



Lifting productivity at Australia's container ports: between water, wharf and warehouse

Draft report

Overview

This is a draft report prepared for further public consultation and input. The Commission will finalise its report after these processes have taken place.

The Productivity Commission acknowledges the Traditional Owners of Country throughout Australia and their continuing connection to land, waters and community. We pay our respects to their Cultures, Country and Elders past and present.

The Productivity Commission

The Productivity Commission is the Australian Government's independent research and advisory body on a range of economic, social and environmental issues affecting the welfare of Australians. Its role, expressed most simply, is to help governments make better policies, in the long term interest of the Australian community.

The Commission's independence is underpinned by an Act of Parliament. Its processes and outputs are open to public scrutiny and are driven by concern for the wellbeing of the community as a whole.

Further information on the Productivity Commission can be obtained from the Commission's website (www.pc.gov.au).

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Opportunity for comment

The Commission thanks all participants for their contribution to the inquiry and now seeks additional input for the final report.

You are invited to examine this draft report and comment on it by written submission to the Productivity Commission, preferably in electronic format, by mid-October.

Further information on how to provide a submission is included on the inquiry website: www.pc.gov.au/inquiries/current/maritime-logistics.

The Commission will prepare the final report after further submissions have been received and it will hold further discussions with participants. Public hearings will be held in early November. Further details on registering for hearings and making submissions can be found on the inquiry website

Commissioners

For the purposes of this inquiry and draft report, in accordance with section 40 of the *Productivity Commission Act 1998* the powers of the Productivity Commission have been exercised by:

Dr Stephen King

Presiding Commissioner

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Commissioner

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An accompanying technical paper to this report, *Container port productivity*, is available online at: www.pc.gov.au/inquiries/current/maritime-logistics/draft.

Overview

Key points

- ✳ **Higher productivity at Australia's container ports is achievable and would deliver significant benefits.**
 - Considerable variation in performance both within and across Australia's container terminal operators points to potential productivity gains from more consistent (high) performance.
 - Inefficiencies at Australia's major container ports directly cost the Australian economy an estimated \$605 million a year. Ports also have large indirect impacts on Australian businesses and consumers, so that any sustained disruptions to imports or exports magnify these costs across the economy.
 - Australia's major container ports rank poorly in international work that looks at ship turnaround times. Slower turnaround times in Australia mainly reflect the use of fewer cranes to handle containers. Using more cranes would raise costs with unclear effects on efficiency. Faster turnaround times are good, but not at any cost.
- ✳ **Lack of competition in some parts of the maritime logistics system means consumers pay too much.**
 - Transport operators have no choice about which terminal they use when picking up or dropping off a container, so must pay whatever price a terminal operator sets. Recent rapid increases in terminal access charges (TACs) have flowed through to cargo owners (and consumers). Terminal operators should only be able to levy fixed charges, like TACs, on shipping lines, who can choose which terminal to use.
 - Transport operators and cargo owners are paying fees to shipping lines for the late return of containers even where the delay is because empty container parks are full. The exemption for shipping contracts, which means that these fees fall outside the scope of the Australian consumer law, should be removed.
- ✳ **Workplace arrangements lower productivity — incremental changes to the Fair Work Act are needed.**
 - Disruptions during recent enterprise bargaining imposed large costs on businesses dependent on maritime freight. More effective remedies are needed to limit unreasonably protracted bargaining and industrial action.
 - Limits should be placed on clauses in container terminal operators' enterprise agreements that are highly restrictive and constrain the ways that workers and equipment can be deployed.
- ✳ **Infrastructure needs in the maritime logistics system are being addressed.**
 - Container port operators and other parts of the maritime logistics system are investing to accommodate bigger ships. There is no need for government intervention to encourage the use of bigger ships.
 - Plans are in place to increase the share of freight moving to and from most major container ports by rail over the coming decades. Any further government investment needs clear cost–benefit analysis.
 - All state governments have freight and transport strategies that cover future port infrastructure needs. Evidence does not suggest that more plans are required or existing plans will not be implemented.
- ✳ **The adoption of technology at Australia's container ports is broadly in line with international practice.**
- ✳ **Concerns about domestic shipping capacity and training may be better resolved by means other than a strategic fleet.**
 - Capacity could be acquired as needed from the international market without the costs involved in supporting a national strategic fleet.
 - Australian-flagged vessels are not a prerequisite to meeting maritime skill requirements. Cadetships and skilled migration appear to be working well in meeting needs for blue-water experience.

International trade underpins Australia's economy (box 1), and most goods move by sea. This translates into significant maritime freight activity, and steady growth in total freight volumes over the past decade is forecast to continue.

Any issues in the maritime logistics system — the many services involved in getting goods off ships and into the domestic distribution chain (and vice versa) — have the potential to echo through the economy.

Box 1 – Some key maritime trade facts

Some key facts about Australia's international goods trade.

- Imported goods account for about 16 per cent of GDP; exports make up about 20 per cent.
- Shipping accounts for 95 per cent of Australian international goods trade by volume.
- In 2018-19:
 - just over 6000 cargo ships made about 34 000 calls to Australia
 - ports handled 1.7 billion tonnes of freight including 5.1 million containers
 - cargo moved was worth close to \$573 billion.
- By 2050 the containerised freight task is forecast to more than triple at the Port of Brisbane, nearly triple at the Port of Melbourne and increase by two and a half times at Port Botany.

Recent events have put pressure on the maritime logistics system

The COVID-19 pandemic had different impacts on different types of cargo. Some Australian bulk commodities, such as iron ore, gas and grain faced port and shipping disruptions during initial lockdowns. However, these supply chains quickly recovered, in some cases moving record export volumes.

In contrast, cargo owners who were reliant on containerised shipping services faced major problems.

On the demand side, an increase in consumer spending on household goods (for example, desks and computing equipment), and online shopping, along with the loss of air freight capacity on passenger flights, pushed up demand for in-bound services. On the supply side, COVID induced port shutdowns around the world and congestion at ports significantly disrupted global container shipping services.

The combination of increased demand and disrupted supply led to a substantial increase in the price of container shipping services, disrupted shipping schedules and extended shipping times. At some Australian ports, these broader disruptions were reinforced by protected industrial action during enterprise bargaining that impeded container terminal operations and, in some cases, led to ships by-passing ports.

These pandemic-induced disruptions highlighted a range of long-term performance issues in the Australian maritime logistics system, particularly for the movement of containerised freight.

For example: a May 2021 release of a World Bank report ranked the efficiency of most of Australia's container ports in the bottom 20 per cent of 351 international ports; a November 2021 report from the Australian Competition and Consumer Commission (ACCC) described significant performance issues at Australia's container ports; and a report by Victoria's Essential Services Commission raised issues of market power at the Port of Melbourne.

In December 2021, the Government asked the Productivity Commission to examine long-term factors affecting the productivity, efficiency and dependability of the Australian maritime logistics system and to identify mechanisms to address any issues found. This report summarises the Commission's draft advice against its terms of reference.

Where is the inquiry focusing?

Cargos fall into three broad types — containerised, bulk and break bulk (figure 1).

Figure 1 – Cargo types handled within the maritime logistics system

Shipment type	Sub-type	Typical commodities	
Containerised	General	General	
	Refrigerated	Produce / frozen goods	
	Food grade	Milk powder / grains	
	CWO (B grade)	Scrap / timber / hides	
	Hazardous	Chemicals	
	Tank	Wine	
	Out of gauge	Earthmoving tyres	
Non-containerised	Bulk	Dry bulk	Iron ore
			Coal
			Grains and legumes
			Cement
	Liquid bulk		Refined petroleum
			Crude oil
			Chemicals
			Chemicals
	Break bulk	Roll On Roll Off (RORO)	Cars / machinery
		Project cargo	Wind turbines
		General	Any non bulk or non containerised cargo
		Multi purpose	Break bulk and containers (Islander trades)

Each cargo type involves different commodities, types of vessel and port infrastructure, and stevedoring and transport services. Containerised shipping, for example, mostly carries cargoes that can be boxed up. Vessels

are purpose built with holds divided into 'cells' to keep containers fast. In port, quay cranes move containers between ships and shore; straddle carriers or stacking cranes move them between the dock and trucks and trains. In contrast, dry bulk cargos are loaded directly into bulk carriers' holds using conveyors connected to silos or stockpiles, while liquid bulk cargos are shipped in tankers, pumped out of holds into storage tanks and piped or trucked via tanker out of ports.

The biggest problems overwhelmingly relate to containerised shipping. Consequently, that is where the inquiry has focused, and maritime logistics chains incorporating the five largest container ports — Brisbane, Sydney (Botany), Melbourne, Adelaide and Fremantle — have received most attention. Ports that handle very small container volumes including Townsville, Darwin and Bell Bay are not a focus. Broader issues associated with the domestic distribution of freight are outside scope and have not been considered.

An overview of the maritime logistics system

The system is bounded by the point where a vessel enters or departs Australian territorial waters and the point where its cargo is transferred to or from the domestic logistics system.

Cargo progresses through three principal fields of activity (figure 2) — marineside, quayside and landside operations. Import and export cargo flows mirror each other, except for border control practices.

A range of parties provides services (figure 3). Some are engaged to handle cargo. Focusing on containerised imports for brevity, shipping lines carry containers and stevedores at container terminals unload vessels. Australian Government border protection and biosecurity officers monitor cargos. Containers are transferred to landside transport operators (road or rail) who move them to their final destinations or to warehouses for unpacking and cargo distribution.

A number of other parties do not directly handle cargo but are also integral to service provision. For example, port operators provide infrastructure like channels and wharfs, and pilots board vessels when they arrive in port waters and steer them through local shipping channels towards berths. Tugs move vessels into position and linesmen secure them to wharves. Unpacked containers are stored in empty container parks (ECPs).

Underpinning these services is a range of industry and government institutions and frameworks which govern how the parties interact and the industry is regulated. For example, state governments own the major container ports and, apart from Fremantle, lease them to private operators. And the Australian Government is responsible, for example, for workplace relations regulation.

Demand for container logistics is driven by the decisions of an estimated 200 000 Australian cargo owners. These decisions are enacted through a chain of contracts agreements and international conventions that lay out commitments between cargo buyers and sellers and transportation providers.

Negotiating and documenting these commitments requires specialist expertise. Many cargo owners employ forwarding and customs agents to act on their behalf. These agents also deliver economies of scale by consolidating the requirements of multiple cargo owners.

Figure 2 – Cargos move through three fields of operations

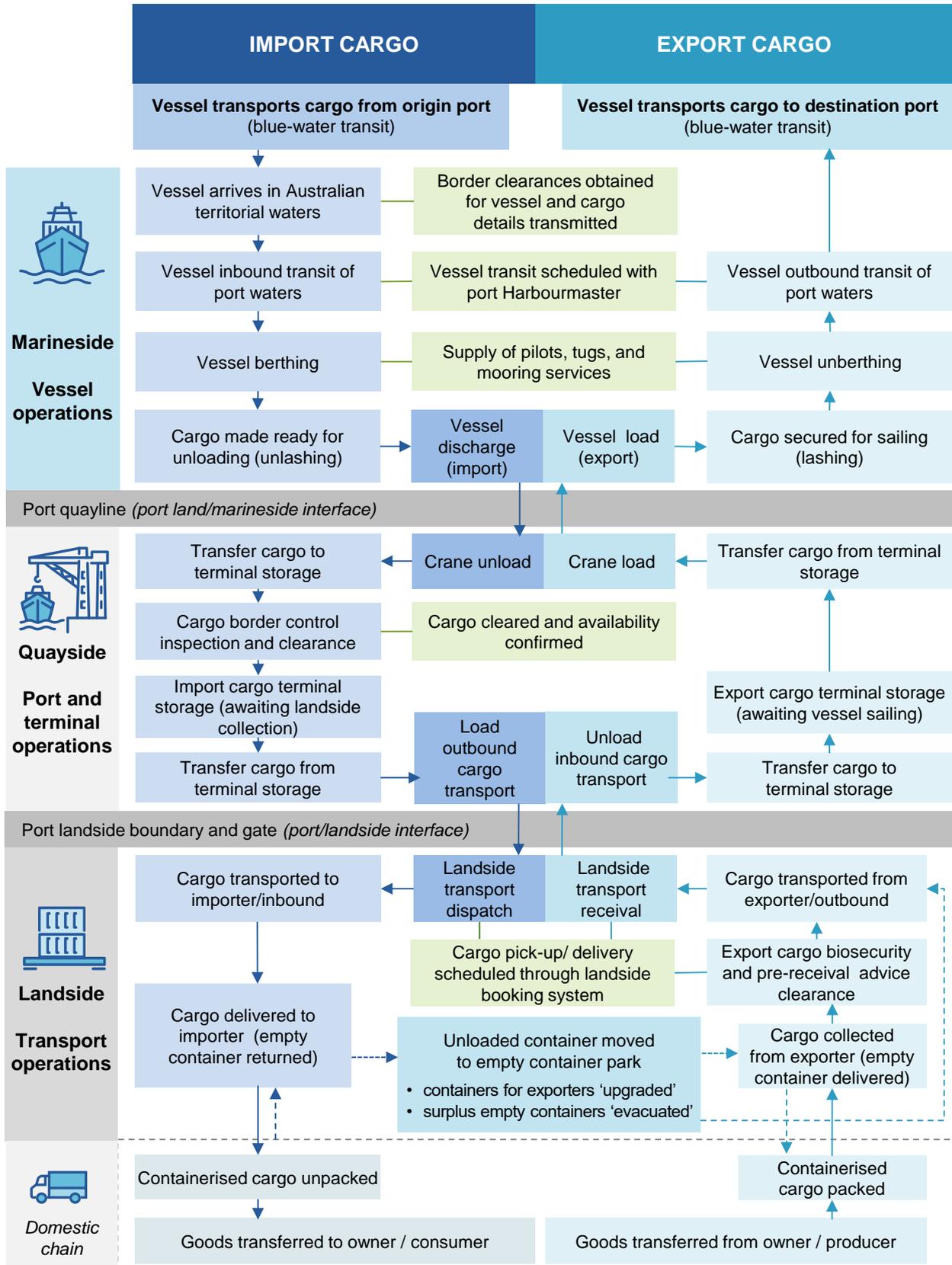
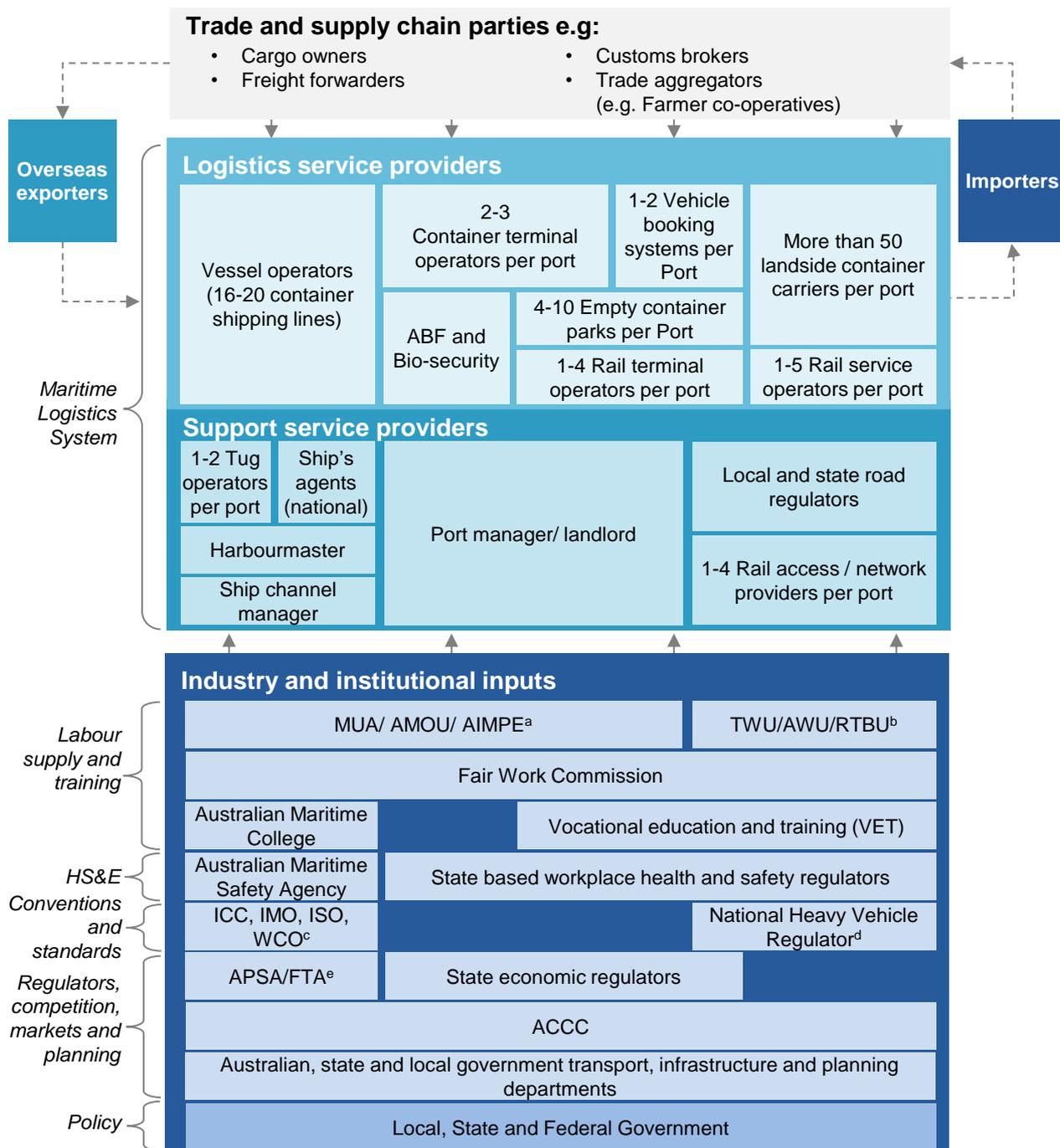


Figure 3 – Many parties make up Australia’s maritime logistics system



a. Maritime unions: MUA (Maritime Union of Australia), AMOU (Australian Maritime Officers Union), AIMPE (Australian Institute of Marine and Power Engineers) **b.** Domestic logistics industry unions: TWU (Transport Workers Union), AWU (Australian Workers Union), RTBU (Rail, Tram and Bus Union) **c.** International standards and policy organisations: IMO (International Maritime Organisation), ISO (International Standards Organisation), WCO (World Customs Organisation) **d.** Road vehicle regulation — encompassing licencing, compliance and performance based standards for heavy vehicles. **e.** Peak cargo industry bodies: APSA (Australian Peak Shippers Association), FTA (Freight Trade Alliance).

Why productivity, efficiency and dependability?

Productivity growth has been one of the primary drivers of increasing living standards for Australians. Put simply, the more goods and services a society can produce with a given set of inputs, the greater will be its material standard of living.

But just producing more with a given set of inputs will not make Australians as well off as they could be if the outputs could be either produced with a less costly input mix or are not the things that the community values most highly or if innovation is unnecessarily impeded. For example, restrictions on how workers are deployed by a business might mean that the costs of producing a service are higher than needs be. Constraints on competition might mean that businesses produce products that could be better supplied by rivals. And limitations on automation might mean that a company settles on an input mix that is higher cost than needs be. In other words, overall economic efficiency also matters.

Moreover, when businesses enter contracts and plan production accordingly, they do so based on expectations about the future availability and prices of the inputs they will need. If unanticipated disruptions or shocks within input markets mean those expectations are not met (that is, markets are not dependable or reliable), businesses will likely face higher costs and lower profitability than expected. Ultimately the broader community bears these costs — through price rises or temporary shortages of supply. A resilient and dependable system can plan for and minimise the costs of disruptions, benefiting both producers and consumers.

What drives productivity, efficiency and dependability?

Many factors contribute to productivity growth including:

- change at a business level — for example, the creation or adoption of new technologies or improvements in management practices and work arrangements
- economic factors that condition business decisions — for example, competition within a market can spur businesses to innovate
- policy and institutional settings — for example, government policies that influence investments in skills and infrastructure.

Efficiency gains are driven by initiatives that enable resources to flow to their highest value (or highest net benefit) uses. Examples include the: sharing of data to enable participants in a supply chain to better plan their operations; removal of practices that create 'closed shops' for workers or cartels for businesses; and development of single window portals that remove duplication in business reporting to government.

Clearly, the decisions of private businesses are central to productivity and efficiency performance. They are key agents in what is produced with an economy's resources and how. Innovation on their part spurs productivity growth and efficiency improvements.

But governments can also foster productivity growth and efficiency in a host of ways, for example, via: working to ensure government services are provided as efficiently as possible; regulating to promote competitive outcomes (or limit harm where parties hold market power); implementing labour relations laws that balance employer and employee interests; investing in essential infrastructure; and using taxpayer funds only on projects that deliver the highest net benefits to the community.

Dependability or resilience can be enhanced by actions like:

- requiring suppliers to give advance warning of price changes, to enable customer businesses to factor them into their planning and future contracts

- limiting disruptions to service provision where possible
- planning and provisioning to cope with shocks.

Again, the actions of private parties are integral to service dependability, but governments can also play important roles.

Consistent with these drivers of productivity, efficiency and dependability, this report examines:

- what is happening at a business level (focusing on use of new technologies and workplace arrangements)
- the state of competition across the system
- skills and infrastructure needs and constraints.

Discussion of ways in which governments might support improvements in productivity, efficiency and dependability cuts across the report. Before heading into that analysis though, the report looks at how well Australia's container ports are performing.

How well are Australia's container ports performing?

Well-functioning container ports enable goods to enter Australia faster than otherwise and reduce the cost of these imports. Similarly, they enable Australian exporters to compete more effectively on global markets.

Efficient ports minimise the time taken for containers to pass through the port and the time that ships and land transport spend within the port, while ensuring that inputs are used as effectively as possible. Ports that move containers more quickly, reliably and in a cost-effective manner are better performers than those that do not.

Data gaps limit assessment

A comprehensive framework for measuring port performance would include data on the time taken to move containers through each of the steps involved in marineside, quayside and landside operations (figure 2). Comparison of these time-based metrics across ports would then reveal where operations in a port are relatively inefficient. Other performance measures could then be used to understand *why* these relative inefficiencies exist. For example, analysis of the rates at which cranes move containers can shed light on quayside operation times: more productive cranes should result in faster container movement times.

Current Australian data collections do not support comprehensive analysis of this type. Data are missing for a number of areas of port performance, including, for example, labour inputs (the number and type of workers and the hours they work), cargo operation times (the time spent loading and unloading a ship while it is at berth), and container dwell times (the time containers spend in port after being discharged from a ship until loading onto land transport, in the case of imports).

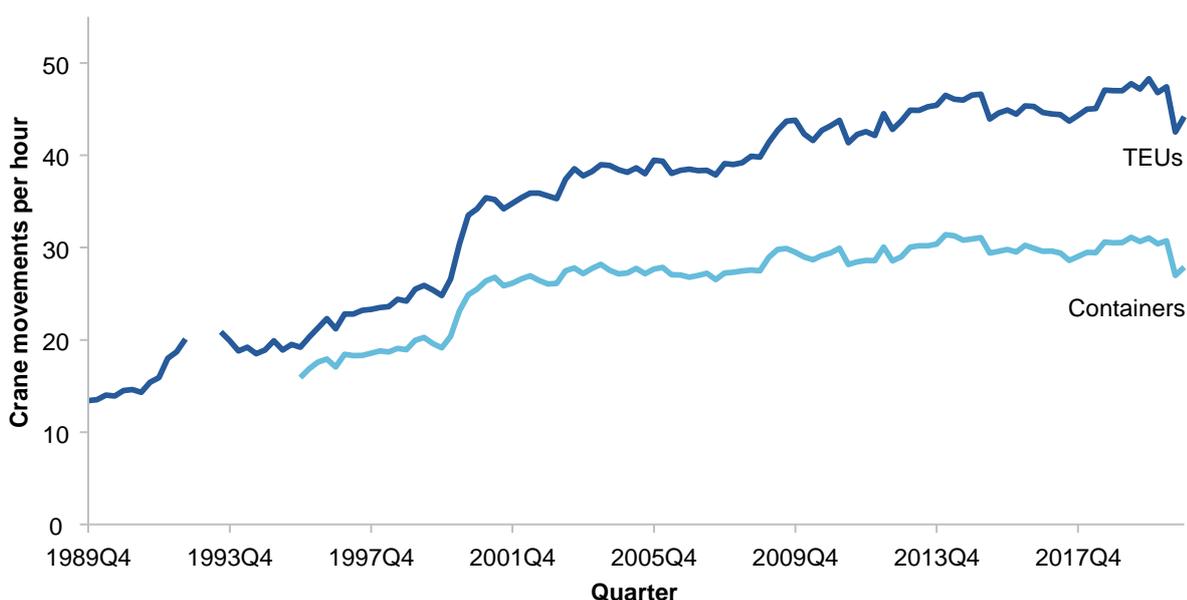
While performance information could be improved by linking existing data collections and, potentially, augmenting them, collecting, cleaning and maintaining data is not costless. Richer data would support richer insights into port performance, but it is unclear if the associated benefits would outweigh the potential costs inherent in extending existing collections. The Commission is seeking feedback on this question.

The Commission has used Australian collections and IHS Markit's Port Performance Program to benchmark Australia ports' operations and to unpack the determinants of relative performance as far as the data permit. Lengthy time series are scant. Most of the analysis, therefore, focuses on recent performance. Given the disruptions to international and Australian container shipping markets wrought by the COVID-19 pandemic, data from the 2019 calendar year are the primary source — this was a more representative year. Moreover, given data gaps, performance is assessed using a range of metrics.

Data suggests productivity has risen over the long term

Measured by net crane rates (container movements per crane per hour of operation), productivity at Australia's container ports rose strongly in the 1990s following significant waterfront reforms, and continued to grow at a slow pace over the following two decades prior to onset of the COVID-19 pandemic (figure 4). Growth measured in 20-foot equivalent units (TEUs) was stronger than for containers per se, because of the increasing share of 40-foot containers used in trade (which equate to two 20-foot equivalent units). The fact that ports are handling larger containers and the crane rate has not declined also points to productivity improvements in terms of the quantity of goods being moved.

Figure 4 – Long-term productivity has risen in Australia's ports



Australian ports do not compare well against international peers

A recent World Bank study benchmarked performance of 351 ports. Australia's major container ports with the exception of Brisbane ranked among the worst performing 20 per cent of ports, and Brisbane ranked in the bottom 30 per cent. The Commission used the data underlying this work to look at why Australian ports apparently perform so poorly.

The World Bank analysis focused on time taken to turn ships around. Australia's major container ports tend to be considerably slower on this metric than the average international port, particularly for medium and larger-sized vessels (those with a capacity of more than 5000 TEUs) (figure 5).

Most of the difference reflects longer operating times — Australian ports take longer to load and unload ships. Two factors are key to this outcome:

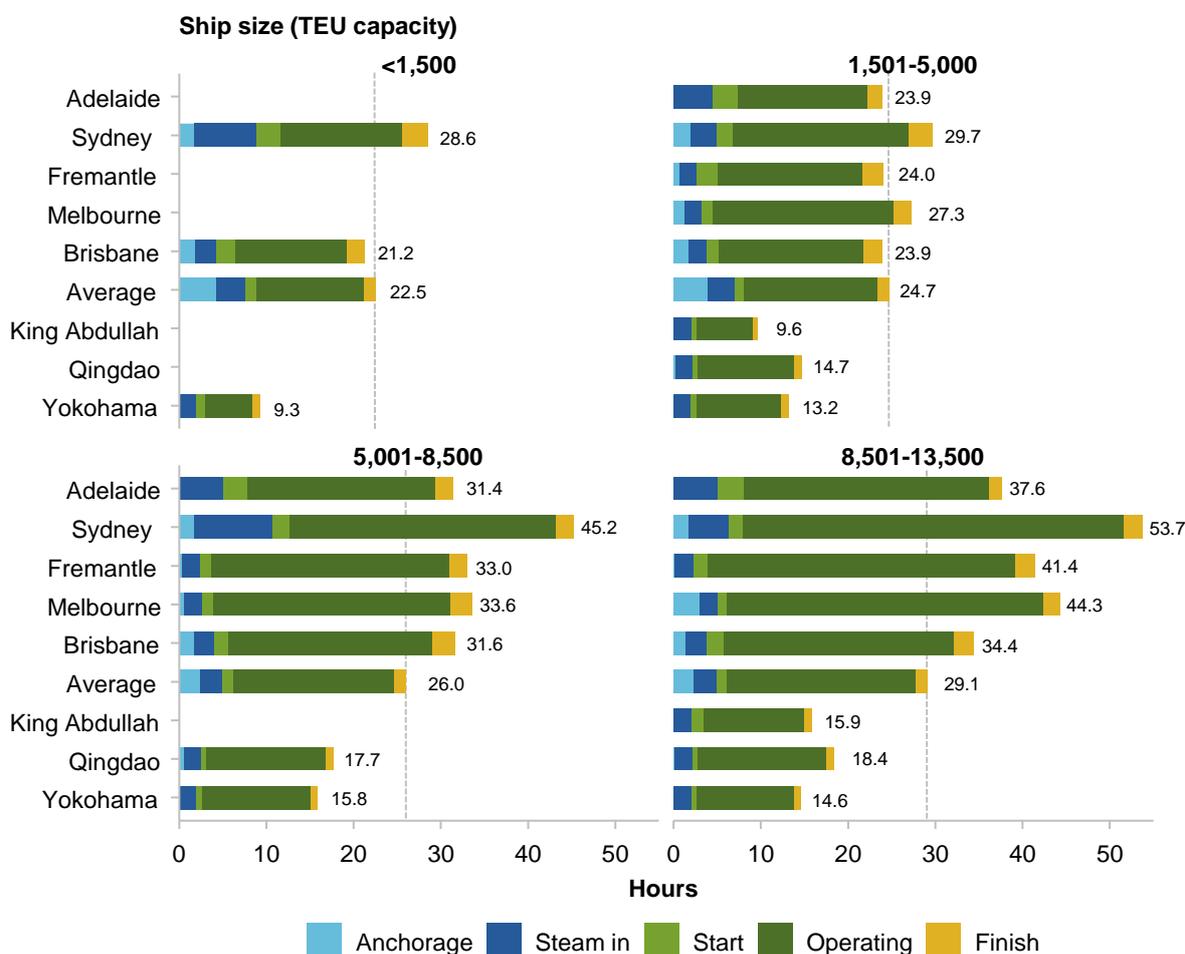
- the number of cranes deployed (crane intensity)
- the productivity of those cranes (gross crane rates).

On average, Australian cranes were just as productive as the international average (figure 6). A key explanation for Australian ports' underperformance is that they used fewer cranes to service ships than the average international port (figure 7).

At first glance, faster turnaround times look like a good thing. Longer times in port can lead to delays to shipments and disruption to supply chains, higher sailing speeds, meaning increased fuel consumption, emissions and costs, or the omission of a port or ports from a trip. So longer port times imply higher costs (for shippers, shipping liners, container terminal operators and other participants in maritime supply chains).

But the World Bank’s analysis did not account for the fact that some ports can turn ships around faster because they use more inputs. And higher turnaround times will not be a good thing if they rely on inefficient use of inputs.

Figure 5 – Turnaround times at Australian ports are above international averages^{a,b}
Port hours by ship size and component, selected ports and global average, 2019-20

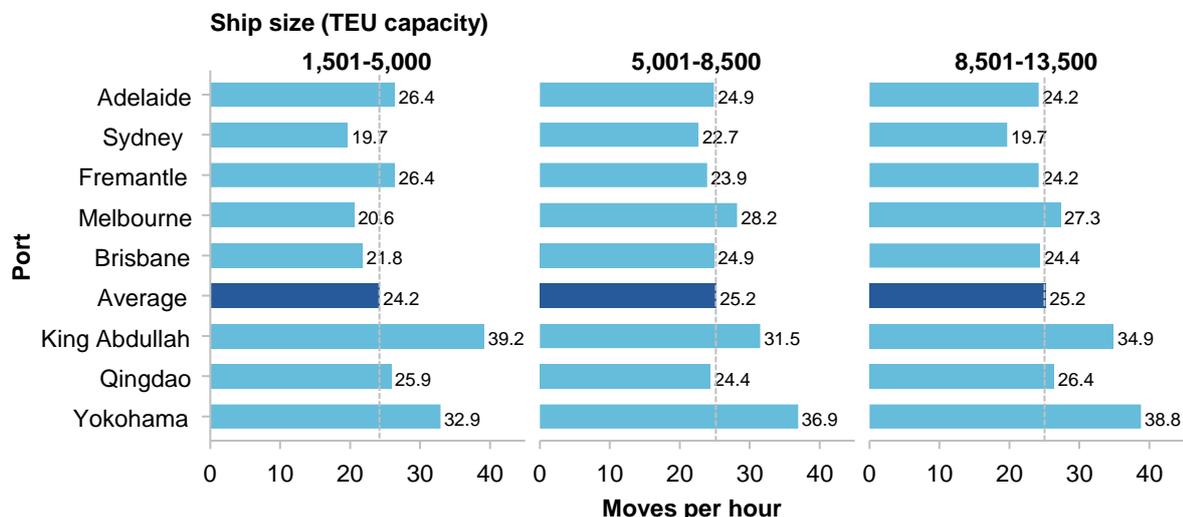


a. Gaps indicate that a port did not receive at least ten visits in the period. b. King Abdullah, Qingdao and Yokohama were the top performers in the World Bank’s 2021 study of 351 ports.

The Commission also used IHS data on port characteristics to analyse port efficiency. A subset of ports with broadly similar characteristics (throughput levels and origin–destination cargo patterns) to Australia’s major container ports was selected. Unfortunately, data constraints confined the analysis to capital inputs, for example, terminals, berths and cranes. Many of these variables are effectively fixed in the short to medium term, meaning the analysis can primarily only provide guidance on the potential to improve efficiency in the long term.

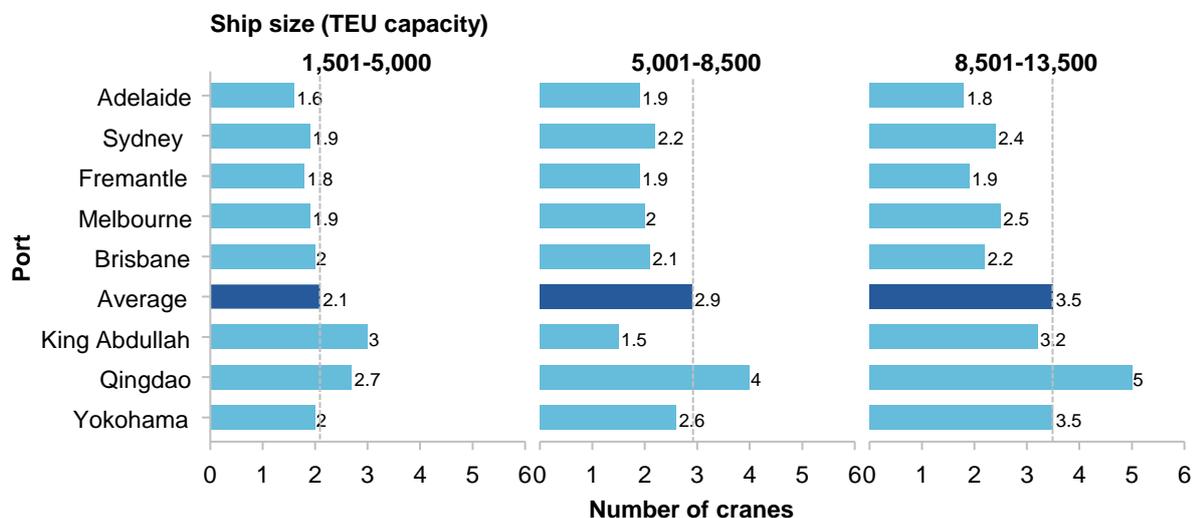
This work identified a ‘best practice’ set of ports — those that were using their inputs most efficiently. Apart from Adelaide, Australian ports were not operating at this ‘efficient frontier’; they could handle an increase in throughput by using their capital inputs more efficiently.

Figure 6 – Australian crane productivity is roughly similar to the global average^{a,b}
Gross crane rates by ship size, selected ports and global average, 2019-20



a. Ships with capacity less than 1500 TEUs are excluded because of missing gross crane hours data for Australian ports.
 b. King Abdullah, Qingdao and Yokohama were the top performers in the World Bank's 2021 study of 351 ports.

Figure 7 – Australian ports typically use fewer cranes to handle ships^{a,b}
Crane intensity by ship size, selected ports and global average, 2019-20



a. Crane intensity is calculated as gross crane hours divided by operating hours. Ships with capacity less than 1500 TEUs are excluded because of missing gross crane hours data for Australian ports. b. King Abdullah, Qingdao and Yokohama were the top performers in the World Bank's 2021 study of 351 ports.

But the analysis also revealed the importance of considering port inputs. The port of Yokohama, for example, topped the World Bank rankings. Yokohama had similar throughput to Melbourne and Sydney, but had more inputs. Yokohama had five container terminals, about 5.5 km of berths and about 40 quay cranes. In contrast, Melbourne and Sydney each had three terminals, about 2.5 to 3.6 km of berths and about 20 quay cranes. Yokohama did have higher gross crane rates than the Australian ports, but its capital utilisation rates were much lower (and its capital costs per lift presumably much higher). Yokohama turned vessels around more quickly, but was less efficient than all five of Australia's major container ports in its use of inputs.

Faster turnaround times are a good thing, but not at any cost.

Performance variations point to significant scope to lift productivity

Evidence of considerable variations in gross crane rates for each terminal operator over time, and between terminal operators requires further consideration. The data suggest that Australian terminal operators have significant scope to improve ship turnaround times without making any changes to crane intensity.

Between 2017 and 2019, for example, the average number of containers moved per crane at Patrick's terminal in Melbourne, ranged between a high of 38 per operating hour and a low of 27 (figure 8). And Patrick's cranes averaged 10 more moves in an hour than cranes at DP World's terminal (figure 9) (with similar levels of automation at the two terminals).

Reasons for these variations in performance are not clear, but restrictive work practices (discussed below) that make it less likely that each job in a container terminal is filled by the most appropriate person, are a clear candidate.

Figure 8 – Variation in performance points to scope for improvement

Average monthly gross crane rates, 2017–2019

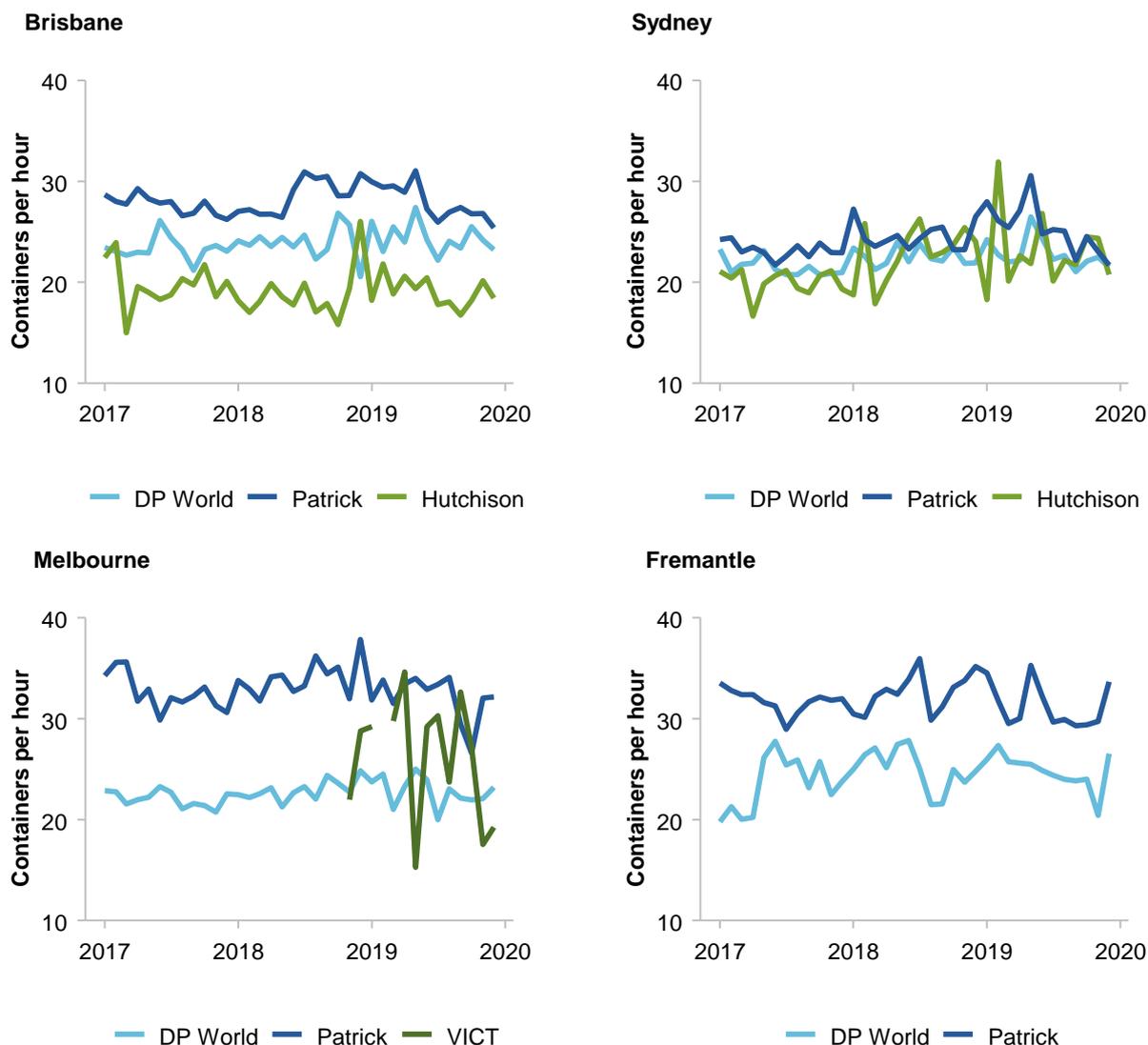
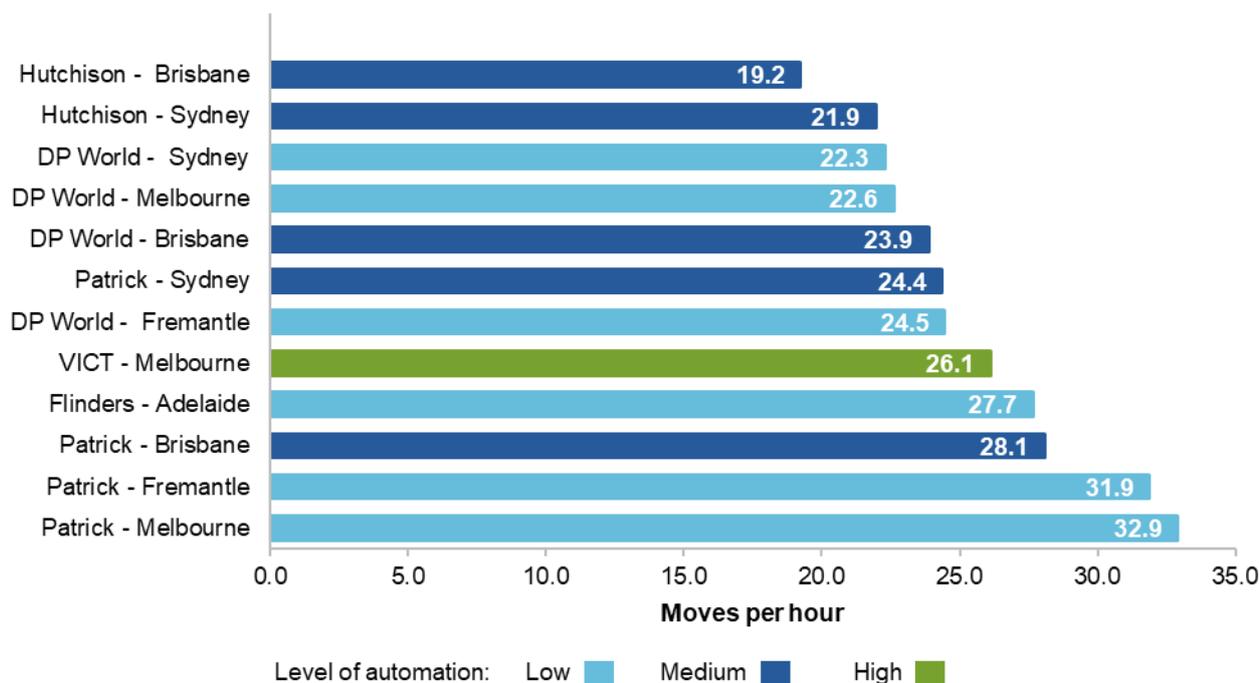


Figure 9 — Average monthly gross crane rate by terminal operator, 2017–2019



Potential gains from improving container port productivity

If all five of Australia’s major container ports achieved turnaround times in line with the global average, and passed the resulting cost savings through, Australia’s importers and exporters combined could save an estimated \$605 million a year. Although these estimated direct benefits are small relative to the size of the entire Australian economy, they are significant.

Aside from the costs that port inefficiency imposes on importers and exporters, ports also play an essential role in the maritime supply chain and have large indirect impacts on Australian businesses, consumers and the economy. Any sustained disruption to imports or exports has the potential to cause substantially larger economic impacts than the direct cost estimates suggest. For example, disruptions to imports of goods that are critical to local production (such as the chemicals used in water treatment and personal protective equipment used in health care) or to exports that provide a significant share of national income and employment, could jeopardise the economy and the wellbeing of all Australians.

Well-functioning, efficient container ports help to ensure the reliability of the maritime supply chain and logistics systems more broadly.

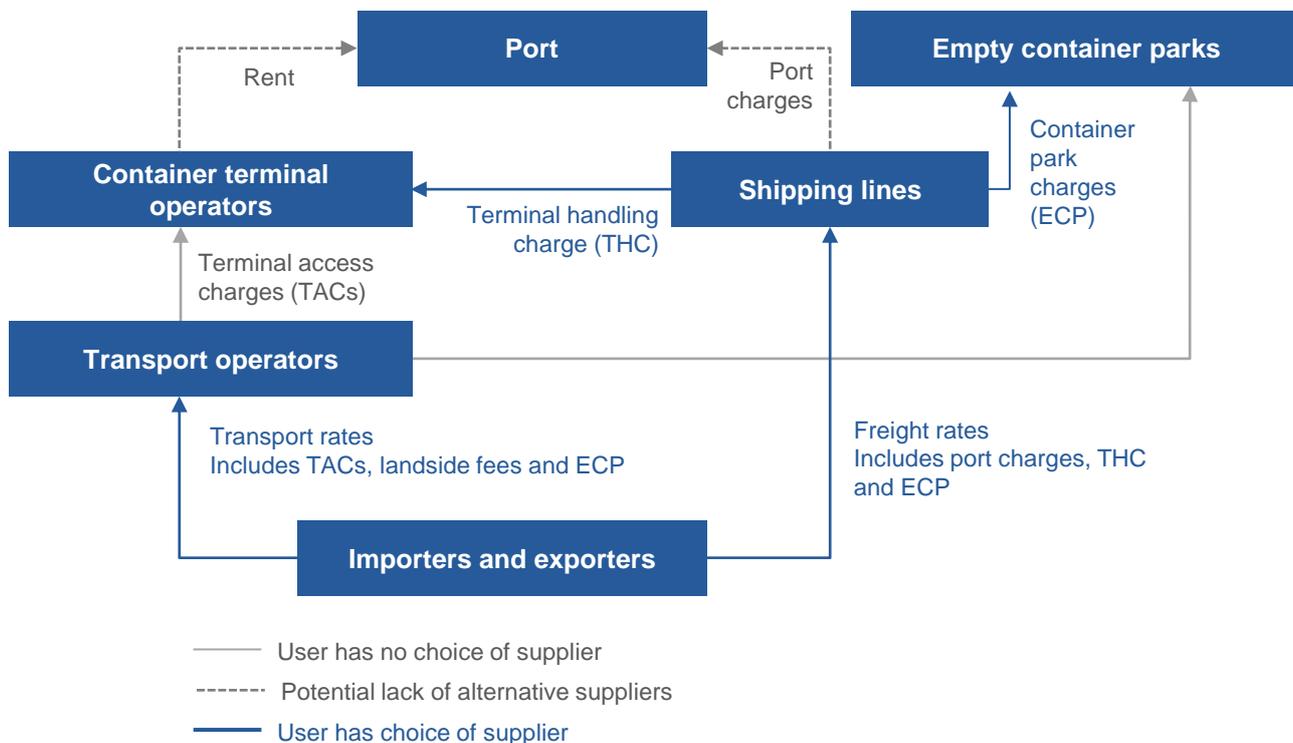
Is market power impeding system performance?

The maritime logistics chain involves a wide range of services (figure 10). For example, ports supply anchorage and berth services to shipping lines; container terminal operators supply terminal services to transport operators.

Customers for some of these services have little or no choice of supplier, raising the possibility that some suppliers in the maritime supply system are not constrained by competition and are potentially exercising

market power. This could lead to higher prices for customers, cost complacency by operators and lower levels of innovation in port services.

Figure 10 – Port decisions affect the entire system
A simplified depiction of the maritime logistics value chain



Ports have some market power but further regulation is not needed

While demand for a port’s end product (movement of freight) is driven by importers and exporters, port operators’ main interface with the system is via contracts with shipping lines and container terminal operators.

Each of the five large container ports has (but are not necessarily exercising) market power in their relationships with shipping lines. If a shipping line wants to engage with cargo owners in a particular part of Australia, then it must operate through the ‘local’ port and there is little if any scope for shipping lines to substitute between container ports. Import cargo destinations are overwhelmingly local to each port and landside transport costs mean that moving cargo between cities to access an alternative port would be uneconomic. Shipping lines cannot credibly threaten to move their business elsewhere.

Port privatisation processes have entrenched this power in Sydney by combining the ownership of Port Botany and Port Kembla and penalising any development of container capacity at the Port of Newcastle.

In contrast, container ports enter long-term contracts with container terminal operators and both parties bring considerable heft to the negotiating table. That said, there remain some risks that ports can exercise market power in their relationships with terminal operators. Container terminals operate significant infrastructure as tenants of the ports, have large setup costs and large sunk assets that can be held captive by a port in the event of expiry or renegotiation of a lease. And all long-term lease contracts are incomplete — it is impossible for them to cover every possible future contingency. Where material changes in market conditions, such as changes in port ownership, are not reflected in a contract, they may enable a port to

behave opportunistically towards a terminal operator tenant. Moreover, post-privatisation rents have increased significantly for container terminal operators at Melbourne, Sydney and Brisbane.

However, the Commission has not seen evidence consistent with the ports exercising significant and sustained market power over individual container terminal operators.

Regulatory settings appear to be adequate

The major container ports face regulation for both their interactions with shipping lines and with tenants, such as terminal operators.

In the case of shipping lines, prices for services provided by ports are typically monitored (or face the threat of further regulation). The Commission received few complaints about port pricing to shipping lines, consistent with this regulation acting as a constraint on the ability of each port to exercise market power over the shipping lines.

For landside tenants, container ports in Brisbane, Sydney, Adelaide and Fremantle operate under light-touch regulatory regimes and these jurisdictions have reserved the right to impose more comprehensive economic regulation. The Commission discovered little by way of complaint from tenants about the conduct of these ports. This does not mean issues do not exist, however, as aggrieved parties may simply lack an avenue for complaints to be aired.

In contrast, the Port of Melbourne is both the most heavily regulated and most commonly complained about container port. Investigation by the Victorian Essential Services Commission found that the port has been exercising its market power over tenants in the setting of rents and in breach of its pricing order.

Given that only the Port of Melbourne has been found to be exercising market power over tenants there is no case for tighter regulation on all ports. The threat of further regulation appears to be constraining the conduct of ports in Brisbane, Sydney, Adelaide and Fremantle. For the Port of Melbourne, the current arrangement for a 2025 review of the Port's adherence to a voluntary Tenancy Customer Charter (implemented in response to the Essential Services Commission investigation and providing additional dispute rights to current and prospective tenants), appears to be a next logical step in addressing issues around the Port's exercise of market power over tenants.

Issues in other markets need attention

Excluding ports, the maritime logistics system for containers has three main markets: shipping lines' provision of shipping services to cargo owners; container terminal operators' provision of loading/unloading services to shipping lines; and landside transport operators' provision of services to cargo owners via container movements.

Repeal of Part X of the Competition and Consumer Act is recommended

Competition is robust in the market for shipping lines' services. While lines have been consolidating over the past three decades, multiple providers service Australia and cargo owners can easily switch between them. Before the COVID-19 pandemic, competition between lines resulted in declining prices. Recent steep increases in blue-water charges reflect market responses to pandemic-related pressures and evidence on trade volumes (steady growth) and orders for new ships suggest that rates will fall as markets normalise.

That said, lines are permitted to cooperate on ship use, schedules (timetables), containers, use of terminals and freight rates through agreements registered with the Registrar of Liner Shipping. For example, three lines might agree to run one service a week between Australia and Singapore. At a 42-day round trip, the service requires six vessels. The lines will agree on how many vessels each will contribute and on how much

capacity each gets per vessel. Unused capacity can be sold to competitors that are not party to the agreement. (The Commission understands that none of the current agreements include price cooperation.)

While agreements enable shipping lines to achieve economies of scale, the law permitting them (Part X of the Competition and Consumer Act) does not require shipping lines to show that their arrangements provide a net public benefit to Australia — a requirement faced by similar industries. Putting shipping lines onto the same footing as other industries would ensure that any anticompetitive avenues for price cooperation are only available to shipping lines when the cost of reduced competition is outweighed by other public benefits.

More active regulation of terminal access charges is recommended

Container terminal operators compete vigorously to provide services to shipping lines. Together with an increase in lines' bargaining power via consolidations and increasing port rents and labour costs, this has contributed to declines in operators' profits over the past decade.

On the other hand, container terminal operators have market power over landside transport operators who have no choice about where they pick up a container because shipping lines choose which terminal to use for a shipment.

Over recent years, container terminal operators have increased existing fees or levied new fees on transport operators.

Some of these charges are incentive based and, if set at an appropriate level, could improve efficiency. For example, no-show fees are charged when a landside operator fails to collect or drop off a container on time. Containers must be prepared prior to the landside operator arriving, and a truck missing its time slot costs the terminal operator. These fees are avoidable as long as the truck arrives on time, and they ensure that containers are picked up and dropped off efficiently.

Other fees, most notably terminal access charges (TACs), are not based on incentives but simply represent a fixed charge levied by a container terminal operator to receive a container from, or deliver a container to, transport operators. Inquiry participants have raised concerns about what they see as the lack of justification for increases in TACs and transport operators' inability to push back on them.

TACs have increased markedly at all capital city ports over the last five years. For example, between January 2017 and January 2021, the three operators in Melbourne increased their TACs from close to zero to over \$120 per container. These steep increases may reflect terminal operators 'rebalancing' their revenue streams as payments from shipping lines have declined, and are consistent with terminal operators exercising their market power.

In the short term, transport operators bear the brunt of any fee increases or new fees. In the longer term, they pass those costs to cargo owners.

Container terminal operators are subject to a range of fees regulation. The ACCC monitors their prices, costs and profits. New South Wales requires notification of fee increases to their transport department. And Victoria has acted to make fees more transparent through a voluntary protocol that sees complying operators provide advance notice of fee increases to transport operators and restrict fee increases to once a year. The National Transport Commission is developing similar voluntary national guidelines. There are, however, limitations to these approaches. New South Wales does not require notifications to industry. And uptake of a voluntary approach is neither guaranteed nor will container terminal operators that do take part necessarily strictly adhere to a protocol.

Rapid increases in TACs, coupled with transport operators' lack of countervailing power in their relationships with terminal operators, suggest these regulatory settings are inadequate.

One response would see governments regulate fees, but this has costs: the direct costs of any scheme for terminal operators and regulators, plus the risk of distortions — for example, fees that incentivise efficient behaviour might be set too low.

The Commission's preferred option would prevent container terminal operators from charging fixed fees, such as terminal access charges, to transport operators. All fixed charges associated with container collection should be shifted to shipping lines, precluding terminal operators from exercising their market power over transport operators. Incentive fees could be charged to transport operators subject to monitoring.

Unfair contract terms should be addressed, particularly detention fees

Under Australian Consumer Law (ACL), in certain circumstances, application can be made to a court or tribunal to render void contract terms that are deemed to be unfair. The law only applies to 'standard form' contracts (contracts which are typically prepared by a single party to the transaction and offered on a 'take it or leave it' basis), involving at least one small business (one with fewer than 20 employees) and where the upfront price is no more than \$300 000, or \$1 million if the contract is for more than 12 months.

A term in a qualifying contract is unfair if it:

- causes a significant imbalance in the parties' rights and obligations
- is not reasonably necessary to protect the legitimate interests of the party advantaged by the term
- causes detriment (financial or otherwise) to a small business if it were to be applied or relied upon.

There is evidence of unfair contract terms being used in the maritime logistics system. In 2019, DP World, Hutchison and Victoria International Container Terminal (VICT) agreed to remove or amend terms in their standard form contracts for land transport operators which the ACCC concluded were likely to be considered unfair. The ACCC also entered into a court enforceable undertaking with Hutchison. As part of this process, Hutchison acknowledged that two clauses contained within its Terminal Carrier Access Agreement may contravene the small business unfair contract terms provision of the ACL. And in 2021, GrainCorp (a company that provides export, storage and port terminal services) agreed to amend 19 terms in the grain warehousing agreement it used for small business grain growers.

Concerns raised by inquiry participants suggest detention fees might be a further example of unfair terms.

Part of the contract between shipping lines and cargo owners covers container hiring. Shipping lines usually own containers and hire them to cargo owners. That hire usually includes 7–10 'free' days (sometimes less, sometimes more) for cargo owners to unpack a container once it has been unloaded from the ship (discharged) and return it either to the specified port terminal or an ECP for de-hire. Shipping lines charge detention fees when containers are returned outside their free days window.

Transport operators play a key role in this process. Cargo owners pay transport operators to pick up their containers from the ship and to drop them off at an ECP once unpacked. Transport operators typically take responsibility for the container only after it has been unloaded and gone through customs / biosecurity checks. Therefore, cargo owners pay detention fees stemming from a delay in customs clearing a container. Once the container has been picked up, however, the contract for service between the transport operator and the cargo owner comes into play. Transport operators may bear responsibility for getting a container de-hired on time, depending on what they have agreed to in their contracts. As a result, if detention fees accrue because a transport operator cannot deliver a container at the agreed time, the operator may have to compensate the cargo owner for those fees.

Issues raised in this inquiry about detention fees include:

- full ECPs turning empty containers away, leading to detention fees for cargo owners

- customs / biosecurity delaying when the container can be picked up
- free day allocations including weekend days and public holidays, but ECPs not being open on those days
- shipping lines providing fewer de-hire days.

The potential remedies for these issues would be costly for a small transport operator or cargo owner to pursue.

Shipping contracts are exempt from the ACL's unfair contract provisions, meaning detention fees fall outside the scope of Australian law. International law covers contractual terms in a maritime context, but accessing justice via this avenue could be prohibitively expensive.

An alternative option would see remedy sought on the grounds that detention fees constitute unconscionable conduct. However, for conduct to be judged unconscionable, it must be more than simply unfair. It has to be against conscience as judged against the norms of society — a high threshold to meet.

Detention fees exist to incentivise the timely return of containers. But if fees are levied, for example, when empty containers cannot be returned because parks are full, the incentive regime becomes moot.

Faced with similar issues, the US Federal Maritime Commission issued a rule noting that they will consider the reasonableness of the conditions attached to fees in interpreting the relevant law.

The Commission considers that shipping contracts should not be exempt from the unfair terms provisions in the ACL and that this exemption should be removed. Moreover, the Commission is seeking feedback on whether unfair contract terms are an issue in any other part of the maritime logistics system.

Infrastructure needs are being addressed

Larger vessels will be accommodated

Container ships calling at Australian ports are small by global standards, prompting some to worry that Australian shippers may be missing out on the potential benefits of larger ships.

- The biggest ships that visit Australia can carry 10 500 TEU, which is the median ship size in the global fleet. While operators at the world's largest ports are contemplating the investments needed to accommodate 24 000 TEU ultra large vessels, Australian port operators are planning to accommodate 14 000 TEU ships.
- Bigger ships promise lower blue-water rates and fewer emissions, but they increase costs in the rest of the maritime logistics system. They may need deeper and wider channels, higher bridges and bigger and more cranes. And they make the landside freight task 'lumpier', with peaks requiring more flexible labour and potentially adding to urban congestion.

Australian container port operators and other parts of the maritime logistics system have invested to accommodate bigger ships and continue to prepare for further investment. There is no clear need for government intervention to fund or otherwise coordinate investment to encourage the use of bigger ships.

More rail will require significant (possibly uneconomic) investment

Rail's share in container movements at Australia's ports is low (ranging from below 2 per cent at the Port of Brisbane to about 18 per cent at the Port of Fremantle).

This is not surprising. With some exceptions, transporting containers to and from Australian ports by train is more expensive than using trucks, and rail services are inherently limited in where they can deliver or pick up goods. For rail to be cost competitive, services need to run at a high frequency or cover large distances, but most

imported containers are delivered within about 50 kilometres of ports. And freight typically competes with passengers for access to rail corridors, with passengers prioritised and slots for freight limited. Costs encountered when changing mode at intermodal terminals further influence whether and when rail is competitive.

Within and outside the maritime logistics system, the case is frequently made for increasing the rail mode share. Rail brings a range of nonmarket benefits — reduced road congestion, carbon emissions and other pollutants, noise and accidents. And forecasts of substantial growth in Australia's freight task over the coming decades have contributed to most port authorities planning to substantially increase their rail mode share to slow the growth in road congestion. However, mode share targets have been set by state governments and not met in the past.

Increased use of rail is only likely to be achieved with significant (and possibly uneconomic) investment in dedicated rail lines and intermodal terminals. Taxpayer contributions to those projects is potentially justified by the nonmarket benefits associated with rail, but any contribution has to be considered on its merits. Careful business case development will be needed, including consideration of the likely demand for passenger rail services and the potential for developments like electric vehicles and new road investments to reduce the nonmarket costs of road transport. Changing current road transport regulations (for example, curfews) would retain flexibility around future transport options and lead to a more efficient land transport system for containers without the cost and inflexibility of rail investment.

Empty container management will improve as pressures recede

Australia imports more containers than it exports, by a wide margin. And differences in the types of containers used for exports (primarily agricultural goods and raw materials) and imports (primarily manufactured goods) exacerbate this surplus. ECPs store containers before they are exported. Exports of containers occur on both regular container vessel services and on purpose specific 'sweeper' services.

The surge in global demand for consumer products during the COVID-19 pandemic, and a consequent repurposing of sweeper vessels to carry full containers, led to ECP congestion, particularly in Sydney (which had less capacity than other cities). With some ECPs at or near capacity, transport operators trying to return empty containers were sometimes turned away, contributing to the detention fees discussed above.

Temporary responses to congestion in Sydney have included an easing of restrictions on the height to which containers can be stacked in some ECPs and a subsidy scheme that encourages ships to collect more empty containers. While the scheme appears to have increased collection of empties, there is a risk it will reduce exporters' access to relatively scarce 20-foot food grade containers because the incentive structure does not distinguish between empty container types.

Overall, it is expected that many of the ECP pressures are transitory and will reduce as pandemic pressures recede. Not least, pressures on berth access are likely to lift as disruptions ease, making both loading empty containers onto regular services and chartering sweeper vessel services more feasible. Reduced traffic and greater availability of ships has already meant that sweeper vessels were able to be scheduled in 2021.

Longer term, increasing use of 40-foot containers for imports could mean that exporters who need 20-foot containers struggle to access capacity. Many agricultural products are dense and too heavy to ship in full 40-foot containers, and partially filling a 40-foot container would create safety risks if the contents moved. Potential remedies include technological solutions to contain loose cargos inside 40-foot containers and exporters acquiring their own containers so that they no longer rely on shipping company container pools. But finding solutions for this issue is a task for industry, not government.

Long-term planning appears to be adequate

Urban encroachment affects all major Australian container ports except Brisbane. Industrial land around some ports is gradually being redeveloped for higher value commercial and residential uses and this can create conflict with some port users. Planning decisions should support the highest value land use (which factors in nonmarket costs and benefits of alternative uses) — and this may involve rezoning and moving future terminal developments to sites where land use is less contested. Existing planning tools can be used to balance competing community demands.

Accommodating the expected growth in container freight in the coming decade requires effective long-term planning. While ports plan and invest in infrastructure to move goods between ports and the landside logistics system, governments have the primary responsibility for planning and investment in infrastructure beyond the port gate. And, given maritime logistics systems are often spread across multiple local government areas, they are subject to both state and local government planning controls and decision making. State governments have the lead planning role; local government planning needs to align with higher-level schemes and coordination between different levels of government is central to efficient outcomes.

All state governments have released freight and transport strategies that include consideration of port infrastructure needs into the future. Compelling evidence has not been presented that more plans are required or that these plans will not be implemented.

Workplace arrangements lower productivity

Workplace arrangements are critical to the operation of a business and are fundamental to employees' livelihoods and wellbeing.

These arrangements are shaped by Australia's workplace relations system — a complex array of laws, regulations and institutions, with the *Fair Work Act 2009* (Cth) (FW Act) and the institutions that administer it at the centre. The Fair Work Commission (FWC) plays a key role. Among other things, its functions include approving enterprise agreements (EAs), dealing with matters about bargaining and industrial action, and issuing orders to stop unprotected industrial action. The FWC can deal with disputes between employers and employees through conciliation, mediation and (where permitted under the FW Act) arbitration.

Key elements of workplace arrangements on Australia's container ports (for example, hiring and promotion protocols, remuneration and rostering rules) are set out in EAs negotiated between employers and employees who are usually represented by one or more of the three unions that operate in the sector: the Maritime Union of Australia (MUA), the Australian Maritime Officers Union and the Australian Institute of Marine and Power Engineers.

Workplace arrangements are a significant concern for many inquiry participants

There are compelling arguments that workplace arrangements in Australian ports have adversely affected productivity. This has been recognised by many parties (box 2). Notably, the ACCC remarked that:

... systemic industrial relations issues across the entire container freight supply chain have played a pivotal role in inhibiting productivity and efficiency gains at Australian ports. While this has been a challenging area for some time, restrictive work practices and industrial actions have escalated in recent years.

The broader economic ramifications of disruptions to port operations during EA negotiations are also a major concern (box 3). In contrast, the MUA argued strongly that container terminal workers and the EAs under which they are employed are not responsible for supply chain issues or poor productivity of container terminal operations.

Box 2 – Many inquiry participants think workplace arrangements lower productivity

Many inquiry participants stated that workplace arrangements are having significant negative effects on the performance of Australia's container ports.

DP World (sub. 49, p. 51) submitted that 'flaws in DP World's industrial framework impose the most urgent and significant drag on competition and productivity within Australian ports.

QUBE (sub. 64, p. 7) observed that:

The strong bargaining position of the union and its ability to cause significant damage to customers in particular makes the achievement of improved productivity and efficiency extremely difficult.

Ai Group (sub. 60, p. 12) stated that:

... industrial relations practices in the maritime and ports sector are hampering productivity and increasing costs for both operators and users of ports and shipping. There is a clear case for further Government intervention.

Several submissions (HIA, sub. 40, pp. 3–4; IFCBAA, sub. 34, p. 9; NatRoad, sub. 8, pp. 8–9) agreed with the ACCC's 2021 findings that:

Restrictive work practices and industrial actions have escalated over the past decade. This has contributed to the relatively poor performance of Australian [container] ports and has caused ongoing disruptions to the entire supply chain. (ACCC 2021, p. viii)

Employee representatives, on the other hand, argued that workplace relations at container terminal operators are not driving poor productivity on the ports.

The MUA (sub. 59, pp. 6, 30, 40–43) MUA stated that 'the significant improvement in labour productivity has been the main contributor to overall container terminal productivity improvement over the last 22 years. In fact, the overall improvement in container terminal productivity appears to be almost entirely due to the increase in labour productivity'. The MUA also pointed out that workers in terminal operations have no role in many of the tasks which drive some measures of performance like berth hours. These are driven by other workers including pilots, mooring line workers, towage workers and regulators like harbourmasters.

Both the process of bargaining to reach new agreements and the content of EAs have the potential to affect port performance. These are considered in turn.

The Commission investigated Australia's *Workplace Relations Framework* in 2015. Where relevant the Commission has repeated recommendations from that inquiry in this report — primarily in the area of the conduct and regulation of protected industrial action. The Commission's view remains that these recommendations should be applied across the economy, as was recommended in 2015. For draft recommendations being made for the first time in this inquiry (in the areas of length of bargaining, content of EAs and role of the FWC), the Commission has only considered evidence from the operation of workplace

relations on the ports and, therefore, is not in a position to recommend economy-wide changes. It will be for future work to evaluate whether these draft recommendations should be applied more broadly.

Box 3 – Industrial action can have significant effects on third parties — particularly industries dependent on maritime freight

Submissions detailed the impact of protected industrial action on participants in the supply chain. For example:

Industrial strike action at shipping ports has led to significant anxiety and stress for business operators in the food and grocery sector. Industrial dispute action has led to a delay in container movement and warehousing backlogs impacting local businesses and the consumer. This has significant implications for the [fast moving consumer goods] sector where inputs, ingredients and finished goods have limited shelf-life and are prone to infestation ... The [Australian Food and Grocery Council] has received consistent feedback of missed shipping windows and significant cost implications leading to a loss of business and product wastage. (AFGC, sub. 21, pp. 8–9).

... farm machinery destined for the Port of Fremantle was instead diverted to Port Melbourne, creating millions of dollars in additional costs to freight the machinery back to Fremantle via land, and weeks of delay. (NFF, sub. 14, p. 10)

At least five iron ore and gold mining companies in Western Australia were impacted by industrial disruption at the Port of Fremantle resulting in delays to the receipt of mining equipment, including spare components, haul ruck, wheel loaders and dozers. (MCA, sub. 25, p. 5)

During the last bargaining period (2018 to 2020) DP World conservatively estimates that the value of goods disrupted in each day of industrial action was over \$200 million across DP World's four terminals. (DP World, pers. comm., 27 May 2022)

Protracted bargaining and protected industrial action merit reform

Container terminal employees have significant leverage in EA negotiations

The workplace relations system is designed to balance outcomes for employers and employees. Allowing employees to bargain collectively and to take industrial action while negotiating EAs are mechanisms designed to achieve this. Government also sets some minimum standards by regulating floors for wages and conditions.

However, a challenge for governments is to create a regulatory system where neither party has significantly more bargaining power than the other, so that outcomes are likely to represent a reasonably balanced compromise between employer and employee preferences. The system is not static and has been through a number of phases, influenced by political processes, and this in turn affects where this balance lies.

Conditions in container terminal operations confer significant — and unbalanced — bargaining power on employees. Terminal operators have strong incentives to maintain operations; disruptions are very costly to them. Terminals involve significant investments in plant and equipment that have little value in alternative uses and competition between operators is high. Shipping lines can easily shift their business between operators, and parties within vessel sharing arrangements negotiate as a collective, potentially giving them

leverage in contract discussions. Operating profit margins for container terminal operators at the ports in Brisbane, Sydney and Melbourne fell markedly over the decade or so before the onset of the COVID-19 pandemic. This gives greater leverage to unions to the extent that they can threaten actions that affect asset utilisation. This bargaining capacity is strengthened by the dominance of one union, the MUA, and its high membership density in the workforce. The risk of conflict also has an historical dimension, with long-standing adversarial relationships between employers and employees.

Recent negotiations were protracted and industrial action hit productivity

Bargaining periods across container terminal operators extended substantially in the most recent round of EA negotiations (figure 11). The average time to reach agreement was about 525 days (compared with about 295 days for negotiations before 2018). And there was significant overlap in bargaining activity. For at least 900 days, two or more operators were bargaining at the same time, and for about 130 of those days, negotiations overlapped for four of the five operators.

The MUA noted that the COVID-19 pandemic was particularly disruptive for EA negotiations with the three largest container terminal operators — DP World, Hutchison and Patrick Terminals. Other inquiry participants contended that bargaining is not conducted efficiently and consumed significant resources.

One consequence of protracted bargaining is that it translates into an extended period during which employees can take protected industrial action and, once authorised, a wide range of actions can be pursued. Working with a non-dominant hand, for example, is permitted. Disruption can be created at little, if any, cost to employees by the MUA notifying a work stoppage then cancelling the action just before it is due to commence. As a result, workflows are disrupted and contingencies may have been planned, but union members are paid because the shift goes ahead. Employer response options to protected industrial action are limited to lockouts of the workforce.

Evidence suggests that protected industrial action negatively affected container terminal performance during the recent round of EA negotiations:

In late 2020, during the most recent round of enterprise bargaining, a detailed assessment undertaken by DP World showed that productivity was being impacted between 22–34% in any given 24-hour period and that DP World lost between 16 hours and 50 hours of productive work each day. Collectively ... over 60,000 individual working hours was lost to protected and unprotected industrial action during the last DP World bargaining round. (DP World, pers. comm., 27 May 2022)

Close to 35,000 productive hours were lost [between] commencement of bargaining in September 2020 and November 2021, causing significant business interruption across the supply chain. Patrick concluded negotiations in March 2022. (Patrick Terminals, pers. comm., 9 June 2022)

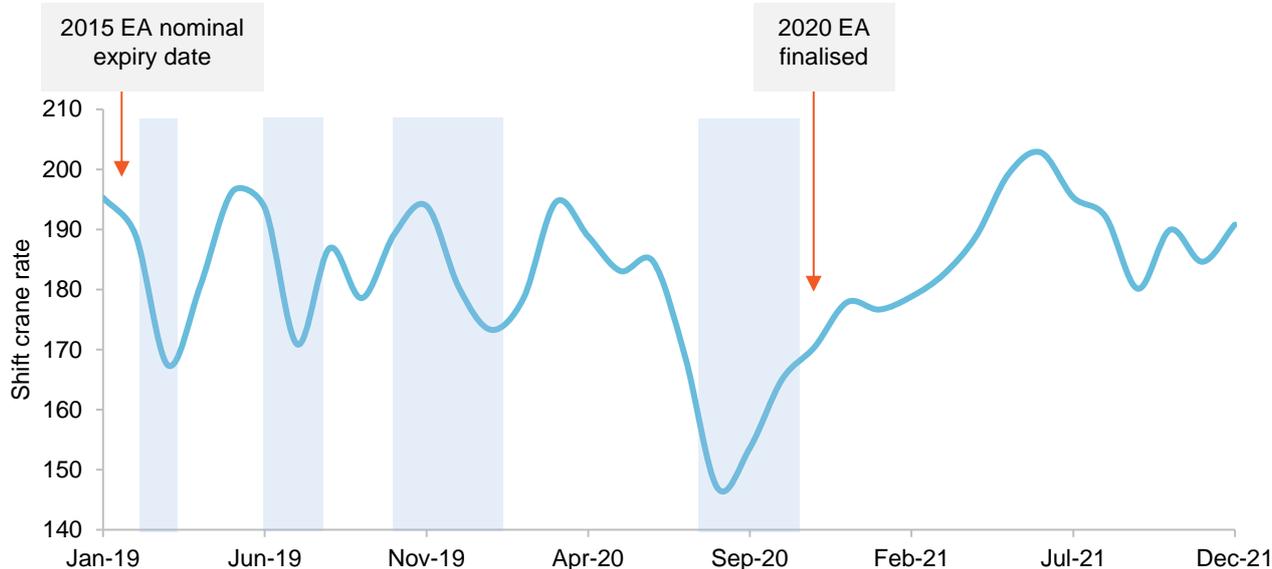
Impacts on productivity were evident in crane rates (figure 12). And there were significant effects on industries dependent on maritime freight (box 3).

Figure 11 – Reaching agreement was particularly time consuming in the recent round
Length of lines represent time spent bargaining for a new EA



Figure 12 – Periods of protected industrial action correlated with a lower crane rate at DP World’s Port Botany terminal

Blue shading represents periods of protected industrial action



Another consequence of the lengthy recent round is that four of the five container terminal operators' EAs expire between March and December 2025. Overlap in bargaining activity is likely to be more common in the next round, bringing with it a number of risks:

- container terminal operators may be subject to simultaneous protected industrial action:
 - this would confer substantial leverage to the MUA, even if chooses not to exercise it, through the ability to shut down or heavily limit operations across an entire port

- it may also prevent container terminal operators from subcontracting work to other operators — a common practice to manage disruptions
- a higher load on union resources, which may lead to longer negotiating periods.

Effective remedies for protracted bargaining and industrial action with economy-wide costs appear limited

Under the FW Act, bargaining parties can apply to have the FWC deal with a dispute during the bargaining process, and an applicant can specify the level of intervention sought, from help in resolving a single issue to more extensive involvement. The FWC can deal with the dispute through conciliation or mediation, making a recommendation or, if the parties agree, arbitration. However, uncertainty about the outcomes of any intervention (in some instances linked to perceived variability in the approach taken by individual FWC members), and concerns about having conditions imposed upon them, may mean bargaining parties are reluctant to approach the FWC.

While parties initiated FWC intervention during recent negotiations, protracted bargaining suggests that additional mechanisms to support parties in reaching agreement would have value.

Parties can also apply to the FWC to terminate an agreement once it has nominally expired, and there are no restrictions on when or why they might do so. In practice, however, the factors that the FWC has to take into account in considering such applications (including the public interest and circumstances of the employer, employees and union covered by the agreement) mean terminations are rarely granted.

If a termination is granted, it results in workplace arrangements reverting to the underlying modern award. This is a potentially costly outcome for employees if EA terms and conditions are substantially more attractive than award provisions and for employers if, for example, EAs deliver work arrangements that better reflect their operational requirements.

Three employers in the ports (Patrick Terminals, Smit Lamnalco and Svitzer) applied to terminate their agreements in late 2021/early 2022. Termination is a serious step, and the fact it was pursued three times in recent negotiations is further evidence in support of the need for additional mechanisms to help parties reach agreement.

The FWC has the option of suspending or terminating protected industrial action on the grounds that it is causing significant economic harm to the employer and employees engaged in bargaining or to the national economy (or an important part of it). But the FW Act does not define 'significant' and FWC decisions have set a high bar.¹ The Australian Government Minister for Employment and Workplace Relations also has discretion to intervene on the basis of significant economic harm. Again, this sort of intervention is rare, but the threat of intervention may contribute to the resolution of industrial disputes. For example, in October 2021, the MUA's decision to suspend an 11-week period of rolling strikes coincided with a threat by the Minister to apply to the FWC to terminate the industrial action on the basis that it was damaging the Western Australian economy.

On balance, the Commission considers that incremental reforms to the FW Act would support effective bargaining and reduce overly harmful industrial action.

¹ Significant' has been interpreted as 'exceptional in its character or magnitude when viewed against the sort of harm that might ordinarily be expected to flow from industrial action in a similar context'.

FW Act amendments and improved operation of the FWC are recommended

In line with its 2015 report *Workplace Relations Framework*, the Commission recommends that the FW Act is amended to:

- clarify that 'significant' should be interpreted as 'important or of consequence'
- allow the FWC to suspend or terminate protected industrial action when it is causing, or threatening to cause, significant economic harm to one party under the EA rather than both (as is currently the case)
- include options other than lockouts for employer protected industrial action
- enable employers who have implemented a contingency plan for protected industrial action that does not go ahead to stand down the relevant employees without pay for the duration of the contingency response if they choose to do so.
- enable employers to choose either to deduct wages or continue to pay employees for protected industrial action which lasts for less than 15 minutes.

Further, port-specific amendments are recommended to:

- widen the range of third parties who can make applications to terminate protected industrial action, for example, to include entities with an interest but who may find it difficult to show they are directly affected, such as employer or employee associations, or third parties like importers/exporters
- include a mandatory requirement for FWC intervention when certain thresholds in bargaining activity are reached (these could include time limits and/or thresholds linked to the number or scale of protected industrial actions).
- enable employers to better prepare for industrial action by lowering the threshold for applications to extend the mandatory three-day notice period for protected industrial action to up to seven days.

The Commission is seeking feedback on whether additional penalties for unlawful industrial action should be recommended.

With the aim of ensuring that approaching the FWC is attractive to bargaining parties, the Commission recommends that the FWC (supported by amendments to the FW Act where necessary):

- establishes a fast-track process for dealing with applications involving port employers and employees and their representatives
- enables more decision making by full benches to assist consistency of decision making
- makes arrangements to ensure FWC commissioners with industry knowledge and familiarity with parties are available.

Amendment of the FW Act to allow input from employers and employee representatives in the selection of FWC members dealing with port matters, with the objective of identifying nominees who have the confidence of both employers and employees, is also recommended.

Prohibition of some agreement content is recommended

Some clauses in terminal operators' EAs constrain productivity and efficiency

A number of the clauses found in container terminal operators' EAs are highly restrictive and constrain the ways that workers and equipment can be deployed.² For example, there are clauses that limit:

- merit based hiring, promotion and training (recruitment is limited to entry level roles in some operators and movement up the career ladder is strongly linked to tenure with that operator)

² Clauses vary from agreement to agreement, but many terms have a similar effect.

- who can fill a role or backfill a position when another worker is not available
- automation.

Agreements also create a strong hierarchy of employment type by tenure. New hires begin as casuals (generally called supplementary employees on the ports) before moving to permanent guaranteed wage and then permanent full-time employment.³ This limits the flexibility (and diversity) of the workforce.

While it is not uncommon for agreements in the rest of the economy to include clauses dealing with at least some of the content listed above, container terminal EAs appear to put much stricter conditions in place than EAs in many other sectors.

Clauses that limit recruitment, promotion and training decisions combine to make it less likely that the most appropriate person for a job is the person in the role. As a result, terminal productivity may not be as high as it could be. These clauses also disadvantage both existing and potential container terminal workers. Existing workers may not be in roles most suited to their skill sets or preferences. And competent outsiders cannot get in — existing employees are shielded from merit-based competition.

Strict rules that dictate who is picked for a shift or cover an absence also limit terminal operators' ability to choose the most appropriate person for a job and can make it difficult to backfill a role. Combined with minimum staffing requirements for some types of equipment, challenges in filling a role can mean that a whole team is unable to work a shift — with clear implications for productivity and efficiency.

Under the FW Act, all EAs must include clauses requiring an employer to consult with their employees about major workplace change, like automation. But requirements in container terminal EAs set up lengthy and/or complex consultation processes and can require employee agreement to any change. These act as a brake on investment and mean that potential benefits, such as improvements in the safety and reliability of terminal operations, may be missed.

Ships arrive in port at all hours of the day and night and container terminal operators are under considerable pressure to have workers and equipment available when a ship berths. Delays in arrival times, for example, from bad weather, can mean workers are rostered on but not working. The extent to which rosters accommodate fluctuations in demand is contested. While operators called for more flexibility; the MUA argued that workers are very flexible and further flexibility is untenable. The Commission would appreciate evidence on how rostering rules in EAs enable or restrict the flexible allocation of workers to tasks.

Limits could be placed on agreement content

To lift productivity and efficiency, the FW Act could include a short list of content that cannot be included in EAs in the ports. The list should aim to prohibit *excessive* constraints on:

- merit-based hiring, promotion and training
- the number of casual workers and other workers with flexible rosters
- who employers can choose to backfill positions
- innovation and workplace change.

Some inquiry participants have argued for a ports code akin to the building code. If adopted, this could involve a longer and more prescriptive list of unlawful agreement content than proposed above. The

³ Permanent full-time employees have relatively fixed rosters. Guaranteed wage employees are permanent employees who usually have a much more flexible work arrangements than permanent full-time employees. They may be entitled to a minimum or average number of weekly shifts, or an equivalent payment.

Commission is seeking feedback to help it in reaching a conclusion about the merits or detriment of a ports code in the final report.

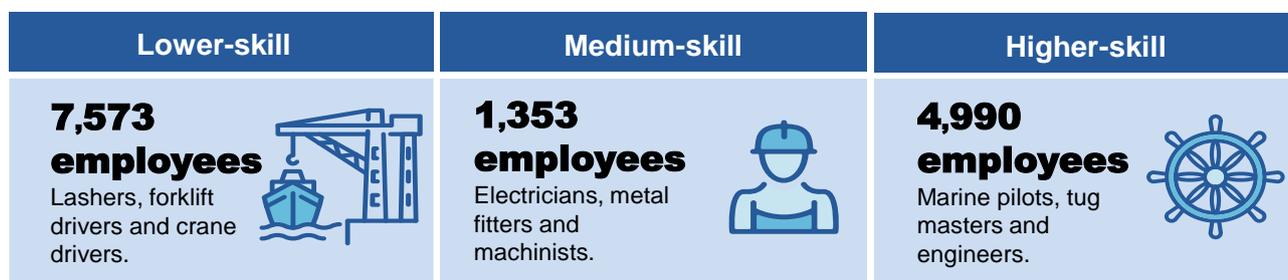
The Commission’s recommended approach to workplace relations reform in ports involves a wide suite of measures that give the FWC an expanded role, impose limits on agreement content and address imbalances in bargaining power. Whether, if implemented, they strike the right balance or involve unforeseen complexities and inefficiencies could be the subject of independent evaluation once these interventions have been in force for five years.

Skills and training raise few productivity concerns

A variety of skills are required to move freight in or out of ports. The journey of a container through a port relies on many workers, from those that the National Skills Commission refers to as lower-skilled, who are usually employed in entry-level jobs such as lashing, to medium-skilled workers such as electricians, through to higher-skilled professionals such as marine pilots (figure 13). Local variations in conditions and technologies can mean that the exact skills needed for specific roles may vary between ports and even between different firms conducting the same task at the same port.

While container terminals rely more on onsite, unaccredited training (reflecting workplace relations arrangements and site-specific needs), professional on-water occupations like marine pilots, tug masters and engineers usually combine vocational education and training or higher education qualifications with extensive blue-water experience.

Figure 13 – Workers in many different roles are needed on Australia’s ports



Inquiry participants have raised very few concerns about the system that delivers skills and training for port workers — the system largely appears to be functioning well. There is scope for improvement in some areas, but extensive redesign is not necessary.

- A lack of formal qualifications could be a barrier to labour mobility between container terminal operators if prior experience is not recognised at another company or port. However, workplace arrangements seem to be creating a larger barrier to labour mobility than either the absence of formal vocational education and training qualifications or any gaps in the mutual recognition of occupational licensing. Adoption of the workplace relations recommendations discussed above would help address this.
- Some participants have raised concerns about the potential for shortages of marine pilots. Access to the blue-water experience needed to qualify for marine pilot roles has become more difficult as Australia’s coastal fleet has reduced, but it appears that this is being addressed through immigration and cadetship programs. Subsidising a strategic fleet (discussed further below) for training purposes would be costly and unnecessary.

Skills needs in parts of the industry are likely to change as automation and other technology is introduced. However, it is likely this adjustment will be gradual, as it has been in the past. Adjustments are already being made to vocational education and training courses to include future-focused content.

Australian ports are adopting technology where desirable

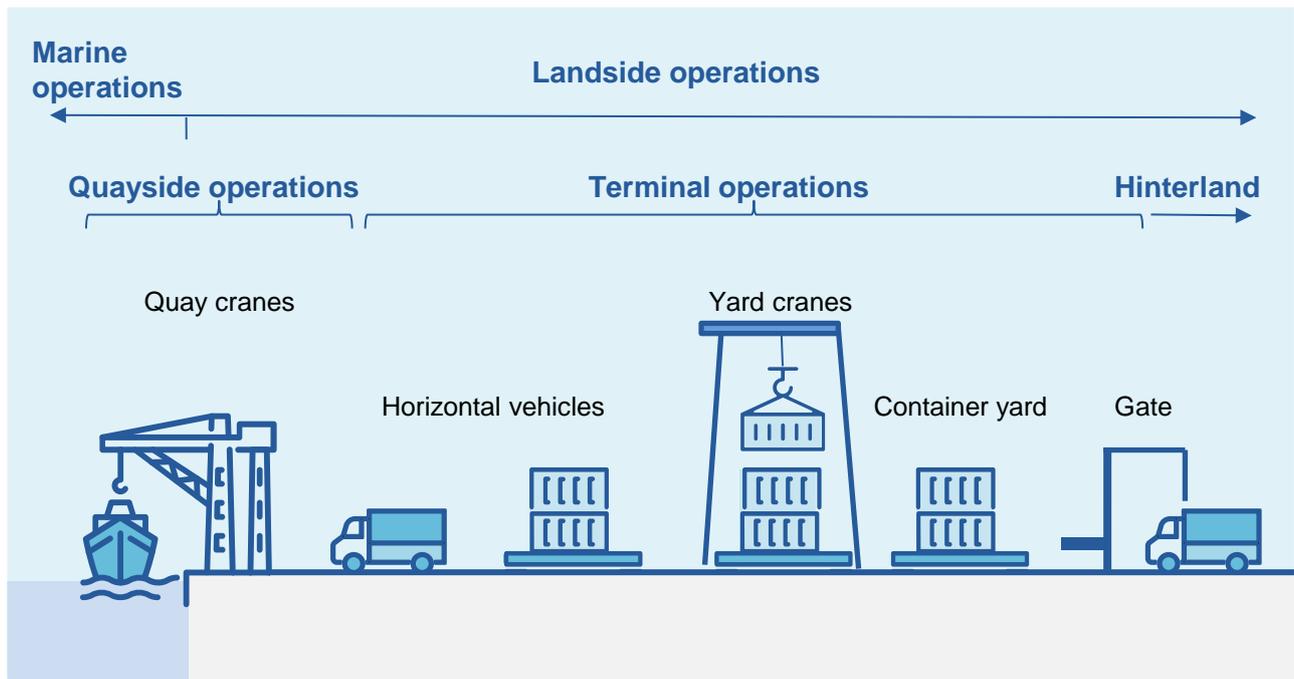
The adoption of technology at Australia's container ports is broadly in line with international practice.

In exploring current practice, the inquiry focused on three topics raised by inquiry participants — automation at container terminals, the availability and exchange of information and cargo clearance systems.

Automation may not increase crane rates but has other benefits

Increased automation can be used at all stages of the maritime logistics chain, and particularly in container terminal operations. All the key operations and hardware used in container terminals (figure 14) can be automated. Extensively automated systems are becoming standard for major greenfield developments. In contrast, existing container terminals typically choose to automate discrete parts of their operations over time, in order to minimise the cost and disruption of converting to fully automated systems.

Figure 14 – Key operations and hardware in container terminals



The level of automation differs substantially across Australia's container terminals. Fremantle is the least automated port — its terminal operators rely on manual yard operations and quay cranes. The Port of Brisbane has the highest overall level of automation, with all its terminal operators utilising automation in their terminal yards, but manual quay cranes. And VICT is Australia's most automated terminal, with automated yard operations and gates and remotely controlled quay cranes.

Despite this variation, Australia's major container ports appear to be well advanced in adopting automation relative to high performing global terminals.

Further, there are mixed views about how great an impact automation has had, or can bring about, on performance in Australia's maritime logistics chain. While terminal operators claim automation can lead to higher rates of cargo handling, the MUA claims it is neither as reliable nor productive as human labour.

Overall, it is not clear from examining gross crane rates at the major container terminals that there is any correlation with levels of automation (as illustrated by the data presented in figure 9). There is no simple argument that more automation moves more containers in an hour.

However, there are some clear benefits from automation that appear to be driving its steady adoption by Australia's container terminals. The use of technology has the potential to improve the safety, reliability and consistency of terminal operations and reduce labour costs. In particular:

- reducing the number of workers required in container yards by automating equipment can reduce or alleviate instances where humans would otherwise be put at physical risk
- the potential for automated equipment to run around the clock without interruption makes it reliable, predictable and easier for operators to plan around.

Data sharing technology and trends

Data is produced and used at all stages of Australia's maritime logistics system. For example, data is generated through interactions between stakeholders and contained in documents. Performance-based data is generated by business activities. Sensors on physical objects create shared electronic data (commonly referred to as the 'Internet of Things').

Data analysis has many potential benefits, such as: optimised freight routes and schedules (ensuring that more cargo can flow uninterrupted); key performance indicators (highlighting opportunities to improve efficiency); and visibility of cargo origins and destinations (supporting infrastructure planning).

Australian ports are implementing new data-based technologies. For example, Flinders Port Holdings has used analytics to optimise the allocation of straddles and positioning of containers, so that containers move through the port as efficiently as possible. And analysis of detailed data on channel conditions has enabled larger vessels to safely access the Port of Brisbane, reducing the need for channel deepening.

While data sharing has enabled innovation, it could provide additional value. The public sector has the potential to aid maritime data sharing by opening access to data held by government agencies, for example statistics on port and terminal performance (held by port authorities), the flow of goods into and out of Australia (Australian Bureau of Statistics and Australian Border Force) or freight and use of transport infrastructure (State and Commonwealth transport Departments). Benefit could also be provided through the creation and maintenance of systems through which stakeholders interact with government and access data insights. Improving national digital infrastructure could also indirectly assist in improving stakeholder digitalisation and data generation practices. However, each of these initiatives would involve significant costs, and would have to provide public benefit that outweigh these costs.

Federal and State Governments have commenced initiatives to increase access to private and public sector data while improving the processes by which this data is collected — the National Freight Data Hub being developed by the Australian Government is one example. Though nascent, these initiatives will complement existing sources of data and could drive future innovation.

Document exchange systems are well established

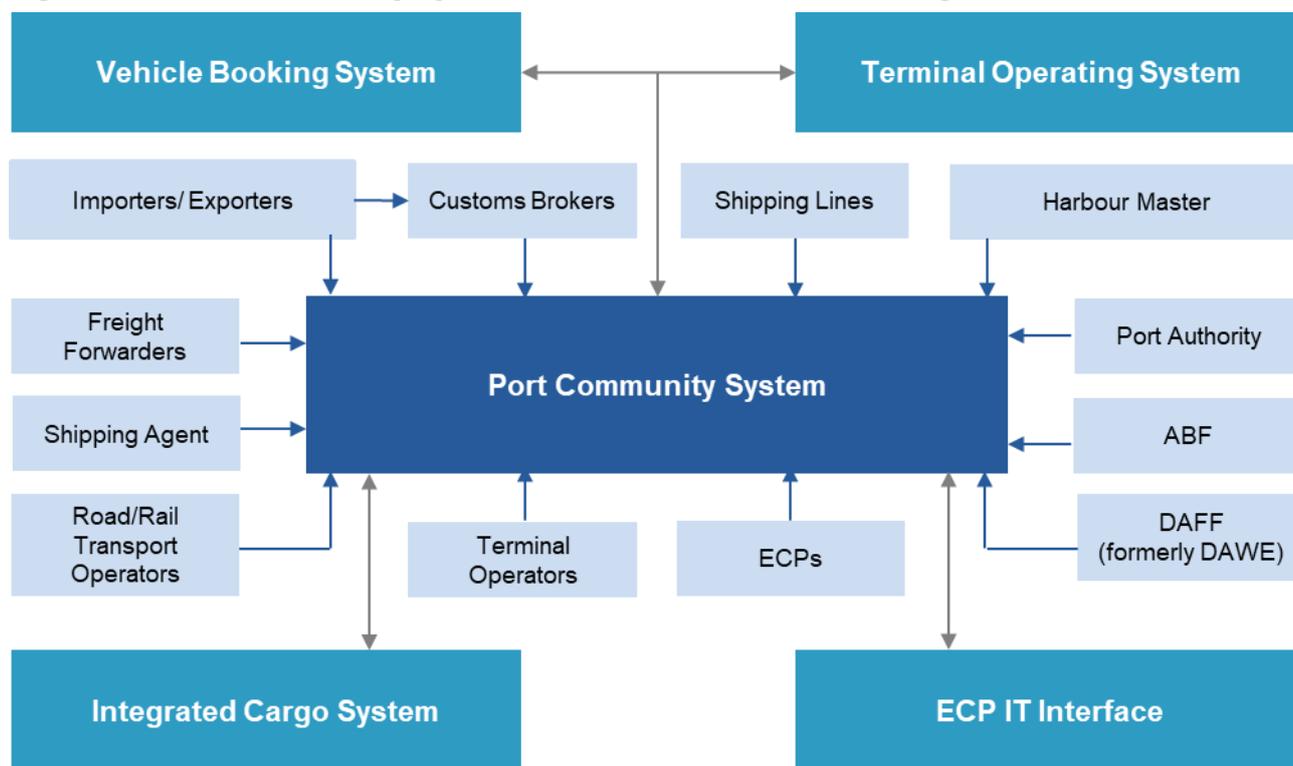
Document exchanges underpin the flow of cargo from sellers to buyers, certifying that cargo complies with regulations or has been received by a party within the logistics chain. Digitisation and digitalisation⁴ mean

⁴ Digitisation refers to the conversion of physically recorded information to electronically readable and transmittable formats. This is contained within digitalisation, which refers to the adoption of digital technologies which change how a business operates.

documents are now typically provided in electronic data interchange (EDI) formats and ICT systems can facilitate document exchanges — improving system efficiency.

Port community systems (PCS) enable public and private stakeholders to upload documents to a single online platform and share access with other supply chain participants (figure 15). A PCS can also host other ICT systems, such as a single window system (which allows a cargo owner or their customs agent to submit their documents for government agency approval to a web portal) and a vehicle booking system (which allows terminal operators to allocate slots for landside operators to book for un/loading cargo).

Figure 15 – Port community systems facilitate document sharing



a. ABF: Australian Border Force; DAFF: Department of Agriculture, Fisheries and Forests (formerly DAWE: Department of Agriculture, Water and the Environment); ECP: Empty Container Park.

Use of digitalisation in Australia's major ports appears to be broadly in line with other countries' initiatives.

While some inquiry participants suggested that government should coordinate a national PCS, a number of commercial document and information sharing options are offered around the world and used in Australia. These systems continue to be developed through the adoption of new technologies. Implementing a government-run PCS would risk simply adding further administrative costs for users in the maritime ICT landscape.

Cargo and vessel clearance systems are a work in progress

A range of regulatory requirements must be cleared before goods can enter or leave Australia to ensure vessels and cargo are compliant with Australia's biosecurity laws and customs regime.

While reviews over the years have led to some investments improving clearance systems, inquiry participants expressed frustration with some biosecurity and customs procedures. Issues raised included: extensive delays in inspection appointments and approvals; the paper-based process for booking biosecurity inspections and the administrative complexity; and duplication of information required by government departments.

Cargo and vessel clearance systems are convoluted and challenging for stakeholders to use, with repetition in data entry and outdated ICT systems. A taskforce established by the Australian Government is working to address these issues through a suite of reforms. To be successful, these reforms will require the elimination of duplicative application processes, adequate resourcing for the department's performing clearances and a stable 'single window' ICT platform that can integrate with port community systems.

National shipping concerns

Amendment of coastal shipping regulation is recommended

Carriage of domestic cargo between interstate ports by foreign flagged vessels (or cabotage) is regulated by the Australian Government with the aim of shielding Australian flagged (or registered) ships from competition from foreign vessels.

All vessels providing interstate cargo services are required to hold a licence. General licences (issued to Australian registered and crewed vessels) are issued for up to five years with no restrictions on coastal trading. In contrast, temporary licence holders (foreign-owned vessels or Australian-owned vessels operating with a mix of Australian and international crew) must undertake at least five voyages during the 12-month licence period and specify the details of each voyage when applying. General licence holders providing competing services can challenge approval of a temporary licence and the Minister for Infrastructure and Transport (or their delegate) must consider that challenge when deciding whether to grant the licence.

In 2018-19, over 75 per cent of interstate coastal freight (by weight) was carried under temporary licences.

Submissions to this inquiry suggest that the regulatory regime remains an issue. Most maintained that the inflexibility and cost imposed mean coastal shipping is uncompetitive with road, rail and international shipping. There was support for simplification of regulation to ease the administrative burden, remove impediments and increase options for supply chain resilience, with some suggesting that the uncompetitive position of domestic shipping has driven increased substitution of international products for Australian domestic production to the detriment of the Australian economy.

However, other submissions argued for a broadening of the regulatory regime to strengthen crewing and workplace relations compliance on vessels and to reduce the reliance on global suppliers for shipping services. While the proposals had a strong focus on safety and resilience, there was little discussion of how proposed measures would contribute to the global competitiveness of Australia's maritime logistics system or what economic costs and benefits regulatory protections provide to the broader Australian public.

In the Commission's view, there is a strong case for reform to allow greater competition from foreign vessels. This would provide more cost-effective shipping services for Australian users. The temporary licence system should be streamlined and general licence holders' ability to contest approval of temporary licences should be limited. Requirements that Australian labour laws apply for licence holders should be retained.

Concerns about capacity and training may be better resolved by means other than a strategic fleet

Recent pressures on global shipping capacity and transport challenges associated with natural disasters have highlighted the importance of international service suppliers to Australia and the limited number of Australian registered trading vessels. In response, there have been calls for greater government support for

Australian-flagged shipping capacity. Some have also called for this support to provide training berths as a remedy for potential blue-water skills shortages.

Both the Australian Government and now opposition have announced policy positions that include development of 'strategic' or 'sovereign' shipping capacity to secure ongoing access to essential imports and to provide vessels for use in times of national crisis or conflict (referred to as a 'strategic fleet').

These proposals involve increasing the number of privately-owned, commercially operated Australian-registered trading vessels, however, locally-registered ships would face significant disadvantages in international shipping markets. They would have to comply with Australian crewing requirements and labour law — giving them higher labour costs than many other vessels. And they would face the risk of having to break contracts if requisitioned by the Australian Defence Force to help in times of natural disaster or conflict. As a result, it is unlikely that they would be profitable in normal circumstances. Owners would need subsidies in order to compete globally on commercial terms and as compensation for the costs and risks associated with having to make their vessels available if requisitioned in times of need.

Further, a strategic fleet may not significantly mitigate any issues of shipping capacity that might arise in the future. First, disruptions can occur to different types of shipping at different times. A strategic fleet would be unlikely to cover all of these disruptions with sufficient capacity. Second, the strategic fleet would likely face the same disruptions as other commercial shipping operations. For example, an Australian strategic fleet would have faced the same congestion issues at international ports stemming from the COVID-19 pandemic as other commercial shipping. In this sense, an Australian strategic fleet would have provided little if any benefit during the recent disruptions to shipping.

Concerns raised about domestic shipping capacity and training may be better resolved by means other than a strategic fleet.

Capacity could be acquired as needed from the international market without the costs involved in supporting a strategic fleet. The shipping charter market provides access to a wide variety of vessels that could be used to address specialist case-by-case needs. And the Australian Government could access international resources — including the charter market — in response to natural disasters and emergencies. Exemptions to licencing requirements for international vessels that allowed carriage of domestic cargo in response to the flooding of the East–West rail line in 2022 illustrate one way in which international capacity can be accessed.

Alternatively, the Australian Government could use financial instruments to underpin capacity that could be drawn down in times of crisis. For example, the government could write options contracts with large cargo owners or with shipping lines to 'buy out' their capacity in times of great need.

Recent experience has also shown that the international shipping sector is responsive to changes in Australian demand. Since the COVID-19 pandemic began, the level of international containerised trade has grown to record levels, and container shipping lines have introduced new services to Australia despite ongoing high global demand for capacity. More generally, in a global market such as shipping, domestic resilience would be facilitated by removing unnecessary barriers to entry for international operators.

In the case of training, as noted above, cadetships and skilled migration (notwithstanding disruptions caused by the COVID-19 pandemic) appear to be working well in meeting needs for blue-water experience.

A strategic fleet requires further evaluation as on present evidence it is not the best remedy for concerns about domestic shipping capacity and training. The complex matters involved might be further evaluated and examined by the Taskforce proposed by the government in its policy position prior to the election.

Finally, issues of access to national shipping capacity to address national security and defence needs are clearly matters for the Australian Government rather than industry and should be considered independently of economic needs through appropriate national security policy settings.

Recommendations and findings

The performance of Australia's container ports



Draft finding 3.1

The elapsed labour rate is not a measure of labour productivity

The elapsed labour rate, which measures the number of containers handled per hour that stevedoring workers are on a ship, is often interpreted as a measure of labour productivity (output per worker or hour worked). However, the rate does not reflect either the number of workers or hours worked and is therefore not a measure of labour productivity.



Draft finding 3.2

Data gaps limit assessment of port performance

Publicly available data relating to port performance is fragmented, incomplete and inadequate. This constrains analysis. Data on labour inputs, for example, are not available, precluding analysis of labour productivity. Other data gaps mean that productivity during some key steps of a container's journey through a port is not visible.



Information request 3.1

The Commission is seeking data on the productivity of labour within ports. Measures could include the average number of 20-foot equivalent units handled per person-shift, per employee or per hour worked. Ideally, the data would enable benchmarking across Australian ports or assessment of productivity trends over time.



Information request 3.2

The Commission would appreciate data on container dwell times in Australian and international terminals or ports.



Draft finding 3.3

The framework for measuring Australian container port performance could be enhanced

A comprehensive framework for measuring port performance would include data on the time taken to move containers through each of the key steps between ship and port gate. Comparison of these time-based metrics across ports would reveal where operations in a port are relatively inefficient. Other performance measures could then be used to understand *why* these relative inefficiencies exist.



Information request 3.3

The Commission is seeking feedback on the costs and benefits of collecting and processing the richer data required to implement a comprehensive performance management framework. Insights into whether there would be any significant downsides to increased information availability, such as the possible facilitation of anticompetitive behaviour, would also be appreciated.



Draft finding 3.4

There is scope to improve crane rates

Crane rates can vary significantly across terminal operators within the same port and over time within the same terminal operator. More consistent attainment of high crane rates would lift productivity.



Draft finding 3.5

Container port productivity has increased in the last 30 years

Measured by crane rates (container movements per hour that cranes are operating), productivity at Australia's major container ports (Brisbane, Sydney, Melbourne, Adelaide and Fremantle) rose strongly in the late 1990s following significant waterfront reforms, and continued to grow at a slow pace over the following two decades.

**Draft finding 3.6****Each Australian container port has different strengths**

How well Australia's major container ports compare to their local peers depends on the performance metric considered. For example, in 2019 Melbourne moved more containers per hour than the other ports because it used more cranes per ship. Adelaide and Fremantle had the highest net crane rates — while they used fewer cranes on average, they worked them harder. Sydney, Brisbane and Adelaide recorded longer anchorage and steam-in times — potentially indicating port congestion and/or port inefficiency. And Sydney underperformed on truck utilisation rates and turnaround times.

**Draft finding 3.7****Australian container ports take longer to turn ships around than many international ports**

Australian ports do not compare well against international ports on measures of ship turnaround times. Their poor rankings in the World Bank's Container Port Performance Index reflect the fact that they take longer than many international ports to process ships (particularly medium to larger vessels — that is, those with a capacity of more than 5000 twenty-foot equivalent units). Slower turnaround times in Australia mainly reflect the use of fewer cranes to handle containers — Australian cranes are just as productive as those in the average international port.

**Draft finding 3.8****International evidence also suggests that Australian ports could lift their productivity**

Benchmarking analysis by the Commission identified a 'best practice' set of ports — those that were using their inputs most efficiently. Apart from Adelaide, Australian ports were not operating at this 'efficient frontier'; they could handle an increase in throughput by using their capital inputs more efficiently.

The Commission's work also revealed the importance of considering port inputs in performance analyses. Recent work by the World Bank did not account for the fact that some ports use relatively more inputs and can, therefore, turn ships around faster. Some ports have an excessive level of investment for their current level of throughput. This over investment in costly capital is inefficient even if it means that they can turn ships around quickly.

On balance, the empirical evidence from international comparisons of port performance suggests that there is scope for Australian container ports to improve their productivity.



Draft finding 3.9

Improving container port productivity would deliver significant benefits

Inefficiencies at Australia's major container ports are estimated to directly cost the Australian economy around \$605 million a year. While this impost is small relative to the value of imports and exports, it is significant. And it is rising with growth in container trade.

Ports also have large indirect impacts on Australian businesses, consumers and the economy. Any sustained disruption to imports or exports has the potential to cause substantially larger economic impacts than the direct cost estimates suggest.

Well-functioning, efficient container ports help to ensure the reliability of the maritime supply chain and logistics systems more broadly.



Information request 3.4

The Commission is seeking feedback on its proposed methodology for benchmarking Australia's ports. Would it be feasible and useful? Would alternative approaches have greater merit? If benchmarking is considered useful, who should undertake it? And how often should it be undertaken?

Australia's container ports have market power



Draft finding 5.1

Major container ports are currently regional monopolies

Major Australian container ports in the short to medium run may involve a natural monopoly technology, where a single port can best serve the relevant market. However, this situation may not hold over time as demand is increasing and space for expansion is constrained. Indeed, it is far from clear that it is economically efficient to have a single container port in some Australian cities including Melbourne and Sydney either today or in the near future.



Draft finding 5.2

Privatisation in New South Wales has impeded efficient outcomes

Privatisation processes in New South Wales have conferred protection on port lessees that are impeding economically efficient outcomes in the development of the state's ports system.

**Draft finding 5.3**
Ports face little countervailing power

There is little countervailing power from either shipping lines or container terminal operators constraining the use of market power by port operators at Australian container ports.

**Draft finding 5.4**
No case has been found for further regulation

In the case of shipping lines, prices for services provided by ports are typically monitored (or face the threat of further regulation). The Commission received few complaints about port pricing to shipping lines, consistent with this regulation acting as a constraint on the ability of each port to exercise market power over the shipping lines.

In the case of tenants, given only one container port has been found to be exercising market power there is no case for tighter regulation at this time on all ports. The threat of further regulation appears to be constraining the conduct of ports operating under 'light touch' regulatory regimes (Brisbane, Sydney and Adelaide). The mechanisms that exist in Queensland, New South Wales and South Australia that enable closer regulatory oversight if concerns arise about ports' use of their market power appear to be adequate. For the Port of Melbourne, the current arrangement of reviewing the Port's adherence to the Tenancy Customer Charter alongside land rents in 2025 appears to be a next logical step in addressing issues around the Port exercising its market power over tenants.

**Information request 5.1**

The Commission invites container terminal operators and other port tenants to respond (with evidence) if they think there is a market power issue with a port operator.

Competition issues in other markets need attention

**Draft finding 6.1**
Shipping lines compete in regional markets

There is not strong substitution between regions for cargo owners, and shipping lines will only transfer vessels between regions if there is a significant economic incentive.



Draft finding 6.2

Competition is a constraint in the shipping line market

There appears to be robust competition in the shipping line market. Multiple shipping lines service Australia and cargo owners can easily switch between them. Prior to the COVID-19 pandemic, terminal handling charges charged to cargo owners by shipping lines were not declining despite these charges to shipping lines from container terminal operators declining. But blue-water charges fell markedly, and these are a greater component of shipping costs than terminal handling charges.



Draft recommendation 6.1

Repeal Part X

The Australian Government should repeal Part X of the *Competition and Consumer Act 2010* (Cth) (CCA).

- No other industry has an exemption like Part X, even though there are industries with similar characteristics to the shipping industry.
- Shipping lines should show that their agreements provide a net public benefit.
- Either a class exemption or the existing provisions under Part VII of the CCA could deal with shipping line agreements under a net public benefit test once Part X is repealed.



Draft finding 6.3

Shipping lines have increasing bargaining power

Greater competition between container terminal operators and consolidation of shipping lines over the past decade have increased shipping lines' bargaining power relative to container terminal operators. This has contributed to declining quayside revenue for container terminal operators.



Information request 6.1

The Commission seeks information on why container terminal operators do not charge shipping lines fees for arriving outside their windows.

**Information request 6.2**

The Commission is seeking information on why landside fees charged by container terminal operators have increased substantially since 2017 and not earlier. Is the increase in fees:

- a competitive response to declining profitability and container terminal operators responding by increasing fees where they can?
- because declining profitability has reduced the regulatory threat and allowed container terminal operators to increase their fees?
- a combination of the factors above?
- because of another factor not included here?

**Draft recommendation 6.2**

Terminal access charges and other fixed fees for delivering or collecting a container from a terminal should be regulated so that they can only be charged to shipping lines and not to transport operators

Regulations should be established that prevent container terminal operators from charging transport operators any fixed fees associated with delivering or collecting a container. Container terminal operators would not be prevented from charging these fees to shipping lines. This reform should be complemented by state and territory government regulators being empowered to monitor flexible fees charged to transport operators by container terminal operators to ensure that these fees are being used to create efficient incentives for transport operators and are not being used to offset any lost revenue from fixed fees.

**Information request 6.3**

The Commission seeks further information on potentially unfair contracts within the maritime logistics system. Are there other terms to be concerned about that are not mentioned in this draft report? Are there other contracts that should be brought to the Commission's attention?

**Draft recommendation 6.3**

Remove exemption for shipping contracts

Shipping contracts should not be exempt from the unfair terms provisions in Australian Consumer Law. The Australian Government should remove this exemption.



Information request 6.4

The Commission invites feedback on draft recommendation 6.3, including any issues that might arise in relation to international treaty arrangements

Infrastructure needs are being addressed



Draft finding 7.1

Port expansions to accommodate bigger container ships do not need taxpayer funding

Australian container port operators and other parts of the maritime logistics system continue to prepare for bigger ships as needed and there is no need for government intervention to fund or otherwise coordinate investment or encourage the use of bigger ships.



Draft finding 7.2

Most container ports are planning substantial investments in rail infrastructure

Container port operators in Brisbane, Sydney, Melbourne and Fremantle plan to increase the share of freight travelling to and from those ports by rail over the coming decades. Any further government investment in rail to service container ports needs to be accompanied by a clear cost–benefit analysis, including analysis of the relevant externalities and including alternative scenarios for the development of truck technology, over the full economic life of the project.



Draft finding 7.3

Planning systems should allocate land around ports to highest value uses

Urban encroachment is an issue at all of Australia's major container ports except Brisbane. Industrial land around some ports is gradually being redeveloped for higher value commercial and residential uses and this can create conflict with some port users. Planning decisions should support the use of land in its highest value.



Draft finding 7.4

Long term planning appears to be adequate

All state governments have freight and transport strategies that include consideration of future port infrastructure needs. Compelling evidence has not been presented that more plans are required or that existing plans will not be implemented.

Workforce arrangements: framework



Information request 8.1

In addition to container ports and towage services, are there other sectors in Australian ports where workplace relations issues affect the efficiency or productivity of operations? For example, bulk ports, empty container park operations or pilot services.



Draft finding 8.1

Unions hold substantial bargaining power

Conditions in container terminal operations, together with the workplace relations framework, confer significant — and unbalanced — bargaining power on unions.

Workforce arrangements: issues



Information request 9.1

What role are modern awards playing in the ports? Given the prevalence of enterprise agreements in the sector, could changes to modern awards contribute to improved workplace relations or productivity? If so, in what way, and would there be benefit in the Fair Work Commission undertaking a review of the Stevedoring Award?



Information request 9.2

Is tenure the deciding factor on who receives training in container terminals because so much training happens within the workplace? That is, it makes sense to train someone who has the required points for promotion because they are better placed to use that training.



Draft finding 9.1

Restrictions on merit-based hiring and promotion harm workers and productivity

There are substantial restrictions on merit-based hiring, promotion and training within container terminal operations. These restrict fair and reasonable access for workers who are qualified, but not currently employed by the specific container terminal operator. They also harm existing terminal workers by precluding them from jobs that best fit their skills and preferences, and create undue hurdles for potential container terminal workers. Overall, the clauses act to constrain productivity.



Information request 9.3

The Commission is interested in further evidence on how container terminal enterprise agreements enable or restrict the flexible allocation of labour. To what extent do existing arrangements provide sufficient flexibility to employers to manage the allocation of labour given variable peaks and troughs in demand?



Draft finding 9.2

Limits to the number of workers with flexible rosters is inefficient

Limits on the number of casual workers and other workers with flexible rosters (permanent guaranteed wage employees) who can be employed in container terminals create barriers to the efficient allocation of labour, which will flow through to the productivity of container terminals.



Draft finding 9.3

'Order of pick' rules limit backfilling and restrict productivity

Strict rules determining the 'order of pick' which specify which workers can be engaged first for a task are limiting terminal operators' capacity to backfill positions. This impedes operators' ability to allocate labour to its most productive use and can mean one absence has an outsized effect on the productivity of a terminal.



Draft finding 9.4

Container terminal enterprise agreements distort operators' ability to automate

Container terminal enterprise agreements contain terms which substantially restrict or disincentivise operators from introducing further automation. These clauses, reflected in mandated consultation lengths and, for some operators, the requirement for employee or third party (such as an independent panel or Fair Work Commission) consent, appear to go beyond equivalent clauses in other industries or the model consultation term in the *Fair Work Act 2009* (Cth).

**Information request 9.4**

Do restrictions on subcontracting of labour in enterprise agreements in the ports limit competition in the labour market? And if so, what is the effect of this?

**Information request 9.5**

What might be the benefits and drawbacks of introducing a ports code (modelled on the previous Building Code)? If there is a code who should be responsible for its enforcement?

**Information request 9.6**

What would be the benefits and drawbacks of classifying the ports as an 'essential service' under the *Fair Work Act 2009* (Cth)? What rights and obligations should follow if the ports were classified in that way?

**Information request 9.7**

To what extent are side deals being used in the ports and how influential is their content? What would be the consequences if side deals were used more?

**Draft recommendation 9.1****Prohibit enterprise agreement content that imposes excessive constraints on productivity in the ports and costs on the supply chain**

The Australian Government should amend the *Fair Work Act 2009* (Cth) to introduce a short list of unlawful terms in enterprise agreements in the ports. The list should aim to prohibit *excessive* constraints on:

- merit-based hiring, promotion and training
- the number of casual workers and other workers with flexible rosters
- strict rules determining the 'order of pick'
- innovation and workplace change.



Information request 9.8

What content should be made unlawful in enterprise agreements in the ports?

How could the most restrictive content in enterprise agreements be curtailed without limiting the rights of workers to be consulted on issues including major workplace change?

How might draft recommendation 9.1 be practically implemented? What are the technical or legal issues which should be addressed and how should they be addressed?



Draft finding 9.5

Existing Fair Work Act mechanisms have not prevented lengthy bargaining in container terminals

Negotiations over recent agreements for container terminal operators involved lengthy and overlapping bargaining periods.

Mechanisms in the *Fair Work Act 2009* (Cth) do not appear to have offered a solution to protracted bargaining in Australia's ports. Recent applications to terminate agreements suggests other remedies to support the bargaining parties in resolving disputes were either lacking or not sufficiently effective.



Draft finding 9.6

Additional or improved mechanisms are needed to help address excessively lengthy bargaining and its costs in container terminals

Bargaining in container terminals is excessively lengthy, creating costs for participants and third parties.

Arrangements that explicitly target protracted bargaining, with appropriate weight given to duration, would more clearly signal the intent to address this issue and give parties and the Fair Work Commission greater flexibility to do so.



Draft recommendation 9.2

Improving bargaining practices in the ports

The Australian Government should amend the *Fair Work Act 2009* (Cth) to create a mandatory requirement for Fair Work Commission (FWC) intervention when certain thresholds in bargaining activity in the ports are reached (these could include time limits and/or thresholds linked to the number or scale of protected industrial actions).

The interventions should scale from FWC conciliation as a first step, to termination of bargaining and arbitration by the FWC for lengthy and intractable disputes.

**Information request 9.9**

The Commission invites feedback on draft recommendation 9.2, including options to supplement or enhance the effectiveness of the proposed reforms in addressing protracted bargaining. Feedback is also sought on the best approach to implementation, in particular:

- whether mechanisms to address protracted bargaining should apply only to some subsectors within the ports, such as container terminal operations
- the design of the thresholds
- any technical or legal issues.

**Draft finding 9.7****Extensive protected industrial action in the ports during recent bargaining caused disruption and impacted productivity in container terminals**

Disruption and, to some extent, reduced productivity are an expected consequence for bargaining parties of protected industrial action. But high levels of protected industrial action in the ports over an extended period during the recent bargaining round translated into markedly lower productivity at affected container terminal operators.

**Draft finding 9.8****Protected industrial action in the ports caused substantial disruption and economic costs to third parties in the supply chain**

The integration of container terminal operators in the supply chain means that protected industrial action in the ports has an outsized impact on importers, exporters and other third parties. The extent and seriousness of protected industrial action seen during recent bargaining in the ports resulted in substantial economic harm to these third parties.

**Information request 9.10**

Is the current level of penalties providing effective deterrence of unlawful or unprotected industrial action in the ports? If not, what level of penalties would achieve this outcome?



Information request 9.11

Part IV, division 2 of the Competition and Consumer Act 2010 (Cth) prohibits secondary boycotts, other than in prescribed circumstances. Are changes needed to these provisions, or supporting compliance and enforcement activities, to ensure secondary boycott conduct is appropriately regulated in the ports?



Draft recommendation 9.3

Add options for protected industrial action by employers to the Fair Work Act

The Australian Government should amend the *Fair Work Act 2009* (Cth) to allow employers to engage in more graduated forms of protected industrial action in response to employee industrial action. Forms of employer response action that should be permitted could include:

- instituting limits or bans on overtime (analogous to employee overtime bans)
- directing employees to only perform a particular subset of their normal work functions and adjusting their wages accordingly (analogous to employee partial work bans)
- reducing hours of work (analogous to employee work stoppages).

Employers should also be able to choose to either deduct wages or continue to pay employees for protected industrial action which lasts for less than 15 minutes.

Where an employer restricts employees' work duties or hours of work, employees should be permitted in response to refuse to perform any work (as is currently the case for employers with respect to employee partial work bans).

Graduated forms of protected industrial action by an employer would still count as employer response action and be subject to employee response action and potential suspension or termination by the Fair Work Commission.



Information request 9.12

Would the broader range of employer industrial action in draft recommendation 9.3 be practical for employers to use? Are there other approaches, including forms of employer response action other than those cited in draft recommendation 9.3 that should be considered?

**Draft recommendation 9.4****Increase disincentives for employees to notify and then abort protected industrial action**

The Australian Government should amend the *Fair Work Act 2009* (Cth) so that where a group of employees have withdrawn notice of industrial action, employers that have implemented a reasonable contingency plan in response to the notice of industrial action may stand down the relevant employees, without pay, for the duration of the employer's contingency response.

**Information request 9.13**

The Commission invites feedback on draft recommendation 9.4, including on the best approach to implementation and any technical or legal issues and how a reasonable contingency plan should be defined.

**Draft recommendation 9.5****Make it easier for employers in the ports to extend the notice period for protected industrial action**

The Australian Government should amend the *Fair Work Act 2009* (Cth) to lower the threshold for applications to extend the mandatory three-day notice period for protected industrial action to seven days for operators in the ports to enable employers to better prepare for industrial action.

**Information request 9.14**

The Commission invites feedback on draft recommendation 9.5, including on the best approach to implementation and any technical or legal issues and how any lower threshold should be defined.

**Draft recommendation 9.6****Make it possible to suspend or terminate industrial action that could cause 'important or consequential' economic harm**

The Australian Government should amend the *Fair Work Act 2009* (Cth) to clarify that when determining whether to suspend or terminate industrial action under s. 423, s. 424 or s. 426, the Fair Work Commission should interpret the word 'significant' as 'important or of consequence'.



Draft recommendation 9.7

Allow a broader range of third parties to apply to terminate protected industrial action occurring in the ports

The Australian Government should amend the *Fair Work Act 2009* (Cth) to widen the range of third parties who can make applications to suspend or terminate protected industrial action under the Act for operators in the ports, to include entities, for example, with an interest but who may find it difficult to show they are directly affected (such as employer associations, employee organisations or third parties like importers/exporters).



Information request 9.15

The Commission invites feedback on draft recommendation 9.7, including on the best approach to implementation and any technical or legal issues.



Draft recommendation 9.8

Enable protected industrial action to be suspended or terminated when it is causing harm to either party, rather than both

The Australian Government should amend s. 423(2) of the *Fair Work Act 2009* (Cth) such that the Fair Work Commission may suspend or terminate protected industrial action where it is causing, or threatening to cause, significant economic harm to the employer or the employees who will be covered by the agreement, rather than harm to both parties (as is currently the case).



Draft recommendation 9.9

Equip the Fair Work Commission for an extended role in the ports

To enable the Fair Work Commission to perform an enhanced role in supervising bargaining on the ports, it should (supported by amendments to the *Fair Work Act 2009* (Cth) where necessary):

- establish a fast-track process for dealing with applications involving port employers and employees and their representatives
- ensure members with requisite skills, experience and standing are available to deal with cases in the ports fast-track stream
- enable more decision-making by full benches to assist consistency of decision making
- be resourced appropriately to give effect to these draft recommendations.

The Fair Work Act should also be amended to allow input from employers and employee representatives in the selection of Fair Work Commission members dealing with port matters, with the objective of identifying nominees who have the confidence of employers and employees.

**Draft recommendation 9.10****Independent evaluation of changes to improve workplace relations in the ports**

If the draft recommendations in this chapter are introduced, the Australian Government should commission an independent evaluation of the state of workplace relations in Australian ports after five years of operation. The purpose of the evaluation would be to make an evidence-based assessment of productivity and efficiency outcomes following the introduction of the changes proposed to the workplace relations system.

Skills and training raise few productivity concerns

**Draft finding 10.1****Port workers appear to acquire the skills they need**

Inquiry participants have raised very few concerns about the system that delivers skills and training for port workers — the system largely appears to be functioning well.

**Draft finding 10.2****If they arise, skills shortages for seafarers can be solved through immigration and industry-led solutions such as cadetships**

There is no strong evidence of skills shortages in the maritime logistics system.

Skills shortages can, and have been, solved through targeted immigration and industry-led initiatives such as cadetships, without the need for a strategic fleet.

**Information request 10.1**

Are there any skills or labour supply issues in Australia's ports that are not identified in this chapter, and which should be addressed?

**Information request 10.2**

Do employers and employees in the ports receive the outcomes they are seeking from the VET system?



Information request 10.3

What are the costs and benefits of formalising qualifications and licensing for heavy equipment that is unique to ports? Are there health and safety grounds for doing so?



Information request 10.4

What is the mix of accredited, unaccredited and informal training at container terminals?

What are the costs and benefits of that mix?

What costs and benefits would be created by a greater reliance on formal training?

Does credit for recognised prior learning occur and, if so, in what context?



Information request 10.5

How does workplace relations influence training, including the content of training, who provides the training, who is trained and when they are trained in the maritime logistics system?



Information request 10.6

Would greater use of merit-based hiring and promotion in container terminal operations result in greater labour mobility?

Would recognition of prior learning, mutual recognition of occupational licencing and/or use of accredited training need to be expanded if there was a greater reliance on merit-based promotion systems?

Which occupational licences used in the ports are not mutually recognised across all states and territories? What are the costs to businesses and firms from these arrangements?

Is there more labour mobility in bulk and general stevedoring compared to container stevedoring?

Are there more standard qualifications for bulk equipment operators that foster mobility?

**Information request 10.7**

How has automation changed the skill profile of the workforce to date?

How well equipped is the skills system to deliver the skills which will be required in the future?

How well equipped is the licensing system to support the transition to automation?

What are the costs and benefits of using old licensing regimes to govern automated operations?

Australian ports are adopting technology where desirable

**Draft finding 11.1****Technology use at Australia's major container ports is in line with international practice**

There is no 'best' level of automation and ICT adoption for container terminal productivity and Australia's major container terminals have implemented varying degrees of both automation and ICT adoption, in line with internationally comparable ports.

However, automation can lead to a range of benefits including improved safety, reliability and consistency of terminal operations.

**Information request 11.1**

The Commission would appreciate data demonstrating the impact that automation has had on productivity (ideally, in terms of the total time taken for containers to move through each of the key steps from the ship to the hinterland), efficiency, safety and reliability where it has been implemented in Australian container terminals.

**Draft finding 11.2****There is no case for a government-run port community system**

Australia's maritime sector relies on a combination of private ICT systems that facilitate the sharing of documents and allow cargo to flow efficiently through the maritime logistics chain. These systems continue to be developed through the adoption of new technologies that increase their safety and usability. Implementing a government-run port community system would risk simply adding further administrative costs for users in the maritime ICT landscape without corresponding benefits.

The Australian Government should continue to work towards ensuring that its customs and biosecurity systems can seamlessly interface with private port community systems.



Draft finding 11.3

Government should continue to overhaul cargo clearance systems

The Australian Government's cargo and vessel clearance systems are currently convoluted and challenging for stakeholders to use, with repetition in data entry and outdated ICT systems. A government taskforce is working to address these issues. Successful reform will require the elimination of duplicative application processes, adequate resourcing for the departments performing clearances and a stable 'single window' ICT platform that can integrate with privately operated port community systems

Two national shipping concerns



Draft finding 12.1

Coastal shipping regulation impedes competition

There is a strong case for reform to coastal shipping regulation to allow greater competition from foreign vessels on domestic sea routes. This would result in more cost effective shipping services for Australian users. The temporary licence system should be streamlined and general licence holders' ability to contest approval of temporary licences should be limited. Requirements that Australian labour laws apply for licence holders should be retained.



Draft recommendation 12.1

Amend coastal shipping laws to increase competition

The Australian Government should amend coastal shipping laws to:

- streamline the temporary licence system to increase operational flexibility and reduce the administrative burden on licence applicants
- retain, but limit, the ability for Australian vessel operators to contest the granting of licences to foreign vessels
- maintain the current application of the *Fair Work Act 2009* (Cth) in coastal shipping
- review conditions for Australian registration of vessels to encourage increased international competition.



Draft finding 12.2

A strategic fleet requires further evaluation as on present evidence it is not the best remedy for concerns about domestic shipping capacity and training

A privately owned, Australian-registered strategic fleet would have limited ability to mitigate the types of issues that have recently affected Australia's international freight task. As commercial operations, vessels would not be immune to global market pressures. Moreover, owners would need subsidies in order to compete globally on commercial terms and as compensation for the costs and risks associated with having to make their vessels available if requisitioned in times of need.

**Draft finding 12.2****A strategic fleet requires further evaluation as on present evidence it is not the best remedy for concerns about domestic shipping capacity and training**

Capacity could be acquired as needed from the international market without the costs involved in supporting a strategic fleet. The shipping charter market provides access to a wide variety of vessels that could be used to address specialist case-by-case needs. And the Australian Government could access international resources — including the charter market — in times of natural disaster and emergencies.

Furthermore, Australian-flagged vessels are not a prerequisite to meeting maritime skill requirements. Cadetships and skilled migration appear to be working well in meeting needs for blue-water experience.