhappy with the outcome.

## **Performance requirements**

It is uncommon for port operators to include operating or performance requirements through their lease agreements with the terminal. However the terminals can be required to submit data on wharf and landside performance to the port without any associated requirements. Only the Port of Fremantle reported using performance requirements to influence behaviour at its leased facilities, with incentives (a variable portion of rent) in the lease agreement for meeting set targets associated with improving cargo flow through the port.

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<sup>180</sup> In March 2022, national voluntary guidelines for landside stevedore charges were published by the National Transport Commission to establish clear protocols for notification and communication on increases to existing, or the introduction of new, charges levied on transport operators for access to pick up or drop off containers, and for the associated handling of containerised cargo.

## Vehicle Booking Systems (VBS)

Over the past decade, terminals have moved heavily towards VBS to assist with management of terminal operations. Those ports that do not yet have a VBS are investigating the installation of a system.

A VBS was used for managing bookings at most of the ports investigated, with each terminal usually deciding on the specific software used. Generally, one-hour zones are issued, with a specific allocation of slots available within each zone decided by the terminal (one slot is required for each container). The zones include an allowance on each side for arriving at the terminal gate.

For the international ports investigated, arriving outside of the booking time (including allowances) results in a new booking required for access, and the original booking fee is forfeited.

In Australia and NZ, it is typical that arriving carriers are allowed entry for a few hours following the completion of the zone (the time varies by terminal operator). However, an additional fee can be charged.

In the Port of Manila all transactions within the VBS are made with pre-purchased points. Each point is equivalent in value to the local currency. The use of points simplifies the transactions, especially around refunds, and guarantees that payment is received prior to the rendering of service.

## Advanced booking

Terminals in both Australia and the Port of Manila report using an advanced booking system. These are usually terminals where the yard is split into modules (with dedicated equipment for each module), landside transfers, and wharf-side transfers. Bookings are made for a specific module, meaning the yard position of the container is required prior to making the booking. This contrasts to a terminal that has shared yard resources (for example, a straddle terminal) where the yard position of the container is not important to the booking and can therefore be attached later.

A benefit of the module-based model is that carriers can only book import slots when they are required, and not in expectation that the containers will be ready. This reduces wasted slots. However, the high demand for slots can mean that the time between the container being ready and the next available slot can be longer than preferable.

Where advanced booking is not used, carriers can book slots without an attached container, based on their available labour force. If a particular container is not available for collection it can be swapped for another anywhere in the yard. Alternatively, if a more recently landed container has higher priority, it can be swapped for a previously booked container. However, carriers can also book slots without containers, and these are not used if a suitable container is not available.

## Vehicle Booking System (VBS) fees

Differential pricing for slot times is limited in its application in the ports investigated, with only the Ports of Los Angeles and Long Beach, the Port of Tauranga, and the Port of Manila having an active program. At the Ports of Los Angeles and Long Beach an additional fee is charged to access the port during peak periods, which is then paid to the terminals to cover

the cost of operating the landside interface during off-peak periods. The system is credited with helping to decrease congestion during peak hours.

Fees are associated with VBS use at all the ports investigated. Australia and Manila are unique in allowing booked arrivals outside the booking window. However additional fees are charged for this feature, with a penalty if the booking is missed. The Ports of Long Beach and Los Angeles only recently introduced the booking fee to address carrier abuses of the system. The specific VBS fees for bookings can vary by terminal operator. While these are publicly available in Australia and the Philippines, they are not usually publicly available for the international ports investigated.

Feedback from industry in Australia is that the fees associated with the VBS (booking, off-slot, no-show) are high and continue to increase regardless of terminal performance. Off-slot and no-show fees are regarded as a penalty rather than reimbursement of costs and do not result in greater efficiency of the carriers.

### **Port Community System**

All the European ports investigated had a port community system (PCS), with the services offered depending on engagement from stakeholders and integrations to the platform. Some services may be accessed both through the PCS or separately. The PCS is primarily used for the exchange of information between all parties within the port supply chain.

At the Port of Valencia, the availability of real-time information about container status and congestion levels has improved the ability of carriers to plan trips to the port. Only the Port of Rotterdam and the Port of Valencia had their respective booking systems integrated into the PCS.

Sharing information through the PCS maximises reuse of information and reduces the number of communications required among stakeholders by providing a single location for all documentation, including to the Harbourmaster and Customs.

### **Staging of containers**

Within Australia there has been a change in practice which has seen containers staged at a depot (normally the carrier's depot) rather than being transported directly between the terminal and customer.

Staging allowed carriers to utilise specialist fleets for specific destinations, with high-capacity trucks used for movements between the depot and the port and lower-capacity trucks for movements between the depot and customer. Similarly, country or long-haul carriers not setup for access to the port can drop containers to a carrier that can access the terminal.

When it comes to empty containers, staging is often required due to Empty Container Parks (ECP) having limited operating hours and the requirement that specific empty containers be returned to specific ECPs (shipping lines want their containers returned to their own ECP).

### **Trucking and rail**

Most of the ports investigated are interested in increasing the share of cargo movements that are completed via rail. This is being done through:

- On dock rail: container terminals have an incentive to shift containers by rail if the siding is within the terminal, as they can shift large numbers at once. When the siding is located elsewhere an additional truck movement is required, and the movement is no different to a normal road exchange or stack run.
- Subsidies: the Port of Antwerp is providing subsidies to lessen the cost of rail transport through the intermodal terminal at the port and the port shuttle service to the terminals.

North American carriers generally use Global Positioning System (GPS) systems which track the truck, with the tags read and tracked by the terminal, local dispatch, or a third-party VBS. GPS or Radio Frequency Identification Device (RFID) tags are required on all port-licensed trucks, allowing the port operator to track and report on TTT and wait times.

High Productivity Freight Vehicles (HPFV) are common especially for carrier fleets focused on container movements to and from the port. HPFV carry up to four 20-foot Equivalent Units (TEU), and on a single trip potentially eight TEUs can be exchanged at the terminal, both delivering exports and collecting imports.

**Access the full report on the TfNSW website - [Advisian May 2022, PBLIS Comparison Study Landside Container Management, Report to Transport for NSW](#)**

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## Appendix 3 – PBLIS Behavioural Research

### Summary – Deloitte Access Economics April 2022, Port Botany Landside Improvement Strategy (PBLIS) Industry Behavioural Research, Report to Transport for NSW

Deloitte Access Economics was engaged by TfNSW to understand the impact of PBLIS on the behaviour of stevedores, road operators and rail operators. The research identified and explained specific behavioural changes that have resulted from the introduction of PBLIS and determined if these changes might still have occurred without the introduction of PBLIS. It also identified the factors underpinning the behavioural changes and described these changes by different industry segments.

A total of 22 companies and organisations that interact with PBLIS were interviewed, including, 13 road operators, three rail operators, all three stevedores, and three other participants including industry associations. Analysis identified six overarching behavioural themes:

#### Theme one – Road operators have focused on more direct trips into the terminal, and truck turnaround times (TTTs) have improved

Road operators have seen a reduction in TTTs and an improvement in TTT consistency. Although stevedore performance has improved, PBLIS has not incentivised other behaviours which would increase truck trip efficiency. The current structure of PBLIS rules disincentivises road operators from increasing container density, consecutive visits to different stevedores and dual loading. The improved TTT and lack of dual loading may have led to an overall increase in the number of trips made to the Port under PBLIS.

Drivers of behaviour:

- Faster and more consistent TTTs
- Containers density per truck not at full capacity
- Two way loading opportunities to avoid empty running not fully utilised
- Use of multiple stevedores may have downstream impacts and is not covered under PBLIS.

#### Theme two – Road operators are booking more slots than required as they maintain high demand for Vehicle Booking System (VBS) slots at peak times

The Vehicle Booking System (VBS) under PBLIS allows operators to return slots to the system within a defined period if a timeslot is no longer required. While this is intended to maximise the use of available slots, an unintended consequence is that it encourages overbooking and hoarding, meaning road operators that are unable to book sufficient time slots or slots at their preferred time, and must monitor the system for returned slots. Road operators often cannot react quickly enough when a slot is re-opened, and therefore slots are underutilised.



Drivers of behaviour:

- Overbooking and hoarding slots
- Slot cancellations 24 hours prior to booking time incur no penalty
- High demand for slots during preferred times
- Coordination requirements constrain the ability to improve slot booking systems.

### **Theme three – Rail operators are holding onto windows, and rail windows are being underutilised**

Rail operators are perceived to be holding more windows than they use, with the benefits of this practice outweighing the current costs. Regional trains need to split and shunt into multiple terminals, impacting overall window utilisation. Stevedore behaviour has also been questioned by rail operators, with suggestions they will often only meet minimum lift requirements and prioritise road over rail due to PBLIS penalties. Although stevedores do not agree with this view, they do believe capped lift rates have not incentivised investment in rail. Together these factors have contributed to lower rail efficiency.

Drivers of behaviour:

- Window sitting
- Rail operator behaviour is largely unaffected by PBLIS
- Regional container trains are not at full capacity, impacting overall window utilisation
- Road is prioritised over rail.

### **Theme four – Arriving within the VBS slot booking time zone has become the top priority for road operators**

While truck turnaround times (TTTs) within the port have improved significantly, the rigidity of the system has created duplication, reduced leniency, and increased administration costs. Road operators are hesitant to fully utilise ECPs before a stevedore slot unless TTT and reliability within the ECPs improves, and the risk of an ECP delay resulting in a subsequent stevedore late arrival PBLIS penalty is reduced. Other internal movements, such as stack runs, can have their efficiencies impacted by the focus on PBLIS truck movements. Penalties and reporting have a direct financial cost as well as an indirect cost associated with increased administrative duties.

Drivers of behaviour:

- TTT in empty container storage facilities not covered under PBLIS
- Slot rigidity constrains flexibility
- PBLIS trucks are prioritised over stack runs
- Reporting requirements add to administrative impost.

## **Theme five – Stevedores have effectively incorporated PBLIS into their commercial and operational decisions and behaviours**

Stevedore efficiency has improved in recent years and other stakeholders believe a rebalance of priorities between port and quayside operations has occurred. It is unclear how much of this rebalance is due to PBLIS rather than to a corresponding increase in competitive pressure over the same period. Despite this, road operators maintain the perception that stevedores still benefit from a power imbalance, although stevedores dispute this. Road operators also believe that the current TTT delay penalty for stevedores (\$25 per 15 minutes) does not consider the increased costs of road transport and charges with HPVs which have occurred since the introduction of PBLIS. Stevedores report that while PBLIS has had an initial positive impact on the overall efficiency of the port, growing volumes have required operational changes in their landside operation regardless to manage the greater throughput now required.

Drivers of behaviour:

- Growth in ship size and vessel exchange has not been accompanied by growth in slots
- Meeting but not exceeding minimum rail lift requirements
- 'Unforeseen events' provide some leniency, but are seen to be used to mask penalties
- PBLIS has improved road efficiency, but structural limitations of rail use persist.

## **Theme six – Road operators continue to favour daytime operations**

One of the key pillars of PBLIS is to encourage 24/7 operations, which quayside was already achieving. PBLIS has created an outcome whereby the port terminals provide consistent service across 24/6 operations. Some transport operators have adopted longer operating hours to take advantage of this. However, many operators, in particular smaller ones, have limited capacity and are not equipped to operate 24/7. Many key points in the supply chain that impact road operations cannot provide consistent 24/7 operations. For instance, many empty container storage facilities, customers and their warehouses are only open during weekday business hours. Industry wide staffing and resource constraints also create barriers to shifting to 24/7 operation.

Drivers of behaviour:

- Customer and warehouse opening hours are mainly daytime weekdays
- Resourcing constraints limit ability to operate 24/7
- Majority of boxes are staged
- Many empty container storage facilities only operate during the day, as they are not captured by PBLIS.

**Access the full report on the TfNSW website - [Deloitte Access Economics April 2022, Port Botany Landside Improvement Strategy \(PBLIS\) Industry Behavioural Research, Report to Transport for NSW](#)**

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## Appendix 4 – Terms of Reference

### Introduction

This document sets out the Terms of Reference for and the intended approach to the review of the *Ports and Maritime Administration Act 1995* (the Act) and the Port Botany Landside Improvement Strategy (PBLIS) ('the Review').

The review was announced on 12 November 2021.

The review will be conducted by Mr Ed Willett ('the Independent Reviewer').

### Review Background

Efficient and productive ports are a priority for the NSW Government as outlined in the NSW Freight and Ports Plan 2018-2023.

The Act provides the administrative framework for important aspects of port and maritime management, and:

- establishes the Port Authority of New South Wales as a statutory State owned corporation;
- sets out the marine safety and other functions of the Minister;
- provides for private port operator safety and security functions and information gathering;
- sets out the financial and other provisions for Transport for NSW and enables the maintenance of safety and security at ports;
- provides for port charges and establishes the port price monitoring scheme;
- provides the ability to regulate ports to promote competition and productivity;
- provides for marine pilotage; and
- sets out other maritime matters relevant for recreational and domestic commercial vessels such as wharves and moorings.

The PBLIS arrangements primarily regulate the performance of stevedores and road carriers at the Port Botany container terminals. Introduced following the 2008 Independent Pricing and Regulatory Tribunal findings about inefficiencies with container movements at Port Botany, it is appropriate that these arrangements be reviewed to assess the outcomes of the strategy and ensure it is meeting its objectives. The review will cover the sections of the Ports and Maritime Administration Regulation 2021 (the Regulation) that are relevant to PBLIS and the Mandatory Standards.

### Matters in Scope for the Review

The review will consider:

1. Whether the policy objectives of the Act remain current and whether the terms of the Act remain appropriate for securing those objectives.

2. Whether any changes to PBLIS (in the Act, Regulation or Mandatory Standards) are required, considering:
  - what PBLIS has achieved;
  - what PBLIS is currently achieving;
  - any unintended impacts of PBLIS; and
  - whether PBLIS remains the best approach for promoting the economically efficient operation and use of and investment in land-based port facilities and port-related supply chain facilities. And, if so, whether these arrangements are appropriate, and if not, what are the alternative options.
3. Feedback provided during the Regulation remake process that was deferred for consideration during this Review.

### **Matters Out of Scope for the Review**

The parts of the Act relating to the long-term lease arrangements at the Ports of Botany, Kembla and Newcastle will only be considered within the context of those lease arrangements.

In addition, specific consideration of stevedore charges will be out of scope for this review, recognising that these charges are a national economic issue that has been referred to the Federal Government for consideration. Where existing PBLIS requirements apply to stevedore charges they will be considered in the review.

The review will not consider parts of the Regulation not relevant to PBLIS that were recently reviewed by Transport for NSW, unless consequential amendments are required as a result of proposed changes to the Act.

### **Review Activities**

The review activities will be determined by the Independent Reviewer and are expected to include the engagement of external economic analysis of PBLIS, industry behavioural analysis and comparison to other (Australian and global) jurisdictional approaches.

### **Outputs and Consultation Process**

1. Appointment of Independent Reviewer.
  2. Confirmation of review activities and consultation timing.
  3. Discussion Paper to facilitate stakeholder feedback.
  4. Stakeholder consultation on Discussion Paper including workshops as suitable, one-on-one engagements as well as written communication.
  5. Analysis of review findings and options, including any proposed changes developed and detailed in a Draft Report.
  6. Stakeholder consultation on Draft Report.
  7. Final Report provided to Minister for Transport and Roads.
- Government response to independent review recommendations.

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## Appendix 5 – Stakeholder consultation attendees and submissions

An extensive public consultation process was undertaken, in line with the NSW Government's Better Regulation Principles. The Review heard from individuals, logistics and retail businesses, port operators, peak industry bodies and industry advisory groups, container stevedores, transport operators (road and rail), maritime (domestic commercial and recreational vessels), unions, agriculture exporters, government, community groups and other stakeholders.

### Submissions to the Review Discussion Paper

The Review received 26 written submissions (of which 20 were from organisations and six from individuals) on the Review Discussion Paper.

#### Review Discussion Paper written submissions

Sub No.	Submitter
1	Alliance Transport Pty Ltd – (confidential)
2	Boating Industry Association
3	Container Transport Alliance Australia (CTAA)
4	Container Transport Interested Parties (confidential)
5	DP World (confidential)
6	Freight Trade Alliance
7	H Y Transport Pty Ltd
8	Hutchison Ports
9	M Jarvin
10	J O'Donnell Customs
11	Tony Latella (confidential)
12	Lopez Bros Transport Pty Ltd
13	Maritime Advisory Council
14	Maritime Union of Australia
15	National Heavy Vehicle Regulator
16	NSW Ports
17	Patrick Terminals (confidential)
18	Port of Newcastle
19	Price and Speed Containers
20	International Forwarders & Custom Brokers Association of Australia (IFCBAA) and Road Freight NSW

<b>21</b>	R L
<b>22</b>	Shipping Australia Ltd (confidential)
<b>23</b>	Svitzer Australia Pty Ltd
<b>24</b>	J Thurgar
<b>25</b>	P Vine
<b>26</b>	G Winstanley

### Submissions to the Review Options Paper

The Review received 21 written submissions (of which 19 were from organisations and 2 were from individuals) on the Review Options Paper.

### Review Options Paper written submissions

Sub No.	Submitter
<b>1</b>	H Y Transport Pty Ltd (confidential)
<b>2</b>	Namoi Cotton
<b>3</b>	Commercial Vessels Association
<b>4</b>	Maritime Advisory Council
<b>5</b>	Manildra Group
<b>6</b>	Patrick Terminals (confidential)
<b>7</b>	Container Transport Alliance Australia (CTAA)
<b>8</b>	Port of Newcastle
<b>9</b>	DP World (confidential)
<b>10</b>	Pacific Tug Group
<b>11</b>	Ampol Limited
<b>12</b>	iMove Co-operative Research Centre
<b>13</b>	Australian Logistics Council
<b>14</b>	NatRoad
<b>15</b>	Tony Latella (confidential)
<b>16</b>	Lynda Newnam
<b>17</b>	NSW Farmers' Association
<b>18</b>	Correct Planning and Consultation for Mayfield
<b>19</b>	NSW Ports (confidential)
<b>20</b>	National Heavy Vehicle Regulator (NHVR)
<b>21</b>	Port Authority of New South Wales (confidential)



Consultation between the Independent Reviewer and stakeholders was held following the release of the Review Discussion and Options papers. Due to COVID-19 restrictions the five Review Discussion Paper sessions were held virtually between 11 and 16 February 2022. A mix of in person and virtual sessions were held for the Review Options Paper between 4 and 28 July 2022. Additional sessions were held with several industry representative and advisory bodies.

Review consultation session(s) attendees - Review Discussion Paper and Options Paper	
1 Stop Connections	Mediterranean Shipping Co
ACFS Port Logistics	MKD Transcorp Pty Ltd
Advanced Marina Management	Mondiale VGL
Alliance Transport	Moorebank Intermodal Company
Ampol Australia	Murrell Freight Services
Ausbarge Marine Services	Namoi Cotton
Australasian Marine Pilots Institute (AMPI)	National Maritime Services
Australian Furniture Removers Association (AFRA)	National Road Transport Association
Australian Logistics Council	Lynda Newnam
Australian Maritime Officers Union	NSW Farmers Association
Australian Rail Track Corporation (ARTC)	NSW Ports
BCQ Logistics	Pacific National
Blue Arcadia	Pacific Tug Group Pty Ltd
Boating Industry Association	Pack and Send
Carter Heavy Haulage & Transport Pty Ltd	Patrick Terminals
CMA CGM Group	Phoenix Freight
Commercial Charter Vessel Industry	PJG Transport
Commercial Vessels Advisory Group	Port Authority of New South Wales
Commercial Vessel Association	Port of Newcastle
Container Transport Interested Parties (CTIP)	Ports Australia
Container Transport Alliance Australia (CTAA)	Qube Logistics
DP World	Recreational Vessels Advisory Group
Freight Transport Advisory Council (FTAC)	Reliance Freight Services
Freight Linx	Road Freight NSW
Global Product Supply Management (GPSM)	Rod Pickette Consulting
GOLOG Pty Ltd	Shipping Australia Limited (SAL)
H Y Transport Pty Ltd	Silk Contract Logistics

Hutchison Ports	South Western Logistics
Icehouse Logistics	Streamline Container Services
International Forwarders & Customs Brokers Association of Australia (IFCBAA)	Svitzer Australia
JJ Lawson Customs & Freight Brokers Pty Ltd	Swift Transport
Johnstons Transport	Sydney Pilot Association
Lovatt Transport	Trojan Transport and Bond Services
Manildra Group	
Maritime Advisory Council	
Janice Thurgar	
Maritime Union of Australia	

## Appendix 6 – Options proposed and Final Recommendations

### Act Options and Final Recommendations

Review Options Paper	Review Final Report
Act Options	Act Recommendations and Findings
1 – Replace the current three tier dangerous goods in ports time-limit penalty structure with an ongoing daily offence penalty	1 – Dangerous goods time limit penalty
2 – Remove the reference to identification numbers issued under the National Law as a condition of holding a mooring licence	2 – Mooring Licenses
3 – Regulate the licencing of towage services, lines handling and bunkering services by the Port Authority under a new statutory regime	3 – Towage, lines handling and bunkering services
4 – Consider extending the requirement to obtain written approval for carrying out bunkering or specified work to other relevant vessels, including those not carrying dangerous goods	4 – Permit requirements for bunkering and other works
5 – Introduce a criminal offence and penalty notice amount (PIN) for breaching private port operator directions	5 – Enforcement of private port operator directions
6 – Amend the port operator direction notification period to one week	6 – Notice of private port operator directions
7 – Extend liability for non-compliance with parking rules to the owner of the vehicle	7 – Traffic control at ports and wharves
8 – Allow for variations in port charges in relation to the environmental performance of a vessel	F1 – Differential port charges for environmental performance
9 – Increase the port charges notification period to the Minister to at least 40 business days before the change	9 – Port price monitoring scheme reporting requirements
10 – Review application of current port boundaries and update if required	11 – Port boundaries
11 – Require the provision of vessel performance information to relevant port authorities	8 – Vessel environmental performance information

12 – Mandate information and data formats and types for vessel manifests and that these be provided to the NSW Government	10 – Vessel manifest information and data formats
13 – Clarify key functions of Transport for NSW, which include keeping waterways free of debris and the maintenance of additional waterway infrastructure	12 – Transport for NSW functions
14 – Expand the functions of the Maritime Advisory Council to include advice and recommendations on property and infrastructure, to align with the expertise required of the MAC members and the functions of TfNSW	13 – Maritime Advisory Council functions
15 – Amend the Act to streamline and simplify requirements where suitable	16 – Updates to the Act and Regulation
Not proposed in Review Options Paper – these Recommendations and Findings respond to stakeholder feedback or are the result of further review consideration	14 – Port Authority objectives
	15 – Application of the navigation service charge
	F2 – Consideration of Port Authority commercial and regulatory functions
	F3 – Consider pilotage provision
	F4 – National collection of stevedore and ship performance data
	F5 – Independent price regulation of port charges is not suitable

## PBLIS Options and Final Recommendations

Options Paper	Final Report
PBLIS Option A	PBLIS Recommendations and Findings
A1 – Apply late penalties per truck trip rather than per container – Change late arrival penalties to be applied per truck rather than per container	7 – Apply late penalties per truck trip rather than per container
A2 – Investigate options for stevedore impacted trucks – Consider options for a port-wide approach to stevedore impacted trucks	F1 – Investigate options for stevedore impacted trucks – PBLIS Option A2 – not recommended
A3 – Apply unforeseen events to terminal sections – Increase flexibility in stevedore unforeseen events to allow cancellation of	8 – Apply unforeseen event terminal sections

part of an impacted time zone, to allow the remainder of the terminal to continue operating	
A4 – Change carrier cancellation rules to ‘take or pay’ – Change the notice period and booking cancellation rules by road carriers to a ‘take or pay’ arrangement	2 – Change carrier cancellation rules to take or pay
A5 – Remove large and small carrier classifications – Remove the option to separate road carriers into Large Carriers (Class B carriers) and Small Carriers (Class A carriers) for the purpose of releasing slots	10 – Remove large and small carrier classifications
A6 – Change penalty amounts – Increase penalties by CPI backdated from implementation and apply annually in future	9 – Update penalty rates by Consumer Price Index (CPI)
A7 – Improve road data transparency – Increase information available publicly on stevedore truck servicing and improve data provided to government to provide additional functionality	12 – Road data transparency
A8 – Remove the broad power for regulating stevedore charges – Remove the broad Regulation power to regulate stevedore charges that is not aligned with the NSW Government regulatory framework and remove the associated PBLIS stevedore charge notification and government assessment requirements	6 – Remove the broad power for regulating stevedore charges
<b>PBLIS Option B</b>	<b>PBLIS Recommendations and Findings</b>
B9 – No booking until discharge – Implement a booking system that allows container pick up scheduling once the container has been discharged from the vessel	3 – Facilitate no booking until discharge
B10 – Points systems – Apply penalties and/or booking fees via a points system	F2 – Points system – PBLIS Option B10 – not recommended
B11 – Differential pricing of time zones – Apply different prices to truck time zones - with peak periods priced higher than off-peak	5 – Differential pricing of time zones
B12 – Certified transport operators – Introduce a certification requirement for	17 – Certified transport operator access

transport operators, as applied in other ports internationally	
B13 – Empty container storage facility data transparency – Require empty container storage facility data and make this publicly available, and require empty container redirections in EDI format	14 – Empty container data transparency and efficiency
B14 – Freight Community System (FCS) – Progress development of FCS Strategic Business Case and if positive, develop a phased implementation plan and proceed as a high priority	15 – Freight Community System
B15 – Second truck marshalling area (TMA) – Investigate further the need and timing for a second truck marshalling area and if required, options for its development	16 – Second truck marshalling area
B16 – Non-government implementation of PBLIS – Consider enabling NSW Ports to administer PBLIS and TfNSW contracting NSW Ports to manage the TMA and ANPR cameras	18 – Engage NSW Ports as a service provider to administer elements of PBLIS, truck marshalling area and TfNSW camera network
<b>PBLIS Option C</b>	<b>PBLIS Recommendations and Findings</b>
C17 – Transition away from PBLIS but retain oversight – Remove the PBLIS regulation in a phased transition, but retain performance monitoring and the potential to re-introduce PBLIS should port performance deteriorate	1 – PBLIS Performance Scheme
C18 – Oversight of access arrangements – In addition to PBLIS Option C17, provide regulatory oversight of industry access arrangements to support the transition away from PBLIS	F3 – Oversight of access arrangements – PBLIS Option C18 – not recommended
<b>PBLIS Option D</b>	<b>PBLIS Recommendations and Findings</b>
D19 – Remove regulated rail booking fee structure – Remove the regulation of rail servicing and booking fees to allow stevedores to set fees and service rules as appropriate	19 – Remove regulated rail servicing arrangements
D20 – Rail data transparency – Make available information on stevedore rail window use, performance and container tracking.	13 – Rail data transparency



D21 – Improve governance frameworks to align public infrastructure managers with the port rail task – Ensure public rail organisation (Sydney Trains and ARTC) requirements are appropriately aligned with the port rail task	20 – Improve governance frameworks to align public infrastructure managers with the port rail task
D22 – Encourage voluntary arrangements between private sector participants to improve rail coordination – Encourage the use of voluntary arrangements to improve coordination among private organisations in the rail supply chain	21 – Examine future rail options
D23 – Examine additional future rail options – As rail investments mature, consider further options for improving interface /coordination between supply chain participants and functions	21 – Examine future rail options

## Appendix 7 – Timeline of PBLIS

**Table 1: Historical timeline of key PBLIS events**



<b>2005</b>	Freight Infrastructure Advisory Board (FIAB) established and recommended changes to support delivery of freight infrastructure objectives.
<b>2006</b>	Port Botany Logistics Taskforce established (in response, in part, to FIAB recommendations) and recommended an independent review of the interface between stevedores and landside transport operators, and the matter was referred to IPART.
<b>2007</b>	<p><b>May</b></p> <ul style="list-style-type: none"> <li>- IPART Issues Paper – Review of the Interface between the Land Transport Industries and the Stevedores at Port Botany – for public consultation.</li> </ul> <p><b>October</b></p> <ul style="list-style-type: none"> <li>- IPART Draft Report – Reforming Port Botany's links with inland transport - for public consultation.</li> </ul>
<b>2008</b>	<p><b>March</b></p> <ul style="list-style-type: none"> <li>- IPART Final Report – Reforming Port Botany's links with inland transport.</li> </ul> <p><b>September</b></p> <ul style="list-style-type: none"> <li>- NSW Government response to the IPART Review, which included the establishment of PBLIS as a two phased strategy.</li> </ul> <p><b>December</b></p> <ul style="list-style-type: none"> <li>- NSW Government introduced powers to regulate the port and port related supply chain, as a contingency if Phase One of PBLIS, voluntary industry action, was not successful.</li> </ul>
<b>2009</b>	<p><b>February</b></p> <ul style="list-style-type: none"> <li>- Sydney Ports Corporation announced industry trials (three) to benchmark Port Botany's existing performance (via the Port Botany Road Taskforce and the Port Botany Rail Team).</li> <li>- First industry trial of the PBLIS reform process undertaken.</li> </ul> <p><b>April</b></p> <ul style="list-style-type: none"> <li>- Second industry trial of the PBLIS reform process.</li> </ul>
<b>2010</b>	<p><b>November</b></p> <ul style="list-style-type: none"> <li>- Regulations enabling the setting of Mandatory Standards introduced</li> </ul> <p><b>December</b></p> <ul style="list-style-type: none"> <li>- NSW Government announced staged rollout of new regulations and the Mandatory Standards with full implementation by early 2011.</li> <li>- Mandatory Standards introduced including directions for stevedores to provide road and rail servicing data to the Sydney Ports Corporation (Patrick Terminals and DP World Sydney).</li> </ul>
<b>2011</b>	<p><b>February</b></p> <ul style="list-style-type: none"> <li>- Third industry trial of PBLIS reform process (trialling the new system before penalties enforced) complete.</li> <li>- Changes to Mandatory Standards made, including to stevedore impacted trucks, clarification of some definitions and minor corrections.</li> <li>- PBLIS financial penalties start to be enforced for stevedores and carriers that do not meet PBLIS requirements.</li> </ul>

- 
- August**
    - Pricing set for rail servicing at Port Botany (Patrick Terminals and DP World Sydney).
  - September**
    - Changes to Mandatory Standards made, including to the carrier and stevedore mandatory standards, definitions, and records and data requirements.
  - **2012**
    - September**
      - The Ports and Maritime Administration Regulation 2007 was remade which included some changes to the Mandatory Standards.
  - **2013**
    - May**
      - NSW Government leased Port Botany (and Port Kembla) to NSW Ports for 99 years.
  - **2014**
    - April**
      - Transfer of functions from Sydney Ports Corporation to TfNSW.
    - June**
      - Pricing for rail servicing set for Hutchison Ports Sydney.
    - July**
      - Hutchison Ports began operations at its Port Botany terminal.
      - The TfNSW Cargo Movement Coordination Centre established, incorporating the previous functions of the Sydney Ports Corporation to implement PBLIS.
  - **2015**
    - December**
      - Changes to the Mandatory Standards made, including to truck servicing, slot bookings, cancellation of bookings and truck turnaround times.
  - **2020**
    - March**
      - TfNSW Freight Operations established, incorporating the functions of the TfNSW Cargo Movement Coordination Centre.
  - **2021**
    - September**
      - Remake of the Ports and Maritime Administration Regulation 2021 in effect including ability to require data from empty container parks and minor changes to the Mandatory Standards regarding truck identification information and clarification of some definitions.

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## Appendix 8 – Stevedore charges NSW Government submission

The NSW Government's position on stevedore charges is outlined in its submission to the Productivity Commission Inquiry into the long-term productivity of Australia's maritime logistics system<sup>181</sup> see below, and was also raised directly with the Productivity Commission.

### NSW Government position on stevedore charges

"Stevedore charges are applied to landside transport operators and passed on to cargo owners. This represents a recent shift in the charging structure of most stevedores from quayside to landside operators.

The same stevedores operate across many of Australia's primary container ports – DP World Australia and Patrick Terminals in Sydney, Melbourne, Brisbane and Fremantle; Hutchison Ports Australia in Sydney and Brisbane; Victoria International Container Terminal in Melbourne; and Flinders Ports in Adelaide.

As outlined in the Australian Competition and Consumer Commission (ACCC) *Container stevedoring monitoring report 2020-21*, within the container supply chain, importers and exporters contract directly with shipping lines for the movement of their cargo and shipping lines choose the stevedore they use. This means landside transport operators are unable to choose a stevedore with lower charges or negotiate their own individual terms of access, including price.

Similarly, while cargo owners have a choice of shipping line and land transport operator, they do not choose which stevedore is used which means they may also be impacted by the lack of bargaining power and market influence, in so far as the charges are passed on to them by landside transport operators.

In NSW, stevedores introduced landside infrastructure and access charges in 2017 and 2018 which have significantly increased (Figure 1).

These increases have raised significant concerns among landside transport operators, including freight-forwarders, cargo owners and transport companies, who have sought government intervention. In particular, land transport operators have noted the lack of market power which sees the charges imposed on trucking operators who do not have a choice in which stevedore's container terminal they attend.

The ACCC has reported that revenue across Australia from Patrick Terminals, DP World Australia and Flinders Ports landside terminal access charges had increased from nil in 2016/17 to more than \$278 million in 2020/21. In contrast, revenue from quayside charges paid by shipping companies reduced from \$1,005 million to \$853 million across the same period. The overall revenue for stevedores increased by \$1,232 million to \$1,371 million across the period.<sup>182</sup>

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<sup>181</sup> Productivity Commission 2022, [Inquiry into Australia's Maritime Logistics System Final Report](#)

<sup>182</sup> ACCC, Container stevedoring monitoring report 2020–21, October 2021, p. 49

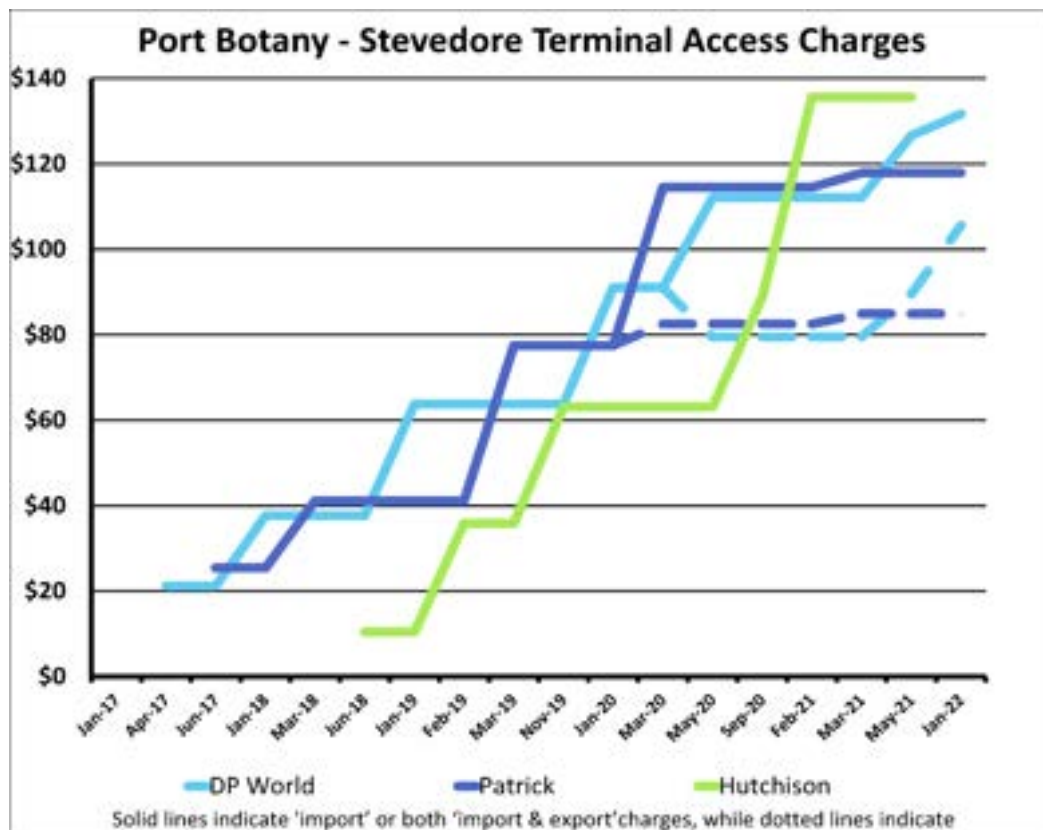


Figure 1: Port Botany stevedore terminal access charges between January 2017 and January 2022 (Source: Transport for NSW)

The NSW Government does not currently have visibility of full costs throughout the supply chain or the ultimate impact of these stevedore charges on customers and the economy but it is expected the stevedore charges are adding to the costs of shipping for exports and importers, with productivity implications for businesses and consumers.

The Inquiry should consider the impact of these charges and assess requests for further government intervention as well as the appropriate level of government regulation, including any increased role for the ACCC.

The NSW Government considers the matter of stevedore charges a national productivity issue as stevedores operate across multiple jurisdictions and issues may not be addressed through increased state-based regulation. Importantly, if the Inquiry recommends any increased control or oversight, this should be undertaken at the national level.”<sup>183</sup>

<sup>183</sup> NSW Government submission 2022, Productivity Commission Inquiry into the long term productivity of Australia’s maritime logistics system