



Senate Economic References Committee

Inquiry into the Australian manufacturing industry

Maritime Union of Australia

Response to Questions on Notice arising from MUA evidence of 6 December 2021 and submission of 10 September 2021

Question on Notice 1

Your submission has warned that Australia is overly dependent on foreign ships for its sea transportation and maritime support needs, and that this is compounding risks with regards to supply chain security and resilience. These risks are behind your call for a review of the National Freight and Supply Chain Strategy.

Q. Could you expand on what you think some of the risks are for Australia from an over-reliance on foreign shipping, and how a failure to tackle these risks could end up creating major challenges for these new advanced manufacturing industries that we are attempting to build in Australia?

MUA response

Australia's foreign owned and operated ship dependency is best illustrated by the fact that only (only four [or 0.06 per cent] of the nearly 6,000 different ships annually involved in Australia's imports and exports, offshore oil and gas operations and large cruise ship trades are Australian registered ships crewed by Australian nationals.

The key risks from over reliance on foreign ships are:

- That rather than creating a positive economic benefit from what could be a large and profitable domestic shipping industry (including the manufacture of ships (and or ships components like navigation systems), Australia is purchasing foreign shipping services at an annual cost of over Aus\$10 billion per annum, contributing to the balance of payments deficit.
- The nation is running down the maritime skills base, which are essential skills for a maritime nation dependant on shipping. While this skills deficit has been filled by temporary skilled migration in the last decade or so, that option is now limited given the constraints caused by the COVID-19 pandemic.
- That Australia has no control over the corporate strategies of large international shipping companies able to exercise market power in their own self-interest contrary to the national

interest. This is reflected in a range of shipping line practices that disrupts domestic supply chains, particularly in container shipping, such as:

- Diversion of services from Australia to higher value routes with higher volumes;
 - Omitting port calls to restore ship schedules;
 - Rolling over cargo (to a later voyage);
 - Cancelling bookings;
 - Implementation of move count restrictions on vessel exchanges;
 - Failing to meet berthing slot windows creating a cascading impact across the supply chain;
 - Massively increasing freight rates that cannot be explained by supply and demand factors alone – it is purely price gouging enabled by the near monopoly power of the container shipping lines;
 - The arbitrary imposition of congestion charges; and
 - The use of larger ships than are required in the Australian trade aimed at manipulating port investment strategies and shipping line contracts with stevedoring companies.
- That Australia’s supply chains are more vulnerable and insecure due to the lack of an Australian ownership presence in the shipping component of supply chains. This is reflected in the national policy discussion about fuel security for example, but more recently in the inability by the mining and agricultural sectors to access mining and agricultural equipment and spare parts, and for manufacturers to access production inputs on a just in time basis. These matters have been ventilated by industry organisations in meetings of the Commonwealth National Coordination Mechanism (NCM), chaired jointly by the Department of Home Affairs and Department of Prime Minister and Cabinet.

A failure to tackle these risks will create major challenges for new advanced manufacturing industries that are likely to emerge in Australia because new advanced manufacturing industries such as production of green steel from hydrogen/wind energy or batteries from lithium, nickel and cobalt are likely to involve smaller and more regionally based production plants more tightly integrated with emerging industries such as offshore and onshore wind energy, and production of electric vehicles.¹

The growth of a more regionally diversified manufacturing sector is central to the energy transition and particularly to the just transition to ensure that those workforces who will be impacted by the decarbonisation agenda will have alternative jobs to maintain their standard of living and avoid the stranding of workers and communities.²

Such new industries will require more tailored transportation requirements for both delivery of inputs to production e.g. iron ore and lithium, but also for transportation of the final products such as positioning of offshore wind energy towers and blades, distribution of electric vehicles to population centres and

¹ Note that Australia exports almost 900 million tonnes of iron ore each year, but only makes 5.5 million tonnes of steel. A Grattan Institute report in May 2020 entitled *Start with steel: A practical plan to support carbon workers and cut emissions* <https://grattan.edu.au/wp-content/uploads/2020/05/2020-06-Start-with-steel.pdf> found if Australia captured about 6.5% of the global steel market, this could generate about A\$65 billion in annual export revenue and create 25,000 manufacturing jobs in Queensland and New South Wales.

² See Figure 1.4 in the Grattan Institute *Start with Steel* Report showing the location of carbon workers and the need for the emergence of renewable energy and manufacturing in those regions. See also Chapter 5 of the Blue Economy Cooperative Research Centre report *Offshore Wind Energy in Australia* of July 2021 (<https://blueeconomycrc.com.au/projects/offshore-wind-potential-australia/>), entitled *Offshore Wind Employment: What Role can it Play in a Just Transition for the Coal, Oil and Gas Workforce?* for an exposé of the opportunities to transition fossil fuel workforces to new industries.

export of the outputs of manufacturing production. This will require fleets of specialised short-sea ships to service those new manufacturing regions.

Australia has a long tradition of investment in tailored shipping solutions. For example, the self-discharging ships to carry relatively low volumes of bulk commodities such as clinker and cement for the construction industry and fertilisers for agriculture, which have not required large landside stevedoring operations, and can meet the lower draught limits of smaller regional ports.

There will be considerable new opportunities for tailored shipping solutions for new manufacturing industries that could not only deliver supply chain solutions for emerging new manufacturing industries, but could build a domestic, Australian owned and controlled shipping industry that would secure national supply chains, rebuild the maritime skills base and reduce the balance of payments deficit.

Demand for a tailored Australian owned shipping fleet would provide demand for the manufacture of ships, thus further supporting the domestic ship building industry that can piggyback off the Defence shipbuilding program.

Control over a domestic shipping fleet would and give Australia considerably more leverage to speed up the decarbonisation of shipping to create a zero carbon shipping fleet. An escalation of the transition to zero carbon emissions by 2050 for the shipping industry, agreed by a group of influential shipping nations at COP 26³, will require a significant commitment from Australia given it is such a large user of ships. Australian ownership of a shipping fleet will enable Australia to influence the timetable for the conversion to a zero emissions shipping fleet.

Question on Notice 2

Your submission has pointed out that economic and national security policy experts are promoting the role that Australian ships can play in supporting energy security, in border security, and for better integration of merchant or commercial shipping in order to complement the Defence Force's maritime and sea lane protection requirements. This is a particularly crucial point given the increasing tension in places the South China Sea, and given the lack of onshore storage of oil, for example.

Q. Could you share with this Committee how you think Australian ships could help to support border force, the defence force and other governments departments in securing sea lanes that are critical to both trade and our national security? And how does this dovetail with your call for the establishment of a national strategic fleet.

MUA response

Australian ships could help to support border force, the defence force and other government agencies in securing sea lanes that are critical to both trade and national security in several ways.

³ See the Net zero shipping emissions by 2050 Pledge signed by Denmark, the US and 12 other countries (Belgium, Britain, Finland, France, Germany, Honduras, Hungary, Iceland, the Marshall Islands, Norway, Panama and Sweden) to build support among IMO member countries for the goal of the IMO to be a reduction in emissions by the global maritime sector to zero by 2050, and to adopt goals for 2030 and 2040 that place the sector on a pathway to full decarbonisation by 2050; and also the Clydebank Declaration for Green Shipping Corridors, to which Australia is a signatory - <https://ukcop26.org/cop-26-clydebank-declaration-for-green-shipping-corridors/>

To provide context, it is important to recognise that Australia has been consistently outsmarted by its trading partners in terms of supply chain sovereignty, particularly in relation to ship ownership. All Australia's key trading partners including Japan, China, Singapore, USA, Germany and UK are also among the largest global owners of ships. A number of these ship owning nations are also major shipbuilding nations, such as Korea, Japan, China and Singapore.⁴

These nations seek to control their international goods supply chains through all facets of the ship supply chain, from shipbuilding to ship ownership, to ship management, to shipping contracts, and often part ownership of the production of the cargo e.g. oil, refined petroleum, LNG, coal, iron ore and rare earths.

Vertical integration has been a conscious decision of the commodity traders in those nations, supported by clear government policy, regulatory settings and industry policy support. The result is that their product supply chains are highly secured, in marked contrast to Australia. Notwithstanding Australia is a major importer of goods, and major exporter of primary production in global trading terms, it does not build a single commercial trading ship, owns and operates only four international trading vessels (soon to be phased out), owns virtually no ship management companies with any scale in global terms and sells almost all its bulk commodity exports on a Free-on-Board (FOB basis), meaning the buyer controls the shipping.

In that context, ownership of ships by Australian entities (consistent with the ship ownership requirements set out in the *Shipping Registration Act 1981*) could help support border force, the defence force and other government agencies in securing sea lanes by:

- Providing ship control and capability to maintain trade and vital supplies in circumstances where Australia is in conflict with a nation which is a provider of ships and the nation providing the ships restricts access to the chartering or use of those ships by Australia or in circumstances where a pandemic creates disruption and delays in supply chains or in circumstances where a cyber-attack disrupts vital elements of the supply chain:
 - Ships are critical national infrastructure, and are the overwhelming or critical vulnerability point that underpins all other supply chain vulnerabilities; and
- Enabling Australian ships to be requisitioned for use by the Defence Forces, by Australian Border Force and by other government agencies in times of conflict, particularly to maintain sea lanes, and or for supporting humanitarian efforts. Foreign ships cannot be requisitioned by a national government.

National strategic fleet ships are identified by meeting a national interest test that could contain the following criteria:

- Contribution to national economic security, such as supply chain security e.g. petroleum tankers for fuel security, bulk carriers to support manufacturing production and distribution of building products and fertiliser (including ammonium nitrate), and container ships to maintain the flow of consumer goods and goods required for the operation of essential services e.g. health services, food production.
- Contribution to the transportation of goods and people between the mainland and Tasmania, and to regional and remote communities.

⁴ See data provided in the MUA submission to the Productivity Commission Inquiry into Vulnerable Supply Chains e.g. Tables 11 and 12. The submission can be found at https://www.pc.gov.au/data/assets/pdf_file/0006/275568/sub038-supply-chains.pdf.

- Contribution to meeting the nation’s renewable energy supply needs e.g. offshore wind energy construction ships to expedite offshore wind farm development to help meet renewable energy targets and energy security needs.
- Contribution to maritime skills needed for maritime employment e.g. to provide ship’s berths for trainees and cadets to undertake mandatory sea time, necessary for the supply of skilled seafarers to meet Australia’s onshore and on water maritime skill needs as required by the IMO Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), 2010; as well as dedicated maritime training ships.
- Contribution to meeting Australia’s marine environment protection e.g. emergency rescue and towage vessels.
- Contribution to national Defence and border protection capability.
- Contribution to national emergency response e.g. in times of bushfires or floods.
- Contribution to the national scientific research effort e.g. research, supply and oceanographic ships such as those operated by or chartered to the CSIRO, the Australian Antarctic Division of the Department of Agriculture, Water and the Environment, and marine authorities such as the Great Barrier Reef Marine Park Authority.

It is vital that Australia maintains a fleet of Australian owned and controlled ships across all these ship types in order to support its industrial production, its defence and border security functions and as a self-sufficiency measure in light of the changing regional geopolitical climate, the vulnerabilities in supply chains that have been witnessed over the COVID-19 pandemic period, and the increasing power of global ship suppliers.

Question on Notice 3

On the innovation front, your submission has called for the establishment of both a maritime industry innovation council, and a national shipping infrastructure and innovation fund. You’ve argued that these measures should be used to help deliver improved competition across supply chains, while also fostering better collaboration between industry, unions, and transport and logistic policy and research centres.

Q. Could you expand a bit more on your proposals for both the innovation council and innovation fund, and are there any similar bodies in other jurisdictions that you are aware of, and which might provide a model for Australia to follow.

MUA response

Perhaps the best example of the concept the MUA envisages for an innovation council is the UK 2050 Maritime Innovation Hub.⁵ This is a partnership with the Port of Tyne, Drax, Offshore Renewable Energy Catapult (OREC), Nissan, Connected Places Catapult, Accenture, Royal HaskoningDHV, Ubisoft and the UK Department for Transport.

The 2050 Maritime Innovation Hub promotes collaboration to develop solutions to technological challenges facing the maritime sector and the wider logistics industry both nationally and globally. It acts as a catalyst for sharing ideas, harnessing research and development, advancing technology and tackling shared challenges.

⁵ UK 2050 Maritime Innovation Hub, <https://www.portoftyne.co.uk/about-us/2050-innovation-hub>

The Hub is aligned with the UK Government's Maritime 2050 Strategy⁶ and works closely with the UK Department for Transport and MarRI-UK (a collaborative innovation vehicle for UK industry and academia to jointly tackle innovation and technology challenges)⁷ to ensure that it delivers for the benefit of the maritime sector as a whole.

Another example is the Smart Freight Centre (SFC), which was established in the Netherlands in 2013 as a global non-profit organisation dedicated to sustainable freight. The SFC has formed two councils – the Global Logistics Emissions Council (GLEC) and the Smart Truck Fleet Management Council (STFMC).⁸

Domestically, the Blue Economy Cooperative Research Centre has some of the features of an innovation council as envisaged. It is an independent not-for-profit company and is a Cooperative Research Centre under the Australian Government's CRC Program. The Blue Economy CRC brings together forty industry, government, and research partners from ten countries with expertise in aquaculture, marine renewable energy, and maritime engineering.

One Australian model that could be examined is the previous Future Manufacturing Industry Innovation Council (FMIIC) established by the then Minister for Innovation, Industry, Science, and Research, Senator the Hon Kim Carr, in October 2008.

The FMIIC's membership includes leaders in innovation from business, the science and research community, unions, professional associations and the Commonwealth Government.

It was one of a number of Industry Innovation Councils (IICs) established by the Commonwealth Government as part of its 10-year strategy *Powering Ideas* aimed at building a culture of innovation in Australia.

The concept of the IICs is to provide strategic advice on innovation priorities to the Minister as well as championing innovation in industry and building connections with industry stakeholders. Through the IICs, the Government and stakeholders partner to:

- Improve Australian industry's productivity, global competitiveness and market access;
- Build a highly skilled and flexible workforce for the 21st century through best practice in employment and training;
- Ensure the sustainable development of Australian industry; and
- Respond to challenges including climate change and social inclusion.

The Department of Innovation, Industry, Science, Energy and Resources would provide the secretariat to the proposed Innovation Council.

Given the many strands of activity that make up the maritime industry from steel and aluminium production for shipbuilding, to the many types of ships used across industry and government including for public transport, to ship ownership, ship management, ship provisioning and all the associated support services such as towage, bunkering, mooring and provisioning, we think an innovation council

⁶ UK Department of Transport, *Maritime 2050: Navigating the Future*, January 2019, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/872194/Maritime_2050_Report.pdf

⁷ MarRI-UK Research and Innovation, <https://www.marri-uk.org/#>

⁸ The Smart Freight Centre, <https://www.smartfreightcentre.org/en/what-is-sfc/>

could focus on development of opportunity to build Australian content and expertise in such a massive industry that is currently neglected in policy and industry support terms.

The purpose of a maritime industry innovation fund would be to support commercial and start-up initiatives of a maritime industry innovation council, and in particular to co-fund the industry policy support measures that would be necessary to establish a strategic fleet of commercial ships, which needs to be the centrepiece of the rebuilding of Australia's commercial shipping industry.