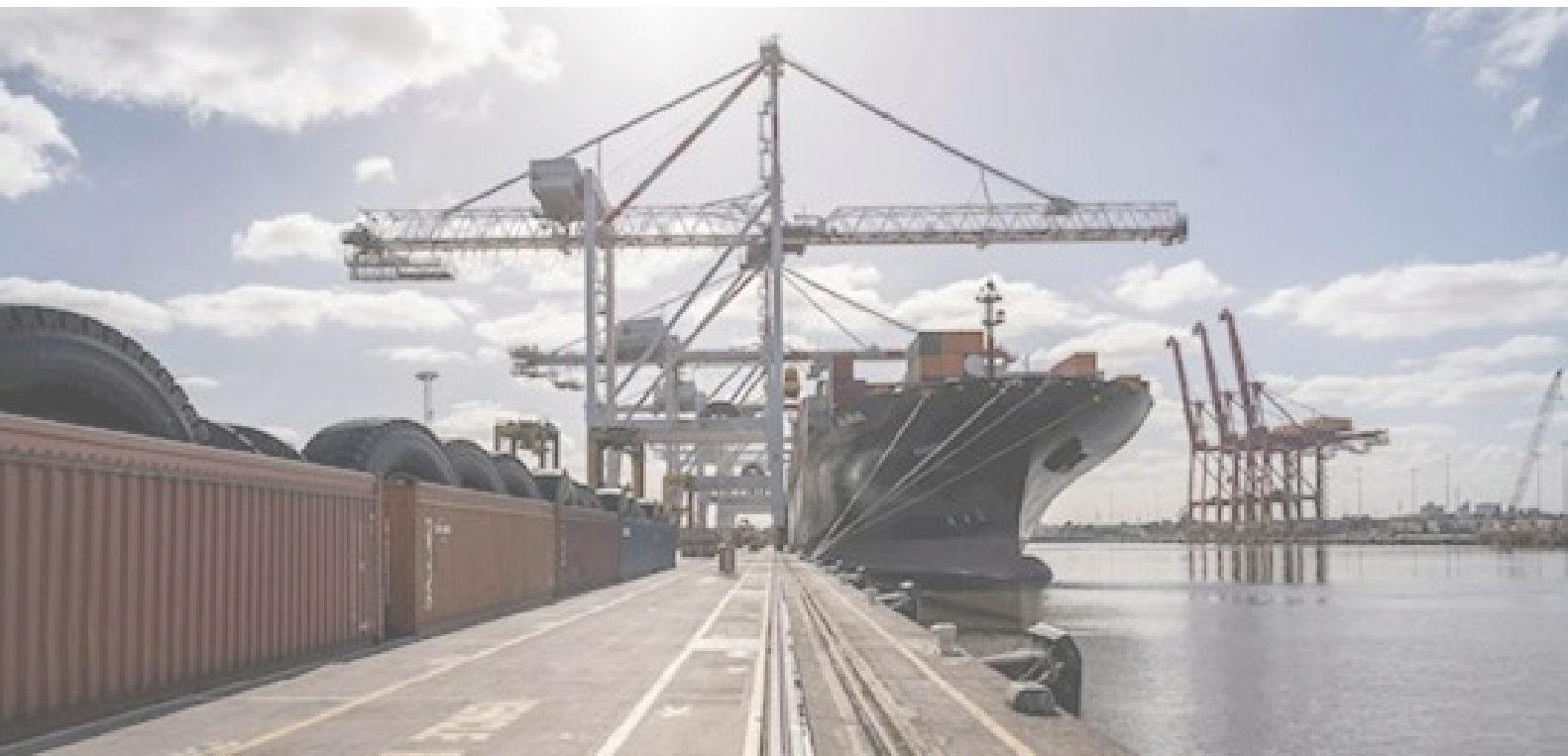

DP World Australia

Submission to Productivity Commission inquiry into Australia's Maritime Logistics System

Public version

25 February 2022



Contents

1	Executive Summary	2
2	Summary of recommendations	16
3	DP World and market dynamics affecting the Australian marine logistics supply chain	19
4	Productivity of Australian stevedores and the marine supply chain	33
5	Supply chain productivity and industrial relations	49
6	Port infrastructure and related landlord costs and issues	65
7	Supply chain costs – blue water costs and landside charges	73
8	Technology	86
Schedule 1	DP World global operations	89
Schedule 2	Farrierswier, Supplementary Expert Report on charging issues for container stevedoring,	90
Schedule 3	Deloitte Access Economics, DP World Australia, Import / Export Supply Chain Cost Analysis	91
Schedule 4	HoustonKemp Economists, Economic effect of industrial action at stevedoring terminals	92
Schedule 5	Port of Melbourne capacity expansion case study	93

1 Executive Summary

1.1 Importance and timeliness of the Productivity Commission's inquiry

DP World is a global leader in stevedoring, operating across 68 countries, 78 port terminals (a full set of locations is set out in **Schedule 1**). In Australia:

- DP World is the largest port and supply chain operator including operating major international container terminals at each of Brisbane, Sydney, Melbourne and Fremantle.
- DP World handle over 3 million TEUs and approximately 1,300 ships each year across its four terminals.

DP World welcomes this opportunity to participate in the Productivity Commission's Inquiry into the long-term productivity of Australia's maritime logistics system (the **Review**). DP World consider the Productivity Commission's Review to be important and timely.

The COVID-19 pandemic has caused some of the most profound disruption to the global shipping market in a century. However, this Review is important because the costs, delays and uncertainty that have troubled Australian supply chains over the last two years are not solely caused by the COVID-19 pandemic.

The cost of this policy failure is real and substantial.

This Review is timely because the 'lived experiences' of businesses and consumers during the COVID-19 period have raised awareness that, as a geographically remote economy, Australia must get its port settings right.

1.2 Is there a productivity problem here to be solved?

As the largest global operator, DP World is well positioned to express a 'real world' view of how the productivity performance of Australian ports compares with other global ports.

DP World track and benchmark its performance at each stage of a container's journey through one of its terminals – including:

- the time the vessel takes to get onto a berth;
- the rate at which containers are unloaded and loaded onto the vessel (container lift rates);
- the amount of time each container spends in its terminal ('container dwell time'); and
- the time taken for them to be picked up (often measured by truck turnaround time).

While DP World monitors performance and seeks to improve in each of these areas, it also understands that care needs to be undertaken when interpreting them. Port performance on measures such as vessel waiting time will depend on a range of factors, including the size of vessels, the trade routes being served, and investment in capacity by stevedores and port operators. While movement in these measures may at least partly reflect the productivity of a port or container terminal, it can also reflect factors unrelated to productivity. This has been particularly the case over the past two years, as global

supply chain disruptions have wreaked havoc with shipping schedules and contributed to 'bunching' of ship arrivals and delays at major ports all around the world.

Any comparison of Australian container port performance against international benchmarks also needs to be viewed in light of the factors that make Australia's operating and legal environment different from other countries.

Australian container ports are different in a number of ways to global peers. Some key differences include:

- **Australian international container ports are relatively small by global standards** (only Melbourne and Sydney fall within the top 100 by throughput¹). Large ports that operate as 'hubs' within the major, East-West trade route (i.e. ports linking Asia, Europe and the United States) are often able to achieve container throughput and crane rates that are higher than smaller, destination ports like those in Australia.
- **Australia operates as a small-volume destination at the end of a long global trade route.** Amongst other things, this means that the vessels visiting Australia tend to be smaller than other routes and Australian services can be disproportionately impacted by delays in vessels leaving other ports bound for Australia. The low volumes also lessen the bargaining power of Australian shippers in dealing with global shipping lines and consortia.
- **Australia is predominantly an importer of containerised goods.** Containerised imports outnumber containerised exports by approximately two to one.² The Australian port supply chain must therefore wrestle with the challenge of de-hiring, storing and exporting substantial volumes of empty containers. This is not a problem that exists, to the same degree, in many other markets.
- **Australia's major demand centres are located on the coast, and mostly co-located with the international container ports.** One consequence of this is that most imported containers only travel short distances from the port to their final destination – for example, around 98% of containers imported through Port Botany never leave the Sydney metropolitan area.³ This may be contrasted with many overseas container ports which service both coastal demand centres and major inland cities (e.g. New Delhi). This feature of Australia's geography shapes landside logistics – particularly the economics rail transport – and therefore impacts landside productivity.

None of these features of the supply chain excuse poor productivity within Australian logistics chains, or at DP World ports, where this exists. But they highlight the need for care in any comparative exercise. They are also important when shaping a policy response that will work in an Australian context.

¹ Lloyd's List, *One Hundred Ports 2020*, 2020. Accessible online at <<https://lloydslist.maritimeintelligence.informa.com/one-hundred-container-ports-2020>>.

² For the fourth quarter of 2020, the Bureau of Infrastructure and Transport Research Economics (BITRE) reported 1,097.6 thousand TEUs of containerised imports exchanged across Sydney, Melbourne, Brisbane, Adelaide and Fremantle. Over the same period, BITRE reported 535.2 thousand TEUs of containerised (full) exports and approximately the same number of empty exports. See, BITRE, *Waterline 67*, 22 December 2021. Accessible online at <<https://www.bitre.gov.au/publications/2021/waterline-67>>.

³ Infrastructure NSW, *NSW State Infrastructure Strategy 2012 – 2032*, October 2012, p 51. Accessible online at <<https://www.infrastructure.nsw.gov.au/expert-advice/state-infrastructure-strategy/state-infrastructure-strategy-2012>>. See also, KPMG, *Quay conclusions Finding the best choices for additional port capacity in NSW*, February 2019. Accessible online at <<https://assets.kpmg/content/dam/kpmg/au/pdf/2019/quay-conclusions-best-choices-additional-nsw-port-capacity.pdf>>.

(a) The comparative performance of DP World's Australian terminals is strong

DP World benchmarking shows that the current productivity performance of its Australian terminals is strong, when they are operational and not impacted by industrial action.

DP World internal benchmarking shows that:

- **Putting aside the effect of supply chain disruptions linked to COVID-19, vessel wait times at Australian ports are relatively low.**

For much of the past decade, the proportion of vessels waiting at anchorage for more than two hours outside Australian ports has been less than ten percent – in other words more than 90 per cent of vessels were able to secure a berth almost immediately.⁴ It is only in the last two years that DP World has seen a significant increase in vessel waiting times, both in Australia and at many overseas ports. This temporary increase in vessel wait times is strongly linked to global supply chain disruptions, and has little to do with the productivity performance of Australian container terminals.

- **Crane rates at DP World Australian terminals are strong, even when compared to large overseas terminals.**

Crane rates are one measure of the productivity of loading and unloading operations, when the terminal is operational. On this measure, DP World Australian terminals perform strongly (see Figure 1 below).

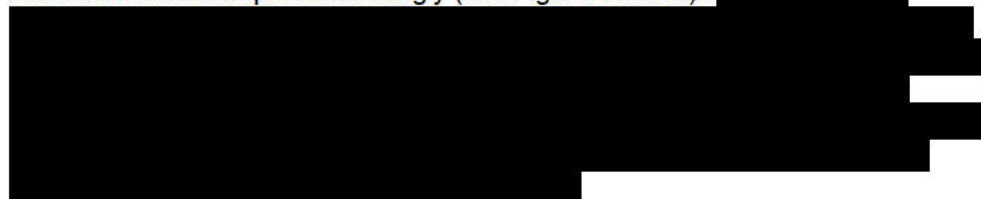
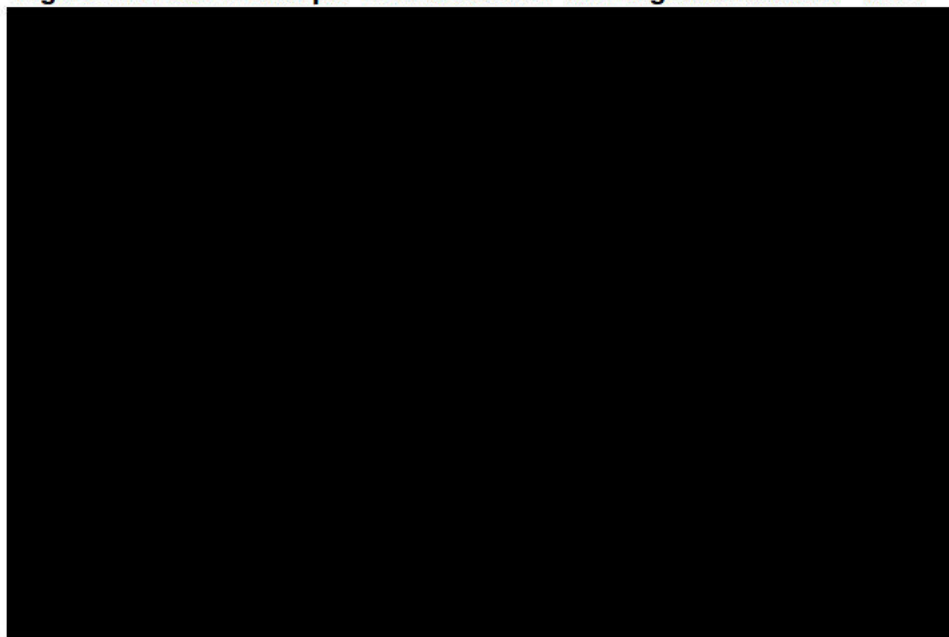


Figure 1: Gross moves per hour across DP World global network – 2021



⁴ Based on BITRE Waterline data. Refer to Figure 12 in section 4.

- **Our Australian terminals are among DP World's most efficient in terms of dwell time and truck turnaround time.**

Dwell time measures how long a container spends in a DP World terminal before it is moved on to its next destination. This is an important measure of the productivity of DP World's terminal operations and is an important metric for shippers – but it is often omitted from public commentary on stevedores' productivity. On this measure, DP World's Australian terminals are among the best in the world (see **Figure 17** below).

The performance DP World's Australian terminals is similarly strong on truck turnaround time (see **Figure 3**).

Figure 2: Import container dwell time (days) across DP World global network - 2021

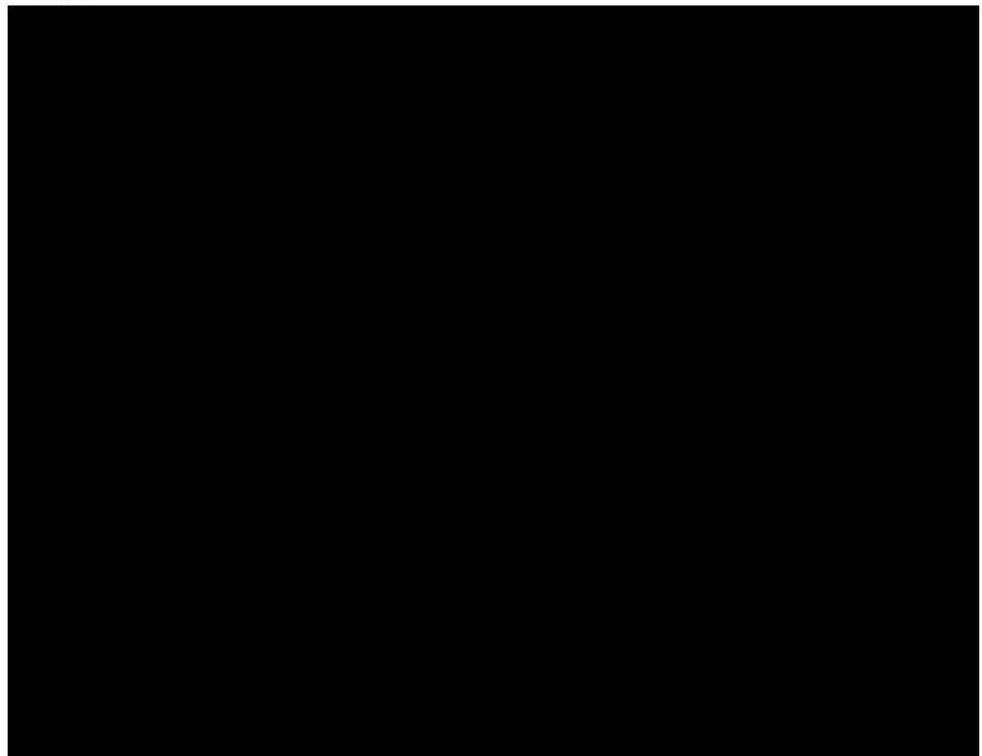
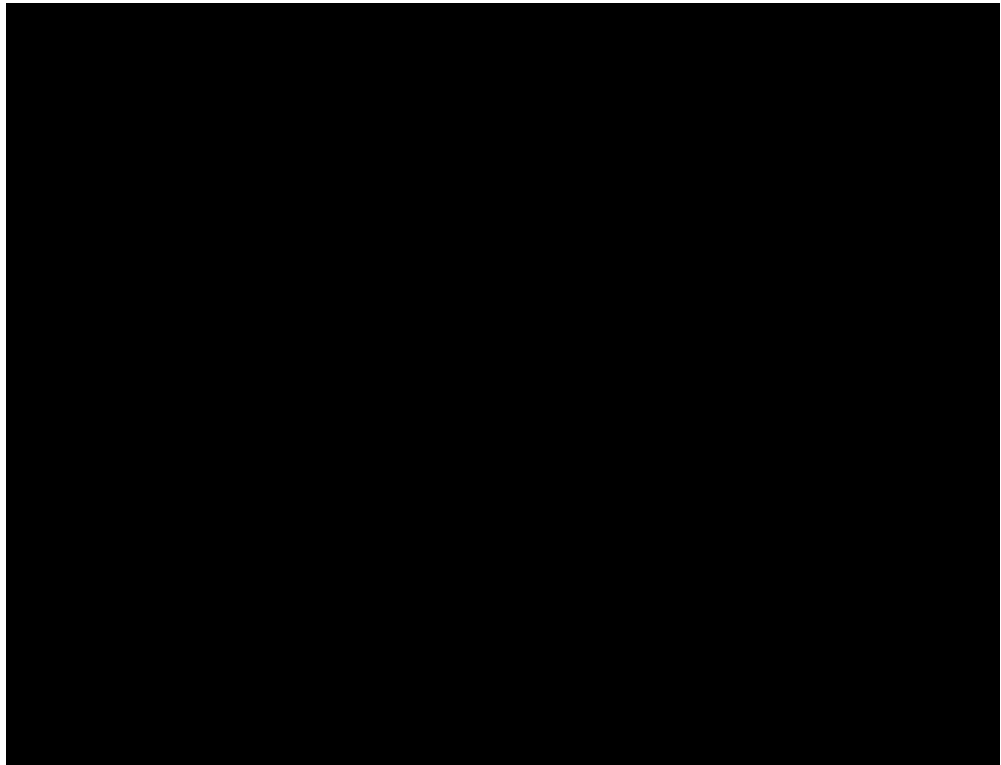


Figure 3: Truck turnaround time (minutes) across DP World global network – 2021



The ACCC, in its recent 2020-2021 Stevedore Monitoring Report (the **2021 Monitoring Report**), was critical of the performance of Australian ports, which the ACCC argued were not internationally competitive.⁵ This conclusion appeared to be based, primarily, on a combination of feedback from global shipping lines, and a benchmarking study undertaken by IHS Markit.⁶

The use of the IHS Markit analysis and conclusions drawn from it by the ACCC in relation to global port productivity were not tested with DP World.

DP World considers that the IHS Markit analysis is of limited assistance as a measure of productivity. Its primary focus appears to be on the extent of delays and costs faced by shipping lines – some of which may be related to port productivity, but many of which will be caused by other factors, including bunching of vessels (resulting in a significant proportion of vessels arriving at Australian ports “off window” and causing congestion). DP World estimates, for example, that at least 50% of the quay side delays experienced by shipping lines are caused by delays at overseas ports.

Other limitations of the IHS Markit analysis include:

- IHS focus heavily on quayside indicators such as vessel time, while ignoring other important indicators of port performance. For example, the report makes no

⁵ See ACCC, *Container Stevedoring Monitoring Report 2020–21*, October 2021. Accessible online at < <https://www.accc.gov.au/publications/container-stevedoring-monitoring-report/container-stevedoring-monitoring-report-2020-21>>.

⁶ ACCC, *Container Stevedoring Monitoring Report 2020–21*, October 2021, p 61 citing World Bank Group and IHS Markit, *The Container Port Performance Index 2020: A Comparable Assessment of Container Port Performance*, 7 May 2021.

reference to container dwell time – a critically important aspect of productivity to shippers and exporter (but of less relevance to shipping lines).

- The methodologies used to rank ports are highly opaque and appear to rest on various ‘normalising’ assumptions (i.e. assumptions which ignore differences in the features of individual ports).
- IHS measures port performance by reference to variance in “port hours” from an average of port hours in each call size group. This methodology will naturally give lower rankings to ports where the same size vessel requires more moves (and therefore more time) to unload, compared to other ports. This is generally the case at Australian ports, in part due to the import-focused nature of DP World’s trade.

Possibly because of these features of its methodology, the IHS Markit analysis produces a range of anomalous results. For example:

- Several ports receive very different rankings depending on whether the ‘statistical approach’ or the ‘administrative approach’ is used. For example, Jebel Ali is ranked 323rd using the statistical approach (placing it in the bottom quartile), but 59th using the administrative approach (placing it in the top quartile); and
- Port Moresby ranks higher than any of the Australian ports, despite it being an order of magnitude smaller, and with a substantially lower crane rate (well below industry standards).

In several places, the report acknowledges that it cannot precisely identify the cause of delays – including the extent to which these are caused by poor productivity or other (exogenous) factors.

The methodology being used for the benchmarking is still being developed and may improve. At this stage, however, DP World would caution against drawing any conclusions from this analysis regarding the productivity of Australia’s ports. Other more established analysis and data is available (such as the data and reports produced globally by Alphaliner or the Waterline service and data produced locally by BITRE).

1.3 Importance of addressing delays and the reliability of transit of containers through Australian ports associated with industrial relations

- (a) The current operation of the FW Act on the waterfront is having a significant and adverse effect on port productivity and the national economy

Based on experience over recent years, DP World considers that a flawed industrial relations framework contributes more than any other policy issue to delays, inefficiency and poor productivity within the Australian seaborne logistics system.

Unfortunately, industrial relations have gone backwards over the last two decades and particularly during the period since the introduction of the FW Act in 2008.

DP World itself has eight enterprise agreements covering its four terminals. Approximately 95% of DP World’s workforce is unionised. During the last round of enterprise bargaining (over the period 2018-2020):

- DP World engaged in 728 days of bargaining, including being required to attend 167 days of direct meetings between management and union representatives;

- [REDACTED]

- 12 separate disputes were lodged.



As well as 'lost hours', **Figure 4** shows the impact of industrial action over the last two years on crane movements at DP World's Port Botany terminal. What is immediately apparent is the direct and severe impact that disputes have on crane utilisation.

Figure 4: Crane moves and protected industrial action – DP World Botany terminal, 2017-2021

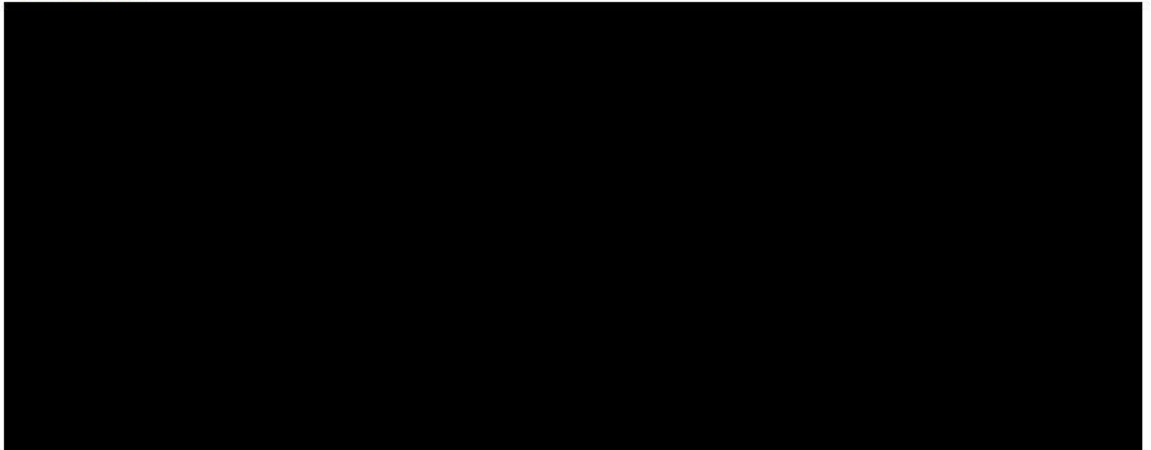
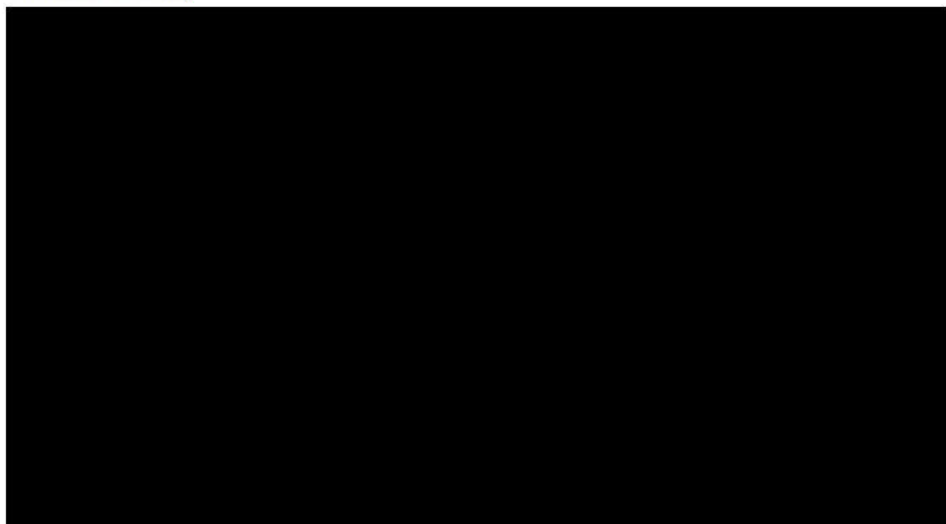


Figure 5: Value of disrupted imported and exported goods per day – DP World terminals only



While there are a range of practical difficulties with the operation of the FW Act, DP World submits that four key issues of principle must urgently be addressed.

(b) Productivity must be put back at the centre of enterprise bargaining

When enterprise bargaining first emerged in the early 1990s, there was a clear emphasis on productivity and competitiveness. This has been lost. The one attempt to change this, in the *Fair Work Amendment (Bargaining Processes) Bill 2014* (Cth), did not become law.⁷

There is no longer any requirement under the FW Act that bargaining deliver productivity improvements or even that these matters be considered in the course of bargaining. The consequence is that the process does not reflect a genuine bargain involving a trade-off between modernised conditions and productivity or efficiency gains.

Instead, existing conditions under enterprise agreements operate as a “ratchet”. Outdated conditions are entrenched as the baseline for each new round of negotiations and unions are incentivised to engage in a crude, war of attrition. The regime has entrenched a range of industry conditions that limit or constrain productivity improvement, including (for example):

- constraints on merit-based promotion and remuneration;
- limitations on outsourcing and automation of operations; and
- the structure of enterprise agreements, which separates conditions across different parts of the Agreement that are negotiated separately – and which acts to prolong negotiation and disputes.

There is very limited scope for genuine negotiated outcomes that permits modernisation of these kinds of employment terms. The result is that DP World enterprise agreements often contain legacy conditions that have long been abandoned in modern award processes. Indeed, the ‘gap’ between DP World’s enterprise agreements and the relevant industry award (Stevedore Industry Award 2020 (the **Award**)) is substantial and growing.

Under DP World’s current Enterprise Agreements, on average, DP World base rates of hourly pay are between 36% and 59% above the Award, before salary rates under the agreements are factored in.⁸

DP World submits that FW Act needs to be amended to refocus on productivity and efficiency as an active consideration for bargaining parties and the Fair Work Commission, when resolving disputes.

(c) The bargaining framework limits incentives for agreement

Under the FW Act, bargaining can start in a number of ways, but it is very difficult to bring bargaining to an end without industrial action. The stevedore has no effective way of ending the bargaining process without being subjected to either (or both) industrial action or a claim for orders that require it to return to the table under the FW Act.

Prior to 2008, an employer could terminate an enterprise agreement that passed its nominal expiry date. However, since the FW Act, the ‘nominal expiry date’ has become

⁷ The Bill would have amended section 187(1) of the FW Act to include a new pre-requisite to approval that the Fair Work Commission be satisfied that improvements to productivity at the workplace were discussed during bargaining for the agreement.

⁸ Non-salaried employees are paid based on the higher base rates and award penalties, so the above-award premium carries over into shift work and overtime payments.

just that, a 'nominal' date that amounts to little more than the starting gun for unions to seek to commence protected industrial action.⁹

The practical effect of this has been that enterprise agreements on the waterfront continue to operate in perpetuity and the bargaining process places little pressure or incentive on unions to achieve a timely outcome for members. To the contrary, the regime incentivises unions to use bargaining as a 'war of attrition' with stevedores to extract new and improved conditions, without any need to trade these off for productivity gains.

The FW Act needs to be amended to provide a credible means to end enterprise bargaining after the nominal expiry date – by terminating an enterprise agreement and moving back to the relevant industry award.

(d) No clarity as to the matters that can be included in enterprise agreements (i.e. 'permitted matters')

There remains considerable uncertainty about the matters that can legitimately form the basis of enterprise bargaining. This was made worse by the FW Act, which replaced an express list of 'prohibited content' with a generalised reference to 'permitted matters' defined by reference to litigation.

This shift has had two effects:

- first, it has resulted in DP World receiving a number of proposals from unions as part of bargaining processes that would have been clearly considered 'prohibited' matters under the earlier legislation. Examples include:
 - “*family and friends*” clauses, whereby a certain proportion of new hires must come from a pool of “family and friends” nominated by existing employees or by the union.¹⁰ These clauses are a relic from the era when it was accepted that unions could operate ‘closed shops’ across an industry but there is nothing in the FW Act that clearly prohibits them.¹¹
 - As a fall-back from seeking to prohibit automation entirely, unions have sought to make it wholly uneconomic by requiring that it be accompanied by no job losses, whilst maintaining strict manning level requirements and limits of allocating new functions to employees with no impact to salary.
- second, resolving disputes about whether matters are lawful has resulted in repeated, long and complex litigation as part of each bargaining process.

Finally, even where conditions are clearly outside the permitted scope of bargaining, DP World notes that a practice has developed by which unions demand that relevant obligations are recorded in a binding deed, as between the union and stevedore. Again, this is a mechanism not expressly addressed by the FW Act.

(e) The protected industrial action mechanism is not working

In last negotiation process for enterprise agreements undertaken by DP World across 2019 - 2020 involved DP World undertaking no less than 167 formal meetings with union

⁹ The *Workplace Relations Amendment (Transition to Forward with Fairness) Act 2008* (Forward with Fairness) ensured that collective agreements could no longer be unilaterally terminated following the expiration of the nominal expiry date of an agreement.

¹⁰ The *Hutchison Ports Australia (HPA) and Maritime Union of Australia Enterprise Agreement 2021* does both - see clause 10.4. Hutchison Ports Australia effectively only gets to choose 30% of its workforce.

¹¹ Unless it is not a “permitted matter” because it relates to the relationship between an employer and candidates, rather than employees. The point does not seem to have been taken when the Fair Work Commission approved the Hutchison agreement.

representatives, often extending across a full day or longer. [REDACTED]

Protected action ballots are secret ballots under the FW Act that permit employees to vote on whether they wish to undertake protected industrial action.

While under section 443 of the FW Act the Fair Work Commission is to consider whether parties are genuinely trying to reach agreement, before granting a protected action ballot order (PABO), this has come to operate as a mere procedural step. In practice, an applicant (typically a union) only needs to demonstrate that negotiations have commenced and that it wants to make an enterprise agreement. The applicant does not have to show that they are bargaining in good faith, that an impasse has been reached or that recourse to industrial action is reasonably necessary or desirable to help achieve agreement.

The kind of practical difficulties commonly experienced with PABOs include:

- duplication and overlap between multiple PABOs (i.e. the same industrial action is proposed more than once across the four terminals). Errors are commonplace.
- a lack of clarity in ballot wording means that there is often complex litigation seeking to have the Fair Work Commission determine how any stoppage, ban or limitation under a PABO is to be applied in a workplace;
- PABOs are used to support industrial action that explicitly targeted named ships and customers – rather than generally seeking to support negotiated outcomes with DP World in relation to an enterprise agreement;
- unions use the short legislative notice periods in a manner that imposes substantial costs on stevedores and shipping lines (i.e. by notifying and then withdrawing action shortly before it is scheduled to commence and after stevedores have incurred costs to change shipping schedules or to sub-contract vessels to mitigate the damage to customers); and
- at times, there is little proportionality between the bans, limitations and stoppages and the claims being advanced by the MUA. For example:
 - DP World's entire operations became the subject of a 24-hour stoppage, over a dispute as to whether a union official should receive a standing invite to a local employee representative committee meeting.
 - at one terminal, a 96 hour stoppage was notified and commenced, despite the fact that key terms including wage increases had already been agreed.

Moreover, in recent times, the focus of some recent PABOs appears to be less about targeting the commercial operations of DP World as a stevedore and have been targeted at broader social or macro-economic issues. Some common forms of industrial action during the 2018-2022 bargaining round targeted third parties (either other stevedores that sub-contracted vessels, specific shipping lines or others).

At one point during 2020, at the height of COVID-19, the MUA had PABOs in place that provided them with the ability, through protected industrial action, to ban individual vessels and prevent them being subcontracted at 10 of Australia's 12 container terminals, including all terminals in Sydney, Brisbane and Fremantle.¹² The MUA had the capacity

¹² The only terminals where the MUA did not have a PABO permitting this were VICT (Melbourne only), and Flinders Adelaide Container Terminal, the only terminal in Adelaide.

to engage in secondary boycotts against shipping lines and those dependent on them, given the statutory immunity granted to it for protected industrial action.

Finally, the experience of DP World has been that even where the Fair Work Commission determines that industrial action is not protected or lawful, it is powerless to prevent it from occurring – forcing stevedores to take further action in the Federal Court of Australia.

A set of specific recommendations follow in Section 2 of this submission. More detail on the issues and background to each recommendation is set out in Section 5.

1.4 Reducing port costs and facilitating supply chain investment through improved port planning

Since 2010, all three major Australian east coast container ports (Sydney, Melbourne and Brisbane) have been privatised.

DP World does not oppose privatisation – and recognises the benefits which it can offer. However, privatisation of the economy’s primary economic gateways, subject only to light price monitoring, has brought about significant changes in the dynamics of Australian container supply chains; not all of them are positive.

Privatisation shifts the economic incentives governing port ownership to favour the private, profit-maximising benefit of owners. Given the monopoly characteristics of major container ports, there are two areas in which these incentives can impact upon supply chain productivity and increase costs:

- the strong incentive to exercise market power in relation to unregulated revenue – most notably land rents; and
- the timing and extent of development and expansion of port capacity.

Port costs and land rent

The impact of privatisation on land rents has been well canvassed by the ACCC. DP World merely notes, in this regard, that its experience to date has differed across different Australian ports.

The negotiating approach and terms demanded by the owners of the Port of Melbourne (**PoM**) have proven substantially worse than others and reflect clear and continued use of monopoly power since they took control of the port in 2016 – an observation made also over the last two years by both the ACCC (see Figure 6) and the Victorian regulator, the Essential Services Commission (**ESC**).

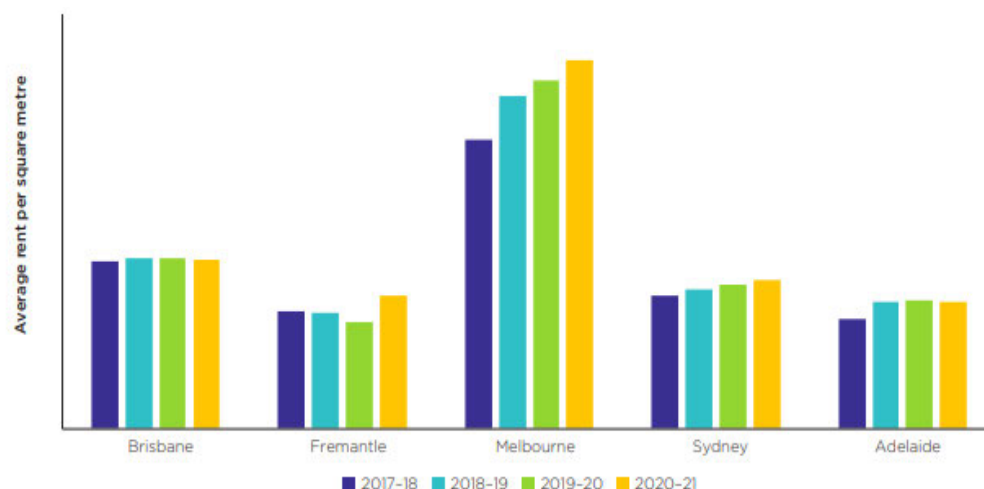
In response to the findings of the ESC, the Victorian Government agreed a ‘voluntary’ tenancy charter to assist port tenants at the PoM. However, the charter expressly excludes those tenants – such as DP World – which are subject to long term leases, in place prior to privatisation. These higher land rents flow directly through stevedore charges to importers and exporters within the Victorian economy – an effective ‘privatisation tax’.

The ESC found in its first post-privatisation review of the Victorian framework that the incentives within the price monitoring regime were not working.¹³ DP World agrees. A

¹³ ESC, *Inquiry Into Port of Melbourne Compliance with the Pricing Order 2021 - Public Report*, 31 December 2021, p 16. Accessible online at

regulatory model that permits and facilitates sustained monopoly pricing of unregulated rents by private owners and, at the same time, also fails to address “sustained and significant”¹⁴ over-charging of regulated revenues, is not fit for purpose.

Figure 6: Average rent per square metre, 2017-18 to 2020-21¹⁵



Source: ACCC analysis of information received from stevedores as part of the monitoring regime.
 Note: The vertical axis of the chart is intentionally left blank to maintain confidentiality.

Port capacity planning

Investment by stevedores and others in port infrastructure involves substantial and long-term capital investment. Such investment demands that stevedores and others work with ports on their capital plans and demand modelling to ensure confidence in, and long term visibility of, a stable port development program.

In 2011, Infrastructure Australia released a National Ports Strategy. The National Ports Strategy recognised this need to improve long-term master planning for ports and to drive greater supply chain efficiencies. While this process involved the publication of best practice guidelines, there has not been any steps to introduce mandatory, minimum standards for port strategies.

In some jurisdictions, such as Victoria, planning obligations have been imposed on port landlords through Ministerial Guidelines.¹⁶ However, again, the experience of DP World has been that despite these guidelines, in the case of the PoM, the port development strategy is high level, has been unreliable and there is a clear lack of effective oversight or dispute rights in relation to the efficiency or appropriateness of the strategy.

Over the last 18 months, the owners of the PoM have proceeded with a highly controversial expansion of the quay line at Webb Dock. Despite initially seeking to argue the expansion was required to meet container growth, PoM has more recently acknowledged that such capacity is not needed. Later justifications for accelerating the development of substantial new capacity was framed instead around catering for large

<<https://www.esc.vic.gov.au/sites/default/files/documents/PoM%20Compliance%20with%20Pricing%20Order%202016-2021%20-%20Final%20report%20only%20PUBLIC%20-%20REDACTED%20-%2020220120.pdf>>.

¹⁴ The ESC found that the overstatement of PoM’s cost of capital and its revenue requirement amount to ‘sustained and significant’ non-compliance with the Victorian pricing order (see <https://www.esc.vic.gov.au/transport/port-melbourne/port-melbourne-compliance-pricing-regulations/inquiry-port-melbourne-compliance-pricing-order-2021>).

¹⁵ ACCC, *Container Stevedoring Monitoring Report 2020–21*, October 2021, p 43, (Figure 4.7).

¹⁶ See e.g., Victorian Department of Transport, *Port Development Strategy Ministerial Guidelines*, July 2017.

vessels. For reasons set out in section 6.4, these arguments are unsafe, do not reflect real world market experience, and cannot be sustained.

Overall, the process engaged in by the owners of PoM has been criticised by the ESC¹⁷ and is subject to both regulatory complaints¹⁸ and litigation.¹⁹ The experience has demonstrated the need for a reliable, long-term and transparent port planning framework at Melbourne.

DP World has not experienced the same lack of effective engagement, unreliable and inefficient development at other ports.

DP World specifically calls for the Victorian Government to urgently address the capital planning concerns arising at the PoM, as one of Australia's primary economic gateways. The private owners of the PoM are looking to commence a commercial process for development of a fourth container terminal before 2030, well over a decade before this was originally slated and will be needed.

It is apparent that neither container volume growth, nor the rationale of 'larger vessels' justifies this move. DP World is concerned that it is linked to a desire by PoM to pre-empt the end of a moratorium granted by the Victorian Government at the time of privatisation until 2031 that prevents government support for a second and competitive container port.

The potential for the accelerated, and premature, development of a fourth container terminal at Webb Dock poses an immediate threat to Australia's largest international container port. Any future development of Webb Dock should reflect the recommendations made by Infrastructure Victoria in 2017, that any such development must be efficiently staged and timed and should only occur after properly testing the competitive and wider logistics benefits of expanding capacity through development of a second container port at Bay West, in Melbourne's outer west.

1.5 Addressing blue water costs

The total (i.e. 'end to end') freight cost associated with importing a container into Australia is dominated by blue water shipping rates (Figure 7). It is a similar story for export containers, although a slightly higher proportion of total costs is associated with landside transport (road or rail) (Figure 8).

Figure 7: Breakdown of nominal total supply chain cost components, 2021 (import container)



¹⁷ ESC, *Inquiry Into Port of Melbourne Compliance with the Pricing Order 2021 - Public Report*, 31 December 2021.

¹⁸ ESC received two complaints under section 49Q of the *Port Management Act 1995* (Vic) from port users about the PoM's compliance with the Pricing Order. See, ESC, *Notice: Investigation of complaints under section 49Q Port Management Act 1995* (Vic), *Allegations of non-compliance by Port of Melbourne with Pricing Order*, 21 October 2021. Accessible online at <<https://www.esc.vic.gov.au/sites/default/files/documents/Notice%20of%20s.49Q%20PMA%20Complaint%20-%20Webb%20Dock%20East%20Expansion%20Project%20-%2020211021.pdf>>.

¹⁹ *Patrick Stevedores Operations No.2 Pty Ltd & Anor v Port of Melbourne Operations Pty Ltd* (matter number VID 356 of 2021) filed in the Federal Court of Australia.



Blue water freight rates are also the fastest growing part of Australian logistics costs – having been particularly impacted by the COVID-19 pandemic.

While the pricing dynamics of global shipping are subject to market forces that are beyond the influence of Australian policy settings, DP World considers two reforms may offer some modest assistance:

- repealing Part X of the CCA and replacing it with a class exemption for collective bargaining that is restricted to smaller shipping lines, transparent, includes stevedores and is subject to proper oversight by the ACCC; and
- implementing mechanisms to improve the transparency of blue water charges, to ensure that to the extent that shipping lines pass through other charges (e.g. stevedore charges) these are transparent to shippers.

2 Summary of recommendations

2.1 Supply chain productivity and industrial relations

DP World submits the following recommendations in regard to supply chain productivity and industrial relations:

Recommendation 1 – The amendments proposed to section 187(1) of the Fair Work Amendment (Bargaining Processes) Bill 2014 be reconsidered.

Recommendation 2 – The FW Act to reconsider the mechanisms by which an enterprise agreement may be terminated by an Employer to prevent inefficient and unproductive enterprise agreements applying in perpetuity.

Recommendation 3 – The FW Act to provide a timeframe in which the terms of an enterprise agreement will continue to apply before terms and conditions revert to the Award, i.e. an enterprise agreement will continue for 12 months post nominal expiry or from when bargaining commences (whichever is later), if the enterprise agreement is not renegotiated by that timeframe, employees revert to the Award terms, provided that all parties have met their good faith bargaining obligations. The effect of this would be to encourage Unions and Employers to renegotiate enterprise agreements quickly.

Recommendation 4 – A clear criterion should be introduced into the FW Act specifying those matters that may be dealt with in enterprise agreements, and which is not reliant on the vague terminology of “matters pertaining...”, as well as a list of matters which may not be included.

DP World submits that any list of matters to be excluded from enterprise agreements should include terms that:

- impose restrictions on outsourcing or the engagement of independent contractors;
- restrict the engagement of labour hire workers, and requirements relating to the conditions of their engagement, imposed on an entity or person for whom the labour hire worker performs work under a contract with a labour hire agency;
- require the provision of information about employees bound by the agreement to a trade union, or a member acting in a representative capacity, officer, or employee of a trade union, unless provision of that information is required or authorised by law;
- relate to right of entry (whilst there are current FW Act provisions that make unlawful any right of entry terms that cut across statutory terms, enterprise agreements can nonetheless confer rights of entry where the FW Act is silent); and
- give rights to trade union to participate in, or represent an employer or employee bound by the agreement in all matters pertaining to the employment relationship as a representative.

Recommendation 5 – Amend section 228 of the FW Act to clarify that parties are obliged to limit their claims to matters that can be included in an enterprise agreement, and that counterparties are not required to engage with these.

Recommendation 6 – Amend the FW Act to insert a civil penalty provision that prohibits the seeking or agreement of any claim that is not otherwise permitted under the FW Act, in any form of instrument, including a deed, memorandum of understanding or informal arrangement.

Recommendation 7 – Section 443 of the FW Act should be amended to require the Commission to recognise the grant of a Protected Action Ballot Order (**PABO**) as a last resort, to be granted only after sufficient steps have been taken by the parties to seek to reach agreement without recourse to industrial action.

In considering the adequacy of steps taken, the Commission should have regard to:

- the extent to which each applicant has clearly communicated its claims in relation to the agreement;
- whether each applicant has provided a considered response to proposals made by the employer and has demonstrated a genuine and bona fide attempt to seek to reach agreement; and
- the extent to which bargaining for the agreement has already progressed.

Recommendation 8 – A PABO order should not operate indefinitely. The FW Act should be amended to require the bargaining representatives to report back on whether good faith bargaining obligations continue to be met and if the parties are legitimately progressing negotiations. Where this is not occurring, the Commission should have powers to cancel a PABO.

Recommendation 9 – The Commission should be required to be satisfied, at the time that a PABO is granted, that the proposed action is proportionate, not unlawful (absent the statutory immunity), and is not likely to cause material economic harm to the national economy or a material part of it (including a significant market).

Recommendation 10 – Amend the FW Act to include a provision that suspends the right of employees to take protected industrial while an order under section 418 of the FW Act is in operation.

Recommendation 11 – Amend the FW Act to require a minimum of 7 working days' notice to be given to an essential services employer for the purposes of section 414(2)(a) of the FW Act.

Recommendation 12 – Amend section 414 of the FW Act to make it clear that bargaining representatives must only give notice of industrial action which they genuinely intend to take.

Recommendation 13 – Amend section 524 of the FW Act to allow an employer to stand down employees where contingency plans have been implemented and bargaining representatives notify industrial action which they withdraw from without at least 24 hours' notice.

2.2 Supply chain costs

DP World submits the following recommendations regarding supply chain costs:

Recommendation 14 – Repeal Part X of the CCA and replace it with a fit-for-purpose class exemption for collective bargaining that is restricted to smaller shipping lines, transparent, includes stevedores and is subject to proper oversight by the ACCC.

Recommendation 15 – Consider mechanisms to improve the transparency of blue water charges, to ensure that to the extent that shipping lines pass through other charges (e.g. stevedore charges) these are transparent to shippers.

3 DP World and market dynamics affecting the Australian marine logistics supply chain

Key points:

DP World

- DP World is the largest global stevedore, working across 78 ports in 60 countries. DP World is also the largest Australian stevedore, with long experience working across the four major international container terminals in Sydney, Melbourne, Brisbane and Fremantle.
- DP World's size and global footprint gives DP World a perspective both on the global trends impacting shipping and the performance of Australian ports, relative to their peers.

Bargaining power within the supply chain

- While stevedores play an important role in the maritime logistics supply chain, they hold little effective bargaining power, and this has lessened over the last two decades.
- Commercial bargaining power in the seaborne logistics supply chain is concentrated at three points:
 - shipping lines at one end, which are large and concentrated global firms which coordinate their activities and operate principally through three global consortia;
 - large Australian shippers or beneficial freight owners, at the other, which are the parties that primarily drive choice of shipping line, stevedore and landside logistics (e.g. carriers); and
 - port owners and operators – that as port landlord holds effective monopoly control over the development of container terminal capacity and associated port costs.
- Container stevedore operations are characterised by substantial fixed cost, long-lived investments. The primary competitive focus of container stevedores is therefore to attract shipping line services or 'calls' to their terminals to maximise capacity utilisation.

Recent market dynamics

- The global shipping market was largely stable for a number of decades until the early 2000s, when a combination of the global financial crisis and other factors led to substantial disruption and both a rapid consolidation of shipping lines and an increase in the size of vessels. Over 2020-21, COVID-19 has had an unprecedented effect on global supply chains and the operation of the global shipping fleet.
- This has reduced both the number of customers and individual services visiting Australia – increasing the lumpiness of demand and materially increasing commercial risk.
- Since the introduction of third container operators in Australian East Coast ports (over the period 2010-2016), the Australian market has been characterised by sustained and significant over-capacity. More recently, this has been exacerbated by private owners of ports seeking to develop new or expanded container capacity to maximise unregulated port rental income (or, in the case of the PoM, to avoid the potential risk of development of a second, competitive container port once legislative controls lift in 2031).

- Finally, the fixed cost base for stevedores has risen significantly over the last decade, reflecting a combination of rent increases, rising energy costs and significant capital costs associated with new and replacement infrastructure.

Large vessels

- Over recent years, there has been a relatively high profile focus on the increase in vessel sizes within the global shipping fleet. While this is the case, it should not be over-emphasised, or assumed to continue in a linear manner.
- Analysis undertaken for DP World, found that:
 - on the North East Asia corridor, the predominant vessel capacity is approximately 5,500 – 6,600 TEUs and growing. If current growth rates are projected to 2030, the average service scale would be approximately 8,800 TEUs;
 - on the Southeast Asia corridor, the average service scale is approximately 4,800 TEUs (excluding outliers). If current growth rates are projected to 2030, the average service scale would be approximately 6,600 TEUs; and
 - the service scale on the remaining three key global trading routes is significantly below 10,000 TEUs and unlikely to increase dramatically given modest trade growth on these routes.
- DP World considers that there is little prospect of a significant number of large vessels (10,000+ TEU) servicing Australia over the next decade. Of the nine new services to commence in Australia over the 2020-2022 period, the largest involved a vessel size of only 4,500 TEU and the average vessel size was 2,400 TEU.
- For this reason, DP World does not accept the assumption (pressed by private port operators and shipping lines) that continued investment in infrastructure and additional terminal capacity at Australian ports to cater for large vessels is necessarily the most efficient means of satisfying container volume growth over the next decade.
- To the contrary, DP World is concerned that an emphasis on vessel size masks the reality – that the growth in container demand in Australia does not justify any further expansion in container terminal capacity for well over a decade.
- Whilst adding additional, and unnecessary, capacity, at significant cost, benefits shipping lines and port owners, this is achieved at the cost of shippers, other stevedores and the efficiency of the supply chain.
- DP World submits that the focus of investment within the Australian seaborne logistics supply chain needs to remain providing and expanding capacity, when and where needed, to meet total demand for total container volume growth, at the lowest cost – not merely to invest in additional infrastructure for large vessels in order to provide ‘option value’ to shipping lines.

3.1 DP World

DP World is a global leader in stevedoring, operating across 60 countries, 78 port terminals. DP World employs more than 53,000 people worldwide, including more than 2,000 Australian based employees.

DP World is the largest port and supply chain operator in Australia, providing both stevedoring services and logistics solutions to Australian shippers. DP World conducts its Australian stevedoring operations at container terminals in Brisbane, Sydney, Melbourne

and Fremantle. DP World services over 3 million TEUs and approximately 1,300 ships each year across its four terminals.

DP World's global experience and longstanding participation in the Australia market provides it with a unique and deep understanding of how Australian ports compare globally, including how the current Australian trends in container stevedoring operations compare with overseas trends, as well as the developments within global shipping fleets, their trade routes and the implications for Australian terminal operators.

3.2 Stevedores role and relationships within the marine logistics supply chain

Stevedores play a critical role in the marine logistics supply chain – albeit they only perform one function within that supply chain.

Moreover, while stevedores play one of the central *functions*, they hold little effective bargaining *power*. The commercial bargaining power in the seaborne logistics supply chain is dominated by three stakeholders:

- by shipping lines (both individually and through their global consortia – which are permitted to collectively bargain under an exemption from Australian competition law, discussed below at section 7.2), at one end;
- the large Australian shippers or beneficial freight owners (**BFOs**) at the other; and
- port owners and operators (most of which are now private equity or infrastructure investors), which hold monopoly power over port land and therefore determine the nature, timing and cost of expansion in capacity of container handling.

Between these players, container stevedores provide services associated with the loading and unloading of shipping containers from vessels. On the 'quayside' or maritime side, this involves lifting containers to and from ships operated by shipping lines. On the land side, stevedores move and position containers for collection by road or rail providers. In this way, stevedores operate as the port interface for containers between blue water and landside transport.

Because of the nature of the stevedoring task, and the various players that operate within the supply chain, the commercial and financial relationships that operate within the logistics supply chain are complex – and, to some degree, there are a number of important relationships that do not involve direct contractual relationships.

The ACCC provides a useful overview of the supply chain in its 2021 Monitoring Report (at Chapter 1). DP World will avoid repeating that important background factual material in this submission.

However, practically, to appreciate the commercial drivers that shape stevedoring, it is important to appreciate:

- *the nature of the cost base associated with stevedoring* – which involves substantial port rents and other fixed cost investment by stevedores in long-lived assets (cranes, straddle carriers, capital improvement of port land to facilitate container storage etc); and
- *the source of the revenue required to meet those costs* – which, until relatively recently, has been almost entirely through charges levied on shipping lines for the services supplied to those lines when assisting to manage and load/unload their vessels at port. Over recent years, stevedores have supplemented this quayside

revenue with charges levied on 'landside' operators, typically road carriers, when collecting or delivering containers to a stevedore's terminal.

Stevedoring charges (and other quayside charges) are levied by stevedores directly to shipping lines. These shipping lines then pass these costs through to shippers or freight forwarders, as part of the overall shipping rates charged by the shipping lines.

Ultimately, this means that the primary commercial driver for Australian container stevedores is attracting vessel services operated by global shipping lines visiting Australian ports. Through attracting shipping lines to use a stevedore's terminal or terminals, a stevedore generates the container volumes that are needed to generate both quayside and landside revenues.

3.3 Drivers of choice of stevedore

The decision by a shipping line of which Australian stevedore to use is influenced by a range of factors, including (amongst other things):

- (a) *The preferences of large or important shippers or BFOs that use the shipping line for transport of goods to or from Australia.*

Shippers and cargo owners are the ultimate acquirers of all services in the marine logistics supply chain. In effect, shippers and BFOs pay participants in the marine logistics supply chain to work together to transport containers from their origin to their destination.

Charges levied by stevedores are therefore typically passed directly through to shippers, both by shipping lines and by transport operators.

Shipping lines are therefore influenced in their choice of stevedore by the preferences and views of their customers (i.e. shippers).

- (b) *Stevedore pricing*

As for any market, shipping lines are highly sensitive to stevedore charges. This is the case, even though in practice shipping lines pass through stevedore charges directly to their shipper customers.

- (c) *Reliability and quality of stevedoring services*

Stevedores compete to secure the right to perform a range of functions for shipping lines including loading and unloading containerised cargo and empty containers onto or from ships at the stevedore's terminal. Stevedores enter into contracts to supply stevedoring services both in respect of ad hoc vessels that call at the port and for regular scheduled service (e.g. weekly, monthly).

Contracts for the supply of stevedoring services typically have a term of approximately two to three years, while typically, relevant customer contracts do not permit the use of other stevedores unless through a sub-contract arrangement, which in practice occurs from time to time.

It is at the discretion of the shipping lines to choose from the various stevedores at each port, who have significant bargaining power as the market for international container stevedoring services is currently characterised by substantial overcapacity, with majority of terminals also operating individually at less than their operational capacity.

- (d) *Other factors – including national footprint, capacity of infrastructure to manage larger vessels, availability of windows etc*

Other factors which a shipping line may consider include:

- the availability of suitable and attractive times or ‘windows’ for a vessel (or a service) to regularly call at the port – amongst other things, the suitability of scheduled windows can reduce the risk of delays;
- national contracts that provide pricing, including standardised stevedore charges, for services supplied across more than one Australian terminal – this is the case for shipping lines that use DP World and Patrick, in that both have container terminals at each major Australian container port;
- innovation and investment in new technology and timely replacement of existing infrastructure and equipment; and
- whether the terminal has the appropriate infrastructure to manage larger vessels, including quay line length and crane size.

3.4 Market dynamics in the global shipping market and the Australian logistics supply chain

It is widely acknowledged that, over the last 10 - 15 years, the global container shipping market has been in a state of almost constant upheaval. During this exceptionally dynamic period there have been significant changes to the nature of the container shipping industry in the wake of both the global financial crisis and the COVID-19 pandemic.²⁰

Over the period from 2010 - 2019, this was caused (amongst other things) by substantial consolidation across shipping lines and between shipping consortia as well as due to changes in the size and composition of the global shipping fleet. More recently, the market has been impacted severely by COVID-19 and international trade tensions and uncertainty.

Locally, Australian stevedores must also adjust to the commercial incentives that have been associated with the privatisation of the three major East Coast international container ports. Over this period, the entry of third terminal operators in each of Brisbane, Sydney and Melbourne has also led to substantial and sustained under-utilisation of terminal capacity.

Each of these dynamics is explored below.

3.5 The consolidation of the global shipping market (2008 - 2018)

Since 2008, there have been two significant periods of shipping line consolidation.

The first was following the global financial crisis in 2008 and the second was around 2016 when shipping lines came under sustained pressure through depressed market conditions and reduced returns.²¹

²⁰ Lloyd's List, *One Hundred Container Ports 2021*, 2021, p 13.

²¹ ACCC, *Container Stevedoring Monitoring Report 2020–21*, October 2021.

Over the short period from 2014 to 2017, the following deals occurred:

Date	Shipping line development
April 2014	Hapag-Lloyd and CSAV agree to merge container operations
Nov 2014	CMA CGM announces offer for German shortsea operator OPDR
Mar 2015	Hamburg Süd takes over Compañía Chilena de Navegación Interoceánica
Dec 2015	CMA CGM unveils plans to acquire NOL for \$2.4bn
Feb 2016	Cosco and China Shipping complete merger
Aug 2016	Hanjin Shipping files for bankruptcy
Oct 2016	NYK, MOL and K Line reveal decision to merge their container lines
Dec 2016	Maersk's \$4bn bid for Hamburg Süd accepted
May 2017	Hapag-Lloyd and UASC complete merger
June 2017	Maersk agrees to sell Mercosur to CMA CGM
July 2017	Cosco announces \$6.3bn takeover of OOIL/OOCL

This remarkable period led Lloyds to observe in 2017 that over the three years prior, the global container shipping industry had experienced *"the biggest upheaval it has ever experienced, [and] the shakeup is far from over."*²²

Following this frenetic period of consolidation, the top ten shipping lines now control more than 90% of the world's transoceanic container traffic and operate through three major alliances. This compares to the 29% market share held by those alliances in 2011.

This consolidation has an even greater impact on Australia than some other markets, because as a relatively remote destination, with a smaller economy and lower-volume ports (by global standards), Australia tends to be seen as less commercially attractive than other markets, by a number of smaller shipping lines.

Over the last decade (between 2012 and 2022), through a combination of global consolidation and market exit, the number of shipping lines servicing the Australian market has fallen by approximately 50%, from 23 to 12 shipping lines. This is in the context of growth in total container volumes over the same period of approximately 35.2%, as shown in Figure 9 and Figure 10 below.

²² Lloyd's List, *One Hundred Container Ports 2017*, 2017. Accessible online at <https://lloydslist.maritimeintelligence.informa.com/one-hundred-container-ports-2017>.

Figure 9: Global shipping lines servicing the Australian market (2012 and 2022)

Source: DP World

2012	2022
APL	CMA CGM
CMA CGM	
COSCO	COSCO
CSCL	
OOCL	
HSD	Maersk
Maersk	
HLC	HLC
UASC	
KL	ONE
MOL	
NYK	
MSC	MSC
YM	YM
Evergreen	Evergreen
HMM	HMM
PIL	PIL
Sinotrans	Sinotrans
TSL	TSL
Hainan POS	Exited (2013)
HJS	Exited (2017)
RCL	Exited (2014)
STX-PO	Exited
23	12

Figure 10: Australian port TEU growth 2012 – 2021)

	2012	2019	2021	% Change
Brisbane	1,044,660	1,547,137	502,477	48.1%
Sydney	2,094,435	2,761,769	667,334	31.9%
Melbourne	2,099,534	2,909,288	809,754	38.6%
Fremantle	675,916	778,614	102,698	15.2%
Total	5,914,545	7,996,808	2,082,263	35.2%

Australian ports are small by global standards. Only Melbourne (63) and Sydney (78) fall within the top 100 global ports, by container throughput.²³

The practical consequence for Australian stevedores has been a near halving of the number of shipping line customers visiting Australia and increased ‘lumpiness’ in demand, through a small number of higher-volume services.

3.6 Entry of third terminal operators and container terminal capacity

Until 2013, international container stevedoring in Australia was supplied by DP World and Patrick. This dynamic was the subject of sustained political and policy criticism and led to the entry of Hutchison Ports at the Port of Brisbane in January 2013 and Port Botany in July 2014 and the lease and development of a third container terminal, Victorian International Container Terminal (**VICT**), at Webb Dock at the PoM, which commenced operating in March 2017.

While the introduction of a third operator has substantially increased total container terminal capacity at the major Australian container ports, over the same period, the number of weekly calls by shipping lines has *decreased* as a combined result of the consolidation of shipping lines and the use of larger vessels.

The result of increasing capacity, in response to falling demand, means that there is now substantial over-capacity at all of the Australian international container ports. For example, the PoM currently has total container capacity across the three terminals (DP World, Patrick and VICT) of approximately 4.5 million TEUs per annum. Based on volumes handed over 2019 and 2020 (allowing for the unusual trade during COVID), this suggests a capacity utilisation of less than 55%. Table 1 below shows the current capacity and utilisation of container throughput at the PoM.

²³ Lloyd's List, *One Hundred Container Ports 2021*, 2021, p 21. Accessible online at <https://lloydslist.maritimeintelligence.informa.com/one-hundred-container-ports-2021>.

Table 1: Utilisation of total container throughput at the PoM*Source: Port of Melbourne historical trade data²⁴*

Year	Approximate total container throughput at the Port of Melbourne (TEU) ²⁵	Utilisation (%)
FY16	2.2 million	49%
FY17	2.3 million	51%
FY18	2.5 million	56%
FY19	2.5 million	56%
FY20	2.4 million	53%

This trend is only likely to worsen, with the recent approval by the Port of Melbourne of a substantial expansion of capacity of VICT to be developed over the next three years – a move which will entrench substantial over-capacity in Melbourne for well over the next decade.

Excess container terminal capacity is also a feature of Port Botany and the Port of Brisbane.

3.7 Port privatisations and their implications for rent costs and capacity planning

Australia has a long history of port privatisations.²⁶ Following this trend, over the last decade, each of the major East Coast international container ports are also now in private hands – Brisbane (2010), Botany (2013) and the PoM (2016).

To a large extent, consistent with the approach previously applied to airports, the activities of port owners are largely unregulated or, at most, are subject to a light-touch form of price monitoring with the associated threat of re-regulation.

DP World generally supports privatisation and recognises the efficiency and greater market-focus that it can bring. However, there are two areas in which the profit incentive of private owners (or the strong incentive to maximise the value of assets for potential sale and 'exit' for current funds) – combined with their natural monopoly position – have led to costly and inefficient outcomes, notably:

- high and growing land rent costs at Australian ports; and

²⁴ Accessible online at <https://www.portofmelbourne.com/about-us/trade-statistics/historical-trade-data/>.

²⁵ Excluding Bass Strait and other Transhipped Trade. See PoM, *Historical Trade Data*. Accessible online at <https://www.portofmelbourne.com/about-us/trade-statistics/historical-trade-data/>.

²⁶ For example, Port of Geelong and Port of Portland (1996), South Australian ports (2001), Dalrymple Bay Coal Terminal (2001), Abbot Point Coal Terminal (2011).

- capital planning and investment programs that lack transparency or engagement and which have a focus on new or expanded terminal capacity, well before such capacity is required.

Both trends have been particularly evident at the PoM.

The failure to efficiently expand terminal capacity to meet demand has, and will continue, to impose costs on the Australian logistics supply chain. To a large extent, this inefficient and premature development of capacity has been driven by the strong commercial incentives of privatised port operators to bring forward unregulated terminal rent income.

The uncertainty associated with the capital planning and development of ports will also continue to impact adversely on investment incentives for stevedores and other.

These issues are discussed in more detail in section 6.

3.8 Effects of COVID-19 on global shipping and Australian logistics chains.

The COVID-19 pandemic caused significant disruptions to the global container shipping industry, the effects of which are still being felt.

After a significant drop-off in demand during early-mid 2020, and contrary to most expectations, by the third quarter of 2020 container volumes began to rise again. Around 632 million TEU were transported in 2020, only 0.7% down on the previous year.

It was difficult for participants in the marine transport supply chain to serve such significant shifts in demand during a period of heavy COVID-related port restrictions.

Inefficiencies and delays at container terminals as well as a sustained increase in consumer demand, particularly in the United States, created bottlenecks across the global seaborne supply chain. For example, delays at busy American ports caused shipping lines to begin to cancel subsequent scheduled voyages. This meant that there were less services being conducted by the same number of vessels.

A further issue was the inability of shipping lines to reposition empty containers to match demand (i.e. empty containers could not be moved quickly enough from import dominant countries like the United States to net exporting countries such as China). These inefficiencies manifested themselves as shortages of container shipping vessels and empty containers, though they were really a reflection of delays and an inability to run to schedule.

The vessel and container shortages led to increased container freight rates. In August 2020 the Shanghai Containerised Freight Index reported Asia-Northern Europe rates of less than \$1,000 per TEU, but rates have now risen to more than \$6,000 per TEU.

High freight rates have been sustained, though they are expected to decrease once the backlog in demand equalises. However, it is not clear whether they will revert to pre-pandemic levels. To some extent, this will depend on whether current levels of demand are sustained. Continued uncertainty about government mandated COVID-19 settings and the associated restrictions on the operation of overseas ports also have the potential to slow progress.

3.9 Changes in the size and composition of the global shipping fleet – and how services visiting Australia operate

- (a) *The general trend towards larger vessels and need for care in forecasting ongoing linear growth for Australian services*

Alongside the consolidation of shipping lines and consortia, it is well documented that there has also been a steady increase in the physical size of vessels comprising the global shipping fleet.

While this ‘macro’ trend is apparent, it is important not to oversimplify the drivers of this trend or to assume that it will continue in a linear way or that continuing growth in vessel size will be uniform across all services and ports. A degree of careful analysis is needed to understand how shipping sizes may develop into the future, especially in relation to those services that visit Australian ports.

Shipping services calling Australian ports operate on a ‘North-South’ route (typically from hubs or large trans-shipment ports in Asia) and are not as high volume as those that service the major ‘East-West’ trade routes between Asia, the United States and Europe.

As a result of being a ‘secondary’ route, shipping services to Australia tend to use smaller vessels. There has been a tendency for shipping lines to “cascade” their fleet and move larger vessels to secondary routes (such as Australia) as they increase the size of those vessels servicing their primary East West services. This cascading effect has meant that vessels travelling to Australia have become larger over the last decade as those previously used on East-West Routes have been replaced.

Large vessels were introduced into the major East-West services as part of the consolidation of shipping lines over the decade 2008-2018. With the number of shipping lines now settling, and based around three global consortia, DP World expects this trend to slow.

Indeed, there are signs that the global shipping market is increasingly recognising the continued need for, and efficiency of, matching different sized vessels to different markets. Notwithstanding the increasing number of new vessel orders with capacities of more than 10,000 TEU, there also remains a strong book of orders for ships in the 5,000 to 10,000 TEU range.

DP World commissioned global shipping consultancy Mercator to advise on likely trends in the size of vessels visiting Australian ports. Mercator found that:

- on the North East Asia corridor, the predominant vessel capacity is approximately 5,500 – 6,600 TEUs and growing. If current growth rates are projected to 2030, the average service scale would be approximately 8,800 TEUs.
- on the Southeast Asia corridor, the average service scale is approximately 4,800 TEUs (excluding outliers). If current growth rates are projected to 2030, the average service scale would be approximately 6,600 TEUs.
- the service scale on the remaining three key global trading routes is significantly below 10,000 TEUs and unlikely to increase dramatically given modest trade growth on these routes:
 - on the North American East Coast corridor, the average ship capacity is approximately 3,600 TEUs and given the modest rate of growth in the container traffic volume in this trade, it is highly unlikely that the carriers

serving this trade will assign ships to that service that cannot access either Swanson Dock terminal within the next ten years;

- on the North American West Coast corridor, the average ship sizes of approximately 4,600 TEUs and it is unlikely that carriers will need ships with capacities more than double the levels of the current ships being operated within the next ten years, given the modest growth rate of this trade lane; and
- on the European corridor, carriers prefer to utilize ships with capacities ranging between 8,200 and 9,500 TEUs. It is possible, carriers on this route may upsize further to a size range that cannot be accommodated in the Swanson Dock precinct within the next five years. Carriers on this route (MSC and CMA CGM) have commenced servicing this route on a joint service basis and it is possible they may revert to individual services and smaller, individual ships.

Mercator's analysis shows that it should not be assumed that 'cascading' of vessels within the global fleet will result in continued growth in those vessels used in Australian routes.

Consistent with this analysis, Table 2 specifies the vessel size of the new services that have commenced in Australia over the last two years, all of which are small or medium sized vessels (and none of which are larger than 4,500 TEU).

Table 2: Vessel size of new Australian services (2020 - 2022)

Service	Vessel Size (TEU)	Started	Port Calls
Polaris	1700	2022	Brisbane
CA2	1700	2021	Sydney, Melbourne, Brisbane
CAP	1100	2020	Brisbane, fortnightly call
CAX (ZIM)	4500	2020	Sydney, Melbourne, Brisbane
C2A (ZIM)	4500	2020	Sydney, Melbourne, Brisbane
N2A (ZIM)	1800	2020	Sydney, Melbourne
AWX	1700	2020	Fremantle
C3A (ZIM)	2800	2022	Sydney, Melbourne, Brisbane
N3A (ZIM)	1800	2022	Sydney, Melbourne

Source: DP World

There are a number of commercial and practical features of the Australian market that are likely to limit ships with capacities greater than 10,000 TEU from regularly calling over the foreseeable future.

Firstly, there is unlikely to be sufficient container volumes from Australia's relatively small population and economy to support frequent, regular services involving such large vessels.

Secondly, physical limitations at some of Australia's major ports that prevent very large ships from accessing east coast Australian ports, including height limitations and the configuration of access channels – particularly in Melbourne and Sydney. The infrastructure components that impact the maximum permitted dimensions of container ships that can enter a port and safely berth include the following:

- the diameter of the swing basin;
- the berth length and width;
- the depth and width of the navigation channel;
- the tidal flows and configuration of the channel;
- operating restrictions such as channel restrictions, vessel size restrictions, vessel beam width restrictions, daylight restrictions and weather restrictions; and
- in relation to Melbourne, the height of the Westgate Bridge over the Yarra River and required minimum clearance.

As a result, DP World expects that the majority of ships calling at Australian ports will continue to be between 6,000 – 8,000 TEU over the next decade.

(b) Implications for port development

For this reason, DP World does not accept the assumption (pressed by private port operators and shipping lines, and accepted by the ACCC) that continued investment in infrastructure and additional terminal capacity to cater for large vessels at Australian ports is necessarily the most efficient means of satisfying container volume growth over the next decade.

Whilst adding such capacity, at significant cost, benefits shipping lines and port owners, this is achieved at the cost of shippers, other stevedores and the efficiency of the supply chain. DP World submits that the focus of investment within the Australian seaborne logistics supply chain needs to remain providing and expanding capacity, when and where needed, to meet total demand for total container volume growth, at the lowest cost – not merely to invest in additional infrastructure for large vessels in order to provide 'option value' to shipping lines.

DP World notes the use of a 'large vessel' argument as the basis for unnecessary and inefficient investment has been particularly noticeable in Melbourne, as discussed below at section 6.5.

(c) Implications for stevedore investment

While the future growth rate is uncertain, the growth in vessel sizes to date has required Australian stevedores to invest substantially in new crane and quayside infrastructure.

The increased beam length of large container vessels requires stevedores to use quay cranes with greater height and reach to load and unload containers across the full height and width of a ship. Large vessels also challenge landside operations by making the arrival and management of containers through a terminal lumpier and therefore requiring more, and more efficient, landside equipment (such as straddle carriers etc).

DP World has invested [REDACTED] in Australian port operations over the last decade to increase its productivity and allow it to service larger ships in Fremantle, Sydney and Melbourne. In 2018 and 2019, DP World installed three new Super Post

Panamax Quay Cranes in each of Port Botany and the PoM. This investment has been accompanied by the installation of automated stacking cranes by DP World at the Port of Brisbane.

In many cases, DP World chose to replace assets early (i.e. in circumstances where existing assets had years of operating life remaining) in order to accommodate and respond to the changing demands of the marine logistics industry and shipping lines, including to cater for larger vessels.

3.10 Conclusions – a challenging market environment for stevedores

In summary, therefore, DP World makes the following observations to assist the Productivity Commission about the dynamics within which stevedores operate in the Australian logistics supply chain:

- bargaining power in the logistics supply chain is highly concentrated in the hands of a limited number of stakeholders, notably at three distinct points:
 - *global shipping lines* – which are substantial and highly concentrated global operators grouped into three main global consortia;
 - *large shippers and BFOs* – which are ultimately responsible for the costs of the supply chain, and therefore control the choice of shipping line, logistics provider, transport operator and (indirectly) the stevedore; and
 - *privatised port owners* – which have monopoly control over port land and control the cost and timing of port developments and capacity.
- the global container shipping market has been substantially disrupted over the last decade, leading to rapid consolidation of shipping lines (over the period to ~2018) and a steady increase in the size of vessels. This has reduced both the number of customers and individual services visiting Australia – increasing the lumpiness of demand and materially increasing commercial risk.
- container stevedore operations are characterised by substantial fixed cost, long-lived investments. The primary competitive focus of container stevedores is therefore to attract shipping line services or 'calls' to their terminals to maximise container volumes. Given the sunk nature of these investments, once made, they are also sensitive to uncertainty regarding the timing of future capacity growth within ports.
- since the introduction of third container operators in Australian East Coast ports (over the period 2010-2016), the market has been characterised by sustained and significant over-capacity.
- the cost base for stevedores has risen significantly over the last decade, which has reflected a combination of rent increases, rising energy costs and significant capital costs associated with new and replacement infrastructure.
- disruptions to marine logistics supply chains and high freight rates caused by the COVID-19 pandemic are likely to continue in the short-term. There remains uncertainty about when the backlog of demand will be resolved and when supply chains will return to something resembling pre-pandemic conditions.

4 Productivity of Australian stevedores and the marine supply chain

Key points:

DP World approach to measuring comparative performance of ports

- DP World bring a global perspective to any assessment of the relative performance of Australian ports, compared with others. DP World recognises unique features of Australia's geography and market dynamics that make it difficult to compare or benchmark performance with other countries and supply chains.
- DP World considers that, overall, productivity and performance of international container terminals should be assessed based on the *entire time* taken from the arrival of a vessel at port to the point that containers exit. Often, however, global benchmarking studies are based only around measures that are of interest to shipping lines (given that they are typically the firms commissioning the studies), and therefore the benchmarking does not take into account the time taken to clear containers from terminals (i.e. container dwell time and truck turnaround time).
- DP World regularly benchmarks the performance of its Australian operations against overseas ports with this 'end to end' view based on:
 - the time taken by vessels to get access to a berth;
 - the crane rate (i.e. gross crane moves pre hour);
 - the 'container dwell time' – being the time taken for containers to move through the terminal once loaded or unloaded; and
 - truck turnaround time – being the time taken for a truck to enter a terminal, collect a container and leave again.
- On these measures, DP World does not share the view of the ACCC in its 2021 Monitoring Report which concluded that the relative productivity of Australian container ports was poor. DP World's benchmarking shows that:

Time into port

- The percentage of vessels waiting at anchorage for more than two hours outside Australian ports (Brisbane, Sydney, Melbourne, Adelaide and Perth) has been relatively low for most of the past decade – in most quarters between 2014 and 2019, less than ten percent of vessels waited more than two hours to secure a berth – in other words more than 90 per cent of vessels were able to secure a berth almost immediately.
- These delays are occurring both in Australia and overseas. An analysis of the individual services visiting Australian ports illustrates that average delays for those services were lower in Australia than overseas.
- During COVID, wait times have also been significantly affected by a marked increase in the number of vessels arriving 'off window' due to delays and congestion at other ports causing bunching of vessels and increased congestion.

Crane rate

- GMPH can be measured in different ways, with different adjustments made to the denominator (crane hours) to reflect delays due to bad weather and other factors. For comparison of productivity across its global network of terminals, DP World uses a measure of GMPH based on the number of crane hours from 'first lift' to 'last lift', excluding time lost due to vessel delays, weather delays, break bulk and rest breaks.
- On this measure, DP World's Australian terminals perform strongly. [REDACTED]

Container dwell time

- While dwell time is important to DP World's customers, it is often not tracked in reporting on stevedores' productivity. It is not regularly tracked by the ACCC or in many international comparisons of port performance.
- On this measure, DP World's Australian terminals are among the best in the world. [REDACTED]

Truck turnaround time

- The performance of DP World's Australian terminals is similarly strong on truck turnaround time (i.e. the time required for a truck to get in and out of one of DP World's terminals). [REDACTED]

Response to ACCC benchmarking

- In comparing the productivity of Australian ports to their international counterparts, the ACCC relied heavily on a study conducted by IHS Markit and a dataset published by the United Nations Conference on Trade and Development (UNCTAD).
- These sources, and the conclusions taken from them by the ACCC, are not reliable and are not a basis on which to conclude that Australian ports are performing poorly compared to their international counterparts.
- However, DP World agrees with the ACCC that flaws in the industrial relations framework have worsened over the last decade and is having a significant impact on productivity at Australian ports.

4.1 Context for assessment of productivity measures

DP World regularly measures and benchmarks the productivity performance of its stevedoring operations. As DP World operates in highly competitive markets all around the world, productivity is crucial to the success of its business. DP World is constantly monitoring its performance and looking for ways to improve its productivity.

DP World assesses productivity in four main areas:

- 1 time spent by vessels waiting to get into port;
- 1 time spent by a vessel in port, being loaded and/or unloaded;
- 2 container dwell time – i.e. the amount of time a container spends in a DP World terminal; and
- 3 truck turnaround time.

While measurement can differ in relation to some details, these are all well understood industry concepts and are routinely used across the industry to assess productivity. They represent the four main components of a container's journey into, through and from one of DP World's terminals, as shown in Figure 11 below.

Figure 11: Key performance measures tracked by DP World



While DP World monitors performance and seeks to improve in each of these areas, it also understands that care needs to be undertaken when interpreting them. Port performance on measures such as wait time, loading rate and dwell time will depend on a range of factors, including the size of vessels, the trade routes being served, and investment in capacity by stevedores and port operators.

While movement in any one these measures may, at least partly, reflect port productivity, it can also reflect factors unrelated to productivity. For example, a temporary increase in vessel waiting time may reflect disruption to global supply chains, congestion on major trade routes, or uncontrollable factors such as severe weather events.

It is important therefore to view port performance measures in their proper context and to avoid over-reliance on 'snapshot' measures, that may reflect transitory factors unrelated to productivity.

Any comparison of Australian container port performance against international benchmarks also needs to be viewed in light of the factors that make Australia's operating and legal environment different from other countries. Australian container ports are in many ways different to their overseas counterparts.

Some key differences include:

- (a) **Australian international container ports are relatively small by global standards.** As a consequence of Australia's relatively small and dispersed population, the demand centres served by Australian ports are relatively small. By contrast, many overseas ports will serve multiple large cities, including both coastal and inland cities, and due to their location, may also serve as major trade hubs. Due to these geographic and demographic factors, Australian container ports are small by global standards – only Melbourne (number 63) and Sydney (number 76) fall within the top 100 by throughput.²⁷
- (b) **Australia operates as a small-volume destination at the end of a long global trade route.** Amongst other things, this means that the vessels visiting Australia tend to be smaller than other routes. It also means that vessel calls are less frequent and can be disproportionately impacted by delays in vessels leaving other ports bound for Australia – as compared with major ports in East Asia, Europe and North America which have larger ports, more frequent ship calls, bigger ships and larger call sizes with better connectivity with global market. Large ports that operate as 'hubs' within the East-West trade route (i.e. ports linking Asia, Europe and the United States) are often able to achieve container throughput and crane rates that are higher than smaller, destination ports like those in Australia.
- (c) **Australia is predominantly an *importer* of containerised goods.** Containerised imports outnumber containerised exports by approximately two to one.²⁸ The Australian port supply chain must therefore wrestle with the challenge of de-hiring, storing and exporting substantial volumes of empty containers. This is not a problem that exists, to the same degree, in many other markets.
- (d) **Australia's major demand centres are located on the coast, and mostly co-located with the international container ports.** One consequence of this is that most imported containers only travel short distances from the port to their final destination – for example, around 98% of containers imported through Port Botany do not leave the Sydney metropolitan area.²⁹ This may be contrasted with many overseas container ports which service both coastal demand centres and major inland cities (e.g. New Delhi). This feature of Australia's geography shapes landside logistics – particularly the economics of rail transport. It also means that

²⁷ Lloyd's List, *One Hundred Container Ports 2020*.

²⁸ For the fourth quarter of 2020, BITRE reported 1,097.6 thousand TEUs of containerised imports exchanged across Sydney, Melbourne, Brisbane, Adelaide and Fremantle. Over the same period, BITRE reported 535.2 thousand TEUs of containerised (full) exports and approximately the same number of empty exports. See, BITRE, *Waterline 67*, 22 December 2021.

²⁹ Infrastructure NSW, *NSW State Infrastructure Strategy 2012 – 2032*, October 2012, p 51. See also, KPMG, *Quay conclusions Finding the best choices for additional port capacity in NSW*, February 2019.

Australian container ports tend to be located on valuable but constrained land close to the centre of major cities.

Given these features of the Australian logistics chain, care needs to be taken in any international comparative exercise.

Additionally, and more significantly, the ACCC has noted that the Australian industrial relations framework has been a central feature inhibiting productivity and efficiency gains at Australia ports.³⁰ The industrial relations framework creates scope for significant delays and disruptions to stevedores' operations, with very material economic consequences. Over the last three years, industrial action by the MUA during the negotiation of a new enterprise agreement with stevedores has caused ongoing disruption to the supply chain, with disputes lasting up to 971 days.

Further information on the impact of industrial action is set out in section 5 below.

4.2 DP World's Australian terminals perform strongly against international peers

DP World regularly benchmarks the productivity performance of its Australian operations against overseas ports. As noted above, DP World tracks productivity and performance at each stage of a container's journey through one of its terminals – including the time the vessel takes to get onto a berth, the rate at which containers are unloaded and loaded onto the vessel, the amount of time each container spends in the terminal, and the time taken for them to be picked up.

DP World benchmarking shows that the current productivity performance of its Australian terminals is strong on each of these measures, even when compared to much larger overseas ports and transshipment hubs.

(a) Vessel waiting time

DP World monitors data on the waiting time of ships at anchorage before they are able to secure a berth. Low wait times at anchorage mean that ships can be turned around more quickly overall, and also ensures some level of flexibility when vessels are delayed at international ports. The ability to quickly proceed to a berth helps shipping lines to limit waste and drive down costs from unnecessarily waiting outside of port.

While this is closely monitored by DP World, it is also recognised that this measure is particularly prone to influence from exogenous factors, such as global disruptions and severe weather events affecting shipping schedules. Where shipping schedules are disrupted, causing more vessels to arrive 'off window' (either earlier or later than their scheduled window), this can lead to 'bunching' of vessel arrivals and longer waiting times.

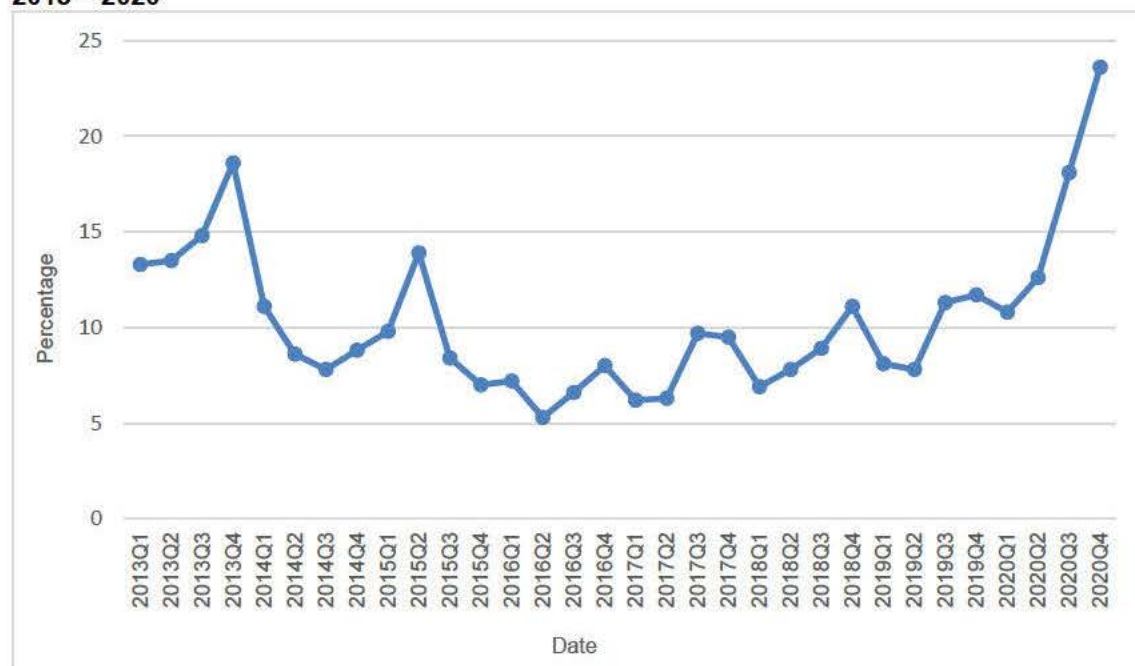
Figure 12 (based on BITRE data) shows that the percentage of vessels waiting at anchorage for more than two hours outside Australian ports (Brisbane, Sydney, Melbourne, Adelaide and Perth) has been relatively low for most of the past decade – in most quarters between 2014 and 2019, less than ten percent of vessels waited more than two hours to secure a berth – in other words more than 90 per cent of vessels were able to secure a berth almost immediately.

The significant increase in vessel wait time in 2020 coincided with significant global supply chain disruption associated with the COVID-19 pandemic, as well as periods of prolonged industrial action by the MUA. As demonstrated below, the COVID-19 pandemic has led to significant disruption to supply chains and an increased percentage

³⁰ ACCC, *Container Stevedoring Monitoring Report 2020–21*, October 2021, section 6.2.

of vessels arriving at ports outside of their scheduled windows. This has increased congestion at Australian ports and meant vessels have had to wait longer for a berth.

Figure 12: Percentage of vessels waiting at anchorage for more than two hours – 2013 – 2020



Source: BITRE Waterline

The recent increase in congestion and vessel waiting times is not unique to Australian ports. Table 3 below shows the average vessel time in port across selected ports in 2019 and 2021.

This shows a shift in the distribution of in-port time across a number of ports, including Australia and overseas ports. For example, at Long Beach (US) there has been a significant increase in the percentage of vessels in port for more than a week, while at Felixstowe (UK) and Singapore there has been an increase in the percentage of vessels in port for more than three days.

Table 3: Vessel time in port at selected ports – 2019 and 2021

	2019			2021		
	< 3 days	3 - 7 days	> 7 days	< 3 days	3 - 7 days	> 7 days
Felixstowe	97.4%	2.5%	0.1%	90.9%	9.1%	0.0%
Long Beach	61.6%	38.4%	0.0%	64.6%	28.4%	7.1%
Ningbo	94.6%	2.8%	2.6%	94.9%	2.3%	2.8%
Shanghai	98.0%	1.4%	0.6%	97.6%	1.6%	0.7%
Singapore	98.2%	1.3%	0.5%	93.5%	6.0%	0.5%
Sydney	96.6%	3.4%	0.0%	82.5%	17.5%	0.0%
Melbourne	98.3%	1.7%	0.0%	92.6%	7.1%	0.3%
Brisbane	97.7%	2.3%	0.0%	95.4%	4.4%	0.3%
Fremantle	94.8%	4.2%	1.0%	76.1%	20.9%	3.0%

An analysis of delays on individual services tells a similar story – these delays are occurring both in Australia and overseas. Figure 13 below attributes service delays between Australia and overseas ports for eight regular services visiting Australia in 2021.³¹ This shows that, for most of these services, average delays were lower in Australia than in overseas ports.

Some of the major sources of delay included ports in Shanghai and Ningbo (for A3N, A3C and A3S), Singapore and Tanjung Pelepas (for SEA1 and SEA2), New Zealand (for TTAS) and the US West Coast (for PSW / PANZ).

Figure 13: Average service delays – 2021



A major driver of increased vessel waiting time and port delays is vessel “bunching” as a result of vessels arriving outside of their scheduled windows.

Many services visiting Australia are weekly services, scheduled to arrive every seven days. Disruptions to global supply chains and shipping schedules has contributed to more vessels arriving “off window”, resulting in bunching – for example, two vessels on the same service might arrive three days apart, and then there will not be another vessel on that service for ten days or more.

This is illustrated in Figure 15, which shows a very small proportion of vessels arriving in a regular weekly pattern.

This inconsistency and irregularity in vessel arrival times has been a major contributor to increased waiting times.

³¹ This is based on analysis of how far “off window” each service is when it enters and leaves Australia. For example, if the service is off window by two additional days when it leaves compared to when it entered, two days of delay is attributed to Australia.

Figure 14: Days between consecutive service call (DP World terminals)

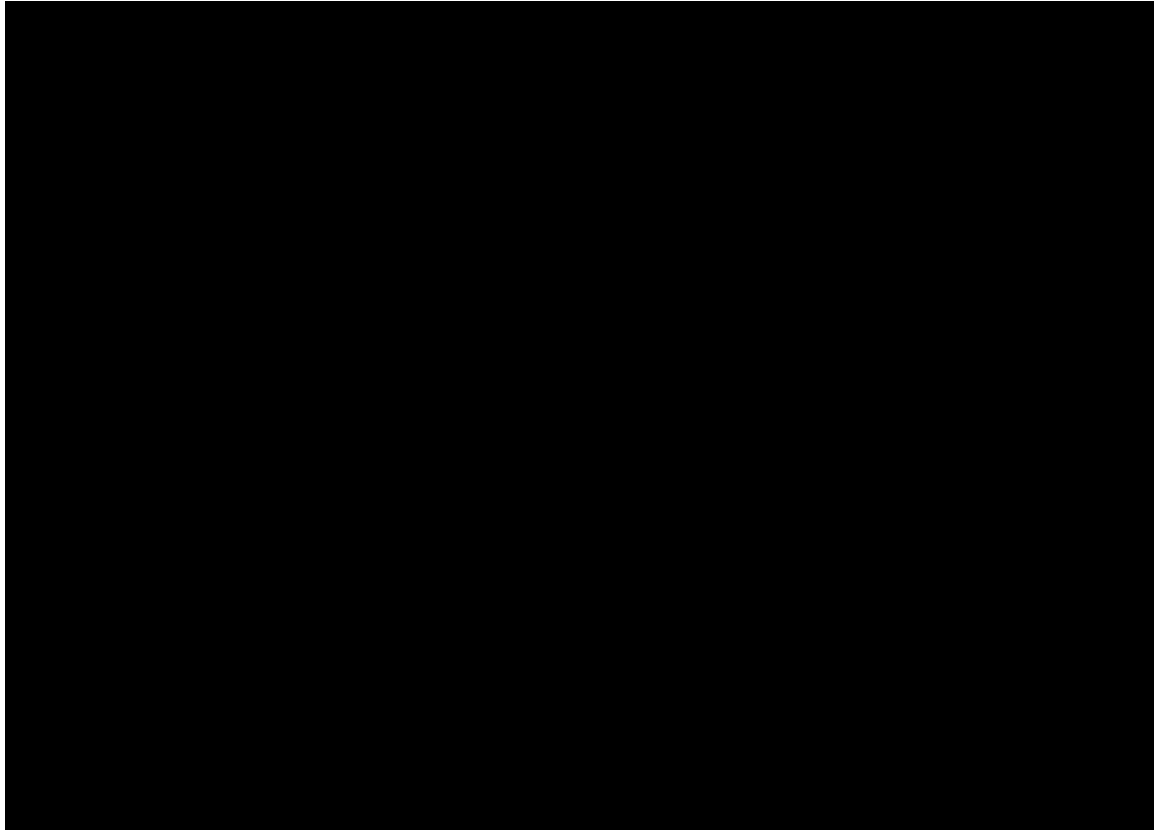
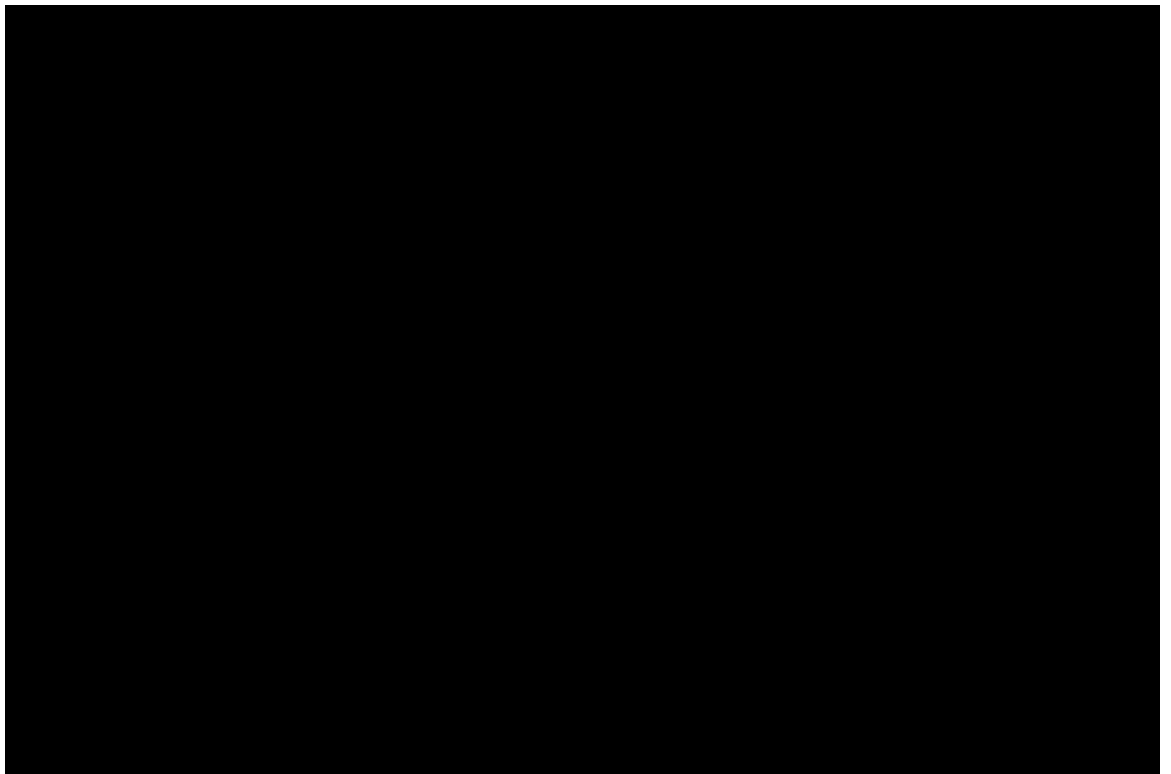


Figure 15: Frequency of consecutive service call (DP World terminals)



(b) Crane rate (gross moves per hour)

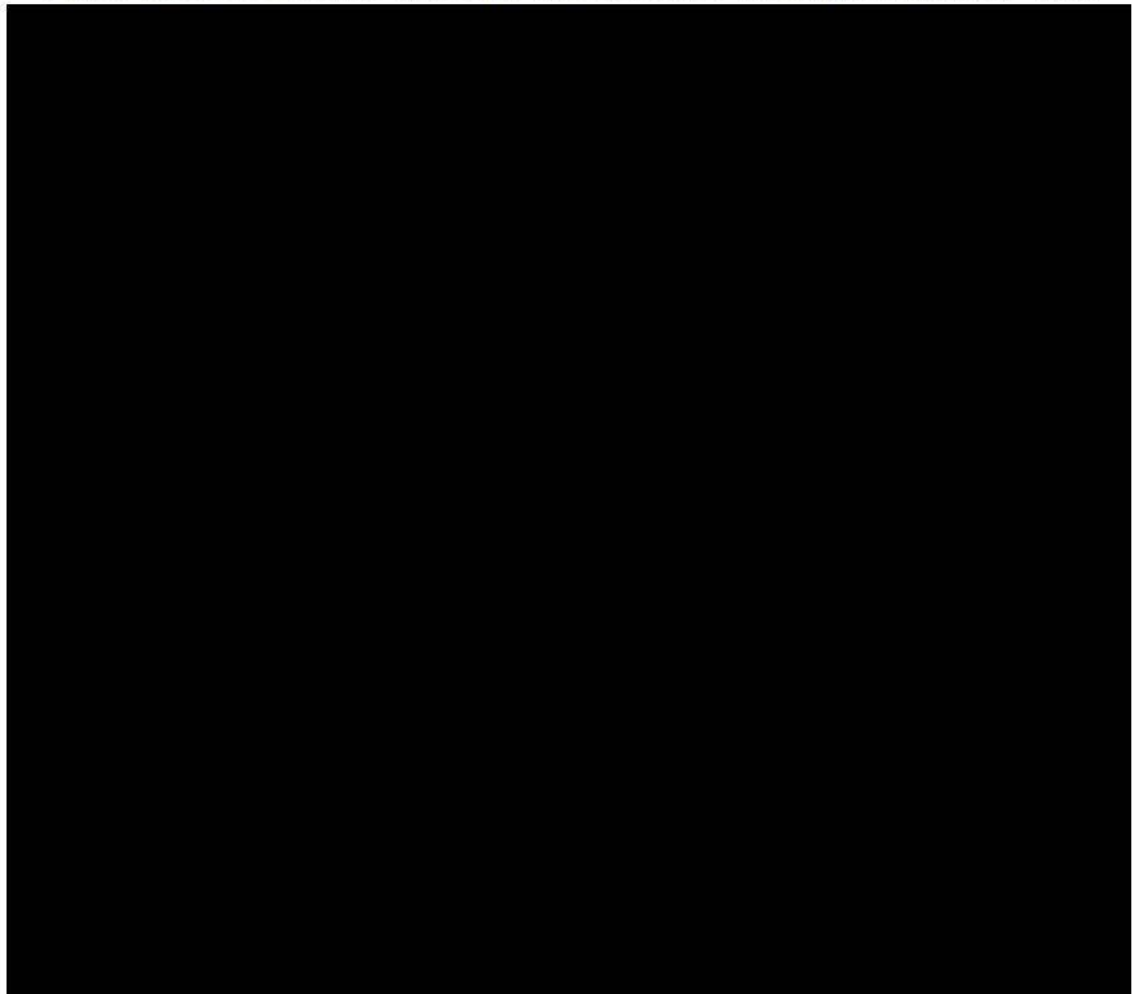
A key productivity measure that is regularly tracked and reported on by DP World across its global network is “gross crane moves per hour” (GMPH). This is a measure of the number of container moves per hour of crane operation. GMPH can be measured in different ways, with different adjustments made to the denominator (crane hours) to reflect delays due to bad weather and other factors.

For comparison of productivity across its global network of terminals, DP World uses a measure of GMPH based on the number of crane hours from “first lift” to “last lift”, excluding time lost due to vessel delays, weather delays, break bulk and rest breaks.³²

On this measure, DP World’s Australian terminals perform strongly (see Figure 16 below).



Figure 16: Gross container moves per hour across DP World global network – 2021



³² We note that this is slightly different to the “crane rate” measure reported by BITRE and referred to by the ACCC in its *Container Stevedoring Monitoring Report 2020–21*. The BITRE measure is based on the hours that each quay crane is allocated to a ship, less certain operational and non-operational delays (for an explanation of how crane hours are measured, see BITRE, *Waterline* 67, 22 December 2021, p 37 (Box 2.1)).

(c) Container dwell time

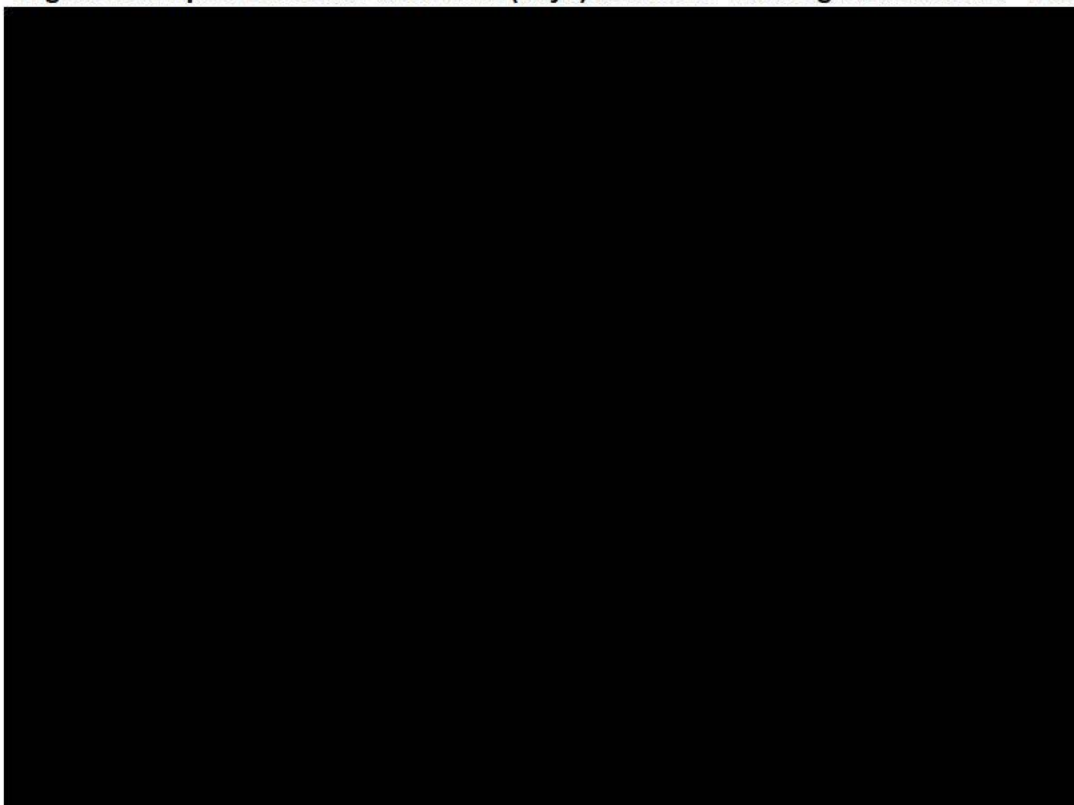
DP World also monitors container dwell time across DP World's global network.

Dwell time measures how long a container spends in a DP World terminal before it is moved on to its next destination. This is an important measure of the productivity of DP World's terminal operations and is also an important metric for shippers – the longer a container spends in a DP World terminal, the greater the cost and potential disruption to the shipper customer.

While dwell time is important to DP World customers, it is often not tracked in reporting on stevedores' productivity. It is not regularly tracked by the ACCC or in many international comparisons of port performance. This may be because most published port productivity measures are developed by, or with reference to, the needs of shipping lines – and the speed with which containers move through ports, after they are unloaded, is of less concern to them. However, it remains a critical component for shippers, which are interested in the full, 'end to end' time taken for containers to move through ports.

On this measure, DP World's Australian terminals are among the best in the world (see Figure 17 below).

Figure 17: Import container dwell time (days) across DP World global network – 2021

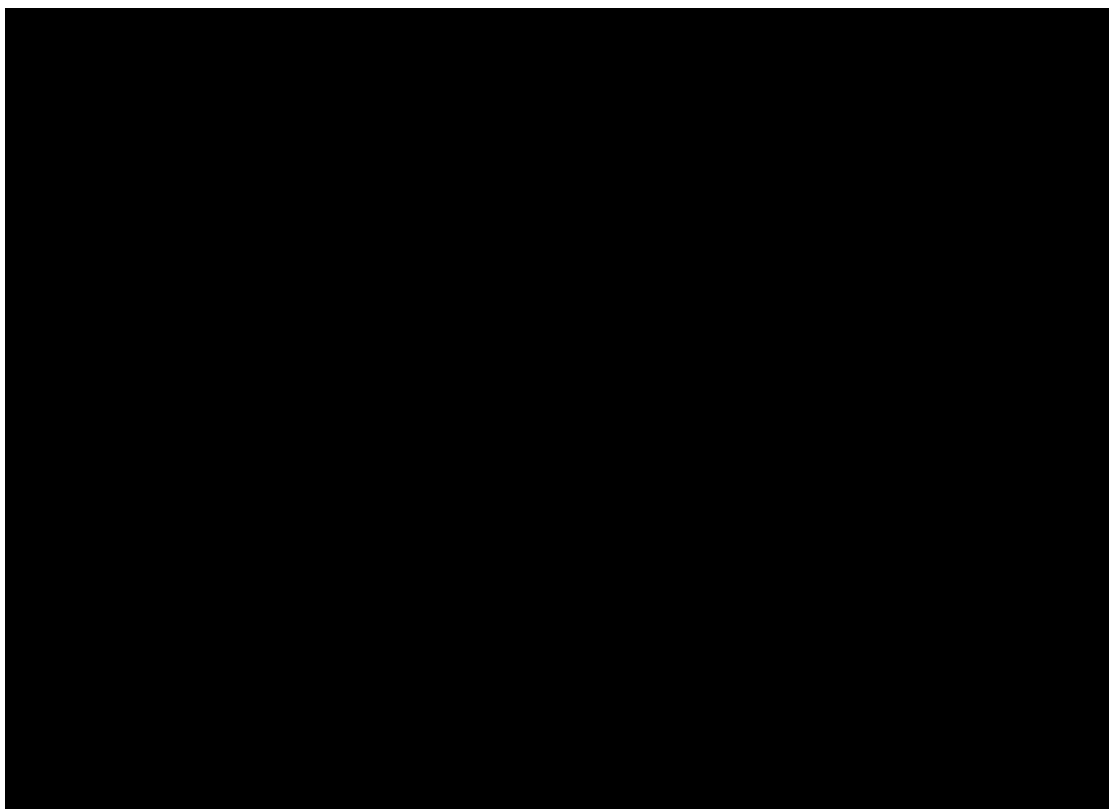


(d) Truck turnaround time

The performance DP World's Australian terminals is similarly strong on truck turnaround time (i.e. the time required for a truck to get in and out of one of its terminals).



Figure 18: Truck turnaround time (minutes) across DP World global network – 2021



4.3 Recent ACCC analysis is based on flawed measures

The ACCC has recently made comments suggesting that Australia's ports are underperforming compared to their international counterparts.³³

This is generally not DP World's experience. As demonstrated above, the productivity performance of DP World's terminals compares favourably to international benchmarks when its terminals are operational and not impacted by industrial action.

DP World has set out below some observations on the ACCC's conclusions about port performance and the weaknesses in the datasets that the ACCC has relied upon.

(a) Limited set of measures analysed by the ACCC

In its 2021 Monitoring Report, the ACCC concluded that quayside productivity and efficiency had stagnated over the last ten years after initial improvements through advancements in technology.³⁴

The ACCC acknowledged that there are several different metrics used to measure quayside productivity and efficiency at container terminals, but its report only included the following selection of measures:

- on a 'net' basis measured by net crane rate, elapsed labour rate and net ship rate; each on a basis of time, net of labour and equipment downtime, and not accounting for operational and non-operational delays caused by holidays, industrial stoppages, adverse weather maintenance and repairs. According to these performance indicators, the ACCC concluded that Australia's performance

³³ ACCC, *Container Stevedoring Monitoring Report 2020–21*, October 2021, p 64.

³⁴ ACCC, *Container Stevedoring Monitoring Report 2020–21*, October 2021, p 57.

across all indicators had improved over time (between 1998-99 to 2020-21) but stagnated in the past 10 years despite substantial productivity-enhancing capital investment made by all stevedores during this period; and

- according to ‘gross’ measures of port time used by international benchmarking studies and market participants, which purport to take into consideration all events that impact a vessel while alongside the quay (that is, without adjustment for downtime for labour and equipment, or part thereof and thus capturing the impact of restrictive work practices in port operations among other factors that are relevant to the cross-country comparison).

Critically, the ACCC did not consider dwell time as part of its analysis. As noted above, this is a key measure of productivity that is regularly monitored by DP World.

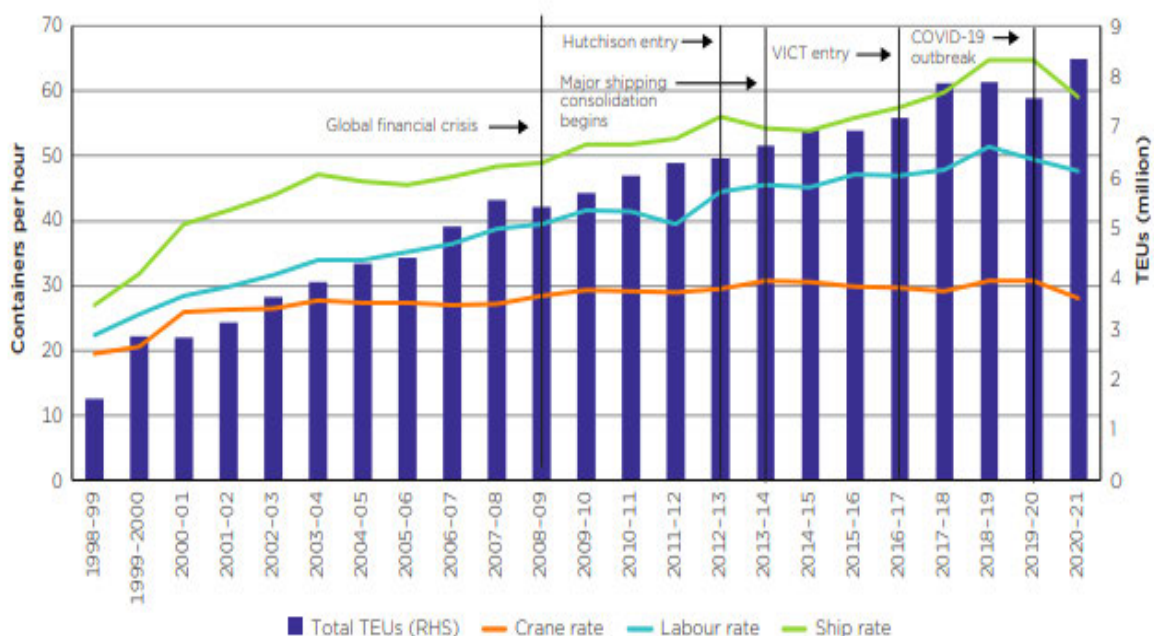
(b) ACCC conclusion that productivity has ‘stagnated’

Even on the limited set of measures examined by the ACCC, the data recorded in its monitoring report does not support a conclusion that productivity has ‘stagnated’ over the past decade.

Figure 19 below (Figure 6-1 from the ACCC report) shows that labour rates and rates continued to improve from around 2011-12 through to the start of the COVID-19 outbreak. There has only been a downturn in the past two years, when there were significant disruptions associated with industrial action and supply chain dislocations.

There is only one measure that could fairly be said to have “stagnated” – the crane rate. However, it is unsurprising that performance on this measure has not significantly changed. There are natural limits to the crane rate, reflecting physical and engineering limits of the cranes themselves. It is for this reason that the crane rate has remained relatively steady while ship rates and labour rates have continued to improve.

Figure 19: ACCC reporting of quayside productivity indicators 1998–99 to 2020–21



Source: ACCC calculation based on data from BITRE Waterline 68.

(c) ACCC reliance on international studies

In comparing the productivity of Australian ports to their international counterparts, the ACCC relied heavily on a study conducted by IHS Markit and a dataset published by the UNCTAD.

These sources, and the conclusions taken from them by the ACCC, are not reliable and are not a basis on which to conclude that Australian ports are performing poorly compared to their international counterparts.

World Bank / IHS Markit Port Performance Index

IHS Markit published the Container Port Performance Index (CPPI) for the first time in 2021.³⁵

The 2021 CPPI sought to compare the performance of ports around the world based on data from the 12 months prior to 30 June 2020. As this was the first publication of the CPPI, it is not a widely known or used source within the shipping industry. DP World considers that the CPPI is unlikely to provide a useful reference point because of limitations in the criteria used to measure port and stevedore performance and particularly its reliance on measuring only time of vessels in-port.

Indeed, it is not clear that the CPPI was intended to be a measure of container terminal productivity. Instead, its primary focus appears to be on the extent of delays and costs faced by *shipping lines* – some of which may be related to port productivity, but many of which will be caused by other factors. In several places, the CPPI report acknowledges that it cannot precisely identify the cause of delays – including the extent to which these are caused by poor productivity or other factors. For example, in relation to time in port, the report itself notes that there are multiple factors affecting additional time spent in port time and “*with the exception of authority clearance delays, none of the other causes of additional port time are reflective of port inefficiency per se*”.³⁶ Similarly in relation to vessel waiting time, the report notes that the data cannot distinguish between waiting time that is “voluntary” or “forced”.³⁷

In its explanation of its methodology, IHS Markit acknowledged that it could have included waiting times in the CPPI, for example by applying a penalty to ports that required ships to wait at anchorage outside of port for long periods. However, IHS Markit decided not to include waiting times as an imposition of this sort of penalty might be seen as a “normative judgment” which would be “inconsistent with the program’s overarching objective of producing an objective quantitative index.”³⁸

Other limitations of the IHS Markit analysis include:

- IHS focus heavily on quayside indicators such as vessel time, while ignoring other important indicators of port performance. For example, the report makes no reference to container dwell time.

³⁵ World Bank Group and IHS Markit, *The Container Port Performance Index 2020: A Comparable Assessment of Container Port Performance*, 7 May 2021.

³⁶ World Bank Group and IHS Markit, *The Container Port Performance Index 2020: A Comparable Assessment of Container Port Performance*, 7 May 2021, p 46.

³⁷ World Bank Group and IHS Markit, *The Container Port Performance Index 2020: A Comparable Assessment of Container Port Performance*, 7 May 2021, p 48.

³⁸ World Bank Group and IHS Markit, *The Container Port Performance Index 2020: A Comparable Assessment of Container Port Performance*, 7 May 2021, p 46.

- The methodologies used to rank ports are highly opaque and appear to rest on various ‘normalising’ assumptions (i.e. assumptions which ignore differences in the features of individual ports).
- IHS measures port performance by reference to variance in “port hours” from an average of port hours in each call size group. This methodology will naturally give lower rankings to ports where the same size vessel requires more moves (and therefore more time) to unload, compared to other ports. This is generally the case at Australian ports, in part due to the import-focused nature of DP World’s trade. For example, Port Botany has much greater average call sizes compared to Singapore and London Gateway for the same vessel sizes.
- 9 out of the 10 Top shipping lines contribute their data but major regional carriers are not included in IHS data currently. IHS captures only 80% of the moves globally however the absence of regional lines has an impact in Australia. In DPW Sydney IHS only captures 83% of the moves in 2020.

Possibly because of these features of its methodology, the IHS Markit analysis produces some anomalous results. For example:

- Several ports receive very different rankings depending on whether the ‘statistical approach’ or the ‘administrative approach’ is used. For example, Jebel Ali is ranked 323rd using the statistical approach (placing it in the bottom quartile), but 59th using the administrative approach (placing it in the top quartile). It is therefore unclear from the IHS Markit analysis whether Jebel Ali should be considered a high performing port (as suggested by the administrative ranking) or an underperforming port (as suggested by the statistical ranking).
- Port Moresby ranks higher than any of the Australian ports, despite it being an order of magnitude smaller, and with a substantially lower crane rate (well below industry standards) – the crane rate at Port Moresby (GMPH) is approximately half of that at DPW’s Sydney terminal [REDACTED]. This again appears to reflect the way in which the survey ‘groups’ ports of a similar size or with a similar number of container movements and then rates them, before re-aggregating them. In effect, this can have the consequence of disadvantaging smaller ports, such as those in Australia, that have a high number of movements – and are therefore compared with substantially larger, global hubs.

Given the CPPI is new and its methodology is still being developed, DP World submits that it was unsafe for the ACCC to place such significant weight on this source as the basis for the productivity conclusions reached in the 2021 Monitoring Report.

DP World notes that there are other more established and appropriate global sources of data on port performance, such as Alphaliner.

UNCTAD data

The ACCC also used UNCTAD data on marine transport in its 2021 Monitoring Report to compare the median time in port in Australia to a series of other countries. The ACCC found that the median in-port time for container ships visiting Australia was 1.4 days in 2020; more than 4 times as long as Japan, double compared to China and 67% greater than time spent in Singapore or New Zealand. On this basis, the ACCC concluded that Australian ports are performing poorly compared to their international counterparts.

However, when referring to the UNCTAD data the ACCC was selective about the countries to which Australia was compared and those parts of the UNCTAD data that were referenced.

The ACCC compared Australia to China, Japan, New Zealand and Singapore. With the exception of New Zealand, the ACCC provided no explanation about why comparison with these countries was appropriate. In reality, container shipping in each of China, Japan and Singapore are fundamentally different to Australia and make any simplistic comparison of time in port futile. Certainly, the comparisons offer little, if any, assistance in seeking to analyse comparative port performance.

The ACCC chose to refer only to the measure of median time in port when comparing the countries, despite the fact that UNCTAD also publishes data on the size of vessels as part of the same dataset on maritime transport. Differences between the types of ships typically calling at the ports in each country demonstrate the issues with crude comparisons based only on median time in port. The table below sets out the median time in port for each country along with the average container vessel size and the largest container vessel to call in the country.

Table 4: Median time in port and average vessel size

Source: UNCTAD data

Country	2020 median time in port (days)	2020 average container carrying capacity (TEU) per container ship	2020 maximum container carrying capacity (TEU) of container ships
Australia	1.4	4,774	9,572
China	0.6	4,637	23,964
Japan	0.3	1,620	18,400
New Zealand	0.9	3,528	9,600
Singapore	0.8	5,228	23,964

One would expect that countries with generally smaller vessels would exhibit lower median times in port. If the average vessel is smaller, it will exchange less containers and is therefore likely to be turned around more quickly. For this reason, one can quickly appreciate that Japan's shipping industry is very different to Australia's, because the average vessel size in the table above is only around a quarter as large as the average ship calling in Australia.

The same is also likely to be true of China and Singapore. Although the average ship size is comparable to the average ship calling in Australia, the very largest vessels in the world, capable of carrying almost 24,000 TEU are regularly visiting ports in China and Singapore. This suggests that there are many, much smaller vessels visiting Chinese and Singaporean ports to drive the overall average down to a level similar to Australia.

Key differences between China, Japan and Singapore compared to Australia include the proliferation of ports serving both very large and very small vessels and the positioning of these countries on major shipping routes. In China, Japan and Singapore, very large vessels exchange large numbers of containers that are then distributed to other locations using much smaller feeder vessels. This arrangement does not occur in Australia, which has a small population, is not located on a major trade route, and does not have a functioning coastal shipping trade. As a result, crude comparisons based on the median time in port such as those conducted by the ACCC using UNCTAD data are not reflective of relative port performance.

DP World also notes that there are likely to be other factors affecting the usefulness of the UNCTAD data including port congestion and delays caused by COVID-19 pandemic,

with Australia being the most affected country with an increase in median in-port time by 5.5 hours (20%).

The studies and data sets reviewed by the ACCC are not well known, did not test a full set of appropriate metrics and only analysed a small sample in a short timeframe during the COVID-19 pandemic.

DP World considers that the analysis undertaken in the 2021 Monitoring Report is therefore not a safe basis to form any view as to the comparative productivity of Australian ports relative to global peers.

5 Supply chain productivity and industrial relations

Key points:

Context – DP World's recent experience of a framework that is not fit for purpose

- On the waterfront, the FW Act is failing Australian supply chains and consumers – having become the primary source of delay and dysfunction weighing on port productivity.
- DP World has a highly unionised workforce and operates under 8 enterprise agreements across its four Australian terminals.
- The position has deteriorated significantly over the last decade following the last series of legislative reforms in 2008 introduced under FW Act. Under the FW Act, during the last bargaining period (2018 to 2020):
 - DP world engaged in 728 days of bargaining, including being required to attend 167 days of direct meetings between management and union representatives;
 - 12 separate disputes were lodged;
 - [REDACTED]
 - productivity at DP World terminals was impacted during late 2020 [REDACTED]
 - [REDACTED]; and
 - [REDACTED]

There are four key areas where reform is urgently required.

Put productivity back at the centre of enterprise bargaining

- When enterprise bargaining first emerged in the early 1990s, there was a clear emphasis on productivity and competitiveness. This has been lost.
- There is no longer any requirement under the FW Act that bargaining deliver productivity improvements or even that these matters be considered in the course of bargaining. The consequence is that the process does not reflect a genuine bargain involving a trade-off between modernised conditions and productivity or efficiency gains.
- Instead, existing conditions under enterprise agreements operate as a “ratchet”. Outdated conditions are entrenched as the baseline for each new round of negotiations and unions are incentivised to engage in a crude, war of attrition. The result is that DP World's agreements contain various conditions that have long been abandoned in modern award processes.

The IR framework encourages protracted bargaining

- Under the FW Act, bargaining can start in a number of ways, but it is very difficult to bring bargaining to an end without industrial action. The stevedore has no effective way of ending the

bargaining process without being subjected to either (or both) industrial action or a claim for orders that require it to return to the table under the FW Act.

- The protracted bargaining on the waterfront is the result of the ineffective mechanisms to encourage the swift conclusion of bargaining. Prior to 2008, an employer could, as a matter of course, terminate an enterprise agreement that passed its nominal expiry date. However, since the FW Act, the 'nominal expiry date' has become just that, a 'nominal' date that amounts to little more than the starting gun for unions to seek to commence protected industrial action.
- The FW Act needs to be amended to provide a credible means to incentivise the conclusion of enterprise bargaining after the nominal expiry date – by terminating an enterprise agreement and moving back to the relevant industry award.

The FW Act has re-introduced uncertainty about the matters to be included in enterprise agreements

- Prior to the introduction of the FW Act, the workplace legislation included clearly defined matters that were 'prohibited'. Most of these were, rightly, seen as uncompetitive and eroding productivity.
- Over the last decade, DP World has seen these clauses successfully reintroduced by unions because of the failure of the FW Act to expressly define permitted and prohibited matters.
- For example, DP World notes the following (previously prohibited) conditions in some agreements across the stevedoring industry:
 - “*family and friends*” clauses, whereby a certain proportion of new hires must come from a pool of “family and friends” nominated by existing employees or the union;
 - practical restrictions that make it commercially infeasible to introduce automation or other technologies or to outsource activities where this is more efficient.

The FW Act tips the scales against proportionate industrial action

- Protected action ballots are secret ballots under the FW Act that permit employees to vote on whether they wish to undertake protected industrial action. While under section 443 of the FW Act, the Fair Work Commission must consider before granting a PABO whether parties are genuinely trying to reach agreement, this has come to operate as a mere procedural step.
- An applicant seeking a PABO does not have to show that they are bargaining in good faith, that an impasse has been reached or that recourse to industrial action is reasonably necessary or desirable to help reach agreement.
- By allowing unions to apply for and be granted PABOs early in the bargaining process, the legislation removes any real incentive for representatives to engage and commit to genuine and good faith to negotiations to resolve bargaining without resorting to industrial action.
- PABOs are often unclear, duplicate each other and are disproportionate to the nature of the terms in dispute. The PABO process has also been misused to enable protected action at the waterfront to target third parties (e.g. particular vessels or shipping lines).
- Finally, recent experiences have highlighted that the Fair Work Commission has little effective power to prevent or respond to unlawful industrial action in a timely way – forcing stevedores to escalate litigation to the Federal Court of Australia before unlawful action can be addressed.

•

5.1 Flaws in the industrial relations framework are a major drag on productivity and impose significant economic costs

DP World considers that flaws in DP World's industrial framework impose the most urgent and significant drag on competition and productivity within Australian ports.

The regime is broken in at least four important ways:

- 1 **No productivity focus:** First, the FW Act neither promotes a focus on, nor provides any real support for, improvement in productivity and competitiveness. The current model is largely designed to 'lock in' legacy arrangements and does nothing to reward or encourage a focus on productivity.
- 2 **No ability to resolve bargaining in a timely manner:** Second, the FW Act makes termination of enterprise agreements (and reversion to the award) very difficult for stevedores – effectively creating an incentive for unions to extend disputes. Effectively, bargaining operates as a 'ratchet', in which unions demand additional improved conditions, without any need to risk 'trade' those conditions for improved performance.
- 3 **No clarity around permitted content of enterprise agreements:** Third, the scope of matters that can be the subject of enterprise agreements is poorly defined and has led to extensive, complex and time-consuming litigation. In many cases, unions then seek to circumvent any constraints through 'side deals' with stevedores to address issues that would otherwise not be permitted.
- 4 **The FW Act permits industrial action with consequences disproportionate to the issues in dispute:** Fourth, where agreement cannot be reached (which, for the reasons above, is now common), the process for resolving the bargaining process is characterised by repeated, protracted, and severe disputes between stevedores and the MUA. The consequence has been substantial delays and disruption to port operations and Australian supply chains – operating as an economic sledgehammer, out of proportion to the often limited nature of the issues in dispute.

The ACCC observed that restrictive work practices are preventing stevedores maximising labour efficiency and effectively utilising technological enhancements.³⁹ DP World agrees.



³⁹ See ACCC, *Container Stevedoring Monitoring Report 2020–21*, October 2021, p 64.

As well as 'lost hours', this action also impacted on crane productivity.

Figure 20 shows the impact of industrial action on productivity at DP World's Port Botany terminal over the past two years – and particularly the impact of protracted industrial action in the third quarter of 2020.

This graph maps crane moves at DP World's Port Botany terminal (using the Shift Crane Rate (**SCR**)) over the last period of enterprise bargaining. Immediately apparent is the direct and severe impact that disputes have on crane utilisation.

Figure 20: Crane moves and protected industrial action – DP World Botany terminal, 2017-2021



This delay and disruption has real and material economic consequences.

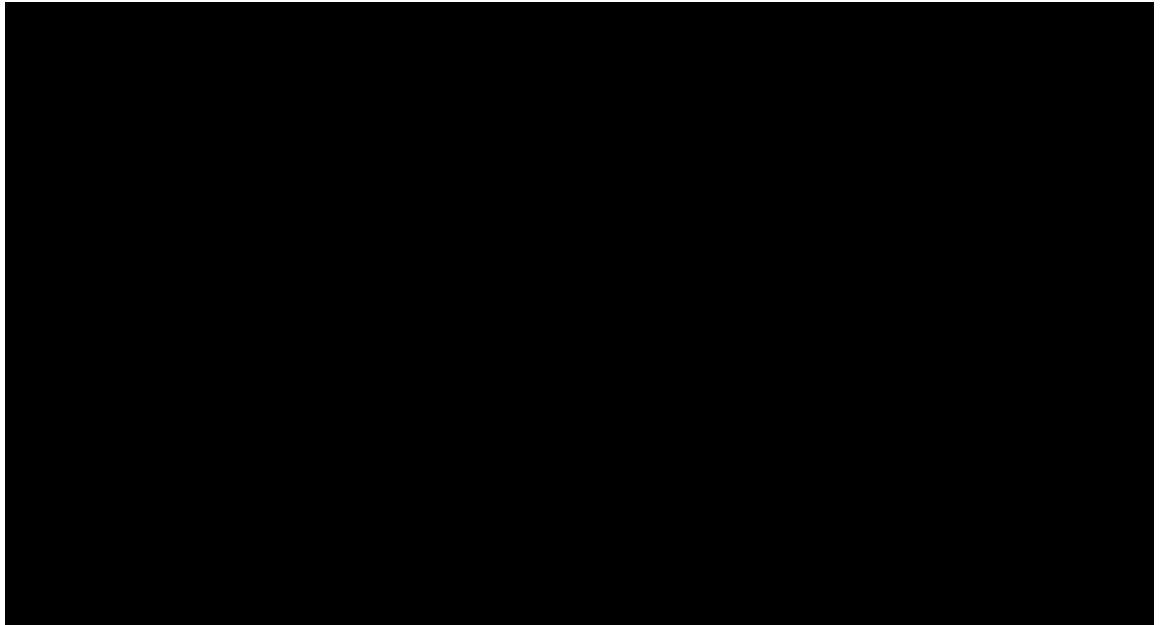
HoustonKemp has analysed the economic effect of industrial action at Australian stevedoring terminals, including both the immediate impact of disruption to containerised trade and potential knock-on (or 'multiplier') effects. HoustonKemp's analysis is at **Schedule 4**. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Figure 21: Value of disrupted imported and exported goods per day – DP World terminals only



In this section, DP World will briefly review the four key areas identified for urgent reform.

5.2 Legislation with no focus on, or support for, productivity

(a) History of productivity as a focus of the industrial relations framework

Under the FW Act, there is no requirement that an enterprise agreement deliver productivity improvements in an enterprise, or even that these matters be considered in the course of bargaining. The one attempt to change this, in the *Fair Work Amendment (Bargaining Processes) Bill 2014* (Cth), did not become law.⁴⁰

This position may be contrasted with the situation when enterprise bargaining first displaced central wage fixation in the early 1990s. The system displaced at this time was one where, since the late 1980s, National Wage Cases included two tiered outcomes of increases: a wage increase that would flow on to all award rates, and a second component available only where parties to an award could demonstrate measures to improve efficiency.

The agreement-making provisions introduced into the Industrial Relations Act 1988 (**IR Act**) reflected this development. “Enterprise flexibility agreements” would not be approved by the Fair Work Commission where their implementation was contrary to the public interest or to principles established by Full Benches of the Fair Work Commission in determining wages. The legislative framework ensured that productivity outcomes were at the centre of the bargaining process, and a key focus of it.

Since the Workplace Relations Act 1996 (**WR Act**), however, the outcomes of bargaining have become essentially a matter of whatever the parties can negotiate, using the leverage available to them, subject only to certain content that was prohibited. The shift was from a system based around the public interest and principles of productivity and structural efficiency, to a more rules-based system. It is in that context that DP World’s predecessor, P&O Ports, began negotiating certified agreements.

⁴⁰ The Bill would have amended section 187(1) of the FW Act to include a new pre-requisite to approval that the Fair Work Commission be satisfied that improvements to productivity at the workplace were discussed during bargaining for the agreement

The first P&O agreements were made in 1999, after the bitter and well publicised 1998 Waterfront Dispute between Patrick and the Maritime Union of Australia (**Waterfront Dispute**). While both lengthy and costly, the Waterfront Dispute created a shift that led to productivity improvements on the waterfront, through employers being able to effectively use the provisions of the WR Act.

In the early phases of bargaining, P&O Ports was able to leverage the provisions of the WR Act to create productivity enhancements through bargaining for terms and conditions not contained in the (even then) outdated Stevedoring Award. For example, its agreements allowed it to:

- 'buy' its way out of the limitations of the 35-hour Monday to Friday working week;
- enable regular operations to occur over the weekend; and
- create 8-hour shifts, enabling 24-hour operations to be assured for customers.

However, since this time, many avenues for productivity gains have, at best, plateaued over the multiple rounds of bargaining and current legislative arrangements create no incentive for the MUA to make trade-offs. The bargaining process has become one of parties deploying leverage to advance their interests, rather than one that requires them to have regard to productivity or efficiency gains.

(b) A move backward to 'ratchet bargaining'

Instead, enterprise agreements now operate as a 'ratchet'. In reality, industry bargaining in the stevedoring industry is a process where employees (and the MUA) don't 'give up' any existing terms and conditions, but rather take industrial action to seek to improve their existing conditions. Any 'attack' on existing conditions is unacceptable to the MUA; meanwhile, it agitates numerous additional claims for higher wages and improvements to 'conditions' - often in the form of restricted work practices.

There has been little, if any, interest shown in reviewing or modernising enterprise agreements. This results in many of the clauses in DP World's agreements being outdated and referring to conditions that have long since been abandoned in modern award process (e.g. the continued existence of "closed port days", a concept that was removed from the modern award in 2015) and seek to preserve unproductive clauses.

The impact is that the stevedoring industry stagnates, rather than to continues to improve in terms of production, efficiency and adopting new ways of doing business and tasks.

Examples of restrictive legacy clauses include the following:

EA provision	Impact on Productivity
Promotion decisions	<p>There is limited scope to create a true merit-based system for promotion within the Enterprise Agreement terms.</p> <p>The criteria in the Enterprise Agreements set out a weighting heavily in favour of length of service factors, effectively creating a system where the longer serving (and thus usually older) employees, rather than the best performers or those that DP World considers have best potential for long-term careers in the industry or at higher levels, are first in line for more lucrative skills opportunities.</p>

Implementing change	<p>Consultation regarding major changes must occur (which is required under the FW Act), following which there must be minimum time periods before notification and implementation (which is not a standard feature of consultation provisions outside of the stevedoring industry).</p> <p>The period required is 30 days in “business downturn” circumstances which may involve redundancies, or 60 days for any other change. This hampers the ability to act quickly in the event of unexpected business conditions (e.g. COVID-19).</p>
Outsourcing of labour	<p>The Enterprise Agreements have over time, built up restrictions on how and when work may be outsourced to third parties. There are multiple steps that need to be canvassed before a third party can be secured to perform work.</p> <p>The MUA has sought to use these provisions - unsuccessfully - to prevent the contracting of work that its members had refused to do until the last minute.⁴¹</p> <p>Further, in practice DP World has continued to be subject to industrial action on occasions when using these provisions. A case of this nature is currently before the Federal Court of Australia (matter NSD 445 of 2021).⁴²</p>
Automation	<p>Thile after hard-fought proceedings on the subject in 2020,⁴³ DP World retains the right to make decision to automate part or all or a terminal operation, there is a considerable onus on time invested in this process with the parties being required to make themselves reasonably available for intensive discussions between nine months and six months in advance of the scheduled go live date.</p> <p>DP World must seek to agree with the MUA on roles, rosters, and labour arrangements and requirements, failing which any non-agreed points must be referred to an Independent Panel. While there is no blanket prohibition on automation, the process required makes any decision to introduce new technology slow, painstaking and difficult to achieve. Redundancy that occurs via this process is also subject to an additional severance package of 15 weeks' pay.</p>
Order of engagement	<p>Clauses that specify the order in which different types of employees are engaged for a <i>shift</i>, also known as also known as the "order of pick", which constrains managerial decision-making and stops DP World from choosing the right employee for the job on a given day because of the need to follow a complex set of rules about which employees are to be offered work and when.</p>

⁴¹ In *Construction, Forestry, Maritime, Mining and Energy Union v DP World Sydney Ltd* [2019] FWC 4884, the MUA sought to prevent DP World Sydney from using contractors to perform a rope change on a quay crane at short notice. The Fair Work Commission found that DP World had complied with the contractor clause in question and rejected an argument that it imposed a total prohibition on contracting out this work. The MUA has subsequently claimed that the contractors did not do the job properly - what they omit to mention is that in the face of sustained pressure from the MUA, the original contractor (which does this work for other stevedores and is perfectly capable of performing it to the highest standard) withdrew from the arrangement.

⁴² This related to a ropes change as well. The background is set out in *DP World Sydney Ltd v Construction, Forestry, Maritime, Mining and Energy Union* [2021] FWC 1746. The MUA is counter-claiming for employees' wages.

⁴³ See *DP World Sydney Ltd v Construction, Forestry, Maritime, Mining and Energy Union* [2020] FCA 87.

Duplication of safety provisions in Agreements	Clauses regarding safety that duplicate those that are already comprehensively regulated by legislation. This has the intent of blurring the line between safety and industrial relations issues and permitting industrial disputes to often be prosecuted under the guise of safety.
Costly and restrictive redundancy provisions	In addition to the significantly increased cap of a maximum of 52 weeks' pay, Agreements contain a requirement to offer voluntary redundancies, and to accept them, before implementing forced redundancies, using out-dated criteria that lean very heavily in favour of length of service with the result of curtailing DP World's discretion to retain skilled and high-performing employees.

These EA clauses are legacy provisions, which continue to persist in current stevedoring enterprise agreements across the industry and have spilled into ancillary port services tug operations.

There are other matters current addressed in DP World's enterprise agreements that which would have been *prohibited clauses* under the prior WR Act and in some cases are of unclear enforceability under the FW Act:

- clauses placing restrictions on outsourcing and the use of independent contractors;
- clauses which require DP World to provide considerable amounts of information to the MUA and employees outside of change proposals including manning numbers, idle time, container lifts etc.

(c) Underpinning instruments in the industry provide a significant safety net

The constant ratcheting up of terms within enterprise agreements is occurring against a baseline that was already generous within the stevedoring industry.

The result has been that the 'gap' between enterprise agreements and the relevant industry award (Stevedore Industry Award 2020 (the **Award**)) is substantial and growing.

Under DP World's current Enterprise Agreements, on average, base rates of hourly pay are between 36% and 59% above the Award, before salary rates under the agreements are factored in.⁴⁴ Employees receive a number of other entitlements in excess of the FW Act or the Award including:

- a maximum redundancy payment of 52 weeks (compared to the statutory requirement of 16 weeks in the FW Act);
- payment to employees for time spent attending union meetings (on and off site);
- superannuation payments of 12% compared to the statutory 10%;
- additional 3 days for carer's leave in addition to the 10 days that can be used for sick or carer's leave; and

⁴⁴ Non-salaried employees are paid based on the higher base rates and award penalties, so the above-award premium carries over into shift work and overtime payments.

- paid income protection insurance for all employees irrespective of whether their superannuation fund also provides this.

DP World submits that FW Act amendments should be revisited to ensure productivity and efficiency form a central consideration for bargaining parties and the Fair Work Commission, when resolving disputes.

Recommendation 1 - The amendments proposed to section 187(1) of the Fair Work Amendment (Bargaining Processes) Bill 2014 be reconsidered.

5.3 The bargaining framework limits incentives for employee representatives to reach agreement

Under the FW Act, bargaining can start in a number of ways. However, there are only two ways it can formally end:

- the making of a new enterprise agreement; or
- in a very limited range of circumstances, the termination of industrial action leading to a “workplace determination” (that is, essentially, an arbitrated enterprise agreement).

In this way, the FW Act presupposes that the employer and its employees will reach a mutually acceptable deal. In reality, this isn’t always possible.

Regardless of how intractable any dispute becomes; the stevedore has no way of ending the bargaining process without being subjected to either (or both) industrial action or a claim for orders that require it to return to the table under the “good faith bargaining obligations” in the FW Act.

Unlike the legislative position that existed before 2008, a party cannot simply give notice to terminate an agreement unilaterally once it passed its nominal expiry date, and instead return to the underpinning Award.⁴⁵ Instead, the post 2008 position is that the agreement must either be replaced by a new one or terminated under onerous provisions that require an assessment of the ‘public interest’ and give the Fair Work Commission broad discretion as to the outcome. This shift has significantly altered the bargaining dynamic and is a key source of the increasingly protracted impasses in bargaining across the waterfront.

Often, at the heart of many of these cases before the Fair Work Commission, is a reluctance by the Fair Work Commission to terminate agreements if this is perceived as impacting the bargaining power of employees and their union. In litigation involving Esso’s offshore operations, for example, the Fair Work Commission declined to terminate an agreement which prevented the implementation of changes to rosters because AWU members had - by their union’s unlawful conduct - lost the right to take protected industrial action. The continuation of the status quo was their best remaining leverage.⁴⁶

During any termination application, bargaining and industrial action continues and employees and unions are free to continue to press claims.

⁴⁵ The *Workplace Relations Amendment (Transition to Forward with Fairness) Act 2008* (Forward with Fairness) ensured that collective agreements could no longer be unilaterally terminated following the expiration of the nominal expiry date of an agreement.

⁴⁶ *Esso Australia Pty Ltd v Australian Workers Union* [2019] FWC 6143; upheld on appeal in *Australian Workers Union v Esso Australia Pty Ltd* [2020] FWC 1077.

The practical effect of this has been that enterprise agreements on the waterfront continue to operate in perpetuity and the regime places little pressure on unions to achieve a timely outcome for members. To the contrary, the regime incentivises unions to use bargaining as a ‘war of attrition’ with stevedores to extract new and improved conditions, without any need to trade these off for productivity gains.

Recommendation 2 – The FW Act to reconsider the mechanisms by which an enterprise agreement may be terminated by an Employer to prevent inefficient and unproductive enterprise agreements applying in perpetuity.

Recommendation 3 – The FW Act to provide a timeframe in which the terms of an enterprise agreement will continue to apply before terms and conditions revert to the Award, i.e. an enterprise agreement will continue for 12 months post nominal expiry or from when bargaining commences (whichever is later), if the enterprise agreement is not renegotiated by that timeframe, employees revert to the Award terms, provided that all parties have met their good faith bargaining obligations. The effect of this would be to encourage Unions and Employers to renegotiate enterprise agreements quickly.

5.4 No clarity as to the matters that can be included in enterprise agreements (i.e. “permitted matters”)

The FW Act in section 172(1) sets out the terms that can be included in enterprise agreements, namely:

- matters pertaining to the relationship between an employer that will be covered by the agreement and that employer’s employees who will be covered by the agreement;
- matters pertaining to the relationship between the employer(s), and the employee organisation(s), that will be covered by the agreement;
- deductions from wages for any purpose authorised by employees who will be covered by the agreement; and
- how the agreement will operate.

These matters, and particularly the first (which is by far the most significant) are drawn from a long and storied case-law based on what constituted an “industrial matter” for the purposes of the *Conciliation and Arbitration Act 1904* (Cth).

The intent of the matters in s172 is relatively simple, as noted by the Explanatory Memorandum to the Fair Work Bill 2009 (Cth):⁴⁷

This content rule retains the ‘matters pertaining’ formulation established in case law and ensures that matters that clearly fall within managerial prerogative, that are outside the employer’s control or are unrelated to employment arrangements are not subject to bargaining and industrial action. The continuation of the familiar ‘matters pertaining’ formulation provides certainty to employers as to what matters can be included in enterprise agreements.”

⁴⁷ Explanatory Memorandum to the *Fair Work Bill 2009* (Cth) at regulatory analysis paragraph 145 (page 39).

In practice, however, to know whether a claim is for a “permitted matter”, an employer must review substantial case law and undertake a complex (and costly) legal analysis, which will itself remain uncertain.

For example:

- a claim that is framed subtly differently from others (that have been considered in the past) might nonetheless demand a judicial resolution;
- while it is established that a total prohibition on contracting out is not a “matter pertaining...”, agreed clauses prescribing lengthy procedures *before contracting out occurs*, or requiring consideration of in-house bids, are generally upheld; and
- other live examples present in stevedoring today include inclusion of selection or recruitment processes in an EA, or what ‘safe’ manning levels for work may be or restrictions on automation or changing work practices.

The reliance on this ‘matters pertaining’ language, and dated case law, takes the framework backwards after the clearer approach in the “Work Choices” iteration of the WR Act. That legislation simply specified content which was “prohibited” and could not be included in what was then called a “collective agreement”.

Increasingly, DP World has experienced an increase in the number of proposals from trade unions which would have been considered “prohibited content” under the WR Act.

These proposals relate to matters which are solely for the benefit of the trade union rather than for the benefit of employees, and which restrict business operations or obstruct change. All are matters which negatively impact productivity.

Examples include:

- (a) “*family and friends*” clauses, whereby a certain proportion of new hires must come from a pool of “family and friends” nominated by existing employees or by the union.⁴⁸

These clauses are a relic from the era when it was accepted that unions could operate ‘closed shops’ across an industry. Oddly, from an employer perspective there is nothing in the FW Act that clearly prohibits these clauses.⁴⁹

- (b) as a fall-back from seeking to *prohibit automation* entirely, unions have sought to make it wholly uneconomic by requiring that it be accompanied by no job losses, whilst maintaining strict manning level requirements and limits of allocating new functions to employees with no impact to salary.

The removal of the concept of “prohibited content” in the shift from the WR Act to the FW Act has rendered section 172(1) of the FW Act largely ineffective as it provides no protection to employers.

DP World submits that the FW Act should clearly and exhaustively spell out those matters that be included in an enterprise agreement.

⁴⁸ The Hutchison Ports Australia and MAU Enterprise Agreement 2021 does both – see clause 10.4. Hutchison Ports Australia effectively only gets to choose 30% of its workforce.

⁴⁹ Unless it is not a “permitted matter” because it relates to the relationship between an employer and candidates, rather than employees. The point does not seem to have been taken when the Fair Work Commission approved the Hutchison agreement.

Finally, there is a practice that has developed by which unions demand that relevant obligations (that are otherwise outside of permitted matters) are recorded in a binding deed, as between the union and stevedore. This is another means by which they endeavour to circumvent the limited protections of the legislative framework.

Recommendation 4 – A clear criterion should be introduced into the FW Act specifying those matters that may be dealt with in enterprise agreements, and which is not reliant on the vague terminology of “matters pertaining...”, as well as a list of matters which may not be included.

DP World submits that any list of matters to be excluded from enterprise agreements should include terms that:

- impose restrictions on outsourcing or the engagement of independent contractors;
- restrict the engagement of labour hire workers, and requirements relating to the conditions of their engagement, imposed on an entity or person for whom the labour hire worker performs work under a contract with a labour hire agency;
- require the provision of information about employees bound by the agreement to a trade union, or a member acting in a representative capacity, officer, or employee of a trade union, unless provision of that information is required or authorised by law;
- relate to right of entry (whilst there are current FW Act provisions that make unlawful any right of entry terms that cut across statutory terms, enterprise agreements can nonetheless confer rights of entry where the FW Act is silent); and
- give rights to trade union to participate in, or represent an employer or employee bound by the agreement in all matters pertaining to the employment relationship as a representative.

Recommendation 5 – Amend section 228 of the FW Act to clarify that parties are obliged to limit their claims to matters that can be included in an enterprise agreement, and that counterparties are not required to engage with these.

Recommendation 6 – Amend the FW Act to insert a civil penalty provision that prohibits the seeking or agreement of any claim that is not otherwise permitted under the FW Act, in any form of instrument, including a deed, memorandum of understanding or informal arrangement.

5.5 The protected industrial action framework is not working

[REDACTED]

The stevedoring workforce is highly unionised, with estimated 95% membership across most terminals). The MUA remains the dominant union representing stevedoring employees. Noting the high degree of control exercised in the workplace by the MUA, threats and the taking of industrial action are commonplace. Where action is organised by the union it is exceedingly rare that employees elect not to participate in the action.

Protected action ballots are secret ballots under the FW Act that permit employees to vote on whether they wish to undertake protected industrial action.

While under section 443 of the FW Act the Fair Work Commission is to consider whether parties are genuinely trying to reach agreement, before granting a PABO, this has come to operate as a mere procedural step. In practice, an applicant (typically a union) only needs to demonstrate that negotiations have commenced and that it wants to make an enterprise agreement. The applicant does not have to show that they are bargaining in good faith, that an impasse has been reached or that recourse to industrial action is reasonably necessary or desirable to help achieve agreement.

While obtaining a PABO has become straightforward, the consequence of it being put in place are significant. A PABO makes it substantially easier for unions to engage in industrial action. Once granted, the Fair Work Commission no longer makes any enquiries as to whether:

- the parties are continuing to try and reach agreement;
- the parties are continuing to meet their good faith bargaining obligations; and
- whether the industrial action taken is assisting in the facilitation of the negotiations.

By allowing unions to apply for and be granted PABOs early in the bargaining process, the legislation removes any real incentive for representatives to engage and commit to genuine and good faith to negotiations to resolve bargaining without resorting to industrial action (or minimising the need for it).

Moreover, the focus of some recent PABOs appear to be less about targeting the commercial operations of DP World as a stevedore and have been targeted at broader social or macro-economic issues. Some common forms of industrial action during the 2018-2022 bargaining round targeted third parties (either other stevedores that sub-contracted vessels, specific shipping lines or others). The kind of action taken against these third parties included:

- refusal to conduct work on vessels that were subcontracted to or outsourced by another stevedoring company for an indefinite period;
- refusal to work on particular ships or shipping lines as nominated by the CFMMEU;
- bans on the performance of work on vessels delivering particular cargo; and
- bans on the performance of work on any vessel that has been at sea for less than 14 days to 21 days since leaving its last port.

Effectively, unions have sought to use industrial action to dictate which vessels will be stevedored in Australia.

At one point during 2020, at the height of COVID, the MUA had PABOs in place that provided them with the ability through protected industrial action to ban individual vessels and prevent them being subcontracted at 10 of Australia's 12 container terminals, including all terminals in Sydney, Brisbane and Fremantle.⁵⁰ The MUA had the capacity to engage in secondary boycotts against shipping lines and those dependent on them, given the statutory immunity granted to it for protected industrial action.

⁵⁰ The only terminals where the MUA did not have a PABO permitting this were VICT (Melbourne only), and Flinders Adelaide Container Terminal, the only terminal in Adelaide.

Our experience is that the PABO framework – both in its form and its current application by the Fair Work Commission – is not fit for purpose. The kind of practical difficulties commonly experienced include:

- duplication and overlap between multiple PABOs (i.e. the same industrial action is proposed more than once across the four terminals). Errors are commonplace.
- a lack of clarity in ballot wording means that there is often complex litigation seeking to have the Fair Work Commission determine how any stoppage, ban or limitation under a PABO is to be applied in a workplace;
- PABOs were used to support industrial action that explicitly targeted named ships and customers – rather than generally seeking to support negotiated outcomes with DP World in relation to an enterprise agreement; and
- at times, there was little proportionality between the bans, limitations and stoppages and the claims being advanced by the MUA. For example:
 - DP World’s entire operations became the subject of a 24-hour stoppage, over a dispute as to whether a union official should receive a standing invite to a local employee representative committee meeting.
 - at one terminal, a 96 hour stoppage was notified and commenced, despite the fact that key terms including wage increases had already been agreed.

Recommendation 7 – Section 443 of the FW Act should be amended to require the Commission to recognise the grant of a PABO as a last resort, to be granted only after sufficient steps have been taken by the parties to seek to reach agreement without recourse to industrial action.

In considering the adequacy of steps taken, the Commission should have regard to:

- the extent to which each applicant has clearly communicated its claims in relation to the agreement;
- whether each applicant has provided a considered response to proposals made by the employer and has demonstrated a genuine and bona fide attempt to seek to reach agreement; and
- the extent to which bargaining for the agreement has already progressed.

Recommendation 8 – A PABO should not operate indefinitely. The FW Act should be amended to require the bargaining representatives to report back on whether good faith bargaining obligations continue to be met and if the parties are legitimately progressing negotiations. Where this is not occurring, the Commission should have powers to cancel a Protected Action Ballot Order.

Recommendation 9 – The Commission should be required to be satisfied, at the time that a Protected Ballot Action is granted, that the proposed action is proportionate, not unlawful (absent the statutory immunity), and is not likely to cause material economic harm to the national economy or a material part of it (including a significant market).

5.6 Other problems with the industrial action framework

As well as structural issues with the approval and operation of PABOs, DP World notes that significant issues arise as a result of:

- the inadequacy of the FW Act to quickly address industrial action that is unlawful or not protected (i.e. not approved under a PABO); and
- the 'gaming' of notice periods by unions to maximise the impact of industrial action on stevedores and their customers.

Each is briefly addressed below.

(a) Unlawful industrial action

[REDACTED]

[REDACTED]

One of these occurred at the Swanson Terminal in Melbourne and involved a 'go slow' which was not approved under a PABO. DP World successfully obtained an order from the Fair Work Commission for the conduct to terminate – but this was ignored by the MUA. DP World ultimately had to take the additional step of obtaining an interim injunction in the Federal Court before the conduct ceased.

The experience highlights that, even where the Fair Work Commission made orders under section 418 of the FW Act restraining conduct, and those orders are not followed, the Fair Work Commission then has little effective power to act.

Recommendation 10 – Amend the FW Act to include a provision that suspends the right of employees to take protected industrial while an order under section 418 of the FW Act is in operation.

(b) Problems with inadequate notice in use of protected industrial action

As noted elsewhere in this submission, industrial action has a significant and 'cascading' effect on the supply chain. Wherever possible, stevedores try to mitigate the direct impact on the supply chain by taking steps such as sub-contracting vessels to be worked by other stevedores, if industrial action is otherwise preventing stevedoring.

However, subcontracting by a stevedore typically requires:

- at least 6-7 days' notice, which is greater than the default of 3 clear working days prescribed in the FW Act;⁵¹ and
- a second operator with available berths at the relevant time and that is prepared to take the sub-contract knowing that it is occurring during to the impacts of industrial action (risking its own employees being treated as 'scabs' by the MUA).

Where work cannot be subcontracted, delays can generally only be ameliorated by shipping lines by steaming faster (i.e. increasing the transit speed of the vessel to get to the next port faster), reduction in container exchanges, port omissions and occasionally vessel service cancellations. All of these alternatives come at a cost to (e.g. increased

⁵¹ In 2019, DP World sought a longer period of five working days - i.e. a calendar week, as these must be clear days - which the Fair Work Commission granted to allow sufficient time for subcontracts to be arranged. In response, the MUA not only unsuccessfully appealed but then took its case to the Full Federal Court of Australia in an attempt to deprive DP World of the additional notice: *Construction, Forestry, Maritime, Mining and Energy Union v DP World Sydney Ltd* [2019] FCAFC 99.

demurrage, fuel costs and bunker costs) and, potentially, by eroding the reliability of sea freight within the Australian supply chain, especially if it involves the cancellation of services or port omissions.

Recommendation 11 – Amend the FW Act to require a minimum of 7 working days' notice to be given to an essential services employer for the purposes of section 414(2)(a) of the FW Act.

In other cases, unions notify protected action but then subsequently withdraw it at the last minute, in a manner designed to damage stevedores – particularly where the stevedore has taken steps to alter shipping schedules, sub-contract work to other ports or make other arrangements to ensure continuity of operations. The costs associated with preparing contingency plans are significant and may not be recoverable in the event that threatened protected industrial action does not proceed.

The tactic of notifying and withdrawing industrial action notices in this way is not a form of industrial action and so stevedores have no recourse to remedies under the FW Act.

Recommendation 12 – Amend section 414 of the FW Act to make it clear that bargaining representatives must only give bona fide notice of industrial action, of a kind which they genuinely intend to take.

Recommendation 13 – Amend section 524 of the FW Act to allow an employer to stand down employees where contingency plans have been implemented and bargaining representatives notify industrial action which they withdraw from without at least 24 hours' notice.

6 Port infrastructure and related landlord costs and issues

Key points:

Port owners have market power

- DP World generally supports privatisation of port infrastructure where there is scope for this to deliver productivity gains and improved supply chain efficiency.
- However, with privatisation comes a greater risk that monopoly power will be exercised to the detriment of economic efficiency. Regulation needs to be able to address the exercise of market power by port landlords, as and when it occurs.
- DP World's experience is that, while all port landlords hold a significant degree of market power, the extent to which it is routinely exercised varies between Australian ports – meaning that regulation needs to be appropriately targeted.

Exercise of market power in relation to port rents

- The most significant and blatant use of market power within the Australian privatised port context has been at the PoM. In 2020, the ESC found that the owners of the PoM routinely exercised market power in setting and reviewing rents. More recently, in its 2021 Monitoring Report, the ACCC made similar observations regarding lease increases in Melbourne relative to other Australian ports.
- This has been consistent with DP World's experience, which is that its Melbourne lease is not consistent with commercial standards and ties it to excessive rent under a 'one way ratchet' mechanism, while fully exposed to any reduction in demand (either due to global demand or an increase in capacity at the port).
- The response of the Victorian Government to this market failure – which was to introduce a voluntary tenancy code of conduct – does not adequately address the non-commercial terms and higher cost base of port tenants in Melbourne.
- DP World has not witnessed an exercise of market power at either Brisbane or Port Botany.

Lack of minimum standards for port capital planning and investment

- Port landlords occupy a critical position in the containerised freight supply chain. The decisions that port landlords make around expansion or augmentation of capacity define the "envelope" within which the supply chain operates and therefore where, and to what extent, other stakeholders invest.
- However, like other monopolies, port owners can have commercial incentives to over-dimension their container terminal capacity or to develop capacity prematurely. This reflects that such capital investment is typically recovered by port owners through regulatory arrangements that reward capital investment (over operational or other efficiency), insulate the port owner from demand risk and permit port owners to increase unregulated terminal rents.
- Infrastructure Australia released its *National Ports Strategy (NPS)* in 2011. While each major port has subsequently published a Port Development Strategy under this framework, in the case of the Port of Melbourne it has proven high level and unreliable.
- Stevedore investment involves DP World putting at risk substantial and long-term capital. Such investment demands that ports engage with stakeholders on their plans and

demand modelling to ensure confidence in, and long term visibility of, a stable and appropriately staged development program.

- DP World submits that recent experience at the PoM highlights a need for a more considered approach to integrated port planning.

6.1 Background

Since 2010, all of the major east coast container ports have been privatised, starting with Port of Brisbane in 2010, followed by Port Botany in 2013 and PoM in 2016. This has brought about significant changes in the dynamics of Australian container supply chains.

DP World generally supports privatisation of port infrastructure. It recognises that privatisation can deliver productivity gains and efficiency dividends across the supply chain.

However, privatisation shifts the economic incentives governing port ownership to favour the private, profit-maximising benefit of owners. Given the monopoly characteristics of major container ports, there are two areas in which these incentives can impact upon supply chain productivity and increase costs:

- the strong incentive to exercise market power in relation to unregulated revenue – most notably land rents; and
- the timing and extent of development and expansion of port capacity.

DP World's experience is that, while all port landlords hold a significant degree of market power, not all of them are exercising it to the detriment of customers or the supply chain.

As will be discussed below, there is evidence that PoM stands out as the privatised port that has most clearly exercised market power with the effect of increasing supply chain costs since privatisation in 2016, undermining investment certainty for stevedores and distorting competitive dynamics. DP World have not observed the landlords at either Port Botany or Brisbane, behaving in the same manner.

Any regulatory response therefore needs to be capable of being targeted to the circumstances and actions of individual ports and owners.

6.2 Exercise of market power by PoM in setting and reviewing rents

The clearest and most recent example of a port landlord exercising market power to the detriment of economic efficiency is the PoM's approach to setting and reviewing rents. While various services are 'prescribed' at the PoM and can have their tariffs directly regulated under the *Port Management Act 1995* (Vic) (**PMA**), the leasing of land by PoM is unregulated.

However, the regime does provide for a periodic review by the ESC of PoM's processes for setting and reviewing market rents every five years. In August 2020, the ESC completed its first "market rent inquiry" since privatisation.

The ESC found that:⁵²

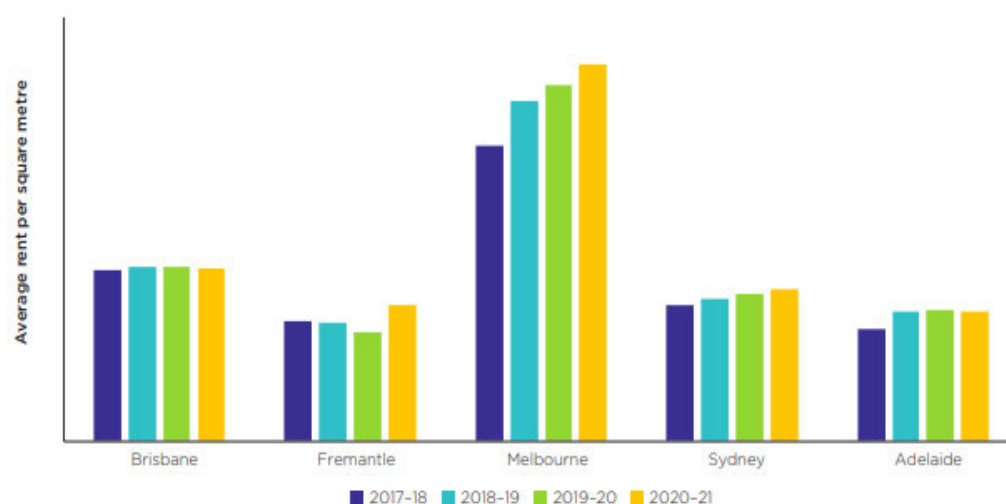
⁵² ESC, *Port of Melbourne – Market Rent Inquiry 2020: Public Report*, 14 August 2020. Accessible online at <https://www.esc.vic.gov.au/sites/default/files/documents/port-of-melbourne-market-rent-inquiry-public-report-20200820.pdf>.

- 1 PoM has power in setting and reviewing rents, and this power is largely unconstrained.
- 2 PoM is exercising market power in the process of setting and reviewing rents. Some specific concerns raised by the ESC in relation to PoM's conduct included:
 - (a) introduction of 'management fees', which do not appear to be linked to PoM's costs;
 - (b) sequencing of negotiations by PoM to its advantage;
 - (c) use of one-way ratchet clauses; and
 - (d) 'recycling monopoly outcomes' – by using rent outcomes reflecting its market power as 'benchmarks' for future negotiations.
- 3 PoM's exercise of its power has caused material detriment. Tenants are incurring inefficient rental costs and higher transaction costs, evidenced by examples of deferred investment, and uncertainty impacting tenants' ability to lock in new customer contracts. These impacts have flowed through to consumers.
- 4 Remedial action is required to mitigate the PoM's ability to exercise its power and impacts. The ESC recommendations included an enhanced, independently oversighted negotiate-mediate-arbitrate framework.

None of these findings were a surprise to DP World or any other tenants that have been forced to negotiate with PoM and its owners over the last six years.

The ESC's findings have subsequently been reinforced by ACCC analysis of land and terminal rents across the five major container ports (Figure 22 below). The ACCC has shown the extent to which PoM rents are significantly higher (per square metre), and have risen more sharply, than at any other Australian port.

Figure 22: Average rent per square metre, 2017-18 to 2020-21⁵³



Source: ACCC analysis of information received from stevedores as part of the monitoring regime.

Note: The vertical axis of the chart is intentionally left blank to maintain confidentiality.

⁵³ ACCC, *Container Stevedoring Monitoring Report 2020-21*, October 2021, p 43 (figure 4.7).

The ESC's recommendation was for some form of negotiate / arbitrate model covering new lease negotiations and rent reviews under existing leases. The ESC seemed to envisage legislative changes to give effect to its recommendations, including to give the ESC oversight powers under the new framework.

However, the State Government did not embrace the ESC's recommendation for legislative change to implement a negotiate / arbitrate model. Instead, (through Treasury) the Government has required PoM to implement a voluntary "Tenancy Customer Charter" designed to provide additional dispute rights to current and prospective tenants. In November 2021, Treasury and Ports (jointly) released a final Tenancy Customer Charter.

While the purpose of the Charter is unobjectionable – to make sure that PoM rents are (and remain) reasonable and reflect market rates – it does not include effective mechanisms to achieve this. It does not include mechanisms to address all of the concerns raised in the ESC review.

One of the major flaws in the design of the Charter is that it only applies to post-privatisation leases – meaning that the two largest tenants who hold pre-privatisation leases (VICT and DP World) will not have access to it. This limitation was introduced only in the final version of the Charter, so was not consulted upon. DP World considers that there is no good public policy basis for this limitation - to the extent that prior leases include terms that are off-market or unreasonable, these also need to be revisited. As a consequence of this limitation, the Charter creates an uneven playing field – with only one of the three stevedores having access to the dispute process.

In short, the problem of PoM exercising its market power in setting and reviewing rents (and more generally in its negotiation with tenants) has not yet been appropriately addressed. A more complete regulatory solution is required.

6.3 Capital planning processes

Port landlords occupy a critical position in the containerised freight supply chain. The decisions that port landlords make around expansion or augmentation of capacity defines the "envelope" within which the supply chain operates and therefore where, and to what extent, other stakeholders invest.

For example, stevedores often need to make long-term investment decisions in terminal leases and fixed plant and equipment (e.g. quay cranes) based on expectations of:

- when and where port landlords will make capacity available (including overall port capacity and capacity at individual terminals); and
- what complementary infrastructure (e.g. rail interfaces) will be made available.

In order to promote efficient investment decisions across the supply chain, port landlords need to undertake transparent and rigorous long-term capital planning. Decisions to expand or reconfigure port capacity need to be subject to effective consultation and based on rigorous cost-benefit analysis. These decisions also need to be made well in advance of implementation, to allow all port stakeholders to factor them in to their own investment decisions.

Over the past decade, there has been growing recognition of the need for a considered, long term approach to port capital planning:

- in 2011, Infrastructure Australia released its *National Ports Strategy (NPS)*. The NPS recognised the need to improve long-term master planning for ports and drive greater supply chain efficiencies and was intended to "encourage and share best

practice". The NPS includes "best practice guidelines" for master planning and port governance, to be used as a reference tool for the delivery of the NPS objectives. However, the NPS itself has no real "teeth" – it is not binding and appears to have had little practical impact on port planning.

- in 2013, Ports Australia released a best practice guide for port master planning, titled *Leading Practice: Port Master Planning*. This provided some suggestions for the content of port master plans but, again, did not set out any mandatory requirements.
- in some jurisdictions, notably Victoria, planning obligations have been imposed on port landlords. Under the PMA, port authorities in Victoria are required to prepare a Port Development Strategy every five years. Ministerial Guidelines issued under the PMA set out expectations around the content of Port Development Strategies, consultation and publication.

Despite this growing recognition of the importance of consistent and comprehensive port planning, the reforms that have been introduced to date have failed to achieve their objectives.

Again, DP World's recent experience at the PoM (discussed below) highlights the value of a rigorous and transparent approach to long-term capital planning for container ports.

6.4 Incentive for port landlords to over-dimension capacity

Port owners have a commercial incentive to accelerate the expansion of ports by investing in additional terminal capacity.

This is for several reasons:

- first, the capital cost of expansions can often be recovered as part of a port's regulated asset base.
- second, port rents are one of the few forms of revenue that are unregulated, and so development of a new terminal (or expanding the leasable area of an existing terminal) can provide an attractive growth option for a port owner.
- third, port tenants take virtually all demand risk so there is little downside commercial risk for a port owner associated where forecast container volumes do not eventuate.
- fourth, in most major container terminals, the existing stevedores hold long term leases (20-30 years). In some cases, such as Melbourne, this also involves a 'one way ratchet' so that where the value of DP World's terminal falls due to the introduction of substantial additional capacity, this has no adverse effect on the port owner's rental income.

In some ports, such as Botany, the terms of DP World's lease has constrained these commercial incentives and, together with a constructive management approach, have led to a good engagement around capital planning and development.

However, in the Port of Melbourne, where all of the factors above are in play, the commercial incentives have led to extremely poor engagement and a misleading port strategy. As noted below, this has been reflected in an accelerated expansion of container capacity – well ahead of any reasonable forecast demand – and justified on spurious grounds.

In the case of PoM, rapid and early expansion of container capacity is no longer sought to be justified on the basis of demand or increased container volumes, but on the basis of unsafe assumptions about the arrival of ‘big vessels’ and commercial commitments made to an individual stevedore. The danger associated with ports building capacity to cater for assumptions about vessel size, instead of robust container volume forecasts, is addressed at section 3 of this submission.

The risk of economic harm arising from prematurely investing in port capacity has been noted by Infrastructure Victoria, among others, which stated in its recommendations to the Victorian Government regarding the development and expansion of Webb Dock at the PoM:⁵⁴

When undertaking future port and freight infrastructure planning the Victorian Government should, in consultation with the Port of Melbourne Lessee, take into consideration the following key factors that will influence capacity:

- (a) Increasing capacity at Webb Dock to accept ships larger than around 7,500 TEU could make it difficult for Swanson Dock’s capacity to be fully utilised due to its vessel size restrictions. This may prematurely compromise the viability of Swanson Dock, unnecessarily bringing forward the need to invest in additional capacity. This can be managed through deliberate staging of infrastructure investments at Webb Dock as well as upgrades to navigation infrastructure (channels and swing basins) and changes to regulation of navigation. (Emphasis added)*

DP World submits that the commercial risks, and adverse impacts, of over-dimensioning of port capacity are real – as the difficulties experienced by Hutchison in Brisbane and Sydney over the last decade demonstrate.

However, the most immediate, costly and therefore urgent risk in relation to poor capital planning involves the Port of Melbourne and so DP World has set out its experience in relation to that issue in **Schedule 5**.

The situation at PoM is precisely the economic concern identified by Infrastructure Victoria above. PoM has embarked on a major and rapid expansion of capacity at Webb Dock, without adequately staging that development to avoid stranding substantial existing (and under-utilised) capacity elsewhere in the port.

The situation unfolding at the Port of Melbourne can be traced back to a clear failure of PoM’s capital planning process. For reasons set out in Schedule 5, DP World submit that PoM’s capital planning processes fall well short of best practice.

In particular:

- 1 PoM did not provide a meaningful cost-benefit rationalisation for its expansion projects, nor has it stated price and service outcomes upon which it evaluates prudence of investments.
- 2 PoM has not provided evidence that its internal investment planning and asset management governance structures ensure prudent investment, nor has it demonstrated that its internal governance structures ensure its capital expenditure forecasts reflect efficient costs.

⁵⁴ Infrastructure Victoria, *Advice on securing Victoria’s ports capacity*, April 2019, p 107. Accessible online at <https://www.infrastructurevictoria.com.au/wp-content/uploads/2019/04/Securing_Victorias_Ports_Capacity_WEB-1.pdf>.

- 3 PoM has not undertaken comparative benchmarking to demonstrate that its capital expenditure project selection is prudent, nor that its capital expenditure forecasts reflect efficient costs.
- 4 PoM has not provided evidence of the robustness of its input methodologies or forecasts necessary to establish the prudence of its capital expenditure projects.
- 5 PoM has not provided detailed cost breakdowns or rationalisations for the cost of constituent elements contributing to its forecast capital expenditure.

6.5 The need for rigorous capital planning processes

Regulators and policy makers have grappled with the risk of gold plating and over-dimensioning in other infrastructure sectors over the past two decades and solutions have included:

- requirements for rigorous cost-benefit tests to be applied prior to embarking on major capital expenditure projects (e.g. the 'regulatory investment test' that needs to be applied by electricity network businesses – which requires both a clear articulation of the 'identified need', as well as transparent testing of potential solutions to that identified need⁵⁵);
- scope for regulators to issue guidelines for the conduct of cost-benefit assessment (e.g. the regulatory investment test guidelines issued by the Australian Energy Regulator);
- processes for stakeholders to challenge the findings of a cost-benefit assessment;⁵⁶
- requirements to submit capital expenditure forecasts for regulatory review and approval before they can be rolled into the regulatory asset base⁵⁷; and
- scope for the regulator to remove inefficient capital expenditure from the regulatory asset base.

The need for, and design of, such mechanisms should be targeted and calibrated to the port. In ports where engagement levels are strong and capital planning is efficient and sensible, then little more is likely to be needed. At other ports, such as the Port of Melbourne, experience has demonstrated that more direct regulatory intervention is required.

In its first review of compliance with the Victorian pricing order put in place at the time of privatisation, the ESC found that the degree and nature of PoM's non-compliance demonstrated a systemic failure of the port regulatory framework. The ESC concluded (emphasis added):⁵⁸

*When we look at the cumulative nature of the Port's non-compliance, our view is that this amounts to both significant and sustained non-compliance in this review period. That is, we consider that it does not promote the efficient use of, and investment in, the provision of prescribed services for the long-term interests of port users and Victorian consumers. Our view is that the non-compliance is not transitory and has significant (future) financial impact. **The continuation of the***

⁵⁵ National Electricity Rules, cl 5.16 and 5.17.

⁵⁶ National Electricity Rules, cl 5.16B and 5.17.5.

⁵⁷ See e.g., National Electricity Rules, cl 6.5.7 and 6A.6.7.

⁵⁸ ESC, *Inquiry Into Port of Melbourne Compliance with the Pricing Order 2021 - Public Report*, 31 December 2021, p iii.

non-compliance may instil a lack of credibility with port users about the commitment to meeting the objectives of the Port Management Act 1995 (Vic).

Our observation is that the existing incentives within the regulatory framework of the Port Management Act 1995 (Vic) are not working, and that this has contributed to a finding of significant and sustained non-compliance with the pricing order.

Ports are, ultimately, an economic hub around which a tightly integrated logistics supply chain operates. It is critical that stakeholders can trust port owners and their development planning as acting in the best interests of the entire supply chain.

In DP World's experience at Brisbane and Port Botany, this has mostly worked well.

However, a lack of certainty and confidence around port development in Melbourne is increasing the sense of risk that DP World and others face when considering long-term investment.

6.6 Conclusion and recommendations

Investment by stevedores and others in port infrastructure involves substantial and long-term capital investment. Such investment demands that stevedores and others work with ports on their capital plans and demand modelling to ensure confidence in, and long-term visibility of, a stable port development program.

DP World considers that investment by stakeholders in the supply chain requires a more considered approach to long-term capacity planning.

7 Supply chain costs – blue water costs and landside charges

Key points:

Understanding the seaborne logistics cost stack

- The total seaborne freight cost stack is dominated by blue water charges, [REDACTED] Other supply chain functions, such as stevedoring or transport, comprise a much smaller amount [REDACTED]
- The more significant economic impact of failures in the logistics supply chain arises from delays to freight. Delays and unreliability have both direct impacts (through lost, spoiled and damaged goods) and indirect costs imposed on a supply chain that must incur said costs to mitigate and respond to unreliability.
- DP World contends that any policy recommendations will achieve the most tangible benefit by focusing on the following three areas:
 - reform of policy or legal arrangements, such as the Australian industrial relationship framework, that materially and adversely impact on the timeliness and reliability of the seaborne logistics supply chain - as discussed at section 5;
 - poor and inconsistent capital and port planning arrangements that undermine investment confidence throughout the supply chain – as discussed at section 6; and
 - to the extent that there is a focus on costs, particular weight should be given to policy settings that might assist to reduce cases where excessive monopoly pricing by port owners is identified (e.g. Melbourne port rents) and blue water freight rates (which represent the bulk of total international seaborne containerised transport costs) through reform of Part X of the CCA – as discussed in this section.
- DP World acknowledges that the issue of landside charges has been the subject to repeated focus by the ACCC, transport lobby groups and state government bodies and so this topic is addressed, to assist the Commission, in section 7.3 below.

Blue water rates and Part X

- As noted in section 7.1, given that the seaborne freight cost stack is dominated by blue water costs, it is appropriate to focus on policy issues that address these costs. Shipping lines continue to be unfairly aided by Part X of the CCA despite their size and the concentration of the modern shipping industry.
- DP World considers that Part X unfairly exacerbates the imbalance in bargaining power between shipping lines and stevedores. DP World therefore supports proposals that have been made to repeal Part X.

Landside charges

- In recent years, the combination of substantial capital investment, rising terminal rents and other costs (e.g. labour and energy) and substantial over-capacity at each of the three major container ports, have combined to place substantial pressure on stevedore costs and revenues.
- Historically, stevedores have recovered most of their costs through charges levied on shipping lines, with very limited cost recovery from access charges imposed on land

transport providers. However, since 2017, DP World (and other stevedores) have sought to recover an increased share of revenues from landside charges.

- The charges levied by stevedores themselves are fully transparent and are governed by state frameworks in NSW and Victoria that require DP World and other stevedores to publish any changes on an annual basis in advance of being introduced (and to be provided to Ports Victoria and Transport for NSW at least 60-days in advance).
- Stevedore charges are also monitored each year by the ACCC and form part of the detailed statistical Waterline Reports, which are published bi-annually by BITRE and which set out, amongst other things, the average port charges at each of Australia's major ports, including stevedoring charges.
- Put simply, despite operating in a highly competitive market, facing tight margins and over-capacity and being subject to strong bargaining power held by shipping lines, privatised port operators and shippers – stevedore charges appear to be a near-obsession for policy makers and are some of the most scrutinised and reviewed of any market.
- To the extent that price transparency is a problem to be solved, DP World submits that it may be more appropriate to consider how shipping lines and carriers itemise and account for these charges when passing them through to shippers and BFOs. For example, DP World is aware that, historically, carriers have added 'administrative charges' or other surcharges in addition to the landside charges levied by stevedores.

7.1 Placing stevedore costs within the total cost stack for international container freight

Ultimately, all international freight supply chain costs are borne by the shipper/BFO or exporter. In some cases, this may involve a direct contractual relationship, and at other times, such charges are typically passed through to shippers.

The components of the cost of transporting a shipping container may include:

- the 'blue water' freight costs charged by shipping lines;
- road and/or rail transport costs charged by land transport operators to and from the shipper or end customer at the ports of origin and destination;
- stevedoring costs charged by stevedores (again at both the origin and destination ports);
- any port service charges charged by port operators;
- customs and other fees charged by government authorities; and
- fees applicable for returning (i.e. 'de-hiring') and handling empty containers by empty container parks, transport carriers and/or shipping lines.

DP World has engaged Deloitte to conduct an Import/Export Supply Chain Cost Analysis (**Deloitte IMEX Report**) to analyse the relative proportions of each component in the cost of transporting a shipping container. A copy of the Deloitte IMEX Report is at **Schedule 3**.

Deloitte's analysis demonstrates that blue water costs are, by far, the most significant component of total freight costs. [REDACTED]

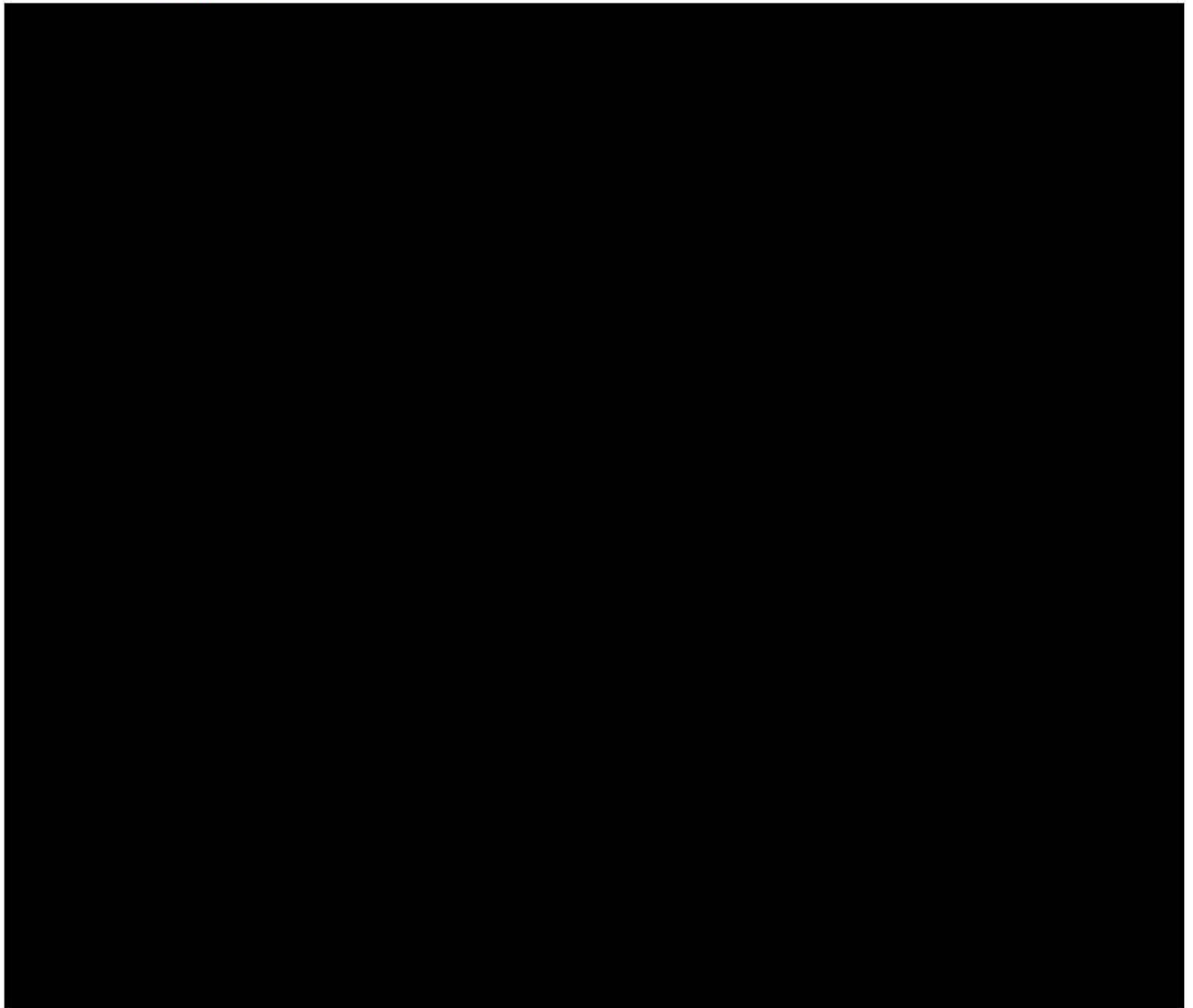
[REDACTED]

After this, road or rail transport costs are next largest component, [REDACTED]

[REDACTED]

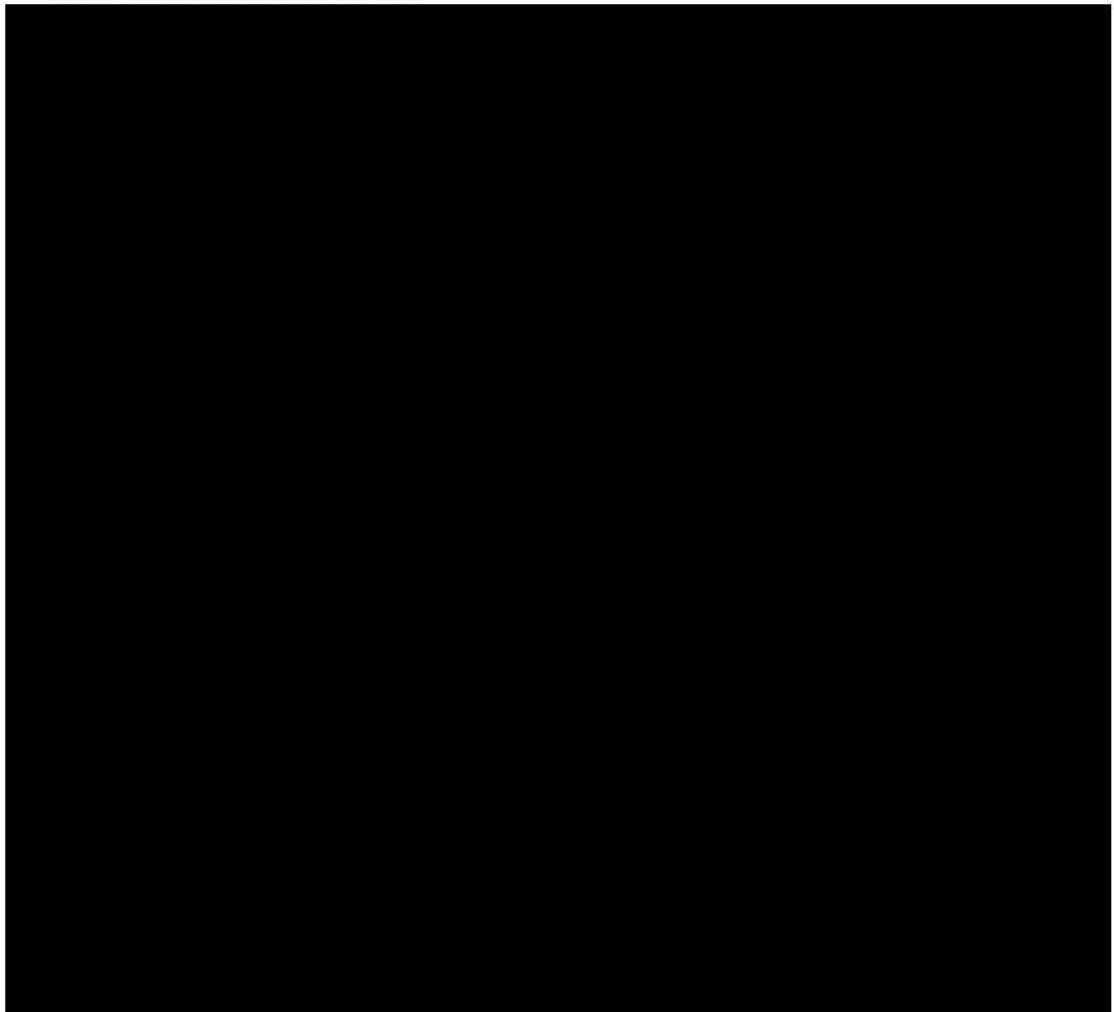
A full breakdown of import costs from Shanghai to each of Brisbane, Sydney and Melbourne is set out at Figure 23 below. A similar breakdown of export container costs, in Figure 24, illustrates that stevedore tariffs comprise an even smaller component of total export costs.

Figure 23: Breakdown of nominal total supply chain cost components, 2021 (import)



As well as total freight costs, Deloitte also analysed stevedore costs as a proportion of the overall value of containerised goods being imported, as shown in Figure 25.

Figure 25: Comparison of stevedore contributions to market value of import goods (East Coast average, \$2021)



Again, as this analysis illustrates, the contribution of average stevedoring costs to the total value of containerised goods is very low or negligible, [REDACTED]

- I [REDACTED]
 - I [REDACTED]
 - I [REDACTED]
- [REDACTED]

It follows from this that while focusing on port costs will have some effect, there is a limit to how much any reform can achieve in terms of outcomes for shippers or consumers.

The more significant economic costs associated with failures in the logistics supply chain arise from the impact on the economy (both direct and indirect) of delays to freight. This has both direct impacts, through lost, ruined and damaged goods, and the indirect costs incurred by a supply chain to mitigate and respond to unreliability in logistics.

7.2 The outdated protections afforded to shipping lines under Part X of the CCA should be removed

As noted in section 7.1, given that the seaborne freight cost stack is dominated by blue water costs, it is appropriate to focus on policy issues that address these costs.

As discussed in section 7.1 above, developments such as the consolidation of shipping lines and the use of larger ships have increased the bargaining power of shipping lines relative to other participants in the supply chain. This has given shipping lines increased power over the tariffs that stevedores can charge and other contractual terms.

Shipping lines continue to be unfairly aided by Part X of the CCA despite their size and the concentration of the modern shipping industry. DP World considers that Part X unfairly exacerbates the imbalance in bargaining power between shipping lines and stevedores. DP World therefore supports proposals that have been made to repeal Part X.

Part X of the CCA provides exemption from parts of the competition law for agreements entered into by shipping lines relating to cargo transported to and from Australia. Part X provides for registration of conference agreements that include provisions that would otherwise constitute price fixing, market sharing and other anti-competitive conduct under the CCA, including:

- fixing or regulation of rates;
- pooling of earnings, losses or traffic;
- restrictions on the quantity of kind of cargo that will be carried under the agreement; and
- restrictions on new lines coming into the agreement.

The effect of Part X is to permit price fixing and other coordination between shipping lines that would be against the law for any other type of business in Australia. This is subject to registration of any agreements with the Registrar of Liner Shipping and following limited negotiations with the Australian Peak Shippers Association (**APSA**). While the APSA is provided with copies of conference agreements as part of the negotiation and registration process, other industry participants such as stevedores are not notified of the existence or terms of agreements. Stevedores are also not notified of any new conference agreements. Part X provides shipping lines with a privileged negotiating position and an unfair advantage over other participants in the marine logistics supply chain. The administration of conference arrangements under Part X is also highly unsatisfactory because it fundamentally lacks transparency.

Part X was originally implemented to ensure Australia's ability to maintain efficient and adequate liner shipping services to and from the country at reasonable freight rates. As noted by in the Competition Policy Review (the **Harper Review**):

The historical argument for exempting liner shipping from competition law is that, without collaborative conduct among operators, the market would not deliver an efficient supply of liner cargo shipping services to Australia. The industry is characterised by lumpy investment, high fixed costs and low marginal costs. The premise underlying Part X is that, without co-operation among shipping companies,

*prices and service levels would be excessively volatile, owing to cycles of entry and exit creating periods of excess and under capacity.*⁵⁹

Recent reviews, including those conducted by the Productivity Commission and the Harper Review have recommended that Part X be repealed.⁶⁰ The Harper Review recommended that Part X be replaced with a 'class exemption' authorisation mechanism to be overseen by the ACCC. Class exemptions are issued by the ACCC to specify that one or more provision of Part IV of the CCA (dealing with anti-competitive conduct) do not apply to specified conduct. In effect, class exemptions provide safe harbour to businesses and removes the administrative need for businesses to lodge authorisation applications or notifications with the ACCC. The Harper Review also recommended that shipping agreements not covered by the class exemption mechanism should be subject to individual authorisation by the ACCC.

The Harper Review recommendations on Part X were justified on the grounds that no other industry enjoys legislative exemption from Australia's competition laws and that if shipping lines wish to make agreements that would otherwise contravene competition law, they should be required to seek approval from the ACCC.

The ACCC issued a discussion paper in December 2019 proposing to establish a new class exemption that would apply to all relevant conference agreements, overseen by the ACCC. The ACCC sought feedback on how this class exemption should operate, including what conduct should be protected and whether it should only apply to protect agreements entered into by smaller shipping lines. The process around an exemption was held up in a Senate Committee and there has been limited public progress since.

DP World supports the proposal to repeal Part X of the CCA and supports the introduction of an appropriately framed class exemption to be administered by the ACCC. Modern shipping lines are large, sophisticated and operate large fleets of vessels. As a result, cooperation between shipping lines is no longer necessary to ensure that Australia has access to efficient and frequent liner services. Where coordination between shipping lines will deliver pro-competitive benefits, shipping lines should be required to apply for authorisation from the ACCC or conform with an appropriately tailored class exemption. There is no longer any cogent justification for exempting shipping lines from the normal operation of Australian competition law, including because no other comparable industries receive similar protections.

Recommendation 14 – Repeal Part X of the CCA and replace it with a fit-for-purpose class exemption for collective bargaining that is restricted to smaller shipping lines, transparent, includes stevedores and is subject to proper oversight by the ACCC.

7.3 Landside charges

(a) Commercial context – pressure on stevedore's quayside revenue

As noted in section 1, container stevedoring in Australia is highly competitive.

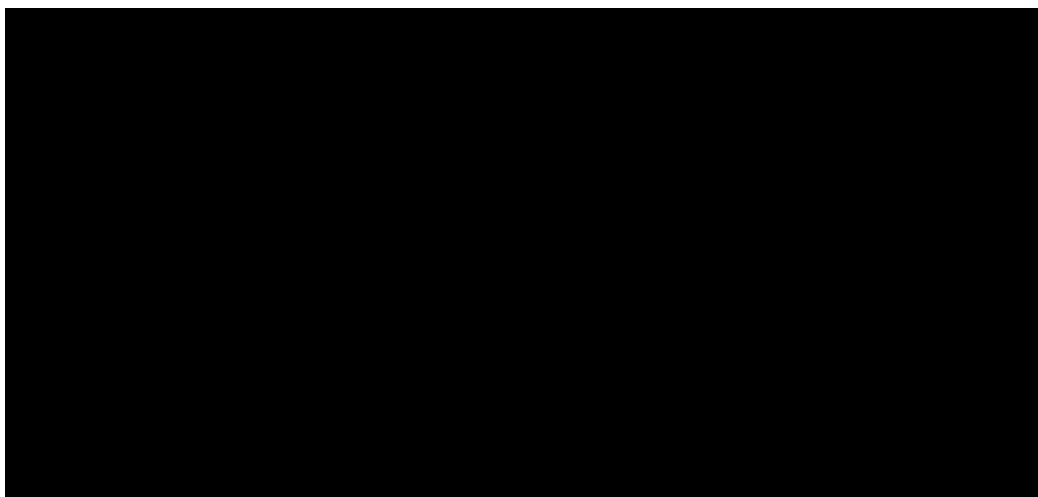
The combination of substantial capital investment, rising terminal rents and other costs (e.g. labour and energy) and substantial over-capacity at each of the three major

⁵⁹ Competition Policy Review Panel, *Competition Policy Review – Final Report*, 31 March 2015, section 20.5. Accessible online at < <https://treasury.gov.au/publication/p2015-cpr-final-report> >.

⁶⁰ See e.g., Competition Policy Review Panel, *Competition Policy Review – Final Report*, 31 March 2015; Productivity Commission, *Review of Part X of the Trade Practices Act 1974: International Liner Cargo Shipping*, 23 February 2005, p xxvi. Accessible online at <<https://www.pc.gov.au/inquiries/completed/cargo-shipping-2005/report/partx.pdf>>.

container ports, have combined to place substantial pressure on both stevedore pricing and profitability. The analysis by Deloitte in Figure 26 illustrates the fall in nominal weighted average quayside charges at East Coast Australian ports over the last ten years.

Figure 26: Historical nominal weighted-average quayside charges at East Coast ports



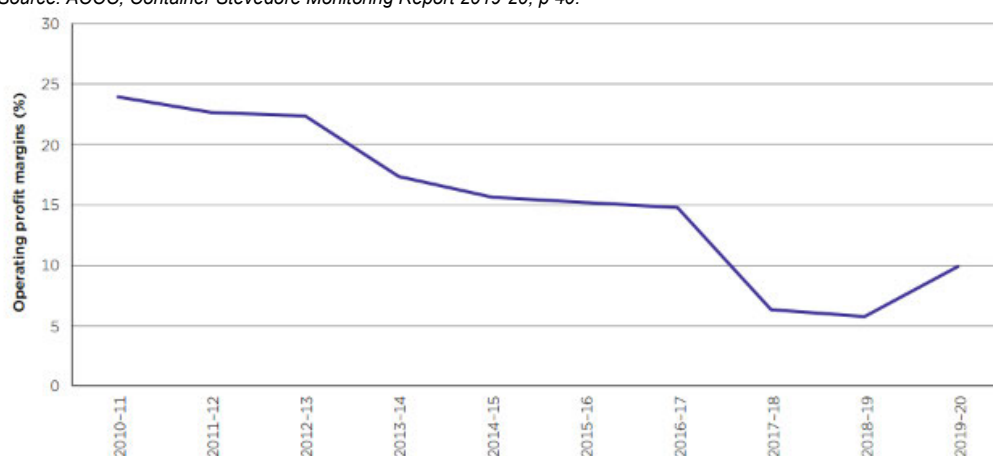
The ACCC similarly estimates that the aggregated quayside revenue per lift for Patrick, DP World and VICT has fallen by 27.6% over the ten years to 2020-21.⁶¹

When coupled with the increasing concentration and bargaining power of shipping lines, this declining quayside charges and revenue has put significant pressure on stevedore operating profits. Figure 27 below from the 2021 Monitoring Report illustrates the aggregate operating profit of the major container stevedores across Brisbane, Sydney and Melbourne during the period of 2010-11 to 2019-20.

There has been a recent upturn in stevedore operating profits over 2019-20 to 2020-21 but as recognised by the ACCC, this upturn has been driven by COVID-19 and these market conditions are unlikely to continue in the long-term.

Figure 27: Operating profit (EBITA) margins: 2010-11 to 2019-20

Source: ACCC, *Container Stevedore Monitoring Report 2019-20*, p 40.



⁶¹ ACCC, *Container Stevedoring Monitoring Report 2020-21*, October 2021, p 48.

(b) Original development of landside charges

Infrastructure charges have been a longstanding feature of stevedore tariffs,⁶² although these were originally set at a low level and were directed at recovering specifically identified infrastructure cost increases, to the extent these could not be absorbed by shipping lines (i.e. principally lease cost increases). Nonetheless, landside revenue had remained low and stevedore revenue was almost entirely derived from quayside charges levied on shipping lines.

DP World began in 2017 to more actively manage its landside charges, as part of its overall revenue mix. At the time this was undertaken, in 2017, the shipping industry acknowledged that the move would improve equity in cost recovery:⁶³

Stevedores have this year made changes to their cost recovery arrangements by appropriately seeking to raise a share of their revenue from landside charges to complement their income from shipping quayside services. This is a fairer allocation as shipping has historically subsidised the landside infrastructure and services provided by stevedores to truck and rail operators.

DP World notes that it remains the case that landside revenues still constitute a minority of total revenues and that stevedores continue to recover substantially more revenue from quayside revenue than landside revenue as highlighted in Figure 28 below, taken from the 2021 Monitoring Report.

Figure 28: Aggregate revenue for Patrick, DP World and FACT: 2006-07 to 2020-21

Source: ACCC 2021 Monitoring Report, p.49



More recently, in early 2020, in response to feedback from a customer, DP World adjusted the structure of its landside revenues to differentiate between import and export containers. This reflected the higher value, and therefore the greater preparedness of customers to bear, landside charges in relation to import containers than export containers.

⁶² Patrick introduced the first infrastructure charge in 2010 at its Brisbane terminal.

⁶³ Shipping Australia Limited, *Annual Report 2017*, 4 December 2017. Accessible online at https://shippingaustralia.com.au/wp-content/uploads/2018/01/SAL_Annual_Review_2017_WEB.pdf.

Moreover, the rebalancing of stevedore revenues has not led to any overall uplift in the cost of transporting a container for shippers or BFOs. Analysis conducted by Deloitte for DP World (see **Schedule 3**) indicates that although the overall cost of transporting a shipping container has increased over the last decade, the proportion of costs relating to stevedoring has remained relatively constant.

[REDACTED]

[REDACTED]

[REDACTED]

In this context, the role and impact of stevedore charges on rising supply chain costs is negligible and stevedoring costs have remained a relatively stable component of the overall transport cost notwithstanding the increase in revenue share from landside charges. In fact, Deloitte shows that stevedoring costs have declined as a proportion of total transport costs over the past decade.

The diversification of revenue sources, and continued development and dynamism of stevedore pricing structures (including the introduction of differentiated charges between imports and exports) reflects stevedores responding to a highly competitive market.

In examining the issue of landside charges in 2018, Farrierswier concluded:⁶⁴

We view rebalancing of stevedore charges of the kind being undertaken by stevedores (as between landside transport operators and shipping lines) as consistent with what an economist would expect in a workably competitive market.

...

In circumstances where pricing practices are in a state of transition in response to recent market changes and increased competition (both within stevedoring and in the wider container shipping supply chain) and the response of other port supply chain participants is still developing, we consider that there is not an economic justification for policy intervention.

To the contrary, policy intervention in these circumstances risks introducing rigidity into the commercial arrangements within port supply chains that could reduce the ability of the supply chain to flexibly adapt to recent market disruption. It may also impact upon and distort incentives of participants to invest in capital expansion of facilities to handle larger ships and improve landside access.

In a recent supplementary report, undertaken for the purpose of the current Commission process, Farrierswier re-confirms this conclusion and points to market evidence since 2018 that is consistent with it (as well as conclusions by both the ACCC and the 2020

⁶⁴ Farrierswier, *Expert report on charging issues for container stevedoring*, 10 August 2018, p 2. Expert report prepared for Gilbert + Tobin by Farrierswier. Attached at Schedule 2.

Independent Review of the Victorian Ports System). Farrierswier's report is at **Schedule 2**.

Finally, there is no evidence that the increase in landside revenues has had any adverse effect on competition within the supply chain. DP World has observed that in the years since 2017, the number of transport companies using DP World's terminals (as indicated by annual renewals of carrier access agreements) has remained relatively constant. The initial fears raised by the transport lobby of landside charges driving small carriers from the market appear unfounded.

(c) ACCC and Victorian reviews and findings

Following advocacy from the transport carrier lobby, the structure and approach to landside charges has been assessed by the ACCC (in every annual stevedore monitoring report since 2017-18) and the NSW and Victorian Governments.

Whilst acknowledging the concerns of the transport lobby, the ACCC has repeatedly found that the charges are lawful and do not constitute a misuse of market power, unconscionable conduct and do not appear to substantially lessen competition.⁶⁵

The ACCC accepts that, at current levels, stevedores are not making excessive returns.⁶⁶ To the contrary, the entry of third operators (and the associated over-capacity at major ports) has led to falling profitability at the same time as stevedores are required to invest in substantial capital projects – and that the introduction and increase in landside revenue is a direct result of the competitive forces facing stevedores.

These conclusions are consistent with other recent reviews. In January 2020, the Victorian Minister for Ports announced a review into the Victorian ports system including (amongst other things) an assessment of landside charges (**Victorian Port Review**). After a detailed, 12-month process, the Victorian Port Review's conclusion was summarised as follows by Ports Victoria:⁶⁷

Landside pricing and access at the Port of Melbourne

The review found that while stevedores exercise market power by levying terminal access charges (TACs) on transport operators, the evidence does not suggest they are using this market power to inflate profits.

Despite recent price increases, the review noted analysis from the Australian Competition and Consumer Commission showing stevedore rates of return have declined over the last decade. This was supported by analysis that indicated the end-to-end supply chain cost of importing a container has not increased in real terms.

The review supports the implementation of the Voluntary Port Performance Model. The review leaves open the option to restore formal price regulation should TACs emerge as a key driver of increased stevedore profitability.

⁶⁵ ACCC, *Container Stevedoring Monitoring Report 2017-18*, October 2018, p 25.

⁶⁶ ACCC, *Container Stevedoring Monitoring Report 2020-21*, October 2021, p 48.

⁶⁷ Victorian Department of Transport, *Independent Review of the Victorian Ports System: Initial Government Response*, February 2021, p 5. Accessible online at <https://www.vgls.vic.gov.au/client/en_AU/search/asset/1302654/0>.

(d) Transparency mechanisms

To the extent that any policy concern remains in relation to stevedore charges, it appears to be related to the need for transparency of charges through to shippers and BFOs.

Ultimately, stevedore charges are not directly billed to shippers but are passed through to them by others in the supply chain:

- quayside charges are passed through by shipping lines; and
- landside charges are typically passed through by freight forwarders or transport operators (often with a mark up).

In both NSW and Victoria, there are now processes governing the review and notification of any change in landside charges by stevedores. The NSW process has been in place for a considerable period as part of the Port Botany Landside Improvement Strategy (PBLIS) implemented in 2010.⁶⁸

In Victoria, a voluntary protocol was introduced in response to the findings of the Victorian Port Review. The protocol provides as follows:⁶⁹

Voluntary Protocol: Notifications regarding pricing for landside charges

Container terminal operators in the Port of Melbourne that levy charges to access their terminals are requested to adhere to this protocol to increase the transparency and predictability of charges.

- 1 Stevedore terminal handling charges will only be changed once per annum.*
- 2 Stevedores must issue a notice of intention to the Secretary, Department of Transport, and industry, 60 days prior to the proposed date of the increase of an existing charge or introduction of a new charge.*
- 3 The notice of intention to change prices or introduce a new charge to the Department of Transport must be accompanied by detailed reasons for the increase or introduction of a new charge, including all relevant supporting information or data.*
- 4 The notice of intention to change prices or introduce a new charge to Industry will be published on the operator's website and must outline relevant detail of the rationale for the price increase or introduction of a new charge.*
- 5 Stevedores will receive feedback from Department of Transport, and industry, on the proposed increase or introduction of a new charge. This feedback will be published on the Department of Transport website based on the feedback themes.*
- 6 Stevedores must issue a final notice of changed prices 30 days prior to the date of the proposed increase. The final notice should incorporate a*

⁶⁸ Clause 19 of the Port Botany Landside Operations, *Mandatory Standards*, has been in place since 2010 and sets out a process for notifying Transport NSW of any change to charges required in connection with landside facilities and service at container terminals.

⁶⁹ See Victorian Department of Transport, *Voluntary Pricing Protocol*. Accessible online at <<https://transport.vic.gov.au/ports-and-freight/commercial-ports/voluntary-port-performance-model/voluntary-pricing-protocol-for-stevedore-landside-charges>>.

statement of engagement summarising issues raised by affected stakeholders and the response of the terminal operator.

The charges levied by stevedores themselves are fully transparent – and, consistent with the NSW and Victorian process, are published by DP World and other stevedores on an annual basis in advance of being introduced (and are provided to Ports Victoria and Transport for NSW at least 60-days in advance).

Stevedore charges are also monitored each year by the ACCC and form part of the detailed statistical Waterline Reports, which are published bi-annually by BITRE and which set out (amongst other things) the average port charges at each of Australia's major ports, including stevedoring charges.

Put simply, despite operating in a highly competitive market, facing tight margins and over-capacity and being subject to strong bargaining power held by shipping lines, privatised port operators and shippers – stevedore charges appear to be an obsession for policy makers and are some of the most scrutinised and reviewed of any market.

To the extent that price transparency is a problem to be solved, it may be appropriate to consider how shipping lines and carriers itemise and account for these charges when passing them through to shippers and BFOs. For example, DP World is aware that, historically, carriers have added 'administrative charges' or other surcharges in addition to the landside charges levied by stevedores.

The issue of transparency around shipping line charges (including opacity around pass through of terminal charges) was also identified in the recent Victorian review. The final report noted:⁷⁰

Another relevant question raised in the DAE work is that of 'unexplained costs' levied by the shipping lines, which have also risen rapidly in recent years. These unexplained costs are also passed through to the shippers in THCs [Terminal Handling Charges imposed by shipping lines].

THCs include stevedore quayside lift charges, port-manager charges (e.g. wharfage and channel fees) and in-port service-provider costs (e.g. pilotage, towage, line boats), as well as the so-called 'unexplained costs'...

The problem here appears to be one of lack of transparency, as it seems that the constituent components of the THC are not clearly and consistently itemised by the shipping lines in their invoicing. Consequently, the validity of these charges cannot be readily verified by the shipper and compared across different shipping lines.

The Review concludes that this amounts to an information asymmetry market failure which has the potential to reduce price competition between shipping lines and, therefore, inflate costs for shippers.

The extent to which this apparent market failure is actually inflating prices is unclear. It does appear, however, that greater transparency in relation to THCs would be beneficial to the efficient operation of the port supply chain.

⁷⁰ Victorian Department of Transport, *Independent Review of the Victorian Ports System: Final Report*, November 2020, p 83. Accessible online at <<https://transport.vic.gov.au/-/media/tfv-documents/ports-review-pdf.pdf?la=en&hash=7FA929D867F34CADD62A1E9F3AC522C2>>.

The ACCC has recently noted that it was also not clear, for example, whether shipping lines were passing through to customers the full impact of reductions in quayside rates. The ACCC found:⁷¹

At least some shipping lines do not separately itemise any of the pass-through charges in their bills to cargo owners. This means that cargo owners lack visibility on the extent to which shipping lines are passing on any savings in pass-through charges. In contrast, cargo owners can observe any changes in pass-through charges they pay to transport operators, as stevedores and empty container parks make those publicly available.

7.4 Conclusions

In summary, stevedore charges are a very minor part of total freight charges and have remained relatively stable within the freight cost stack over the last decade.

Whilst there has been a noticeable increase in the proportion of stevedore revenue obtained from landside activities over the period since 2017, this trend has occurred as part of a 'rebalancing' of tariffs – and has not led to any material change in industry profitability. Multiple policy reviews, by the ACCC and others, have accepted that this shift reflects a competitive response by stevedores to market conditions and is evidence of neither market power nor excessive pricing.

Indeed, stevedore revenues (both landside and quayside) are fully transparent and stevedore costs, charges and margins remain some of the most reviewed, reported and scrutinised of any industry.

To the extent that transparency of supply chain costs remains an issue – this is the consequence of inadequate itemisation of charges by shipping lines and carriers, when passing through charges.

Recommendation 15 – Consider mechanisms to improve the transparency of blue water charges, to ensure that to the extent that shipping lines pass through other charges (e.g. stevedore charges) these are transparent to shippers.

⁷¹ ACCC, *Container Stevedoring Monitoring Report 2020–21*, October 2021, p 55.

8 Technology

Key points:

- DP World sees no policy or other impediments to innovation and technology, other than the impact of the workplace relations framework on the introduction of automation.

General implementation of technology

- In recent years, DP World has made a number of significant investments in productivity-enhancing technologies, including terminal operating systems and vehicle booking systems. These investments have delivered tangible benefits for port users, including reduced truck turnaround times and container dwell times.

Yard Automation

- DP World operates automated and semi-automated terminals in ports around the world.
- In Australia, DP World invested [REDACTED] in a semi-automated mode of yard operation for DP World's Brisbane terminal. The project took approximately 20 months and was completed in 2014. DP World's Brisbane terminal is a world class facility and provides highly reliable, consistent rates of productivity for both waterside and landside customers.

8.1 Introduction

DP World notes the Commission's terms of reference expand to any impediments to the introduction of innovation or technology within the supply chain.

There is a marked difference here between:

- the development and introduction of technology used generally within stevedore terminals – which have been readily developed and adopted by Australian stevedores and, in some cases, are world-leading; and
- the introduction of technology which impacts labour (most notably, the introduction of automated or semi-automated yard operations) – which over the last decade has been the source of some of the most strident and disruptive industrial issues.

In this section, DP World address both issues. DP World sees no policy or other impediments to the introduction of innovation and technology, generally, other than the workplace relations framework issues addressed in section 5.

8.2 DP World investment in innovation and technology

In addition to its 'day to day' operating requirements, DP World invests significantly in innovation and technology.

Over the last decade, in Australia, DP World has invested [REDACTED] directly in technology and over the next three years [REDACTED] has been earmarked to maintain and improve its digital solutions.

Examples of recent projects include the following:

(a) Terminal operating systems

DP World use the leading terminal operating system (TOS) at all of its terminals.

DP World use TOS software and applications to optimise all of its facility operations. The platform supports multi-terminal visibility and control, allowing it to effectively manage shipping line services with multiple Australian port calls. The system provides coordination and optimisation for planning and management of containers and equipment moves. The systems are expensive to implement and run and require ongoing upgrades with enhancements or cybersecurity improvements.

(b) Vehicle booking system

As the volume handled at Australian ports has increased, so has the number of trucks and trains that interact with DP World terminals. In other locations around the world, increases in trucks entering the container terminal has caused long queues and congestion.

To reduce the risk of similar congestion at Australian terminals, a Vehicle Booking System (**VBS**) was introduced around 15 years ago. This vehicle planning and entry/exit gate technology is appointment based and streamlines many of the processes between the terminal and terminal users (i.e., transport operators). The system matches containers with specific vessels enabling both transport operators and the terminal to proactively prepare and allocate resources to meet demand.

The VBS has delivered a number of benefits for port users, including:

- smoothing of peaks and troughs in demand for landside access over a 24-hour period;
- reduced waiting time and reduced demurrage costs for shippers (waiting time charges);
- better balancing of demand with resource availability, ensuring better productivity and utilisation; and
- by reducing congestion, contributed to a safer working environment.

Australia was the first country to introduce a VBS system – an initiative that has been key to Australian terminals achieving some of the best truck turnaround times and container dwell times (see Figure 18 in section 4.2).

(c) IT infrastructure transformation project

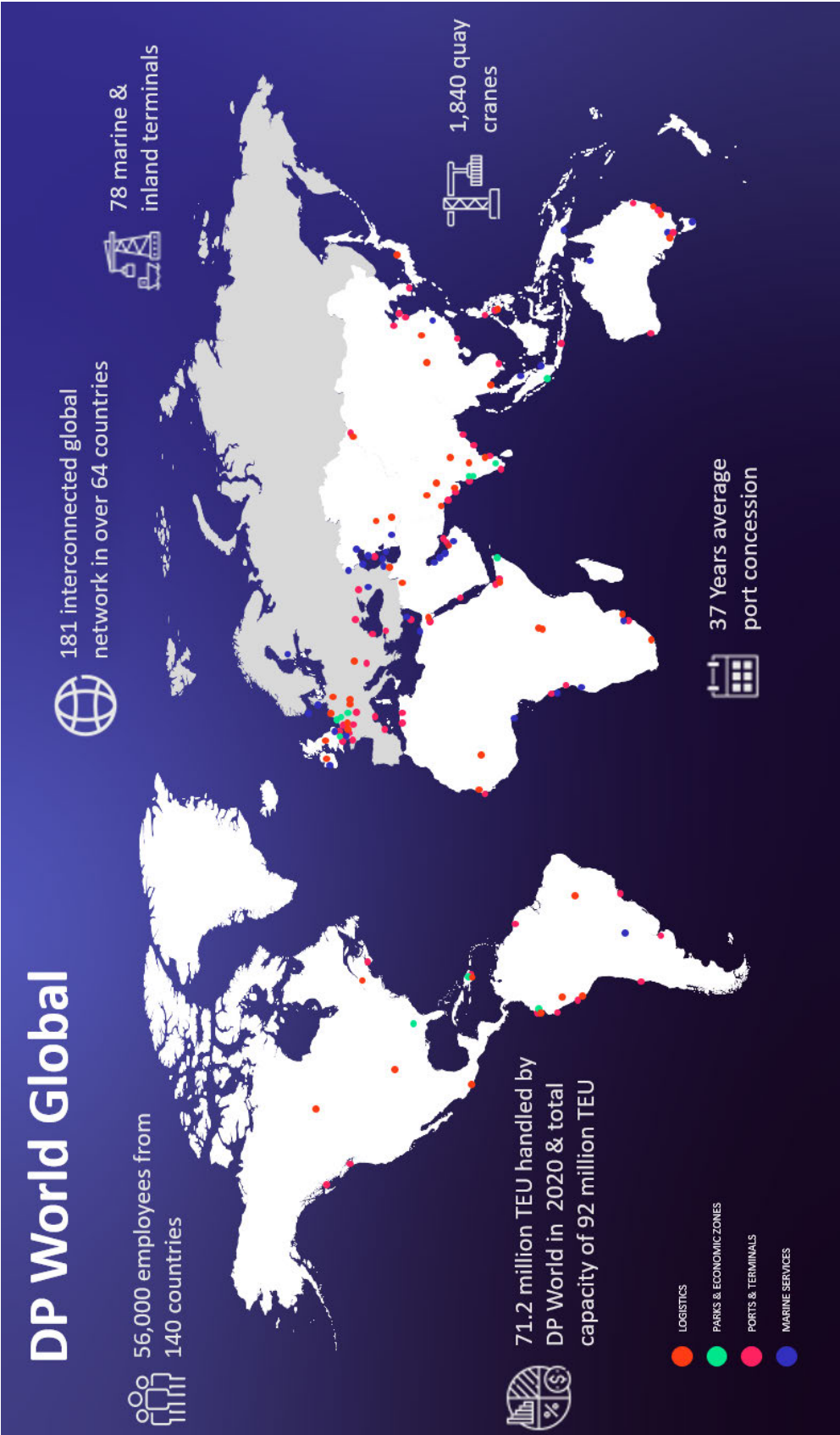
In 2018, DP World migrating its IT infrastructure to purpose-built data centres with cloud integration and updated its wide area network (WAN) to a modern, scalable, resilient, and secure national network. The project has allowed for ease of maintenance, compatibility to implement new operating systems and productivity benefits (as a result of fewer outages, downtime, and equipment issues).

(d) Yard Automation

DP World build and operate automated and semi-automated terminals in its operations all over the world.

In Australia, DP World operates a highly sophisticated semi-automated 'Automated Stacking Crane' (ASC) mode of terminal handling at its terminal in Brisbane. Implementation of the Brisbane automation project was accomplished over a 20-month period, going live in 2014.

To transition from a manual forklift terminal required investment of [REDACTED] in equipment (16 automatic stacking cranes and 14 new shuttle carriers), extensive civil development, Information Technology systems and a state-of-the-art truck interface. This world class facility is highly reliable, producing consistent rates of productivity for both waterside and landside customers.



Schedule 2**Farrierswier, Supplementary Expert Report on
charging issues for container stevedoring,**

See attached.

Schedule 3**Deloitte Access Economics, DP World Australia,
Import / Export Supply Chain Cost Analysis**

See attached.

Schedule 4**HoustonKemp Economists, Economic effect of industrial action at stevedoring terminals**

See attached

Schedule 5 Port of Melbourne capacity expansion case study

1.1 Background

The timely and location of international container capacity at the PoM has been a longstanding policy debate.

The Port is comprised of two separate terminal precincts – the two original container terminals at Swanson Dock (Patrick and DP World) and a third terminal at Webb Dock which was leased shortly before privatisation in 2016 to VICT. Due to its location at the mouth of the Yarra River, Webb Dock has inherent advantages in terms of access – particularly by larger vessels, which do not need to navigate up-river, including under the Westgate Bridge.

As required by the Victorian framework, PoM first published a 'Port Development Strategy' (**PDS**) in draft on 12 November 2019. An updated final version of the PDS was published in October 2020. In the PDS, PoM committed to develop and expand container handling capacity at the Port in a manner that was efficient and that optimises existing capacity and productivity, before delivering new infrastructure.⁷²

Over the last 18 months, however, PoM has taken steps that indicate that it is moving quickly to seek to accelerate the expansion of terminal capacity at the Port, within Webb Dock. This comprises:

1.2 Webb Dock Extension

PoM has recently commenced a project to extend the quay line of the existing Webb Dock terminal operated by VICT (the **Webb Dock Extension**). This involves:⁷³

- demolishing a portion of the Webb Dock East berth 3 structure (known as the 'knuckle');
- extending the Webb Dock East berth 4 by approximately 71 meters to the north, supported by a new mooring dolphin to the south, which will provide an operational berth length of 746 meters; and
- increasing the area of VICT's terminal to enable operation of cranes and service vehicle access behind the extended berth.

While originally slated to be undertaken after 2030, in order to efficiently meet forecast increases in container volumes,⁷⁴ a decision was made in 2021 to bring the project forward.

PoM has now indicated that it intends to commence construction of the Webb Dock Extension as soon as possible, with a view to completing the project within two years (by the end of FY2023).⁷⁵ PoM proceeded with very limited engagement with stakeholders and over the sustained objections of a number of stakeholders, including DP World.

Amongst other things, DP World provided PoM with substantial evidence that any expansion of the quay line was not required to cater for container demand, or to facilitate

⁷² PoM, *Port of Melbourne – 2050 Port Development Strategy (2020 edition) – Final report*, October 2020, p 1. Accessible online at <<https://www.portofmelbourne.com/wp-content/uploads/PoM-PDS-2020-Edition-For-Publication.pdf>>.

⁷³ PoM, *2021 Industry Update*, April 2021, p 35. Accessible online at <<https://www.portofmelbourne.com/wp-content/uploads/Port-of-Melbourne-2021-Industry-presentation.pdf>>.

⁷⁴ PoM, *Port of Melbourne – 2050 Port Development Strategy (2020 edition) – Final report*, October 2020, p 51.

⁷⁵ PoM, *2021 Industry Update*, April 2021.

access by large vessels (which was the modified justification raised by PoM for the accelerated timing of the project).

DP World's own conservative modelling of current excess capacity (prior to the Webb Dock Extension) is at Figure 29 below. Based on this level of utilisation, there is no economic justification for the Webb Dock Extension within the next decade (consistent with the original timing flagged by PoM).

Figure 29: DP world capacity estimate for each stevedore at the Port⁷⁶

TEU/Per Year	DP World	Patrick	VICT	Total Port
Existing nominal capacity	1.5 - 1.8 million	1.5 - 1.8 million	1.2 - 1.5 million	4.2 – 4.8 million
Current utilisation (i.e. approx. demand)	800,000	850,000	800,000	2.45 million
Current over capacity	700,000 - 800,000	650,000 – 950,000	350,000 – 450,000	1.75 – 2.35 million

Despite this, the Webb Dock Extension provides VICT with the quay length to conservatively increase its capacity by a 600,000 – 800,000 TEU.

PoM ultimately abandoned this justification for the Webb Dock Extension in an 'industry update' provided in April 2021. Instead, PoM presented a different reason for progressing with the Webb Dock Extension early, stating for the first time that the project was designed to:⁷⁷

- remove an “*artificial constraint*” at Webb Dock East which PoM says has arisen due to the arrival of larger vessels sooner than expected; and
- restore the ability of Webb Dock East to effectively compete for new trade.

[REDACTED]

[REDACTED]

[REDACTED]

⁷⁶ Based on current berth lengths, crane equipment, and estimating cranes can achieve productivity of 25 moves per hour.

⁷⁷ PoM, 2021 Industry Update, April 2021, p 35.

[REDACTED]

PoM's rationale for investing in the Webb Dock Extension therefore appears to be a need to assist the current Webb Dock stevedore, VICT, to deliver its 'nameplate' operating capacity, which DP World understand is approximately 1 - 1.25 million TEU per annum, and with the berth length required to manage two large vessels simultaneously.

DP World considers that the revised justification does not withstand scrutiny. Amongst other concerns, DP World notes that VICT crane productivity (not lack of quay line) is the primary cause of poor productivity. [REDACTED]

Put simply, DP World understands that VICT crane productivity is well below industry standard and substantially lower than the productivity achieved at the Swanson Dock terminals. This poor operational performance is the primary cause of its throughput level and should therefore not be addressed through capital expenditure by PoM (and therefore port users) on extending the Webb Dock quay line.

There are a range of other objections which DP World has raised in response to the claim that the Webb Dock Extension is needed to cater for large vessels, or to otherwise ease congestion at VICT. None of these have been meaningfully engaged with by PoM.

The overall impression created by the Webb Dock Extension process has been:

- PoM's owners have strong commercial incentives to accelerate development of new or additional container terminal capacity at the Port. These incentives are not related to efficiently meeting demand for forecast container volumes through the Port.
- Any consultation with stakeholders is perfunctory and has typically involved reverse engineering justifications to support the desired outcome. No genuine engagement occurs. The inadequacy of PoM's consultation procedures was noted by the ESC in its recent review of PoM's compliance with the Pricing Order (discussed further below):⁷⁹

Over the last two years, the Port's consultation did not provide port users with appropriate information to enable them to make meaningful contributions ... Port users were also excluded from opportunities to be consulted on matters of significant impact notably for Webb Dock East.

- PoM and its owners have little regard for the regulatory framework.

The Webb Dock Extension is now the subject of two formal complaints to the ESC as well as separate Federal Court litigation (brought by Patrick alleging misleading and unconscionable conduct in PoM's engagement in relation to its capacity plans and timing).

1.3 Timing for development of a fourth container terminal

The experience with the Webb Dock Extension also sharpens DP World concerns about the likely timing of development of a further container terminal in Melbourne.

⁷⁹ ESC, *Inquiry Into Port of Melbourne Compliance with the Pricing Order 2021 - Public Report*, 31 December 2021.

This had been seen as unlikely to be required before 2040 and, based on forecast container volume growth, that remains the case.

However, the accelerated timing of the Webb Dock Extension together with public and private messaging suggest that the owners of PoM are moving to commence the process for granting the right to develop a fourth terminal prior to 2030. Whilst the reasons for doing so are not clear, the privatisation legislation provided the new owners with legislative protection from a second, government-sponsored container port being developed prior to 2031.⁸⁰

DP World can only speculate that the owners of PoM may be looking to ensure that any terminal development (and approvals) are sufficiently advanced that it can avoid the risk of the Victorian Government assessing alternative candidates, when needed. For example, Infrastructure Victoria has previously identified an alternative site at Bay West as potentially suitable for a competitive port with a number of natural advantages (including proximity to the growth corridor to the west of Melbourne).⁸¹

The premature development of a fourth terminal prior to 2040 would be catastrophic for the Victorian port logistics supply chain. Amongst other things:

- moving capacity so far ahead of demand would entrench sustained under-utilisation of container terminal capacity – and associated higher unit costs – for decades. DP World considers that such a move may put the viability of Melbourne stevedores at risk.
- the move would be highly disruptive. Rather than developing in a staged manner, as contemplated by Infrastructure Victoria, the move would fundamentally reorientate container volumes from Swanson Dock to Webb Dock. This would strand significant assets already servicing Swanson Dock and make redundant the current work being undertaken by the Victorian Government on improved rail linkage to the Swanson terminals. Other stakeholders, such as the Tasmanian container trade (currently operating from Webb Dock), would also need to move to facilitate the development of another terminal at Webb Dock.
- the Victorian economy would lose the option value associated weighing up development of a fourth terminal against a competitive alternative at Bay West.

Given the size and importance of the PoM to the national economy, these risks – and the general investment uncertainty that has been created over the last two years by the owners of PoM – has important national implications.

⁸⁰ *Delivering Victorian Infrastructure (Port of Melbourne Lease Transaction) Act 2016* (Vic).

⁸¹ Infrastructure Victoria, *Advice on securing Victoria's ports capacity*, April 2019, p 128. Accessible online at https://www.infrastructurevictoria.com.au/wp-content/uploads/2019/04/Securing_Victorias_Ports_Capacity_WEB-1.pdf.