Australian Government
Department of Infrastructure,
Regional Development and Cities

Submission to the Standing Committee on Rural and Regional Affairs and Transport References Committee:

Australian shipping

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Contents

1. Domestic Shipping Industry Overview

1.1 Roles and responsibilities within the portfolio

The Australian Government, through the Department of Infrastructure, Regional Development and Cities (the Department), supports the regulatory framework for Australian shipping, maritime safety, and protection of the marine environment and implementation of Australia's international maritime obligations under the International Maritime Organization (IMO). The Department works closely with Australia's national maritime safety regulator, the Australian Maritime Safety Authority (AMSA). The Department administers legislation relating to AMSA's safety activities such as the *Navigation Act 2012*, which gives effect to international conventions and covers ship and seafarer safety.

1.2 Shipping in Australia

Australia is the fifth largest user of shipping services in the world.[1] Over 99 per cent of Australia's imports and exports by volume and over 79 per cent by value are dependent on shipping.[2] Further, a relatively small but critical component of Australia's domestic freight task (15 per cent) is carried by coastal shipping.[3]

While this submission focuses on domestic shipping, it is important to understand the broader context of the shipping sector. A detailed analysis of international shipping is set out at **Attachment A**.

It is also useful to consider the overall volume of shipping activity in Australia. Preliminary data shows 5,879 uniquely identified cargo ships made a total of 32,801 port calls at Australian ports in 2016-17. These included 5,743 cargo ships which made 17,068 voyages to Australian waters from overseas ports. Over the five years to 2016-17, preliminary data shows the total port calls by cargo ships increased by 4.2 per cent per annum, while port calls by cargo ships from overseas increased by 4.8 per cent per annum.[4]

Domestic shipping is able to move high volumes of freight at lower economic and environmental cost than road or rail over longer distances, and is well suited to moving large volumes of low urgency products, such as iron ore, coal, petroleum, grain and other non-perishable products.

In 2016-17 35.2 million tonnes of cargo was carried under coastal trading licence.[5] Coastal trading is discussed further at **Section 2**.

In Australia, coastal trading refers to the movement of freight and passengers by ship between ports around the Australian coast, typically between states. This is often referred to as 'cabotage.'[6] Transportation of freight or passengers on a round trip, commencing and concluding at the same port, is not considered coastal trading.

In Australia, commercial domestic shipping is conducted primarily by foreign flagged vessels, as well as a small number of Australian ships, operating on licences under the *Coastal*

[1] PricewaterhouseCoopers Australia (PwC),*The economic contribution of the Australian maritime industry, report prepared by PwC from publicly available material and from discussions held with the Australian Shipowners Association* (2015), ii.
[2] Department of Infrastructure, Regional Development and Cities – Bureau of Infrastructure, Transport and Regional Economics (BITRE), *Analysis of Australian Bureau of Statistics (ABS) Data* (2019).
[3] BITRE, *Australian Infrastructure Statistics – Yearbook 2018* (2018), 67.
[4] BITRE Estimates (2019).
[5] BITRE Estimates (2019).
[6] *Note: Historically, coastal trading (along will a range of other aspects of maritime navigation) was regulated under the Navigation Act 1912. Under the 1912 Act, all ships engaging in coastal trading were required to hold a licence or permit. Conditions placed on licence holders related to standardised pay, seafarer conditions, and employment levels. The Governor-General, on advice from the Government, also had the ability to declare certain voyages not to be coastal trading.*

Trading (Revitalising Australian Shipping) Act 2012 (Coastal Trading Act). The Australian Government also operates a number of ships and other vessels including for the Royal Australian Navy, Australian Border Force, CSIRO (marine research), the Australian Antarctic Division of the Department of Environment and Energy (in connection with Antarctic research and resupply), and maritime emergency response.

1.3 Vessel Types

Australia's domestic shipping freight task is delivered by a range of different types of vessels, including:

- *Dry Bulk Carriers*: vessels designed to carry large quantities of non-packed or unitised commodities such as grains, coal and iron ore.
- *Liquid Bulk Carriers*: vessels designed to carry large quantities of liquid commodities that are stored in a large tank space such as crude oil and liquefied natural gas.
- *Container Ships*: vessels that carry cargo in standardised intermodal containers that can be moved on trucks and trains.
- *General Cargo Ships*: vessels designed to transport cargo not suitable for a container such as irregular sized or loose cargo.
- *Roll On-Roll Off (RORO) Vessels*: vessels designed to carry wheeled cargo, such as cars, trucks, trailers and machines.

1.4 Service Types

The domestic shipping industry typically offers two major types of services, with distinct market structures:

- Charter Services: ships leased for specific purposes, commonly between a specific port of origin and destination. This type of service is usually used to transport bulk cargo, such as petroleum, coal, iron ore or grain. Services may either be long-term and regular (such as the transportation of iron ore from Port Hedland to China) or on a single voyage basis known as spot charter (such as a vessel chartered to transport an oil rig to Australia).
- Liner Services: ships with fixed sequences of ports of call and fixed schedules that are announced in advance to attract customers (predominantly for the transportation of containerised cargo and roll on-roll off cargo).

1.5 The Australian Flagged Fleet

As set out in **Attachment B**, Australia's total domestic freight task increased by 55 per cent between 2004-05 and 2014-15, however coastal shipping's share of the freight task fell by over the period, down from 25 per cent to 15 per cent.[7] Over the period from 2010 to 2030, total domestic freight is projected to grow by 80 per cent; however, coastal shipping is projected to grow by 15 per cent over the same period.[8]

At present, there are 52 Australian vessels holding General Licences under the Coastal Trading Act. 16 vessels are in the Australian major trading fleet, that is vessels over 2000 Dead Weight Tonnes (DWT). 36 vessels are a mix of landing craft, barges, catamarans and passenger vessels, ranging from 40 DWT to 1909 DWT.

[7] BITRE, *Analysis of Australian Bureau of Statistics (ABS) Data* (2019).
[8] BITRE, *Freightline 1 – Australian Freight Transport Overview* (2014), 8.

The major trading fleet has declined from 30 in 2006-07.[9] This has also had an effect on the number of training berths available for Australian seafarers. Training is discussed further at **Section 3**. **Table 1** below details the 16 vessels in the Australian major trading fleet, their tonnage and vessel type.

Table 1 – Australian Flagged Major Vessels

	Vessel Name	**Vessel Type**	**Vessel Capacity (DWT)**
1	Iron Chieftain	General Cargo	50,587
2	Donnacona	(Self-Discharging) Bulk Carrier	27,711
3	Goliath	Cement Carrier	15,539
4	CSL Whyalla	Self-Discharging Bulk Carrier	13,732
5	Tasmanian Achiever II	RoRo Cargo	12,000
6	Victorian Reliance II	RoRo Cargo	12,000
7	Tasmanian Achiever	RoRo Cargo	11,000
8	Victorian Reliance	RoRo Cargo	11,000
9	Searoad Tamar	RoRo Cargo	9,958
10	Accolade II	Limestone Carrier	8,140
11	Searoad Mersey II	RoRo	7,980
12	Spirit of Tasmania I	RoRo/Passenger Ship	5,651
13	Spirit of Tasmania II	RoRo/Passenger Ship	5,651
14	Aurora Australis	Research/Survey Vessel	3,911
15	Trinity Bay	PAX/General Cargo	3,200
16	Newcastle Bay	Container (General Cargo)	2,768

Of these 16 vessels[10]:

- The *Iron Chieftain* is no longer operational following a fire on board in 2018, however the vessel's General Licence has not been cancelled or surrendered by the operator;
- The *Aurora Australis* is a research vessel, which does not engage in trade;
- The *Tasmanian Achiever II* and the *Victorian Reliance II* are replacement vessels for the *Tasmanian Achiever* and the *Victorian Reliance*, and the General Licences for the latter two vessels may be surrendered;
- The *CSL Whyalla* has not reported any coastal trading activity since October 2017.

[9] BITRE, *Australian Seafreight – Statistical Report 2015-16* (2018), 63.
[10] Department of Infrastructure, Regional Development and Cities, *Analysis of Coastal Trading Licensing System (CTLS) Data* (2019).

1.6 Foreign Flagged Vessels

As a result of the reduced number of vessels in the major Australian trading fleet, Australia has become increasingly reliant on foreign flagged vessels. More than half of all coastal cargo by volume is carried on foreign flagged vessels. In the first year of the current coastal trading regime (2012-13) there were 1650 Temporary Licence voyages performed by 348 foreign flagged vessels. In 2017-18, there were 2494 Temporary Licence voyages performed by 588 different vessels.[11] While some large international vessels pick up additional cargo in Australia for domestic transport as part of their voyage around Australia, there are foreign flagged vessels that engage in regular voyages under one or more Temporary Licences on specific routes.

1.7 Cruise Shipping

Both domestic and international cruise vessels form part of Australia's shipping industry. The cruise ship industry in Australia is growing, with the past twelve years seeing a period of strong growth. In 2016, the cruise industry reported the largest annual rise in passenger numbers on record, with an increase of 21 per cent to over 1.34 million passengers.[12] Australia's cruise market is dominated by large, international companies such as Carnival Cruise Line, Royal Caribbean, and P&O Cruises.

Australian cruise ships are typically smaller than their international counterparts and are classified as expedition size vessels. Most Australian cruise vessels do not hold General Licences under the Coastal Trading Act as they typically undertake round-trip cruises such as those offered from Cairns to the Great Barrier Reef, around Sydney Harbour and on other intrastate voyages. Round-trip voyages to and from the same port are not coastal trading under the Act.

1.7.1 Cruise Shipping Regulation

Section 11 of the Coastal Trading Act gives the Minister the power to exempt certain vessels or persons from the provisions of the Coastal Trading Act. Since 1998, exemptions have been in place for large cruise vessels meeting particular criteria. The most recent exemption, the Coastal Trading Act Section 11 Exemption for cruise vessels 2019 (the 2019 exemption) came into force on 1 January 2019 and applies to cruise vessels that meet the following criteria:

- in excess of 5000 gross tonnes;
- capable of a speed of at least 15 knots;
- capable of carrying at least 100 passengers; and
- utilised wholly or primarily for the carriage of passengers between any ports in the Commonwealth or in the Territories, except between Victoria and Tasmania.

The 2019 exemption allows cruise vessels meeting these criteria to operate around the Australian coast without obtaining a Temporary Licence. The majority of international cruise vessels meet these criteria and are therefore exempt from the Coastal Trading Act. Prior to the introduction of the Coastal Trading Act in 2012, exemptions for cruise vessels were provided under the *Navigation Act 1912*.

[11] Department of Infrastructure, Regional Development and Cities, *Analysis of CTLS Data* (2019).
[12] Cruise Lines International Association Australasia, *Cruise Industry Ocean Source Market Report – Ocean Cruise Passengers Australia 2017* (2017), 1.

Smaller foreign-flagged expedition cruise vessels which are greater than 5000 gross tonnes are increasingly competing on price with Australian-flagged expedition cruise vessels that are less than 5000 gross tonnes. As those foreign flagged vessels are not subject to the Coastal Trading Act, domestic operators are unable to take action to challenge these voyages (under a notice in response process described in **Box 2**). Australian cruise vessels are at a cost disadvantage as they are required to pay Australian wages and meet Australian working conditions.

The Department has commenced a review of the regulatory framework around cruise shipping, reflecting on the changes in the cruise industry and the concerns of operators about the uncertainty around the renewal of the exemption. The Department intends to begin consultation in mid-2019 with the cruise industry and associated stakeholders to explore options for a long-term solution.

Box 1. Australian flagged vessels

A range of policy approaches have been proposed, by a variety of parties, to improve the competitiveness of Australian ships and increase incentives to invest in Australian ships. These options range from working with industry to find efficiencies, to subsidies, tax incentives or tax exemptions. With any subsidies, tax incentives or tax exemptions provided to Australian vessel owners, Australian crew or to the owners of cargo. Other approaches that have been suggested include the Government investing directly in shipping.

Subsidies

In 2016 a green paper on Coastal Trading was prepared by the Chief Executive Officer of Maritime Industry Australia Limited following a series of meetings between shipping industry stakeholders. The paper suggested government could provide incentives that acknowledge the subsidisation of road and rail modes and incorporate the idea of the 'blue highway'.[13]

Subsidies have been proposed to promote the competitiveness of the Australian shipping industry and take the following form:

a. Direct subsidies to shipping companies to either flag or re-flag vessels as Australian.
b. Subsidies to make Australian crew more cost competitive.
c. Subsidies to the shippers of cargo if they use Australian vessels.

Tax Incentives or Tax Exemptions

Tax concessions[14] are in place for Australian flagged vessels that provide an income tax exemption for operators, accelerated depreciation and roll-over relief for owners, a refundable tax offset for employers, and an exemption from royalty withholding tax.

In 2017, a number of submissions to a discussion paper on coastal shipping reforms suggested the consideration of tax incentives for businesses and crew to assist the Australian shipping industry.[15]

It has been proposed that subsidies, tax incentives or exemptions be provided to one or more parties in the sector. For example, shipping owners/operators could be given a range of tax incentives or exemptions to encourage the use of Australian flagged vessels. This could include further changes to the current accelerated depreciation regime or additional tax relief for the employment of Australian seafarers. Further, Australian seafarers could be provided with tax incentives or exemptions.

Strategic Fleet

The 2016 green paper on Coastal Trading prepared by the Chief Executive Officer of Maritime Industry Australia Limited also recommended the creation of a 'Strategic Fleet' which would be defined as vessels that offer strategic national interest benefits to the nation. This fleet would be fully Australian and when operating in commercial activities (i.e. not chartered to Government operations), the additional cost (above foreign ship costs) would be offset by external funds. It was proposed that these external funds would come from redirecting the money raised via the application of the Seagoing Industry Award Part

[13] Lloyd, T, *Coastal Trading Green Paper – A Maritime Transition* (2017), 5.

B to a Strategic Maritime Development Fund that would be used in part to fund the Strategic Fleet.[16]

Other Approaches

Other approaches that have been proposed to improve the competitiveness of Australian shipping include mandating the use of Australian ships, as occurs in the United States under the Jones Act. The Jones Act requires all domestic cargoes transported by water between US ports to be carried on US flagged ships, constructed in the US, and owned and operated by US citizens.

Another approach is to require foreign flagged vessels to meet the same requirements as Australian vessels when operating in Australian waters. Foreign flagged vessels operating under a Temporary Licence are required to pay their crew wages in accordance with Part B of the Seagoing Industry Award 2010, from the vessel's third voyage onwards in Australian waters. Part B wages are higher than the minimum wages established under the Maritime Labor Convention, but less than the Part A wages paid to Australian seafarers.

Maritime Clusters

The Organisation for Economic Co-operation and Development has identified four key types of policy instruments[17] for governments to support the growth of potential maritime clusters, namely:

- Developmental support - which relates to the provision of basic facilitating infrastructure such as the development of a national maritime cluster strategy, investment in research and development or the provision of the facilitation of venture capital investment.
- Financial investment – which focuses on growing and developing existing maritime clusters through actions such as taxation initiatives, ship registry initiatives or targeted wage subsidies;
- Coordination and information sharing – to facilitate cluster governance, such as the development of consultative forums, voluntary national associations or local networking platforms;
- Human capital matching – which involves connecting the local labour pool with the cluster's human capital requirements. This can include maritime training and certification, maritime scholarships and grants or research and development programs.

In Australia, concentrations of maritime industry including construction, repair and servicing can be observed around government and private enterprises[18]. For example, concentrations of building and repair services can be found around Osbourne Naval Shipyard[19] in South Australia, the Port of Melbourne[20], Darwin, and Rivergate Marina and Shipyard [21] in Queensland. The Australian-flagged coastal trading fleet operates predominantly between Melbourne and Northern Tasmania. [22]

[14] Department of Infrastructure, Regional Development and Cities, *Tax Incentives – Australian Shipping* (2018).
[15] Department of Infrastructure, Regional Development and Cities, *Coastal Shipping Reform Submissions* (2017).
[16] Lloyd, T, *Coastal Trading Green Paper – A Maritime Transition* (2017), 4.
[17] Organisation for Economic Co-operation and Development (OECD), *The Competitiveness of Global Port-Cities: Synthesis Report* (2013), 84.
[18] IBISWorld, *Industry Report C2391: Shipbuilding and Repair Services in Australia* (2018), 4.
[19] Government of South Australia, *Osborne Naval Shipyard* (2018).
[20] KPMG, *Australia's Marine Industry Capability: Research into the Marine Manufacturing Sector in Australia* (2017), 20.
[21] Rivergate Marina and Shipyard, *Rivergate Marina and Shipyard* (2014).
[22] Department of Infrastructure, Regional Development and Cities, *Analysis of CTLS Data* (2019).

There is already a concentration of relevant businesses in some places in Australia which could potentially be developed into a cluster with government assistance. For example, the Australian Marine Complex (AMC) at Henderson, Western Australia is a marine industrial estate that has been developed to enhance the opportunity created by the clustering of industries. It incorporates fabrication, ship building, technology and support industry precincts and features a deepwater port, world-class common user facilities, load out and fabrication infrastructure and high wide road access to nearby industrial zones.[23]

[23] LandCorp, *Australian Marine Complex* (2019).

2. Coastal Trading

2.1 Coastal Trading Legislative Framework

The current cabotage regime is regulated under the *Coastal Trading (Revitalising Australian Shipping) Act 2012* (Coastal Trading Act). The Department administers the Coastal Trading Act through granting licences on behalf of the Minister for Infrastructure, Transport and Regional Development to authorise vessels to carry passengers or cargo between ports in Australia.

The object of the Coastal Trading Act is to provide a regulatory framework (through a licencing system) for coastal trading in Australia that:

(a) promotes a viable shipping industry that contributes to the broader Australian economy; and

(b) facilitates the long term growth of the Australian shipping industry; and

(c) enhances the efficiency and reliability of Australian shipping as part of the national transport system; and

(d) maximises the use of vessels registered in the Australian General Shipping Register in coastal trading; and

(e) promotes competition in coastal trading; and

(f) ensures efficient movement of passengers and cargo between Australian ports.

Coastal shipping is predominantly used to transport freight, with 90 per cent of coastal shipping related to the shipment of bulk freight.[24] The main commodities transported by coastal shipping are:

- bulk freight, such as sugar, cement, fertiliser, alumina, iron ore, bauxite and steel and refined petroleum; and
- containerised, roll-on/roll-off (RoRo) and other cargo.

2.2 Coastal Trading Act Licence Types

To promote the use of Australian flagged vessels, all movements of freight and passengers between Australian ports must be authorised by one of the three types of licences pursuant to the Coastal Trading Act, unless an exemption applies:

1. General licences – for Australian registered vessels;
2. Temporary licences – for foreign-flagged vessels; and
3. Emergency licences – for emergency situations (valid for 30 days).

A fourth licence type, a Transitional General Licence, was available but can no longer be granted. The box below describes the licence types, who can apply for them and some of the application process around challenging voyages.

Some vessels are exempt from licencing requirements under the Coastal Trading Act[25], including:

1. Cruise Vessels: cruise ships over 5,000 gross tonnes are able to operate around the Australian coast without obtaining a temporary licence;
2. Norfolk Island: vessels undertaking voyages carrying cargo or passengers between Norfolk Island and any port in the Commonwealth or in the Territories;

[24] BITRE, *Australian Seafreight – Statistical Report 2015-16* (2018), 32.
[25] *Note: Section 11 of the Coastal Trading (Revitalizing Australian Shipping) Act 2012 refers.*

3. Christmas Island: vessels undertaking voyages carrying cargo or passengers between Christmas Island and any port in the Commonwealth or in the Territories; and
4. Cocos (Keeling) Islands: vessels undertaking voyages carrying cargo or passengers between Cocos (Keeling) Islands and any port in the Commonwealth or in the Territories.

A detailed history of the coastal trading regime is at **Attachment C**.

Box 2. Coastal Trading Licences

General Licences

General Licences are for Australian flagged vessels listed on the Australian General Shipping Register. General Licences provide unrestricted access to engage in coastal trading in Australian waters for five years. All seafarers working on board the vessel must be Australian citizens, permanent residents or hold a visa with appropriate work rights. Within 30 business days of the end of each financial year, General Licence holders must report details of voyages performed in that financial year to the Department.

Temporary Licences

Temporary Licences allow foreign flagged vessels to conduct coastal trading in Australia. Applications must be for a minimum of five voyages and specify the number of voyages, the number of passengers or volume of cargo to be carried, expected loading dates, the type and size of vessel (if known), the name of the vessel (if known), the ports of embarkation and disembarkation and whether the cargo contains any dangerous goods.

If a Temporary Licence holder wishes to vary the details of an approved voyage beyond the legislated tolerance limits for volume and loading dates, a separate application must be submitted. Similarly, if a Temporary Licence holder wishes to add additional voyages to a Licence, a separate application must be submitted.

Notice in Response

Under the Coastal Trading Act, Australian vessels are able to challenge voyages by foreign flagged vessels through the 'notice in response' mechanism. The Department is required to provide details of Temporary Licence applications to all General Licence holders. This allows General Licence holders to provide a 'notice in response' during mandated consultation periods. A notice in response is a written statement provided to the Department by a General Licence holder, stating that they are able to undertake one or more voyages on a Temporary Licence application.

Applications for new Temporary Licences and to add voyages to an existing Temporary Licence are subject to mandated consultation periods of two business days. Applications to vary a voyage authorised by a Temporary Licence are subject to 24 hour consultation periods. Temporary Licence applications cannot be approved until after the expiry of these consultation periods.

A notice in response triggers a mandatory consultation process between the shipper and the General Licence holder that may be arbitrated by the Department. This is a competitive process and does not automatically grant voyages to Australian operators. A General Licence holder must show they can perform the voyage as it has been applied for. A decision is made by the Minister or their delegate and a notice in response does not guarantee that the Temporary Licence application will be rejected.

Notifications and Reporting

A Temporary Licence holder must also notify the Department of certain details about each approved voyage two business days before loading, and submit a final report on each voyage no later than 10 business days after completion of the voyage.

Emergency Licences

Emergency Licences provide for vessels to engage in coastal trading in Australia for up to 30 days in specific emergency situations. Emergency Licences are available for Australian or foreign flagged vessels to respond to significant national emergencies.

Transitional General Licences

Transitional General Licences were formerly available to foreign-flagged ships that were crewed by Australians and that were licensed under the pre-Coastal Trading Act system. Ships that operated under Transitional General Licences enjoyed the same access and rights as ships operating under a General Licence. All Transitional General Licences have now been surrendered, and no more can be granted.

2.3 Coastal Trading Routes Analysis

By volume, in 2016-17, 35.2 million tonnes of cargo was carried under coastal trading licence. Of that, 28.1 per cent was carried under General Licence on Australian flagged vessels, 4.3 per cent by vessels with Transitional General Licences (foreign flagged but Australian crewed) and the remaining 67.6 per cent was carried under Temporary Licence.[26]

2.3.1 Freight carried under General Licences

Since 2016-17, five of the vessels represented on the map below have ceased to operate under General Licences and Transitional General Licences, accounting for 2.8 million tonnes of cargo carried that financial year, or 24.2 per cent of all cargo carried under those licence categories, and 7.9 per cent of all coastal cargo carried under licence.

The majority of Australian flagged-vessels are now on a specific route, servicing a particular trade and are not available for spot charter (and therefore are not available to challenge for voyages under the Coastal Trading Act). The maps in **Figures 1, 2 and 3** below demonstrate the impact of the surrender of General and Transitional General Licences since 2016-17.

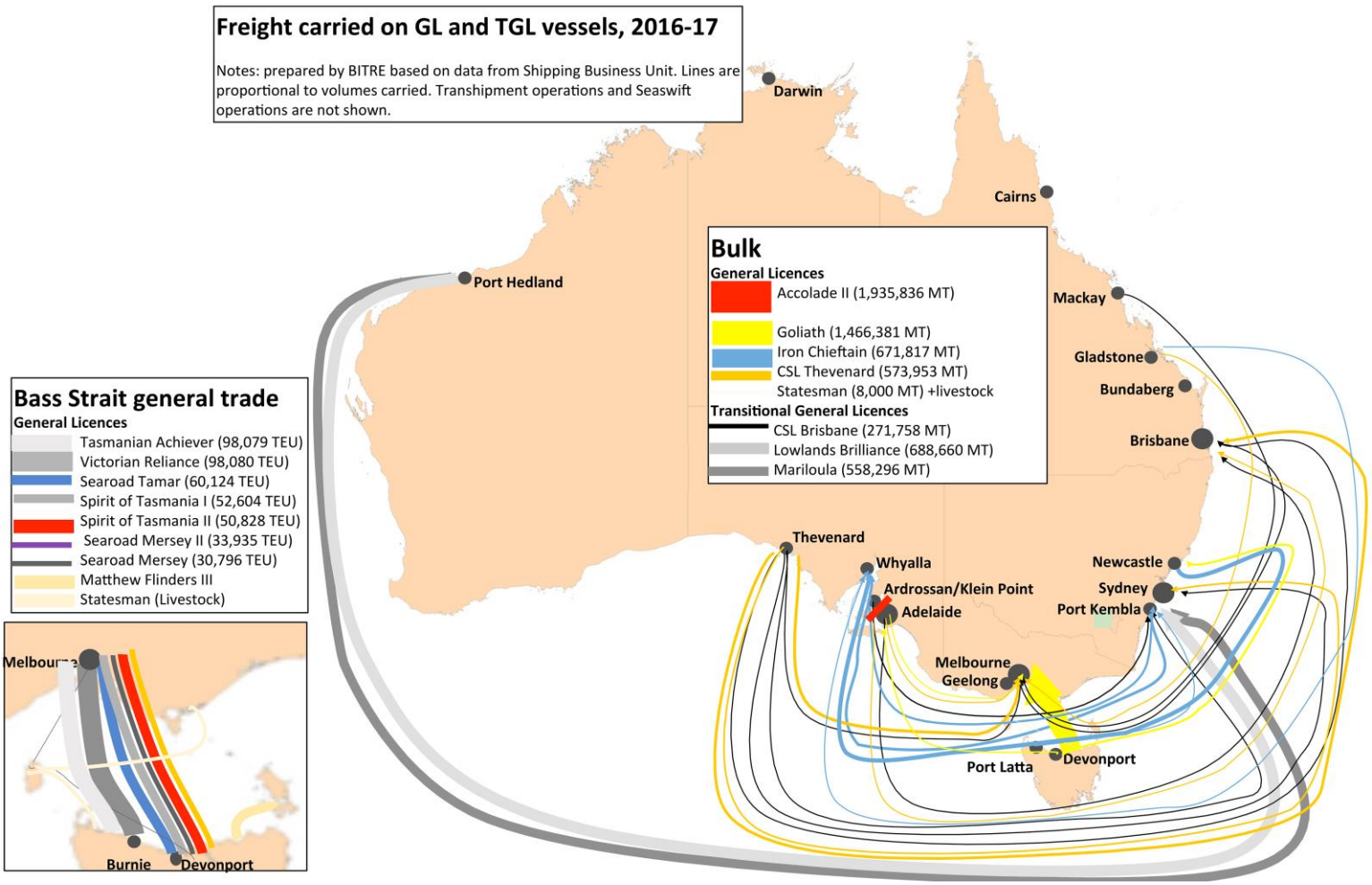
As **Figure 1** shows, in 2016-17 General Licenced vessels were engaged in regular movements between the same ports.

The most used General Licence and Transitional General Licence routes in 2016-17 were:

- Port Hedland to Port Kembla;
- Klein Point to Adelaide;
- Devonport to Melbourne;
- Melbourne to Devonport;
- Melbourne to Burnie;
- Burnie to Melbourne;
- Thevenard to Melbourne;
- King Island to Port Stanley; and
- Ardrossan to Port Kembla.

[26] BITRE Estimates (2019).

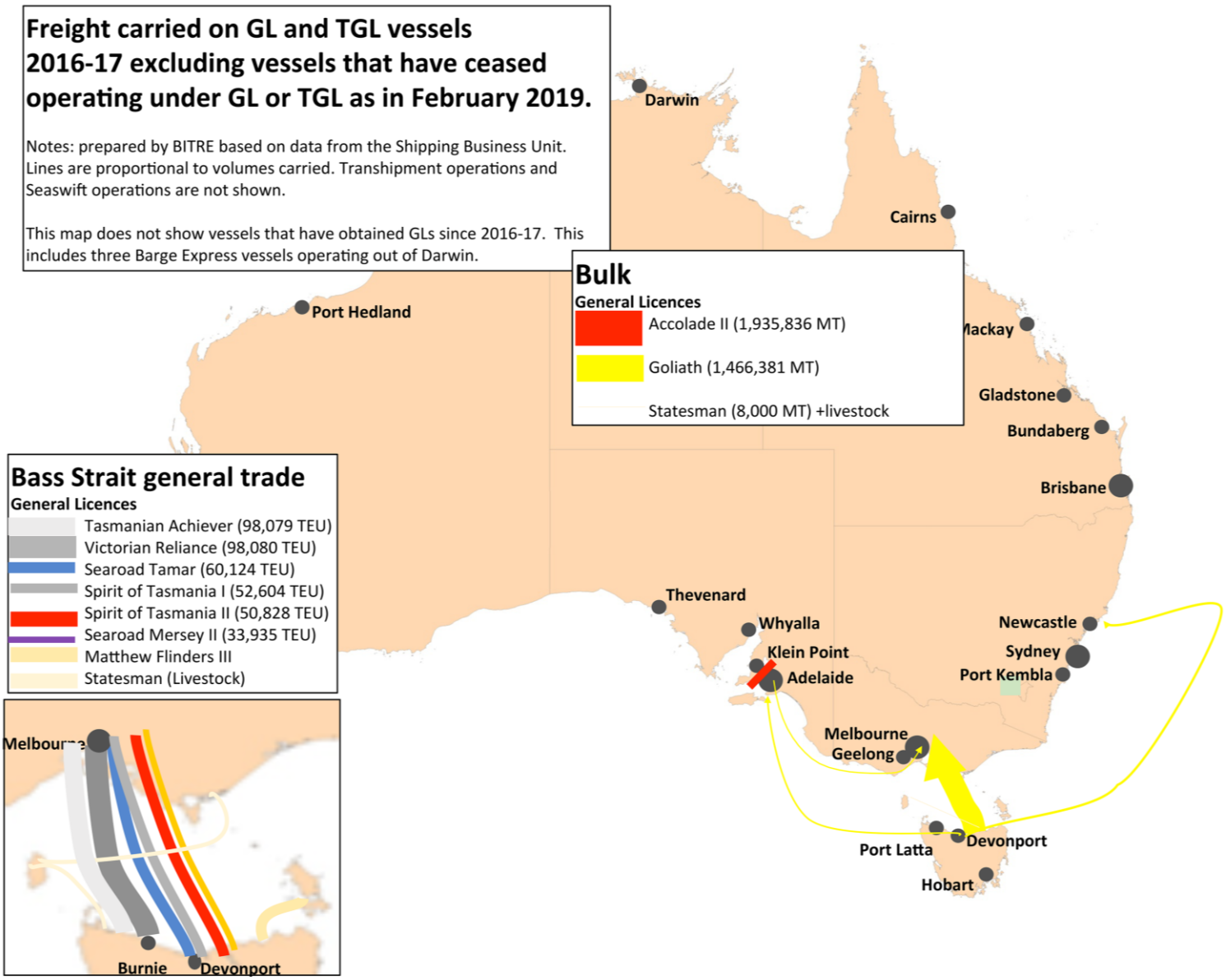
Figure 1 – Freight Carried on General Licenced and Temporary General Licenced Vessels (2016-17)



As **Figure 2** shows, the Bass Strait trade now accounts for the vast majority of General Licence voyages. There are a number of General Licence vessels, which are not part of the major Australian flagged fleet that undertake intrastate trading in the north of Australia, primarily operating out of Darwin and Cairns that are not reflected on the map. These are generally small barges delivering to remote communities.

Since 2016-17, six General Licences and Transitional General Licences used to undertake some of the routes listed above have been surrendered. **Figure 2** below shows freight carried on General Licence and Temporary Licence vessels in 2016-17, excluding those vessels that by February 2019 have ceased operating under General Licence or Transitional General Licence.

Figure 2 – Freight Carried on General Licenced and Temporary General Licenced Vessels (2016-17), Excluding Vessels that have Ceased Operating Under GL or TGL as at February 2019



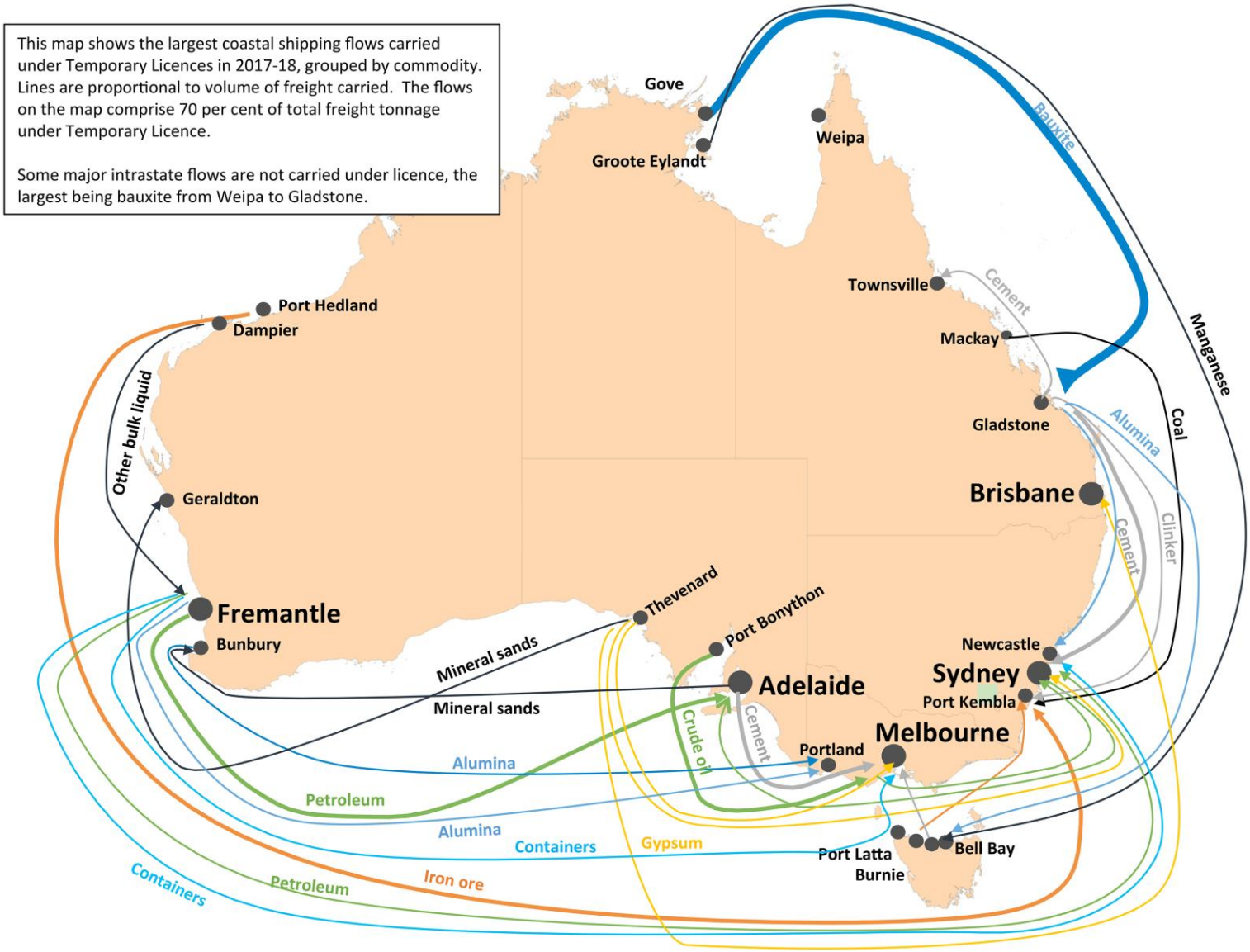
2.3.2 Freight Carried under Temporary Licences

The main freight routes and freight types carried by Temporary Licence holders in 2017-18 are outlined in **Figure 3** below.

The main commodities carried on temporary licenced vessels are:

- alumina/bauxite;
- steel;
- cement; and
- petroleum.

Figure 3 – Major Coastal Freight carried on Temporary Licences 2017-18 (million tonnes)



Aluminium

Bauxite is mined at Gove, and sent on Temporary Licenced vessels to the refinery at Gladstone for processing into alumina. The alumina is then sent from Gladstone to smelters at Newcastle and Bell Bay. Alumina is also refined in Perth and Bunbury and is shipped to the smelter in Portland under Temporary Licence. The largest coastal freight movement of bauxite between Weipa and Gladstone is not depicted in **Figure 3** as it is an intrastate movement that does not occur under Temporary Licence. Although some vessel operators choose to apply for Temporary Licences for intrastate movements, there is no requirement under the Coastal Trading Act for vessel operators to do so.

Steel

Iron ore mined in the Pilbara and Port Latta is shipped on multiple Temporary Licensed vessels to the Port Kembla Steelworks. Coal, which is a major energy source in steel production, is shipped from Queensland to the Port Kembla Steelworks.

Iron Ore was previously shipped on the *MV Lowlands Brilliance* and *MV Mariloula*, which held Transitional General Licences. In early January 2019, BHP announced it was ending its shipping contract with Teekay Shipping, who held the Transitional General Licences for the vessels. The Transitional General Licences for both vessels have been surrendered and they are no longer engaged in coastal trading on the Australian coast.

Cement

Cement is shipped from Gladstone to Sydney, Port Kembla and Townsville, and cement is shipped from Adelaide to Geelong under Temporary Licence.

Petroleum

Petroleum is shipped from refineries at Kwinana and Geelong and between all coastal capital cities and major coastal regional centres, including Cairns, Mackay, Townsville, Gladstone, Newcastle, Devonport, Burnie, Esperance, Broome, Geraldton, Port Lincoln and Port Bonython. All of Australia's bulk fuel supply is moved via ship. Fuel is then distributed from ports to retail outlets via road.

Since 2012 there have been 1934 different voyages carrying petroleum under a coastal trading Temporary Licence, delivering 27.2 million metric tonnes of refined petroleum, petroleum to be refined and crude oil.[27] The shipment of petroleum around Australia's coast over that period has involved over 480 different tanker vessels carrying cargo for Caltex Australia, BP Australia and Viva Energy Australia amongst others.[28]

2.3.3 Tasmanian Shipping

As an island state, Tasmania is particularly reliant on shipping services, and has the highest workforce of seafarers per capita of any Australian state or territory.[29] There are no alternative transport modes except for aviation, which is limited to carrying smaller, higher value cargo.

The Department administers programs that provide assistance to Tasmania to support its transport, freight infrastructure and regional development. The Tasmanian Freight Equalisation Scheme (TFES) provides financial assistance for costs incurred in shipping some goods between Tasmania and mainland Australia. The objective of TFES is to provide Tasmanian industries opportunities to compete in other markets equivalent to their mainland counterparts, due to the absence of connecting road or rail infrastructure. Similarly, the Bass

[27] Department of Infrastructure, Regional Development and Cities, *Analysis of CTLS Data* (2019).
[28] Department of Infrastructure, Regional Development and Cities, *Analysis of CTLS Data* (2019).
[29] Australian Industry Standards, *Skills Forecast 2018 – Maritime* (2018), 20.

Strait Passenger Vehicle Equalisation Scheme (BSPVES) assists in reducing the cost of sea travel across the Bass Strait for eligible vehicles and accompanying passengers.

2.4 Costs of the Australian flagged fleet

Industry stakeholders have indicated during consultation on the Coastal Trading Act that the cost of operating Australian flagged and crewed vessels is the major reason for the lack of competitiveness of the major Australian fleet. For example, Teresa Lloyd, Chief Executive of Maritime Industry Australia Limited, has stated that "…regulatory settings and market conditions meant costs for some Australian ships were between $5 million and $7 million higher with Australian crews."[30]

In February, Rio Tinto gave evidence to the Queensland Parliament Transport and Public Works Committee public hearing for the inquiry into a sustainable Queensland intrastate shipping industry stating that the "…cost differential between an Australian crewed vessel and an international vessel is about US$5 million per year per ship".[31]

Table 2 shows a comparison of Australian and international crew costs, with the cost of employing Australians at the able seamen level being up to six times that of employing international seafarers in the equivalent position. This takes into account differences in leave entitlements, base hourly wages, standard working hours and crewing arrangements.[32]

Table 2 – Part A Wages and Maritime Labor Convention (MLC) Minimum Wage Comparison

	Part A*	MLC^
Standard rate	AU$2477.23 (140 hours)	AU$390.72 (96 hours)
Overtime	N/A - aggregate wage	AU$223.85 (44 hours)
Paid leave accrued	AU$2245.12	AU$54.70
TOTAL	**AU$4722.35**	**AU$669.27**

*The Part A wage displayed in the table above is for a seafarer with a classification of Integrated rating/Assistant steward/Catering attendant working on a cargo vessel of up to 19 000 tonnes manned by 18 or less crew.

^The MLC wage displayed is the minimum wage for an Able Seaman as determined by the International Labor Organization. The exchange rate used is AU$1 = US$0.72/US$1 = AU$1.38. Maritime Labor Convention wages are published in US dollars by the International Labor Organization but are displayed here in Australian dollars for ease of comparison.

It has been estimated that around 40 per cent of operating costs for ships are crew costs.[33]

The cost of shipping services in Australia has risen in recent times, against the global trend. Globally, spot freight market rates for containers fell in all freight markets between 2009 and 2015[34] and the price of shipping dry bulk has dropped substantially between 2014 and 2016.[35]Between 2012 and 2016, nominal shipping rates in Australia rose from 3.02 cents per net tonne kilometre to 3.14 cents per net tonne kilometre (excluding Tasmania).[36]

[30] Australian Financial Review (Baird, L & McIlroy, T), *'A hand behind their back': million dollar disadvantage for Australian-flagged ships* (2019).
[31] Queensland Parliament Transport and Public Works Committee, *Public Hearing for the Inquiry into a Sustainable Queensland Intrastate Shipping Industry – Transcript of Proceedings* (2019), 9.
[32] Department of Infrastructure, Regional Development and Cities, *Analysis of Data from ITF Seafarers and the Fair Work Commission* (2018).
[33] Stopford, M, *Maritime Economics – Third Edition* (2009), 8.
[34] United Nations Conference on Trade and Development, *Review of Maritime Transport 2016* (2016), 52.
[35] United Nations Conference on Trade and Development, *Review of Maritime Transport 2016* (2016), 56.
[36] BITRE, *Information Sheet – Freight Rates in Australia* (2017), 2.

Box 3. Issues arising under the coastal shipping legislative framework

Five Voyage Minimum

The five voyage minimum requirement was included in the Coastal Trading Act so that General Licence holders could adequately assess the commercial viability of particular routes or voyages.

The five voyage minimum particularly impacts those shippers who need to move equipment outside of major shipping routes, but who only require one or two voyages per year. For example, moving a single piece of heavy mining equipment by vessel is not possible under the current licencing regime due to the five voyage limit (and the lack of a suitable General Licence vessel).

Consultation Periods

There are mandatory consultation periods for new Temporary Licences (minimum two business days) and for variations to Temporary Licences (minimum 24 hours) to give General Licence holders adequate time to assess whether they could undertake the proposed voyages in the Temporary Licence application.

Consultation is still required when there are no Australian licensed vessels that are suitable to carry the cargo or transport the passengers. The consultation periods mean that shippers cannot make late changes to their cargo or routes to respond to customer demand outside the tolerance limits.

Variations and Tolerance Limits

The current regime allows a tolerance window of five days for the loading date stipulated on a licence and a tolerance window of 20 per cent for the volume amount stipulated in a Temporary Licence.

These tolerance limits were to allow for industry to adapt to unforeseen or unplanned changes to cargo or vessel movements, and to promote compliance with the approved licence terms. They are also intended to ensure that the nature of voyages does not change so substantially as to not resemble the voyage that was applied for. This ensures that the approved voyages do not change into entirely different voyages that General Licence holder would have challenged for if they had been aware of the size and nature of that voyage at the application point.

These tolerance limits have been the most regular cause of breaches of the legislation as they do not reflect the operating model of many industries that use coastal shipping.

Compliance data on tolerance limits for RoRo cargo indicates that shipments are often increased and decreased by clients at the last minute, including in response to production issues or late ordering. For example, a temporary licence holder may have applied for a licence to carry 2000 tonnes of machinery, based upon bookings from three shippers. As the cargo is being loaded, the licence holder could be advised that one customer has cancelled delivery of a piece of machinery weighing 600 tonnes. As a result, the voyage would be in breach of the tolerance limits through no fault of the licence holder.

3. Maritime Workforce

The Australian maritime workforce includes ship crew, harbour masters, marine pilots, tug operators and maritime surveyors.

It is currently one of the oldest workforces in Australia, with more than half of all workers over the age of 45, and the number of young workers decreasing.[37] Those entering the industry must complete several years of training in line with relevant international conventions, such as the International Convention for the Safety of Life at Sea 1974 and the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers 1978, to gain the necessary certification to undertake their roles. Seafarers must be highly skilled to ensure ships operate safely, particularly in sensitive areas such as the Great Barrier Reef, the Torres Strait and the Coral Sea, because it is vital to protect life and the marine environment while supporting a wide range of important economic activity such as trade and tourism. AMSA manages Australia's maritime certification system.

The Maritime Industry Australia Limited (MIAL) released its Seafaring Skills Census in February 2019. The MIAL Census report indicates that respondents to the Census indicated that 542 additional seafarers would be required by 2023 for jobs at sea and 173 additional seafarers for jobs on land. A significant proportion of these jobs are expected to be in senior roles such as masters and engineers that require many years of training to meet competency standards. Respondents to the survey indicated that the small Australian fleet would impact the capacity for the nation to train seafarers for working at sea who can then transition into critical shore-based roles'.[38] The MIAL Census report also noted that the cost of training was universally identified as the largest barrier to conducting more seafarer training.[39]

Key insights from the MIAL Seafaring Skills Census are that by 2023:

- demand for seafarers at sea is expected to increase by 11.6 per cent,
- demand for seafarers for shore-based roles is expected to increase by 17.7 per cent, and
- for those in training the increase in demand is expected to be 11.0 per cent.

Given this expected demand the MIAL Census forecasts a shortage of 560 seafarers. MIAL also notes respondents to the Census listed cost as the number one barrier to training.[40]

Parts of industry are experiencing particular skill and worker shortages include Domestic Commercial Vessel occupations like Marine Engine Drivers and small vessel Masters and deckhands.[41]

A key issue for the shipping industry into the future is ensuring critical maritime skills are developed and maintained in Australia. As a trading nation and an island, Australia will always require maritime skills. Workforce capacity issues are emerging in the maritime sector in Australia, due to an ageing workforce and a lack of skilled mariners in the employment pipeline. The shortage of training berths for seafarers to complete their practical training and lack of employment opportunities has limited Australia's ability to maintain these skills.

[37] Australian Industry Standards, *Skills Forecast 2018 – Maritime* (2018), 21 & 26.
[38] Maritime Industry Australia Limited, *Seafaring Skills Census Report* (2019), 9.
[39] Maritime Industry Australia Limited, *Seafaring Skills Census Report* (2019), 47.
[40] Maritime Industry Australia Limited, *Seafaring Skills Census Report* (2019), 5.
[41] Australian Industry Standards, *Skills Forecast 2018 – Maritime* (2018), 24.

Australian seafarers do have the option to accept training berths on international ships, at international wage rates. However, this is unattractive to seafarers as Australian wages are often significantly higher than international rates.

There are few Australian seafarers employed internationally, and almost none are Australian resident tax payers. The Australian Taxation Office estimates that there are approximately 1,000 self-identified taxpayers who may be working as seafarers on board international vessels.[42] Currently, Australian seafarers who wish to retain residency are subject to income tax on their wages.

A skilled workforce is required to support shipping operations in Australia beyond crew on board ships. The 70 ports around Australia will continue to require shore-based roles such as harbourmasters, pilots and tugboat operators to manage the transit and arrival of vessels regardless of the size of the Australian fleet. Regulators also require qualified seafarers to support their operations, including ship inspectors. These roles require a highly skilled maritime workforce to ensure ships and ports operate safely in order to protect the marine environment and support a wide range of important economic activity such as trade and tourism.

3.1 Australia's Ageing Maritime Workforce

Australia's maritime workforce is ageing and there is a shortage of skilled Australian mariners coming through the employment pipeline. The Department of Jobs and Small Business profile of marine transport professionals shows that the average age is 49 years, and that many workers in the industry are aged 45 years or older (62.75 per cent), **Figure 4** refers.[43]

Table 3 – Age Profile (Percentage Share)

Age Bracket	Marine Transport Professionals
15 – 19	4.6
20 – 24	0.4
25 – 34	14.9
35 – 44	17.3
45 – 54	39.9
55 – 59	23.4
60 – 64	7.6
65+	1.8

While not directly comparable, data collected through the 2012 Australian Industry and Skills Committee Census confirms that Australia's maritime workforce is one of the oldest in the country, citing 49 per cent of workers as aged 45 years or older.[44] Similarly, the Department's 2013 Australian Maritime Industry Census Report by Orima Research cites the average age of Australian seafarers as 44 years.[45] The subsequent MIAL Census conducted in 2018 identified that 52 per cent of the maritime workforce are 42 years or older.

[42] Australian Taxation Office, *Analysis of 2017 Income Tax Return Data: 899211 Occupation Code (Seafarer)* (2018).
[43] Department of Jobs and Small Business, *Analysis of ABS Labour Force Survey Data – Annual Average 2017* (2018).
[44] Australian Industry and Skills Committee, *Maritime – Industry Overview* (2019).
[45] Orima Research, *Australian Maritime Industry Census Report*, (2013).

As ageing seafarers retire, the number of skilled maritime professionals will decrease. The Department of Jobs and Small Business have predicted that there is likely to be around 2,000 job openings across the maritime industry over the five years from 2017 (approximately 400 per year) that will be challenging to fill.[46]

Industry participants confirm that while demand for qualified Australian seafarers is expected to increase, there are not enough seafarers undertaking appropriate training to fill the required roles. There are not enough maritime organisations contributing to the training of STCW qualified seafarers, with limited access to training berths often cited as the most significant barrier for seafarers undertaking training.

3.2 Seafarer Training

New entrants to Australia's shore-based maritime workforce will require years of training to gain certification that allows them to undertake critical roles such as harbourmasters, pilots and tugboat operators, in line with the requirements of the International Convention for Standards of Training, Certification and Watchkeeping for Seafarers 1978.

AMSA issues Certificates of Competency recognising international seafarer qualifications under Marine Order 70 (Seafarer Certification). These require:

- completion of an approved course of study conducted at an approved organisation;
- completion of appropriate qualifying sea service;
- completion of final assessment (oral examination conducted by AMSA); and
- a valid Certificate of Medical Fitness.

Related requirements for seafarers on domestic commercial vessels are set out under Marine Order 505 (Certificates of competency – national law).[47]

Training requirements differ depending on the level of qualification sought and the current experience of the individual seafarer. Highly skilled positions such as Master Mariner can require up to 15 years of training. A Master Mariner may be in charge of a 300,000 deadweight tonne tanker carrying oil or a cruise ship with 8,000 passengers and crew. These roles have significant responsibilities for the safety and security of life at sea, protection of the marine environment and facilitation of Australia's trade.

Australian Industry Standards (the government-funded not-for-profit organisation responsible for skills standards) administers the Maritime Training Package, which compromises 26 different maritime qualifications for near coastal and ocean going maritime operations. In 2017, there were 6,633 students enrolled in maritime vocational education and training courses in Australia, up from 3,062 in 2014.[48] AMSA data indicates that the total number of certified seafarers is currently 66,633.[49]

While new entrants are able to access training through Registered Training Organisations like the Australian Maritime College, it is often difficult to find a training berth on a vessel to undertake the practical sea service required for certification. This is limiting the number of new qualified entrants being produced through the Australian system.

[46] Department of Jobs and Small Business, *Analysis of ABS Labour Force Survey Data – Annual Average 2017* (2018).
[47] *Note: Marine Order 505 (Certificates of Competency – National Law) refers.*
[48] Department of Education and Training, *Analysis of Maritime Training Package General Enrolments Data 2014-17* (2019).
[49] Australian Maritime Safety Authority, *Analysis of Certification Data 2018* (2019).

3.3 Seafarer Tax Offset

The Department administers the Seafarer Tax Offset established under the *Shipping Reform (Tax Incentives) Act 2012.*[50] The offset is a tax incentive designed to encourage the development of sustainable employment and skills opportunities for Australian seafarers.

The Seafarer Tax Offset entitles eligible Australian companies to a tax offset for salary, wages and allowances paid to Australian resident seafarers who are employed to undertake overseas voyages on certified vessels, if the company employs the seafarer for at least 91 days in the income year. The Seafarer Tax Offset amounts to 30 per cent of the gross payment amounts paid to each eligible employee. The gross payment amounts include total withholding payments covering matters such as those related to employment, accrual of leave, and training allowances.

3.4 The United Kingdom's 'SMarT Scheme'

An example of an international subsidy is the United Kingdom's Maritime and Coastguard Agency has an active and diverse fleet of commercial shipping vessels including cargo and container ships, bulk carriers, tankers and cruise liners known as the Merchant Navy. The UK Merchant Navy provides employment opportunities for seafarers and the Merchant Navy Training Board facilitates maritime education, training and skills.

Introduced in 1998, the UK's Support for Maritime Training (SMarT) Scheme was implemented to support Merchant Navy training to ensure an adequate supply of UK maritime expertise that meets the nation's economic and strategic requirements.

SMarT covers up to 50 per cent of actual training costs, and is paid by the UK Government to eligible shipping companies who sponsor trainees.

In February 2018, in recognition of the importance of sustaining the UK's skills base for the maritime sector, the UK Government announced a £15 million funding boost for the SMarT scheme, increasing total funding to £30 million per year over seven years. This funding has allowed the annual cadet intake to increase by 60 per cent, from 750 to 1,200 on UK flagged vessels.

[50] The Department of Infrastructure, Regional Development and Cities, *Seafarer Tax Offset* (2017).

Box 4. Skilled maritime workforce policy options

Industry Cooperation

The MIAL Seafarer Census noted that better industry-wide coordination of sea time would be advantageous to providing training berths.[51] Industry cooperation on providing training berths across types of vessels and companies would help to ensure the industry has an ongoing supply of skilled Australian seafarers. This action would be aimed at ensuring that the berths available for training are maximised both in terms of the number of berths and in sharing the opportunities to develop capabilities in different situations.

Tax Exemptions for Australian Seafarers on International Vessels

Many international seafarers are exempt from the income tax regime in their country of residence. For example, in the Philippines seafarers are considered 'Overseas Filipino Workers' and their income is tax free as it is earned outside the country of residence.[52] This can make it difficult for Australian seafarers to compete with seafarers from other nations.

In order to make international training berths more viable for Australian seafarers, the green paper on Coastal Trading prepared by the Chief Executive Officer of MIAL proposed that a regime be introduced that allows individuals to be income tax exempt if they spend a certain amount of time working overseas.[53]

Training Berths on Government Vessels

There could be opportunities to source training berths on vessels in the Australian Government fleet including Australian Defence Force, Australian Border Force, the Australian Antarctic Division and AMSA vessels.

However, there is only a very small number of government vessels undertaking appropriate voyages for seafarers to undertake practical sea service. There is also a size issue, as many of these vessels are relatively small and may not be able to provide the variety of experience to meet the training required for higher level qualifications such as Master, Chief Mate and Watchkeeper.[54] They may also not be able to accommodate additional or civilian crew.

Skilled Migration

Use of skilled migrants is an option available to employers to supplement Australia's maritime workforce where skills are unavailable domestically. Reliance on these skilled migrant workers may present strategic risks for Australia over the long term. For example, should global demand for these skills significantly outstrip supply, Australian businesses may face significant cost increases to attract and retain these workers, or be unable to fill positions for a time. This may in turn impact the cost or availability of shipping services in Australia.

Immigration policy, including skilled migration, is the responsibility of the Department of Home Affairs.

[51] Maritime Industry Australia Limited, *Seafaring Skills Census Report* (2019), 47.
[52] Republic of the Philippines – Department of Finance Bureau of Internal Revenue, *Revenue Regulations No. 1-2011* (2011).
[53] Lloyd, T, *Coastal Trading Green Paper – A Maritime Transition* (2017), 14.
[54] Australian Maritime Safety Authority, *International Qualifications – Master* (2018).

4. Australia's Shipbuilding Industry

Australia's maritime industries include shipbuilders and repairers, such as Austal, ASC Shipbuilding Pty Ltd, Bae Systems Australia and Thales Australia. These companies build and maintain large ships, for both military and civilian purposes.

The shipbuilding and repair services industry in Australia is broadly segmented into military and commercial products and services. The industry is comprised of firms that manufacture or repair smaller sized ships or submarines, or manufacture or repair major components for ships and submarines.[55]In Financial Year 2017-18:

- military-related shipbuilding accounted for 57.3 per cent of the market;
- ship repair and maintenance 20.5 per cent; commercial shipbuilding 16.7 per cent; and
- submarine construction 5.5 per cent.[56]

Historically, all defence shipbuilding and through-life support contracts were awarded to Australian-based companies. This policy changed in 2012 as a result of the costs associated with domestic shipbuilding, capacity constraints at Australian shipyards, and access to more advanced technological capabilities that were not available in the domestic market.[57] More recently, a Naval Shipbuilding program has been established that will see more than 50[58] navy vessels built in Adelaide and Perth.

Australia's shipbuilding and repair services for the military sector is the largest market segment, while local commercial shipbuilding has declined due to the dominance of foreign shipbuilders.[59] In this regard, Australian ship building in the military context has been considered to be as much as 30 to 40 per cent more expensive than international competitors offering similar products.[60] Naval vessels are generally more expensive given the inherent technology and specialist design requirements.

[55] IBISWorld, *Industry Report C2391: Shipbuilding and Repair Services in Australia* (2018), 12.
[56] IBISWorld, *Industry Report C2391: Shipbuilding and Repair Services in Australia* (2018), 12.
[57] IBISWorld, *Industry Report C2391: Shipbuilding and Repair Services in Australia* (2018), 6 & 8.
[58] *Note: This includes 12 Arafura class offshore patrol vessels, 21 Guardian class pacific patrol boats, nine Hunter class frigates and 12 Attack class submarines.*
[59] IBISWorld, *Industry Report C2391: Shipbuilding and Repair Services in Australia* (2018), 12.
[60] RAND Corporation, *Australia's Naval Shipbuilding Enterprise: Preparing for the 21st Century* (2015), xxxviii & xxxix.

5. Maritime Safety and Security

Australia has a robust maritime safety and security framework managed by AMSA and the Department of Home Affairs, which helps to ensure Australia's economic and social prosperity. Data indicates that of the 5,879 ships that made 32,801 calls at Australian ports in 2016-17[61], there were few safety[62] or security incidents.

5.1 The Australian Maritime Safety Authority (AMSA)

AMSA is Australia's national maritime regulatory body. In addition to its regulatory responsibilities, AMSA manages Australia's distress beacon registration database, navigational aids and vessel tracking and reporting systems. AMSA also provides a search and rescue service for Australia across a region of nearly 53 million square kilometres (one tenth of the Earth's surface).

More information is available in AMSA's submission.

5.2 Foreign Ship and Crew Standards and Port State Control

Australia's maritime safety regime is based on international safety standards set through the IMO. This reflects the global nature of the shipping industry. Australia is an active participant at the IMO to ensure that the international safety standards are effective. AMSA, in partnership with the Department, works collaboratively to ensure that international maritime safety and crew standards are reflected in Australian legislation. More information about AMSA and the Department's interaction with the IMO is available in **Attachment E**.

In Australia, the *Navigation Act 2012* (Navigation Act) establishes Australia's regulatory framework for international ship and seafarer safety. The Navigation Act gives effect to key international conventions and treaties developed by the IMO, the International Labour Organization and United Nations Conferences to which Australia is signatory.

International conventions and the United Nations Convention of the Law of the Sea (UNCLOS) give responsibilities to Australia (and other flag States and port States) to check and control ships in territorial waters so that they do not pose threats to ship and crew safety.

AMSA employs marine surveyors to conduct flag State and port State control inspections to investigate compliance by Australian and foreign ships respectively with the requirements of various international conventions, including the International Convention for the Safety of Life at Sea 1974 (SOLAS), the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers 1978 (STCW) and the Maritime Labour Convention 2006 (MLC).

Australia is renowned for having a rigorous and effective flag and port State control regime. In 2017, AMSA conducted over 3,000 port State control inspections across 54 different Australian ports, and detained 165 ships.[63]

More detail on AMSA's port State control responsibilities is included AMSA's submission.

[61] BITRE Estimates (2019).
[62] *Note: The proportion of serious incidents to total port arrivals in 2017-18 was 0.3 per cent.* Australian Maritime Safety Authority, *Annual Report 2017-18* (2018), 53.
[63] Australian Maritime Safety Authority, *Port State Control Report 2017* (2018), 4.

5.3 Domestic Maritime Safety

National System for Domestic Commercial Vessel Safety

The Department administers the *Marine Safety (Domestic Commercial Vessel) National Law Act 2012* which establishes the National System for Domestic Commercial Vessel Safety (national system) delivered by AMSA. The national system is Australia's single regulatory framework for the certification, construction, equipment, design and operation of domestic commercial vessels inside Australia's exclusive economic zone. It enables domestic operators, seafarers and vessels to move seamlessly between jurisdictions.

Unlike vessels regulated under the Coastal Trading Act, which usually relates to ships engaged in the movement of freight or passengers along the Australian coast, domestic commercial vessels are typically Australian boats or ships undertaking commercial, government or research activities in Australian waters. This may include operations relating to tourism, public transport, research, fishing or commercial hire-and-drive.

The *Marine Safety (Domestic Commercial Vessel) National Law Act 2012* establishes AMSA as the National Marine Safety Regulator for domestic commercial vessels.

5.4 Maritime Security

The Australian Government regulates the security of Australian shipping through the *Maritime Transport and Offshore Facilities Security Act 2003* (MTOFSA), in line with requirements set out in SOLAS and the International Ship and Port Facility Security Code 2003 (ISPS).

The MTOFSA sets out a regulatory framework which centres on maritime industry participants assessing their operations for security risks and preparing a security plan which sets out measures to counter these identified risks. This framework regulates security requirements for certain security regulated ships, port operators, port facility operators, offshore facilities and offshore service providers are regulated.[64]

More detail on Australia's maritime security arrangements is included in the Department of Home Affairs submission.

Box 5. Automation

Just as with land transport, automation is expected to affect the shipping industry in the future. The IMO Maritime Safety Committee has commenced a regulatory scoping exercise to explore how safe, secure and environmentally efficient Maritime Autonomous Surface Ships (MASS) operations may be addressed by the IMO.

Automation is also expected to affect navigation. For example, improved use of sensor technology and artificial intelligence may help avoid collisions without human intervention.

Automation is also having a significant impact on the loading and unloading of cargo at ports. For example, the Port of Melbourne, Port of Brisbane and Sydney's Port Botany already have semi-automated container handling.

[64] Department of Home Affairs, *Maritime Security* (2018).

6. Environment

Similar to maritime safety and security, Australia has a robust framework for managing environmental risks posed by shipping, managed by AMSA and the Department of Agriculture and Water Resources, which helps to ensure Australia's important marine environment is protected. There are few incidents of pollution or environmental damage from ships.[65]

More information on marine environmental protection is available in AMSA's submission.

6.1 Foreign Ship Environmental Standards and Port State Control

AMSA, in partnership with the Department, works collaboratively through the IMO to ensure that international maritime environment protection standards are reflected in Australian legislation. This includes, but is not limited to, air and oil pollution, ballast water, toxic antifouling, garbage and fuel efficiency. Australia is an active contributor to the IMO on these topics, and has implemented the relevant IMO requirements. A list of legislation and conventions for which the Department is responsible is in **Attachment D.**

The Department leads Australia's engagement at the IMO on greenhouse gas emissions. The Department is working closely with AMSA to implement new limits on sulphur emissions from ships and arrangements to manage marine environment emergencies. The Department's role is described below.

6.2 Marine Environmental Protection - Greenhouse Gas Emissions

In 2012, international shipping was estimated to contribute about 2.2 per cent of global carbon dioxide (CO_2) emissions. Although international shipping is the most energy efficient mode of mass transport and only a modest contributor to overall CO_2 emissions,[66] a global approach to further improve its energy efficiency and effective emission control is needed as sea transport will continue growing apace with world trade.

Emissions from international shipping cannot be attributed to any particular national economy due to shipping's global nature and complex operation, and are therefore the responsibility of the IMO. These emissions are not covered by the various agreements under the United Nations Framework Convention on Climate Change (UNFCCC).

The Department of Foreign Affairs and Trade (DFAT) leads the whole of government work on UNFCCC matters. The Australian Government is committed to a global approach to emissions reduction for shipping and the Department, as the lead policy agency, is actively engaged in these negotiations at the IMO.

In October 2016, the IMO agreed to develop a comprehensive strategy to reduce greenhouse gas (GHG) emissions from shipping. In April 2018, the IMO's Marine Environment Protection Committee (MEPC) adopted an initial strategy to reduce GHG emissions from the international shipping sector that is consistent with the Paris Agreement temperature goals. The levels of ambition for the strategy include a target to improve energy

[65] *Note: The proportion of serious pollution incidents to total port arrivals in 2017-18 was 0.0 per cent.* Australian Maritime Safety Authority, *Annual Report 2017-18* (2018), 55.
[66] International Maritime Organization, *Third IMO Greenhouse Gas Study 2014* (2015), 1.

efficiency by at least 40 per cent by 2030, pursuing efforts towards 70 per cent by 2050, compared to 2008, and a reduction in the total annual GHG emissions across the sector by at least 50 per cent by 2050 compared to 2008 levels, with a view to phasing them out. The initial strategy will be reviewed in 2023.

6.3 Marine Environmental Protection – Sulphur Emissions

Sulphur emissions and related particulate matter from the combustion of fuel have significant environmental and human health impacts, including acid rain, increased rates of cancer and respiratory illnesses. To address these impacts the IMO agreed in 2008 to phased reductions of the allowable sulphur content in marine fuel oil, including a reduction from 3.5 per cent to 0.5 per cent from 1 January 2020. This reduction of more than 85 per cent was reaffirmed in October 2016 by the IMO's MEPC and has posed significant implementation challenges across the global shipping fleet as existing ships are modified to accommodate new marine fuel oil specifications.

Australia has implemented the global cap on the sulphur content for marine fuel oil through the *Protection of the Sea (Prevention of Pollution from Sea) Act 1983* which was amended in 2010 to prescribe the 0.5 per cent sulphur limit from 1 January 2020, and through Marine Order 97 (issued by AMSA). The global nature of these changes means that ships travelling to and from Australia will be required to comply regardless of Australia's domestic position.

6.4 Emissions Control Areas

Increasing awareness of the impacts of growth in shipping emissions and the considerable difference between maritime and land transport emission standards has led to some regions, namely North America and northern Europe, introducing IMO designated Emission Control Areas (ECAs) which have tighter fuel standards of 0.1 per cent sulphur content. Unilaterally, China has already introduced 0.5 per cent fuel sulphur limits in some waters, and is considering mandating 0.1 per cent limits in these waters from 1 January 2020.

Importantly for the Australian Government, the establishment of international ECAs has led some state governments and maritime industry stakeholders to seek 0.1 per cent fuel sulphur limits in port waters, particularly those in proximity to residential areas. Since 23 December 2016, AMSA has been issuing formal directions to cruise ships berthing in Sydney Harbour to limit their sulphur emissions by using low sulphur fuel (0.1 per cent) or an alternative measure that achieves an equivalent emission outcome. In December 2018, the Deputy Prime Minister, the Hon Michael McCormack MP, instructed AMSA to continue issuing these directions until 31 December 2019, with the Government to further consider Sydney Harbour sulphur limits applicable after that date.

IMO designation of an ECA requires evidence that the benefits of sulphur content reduction beyond the global limit will be greater than the economic cost to the shipping sector. These benefits will be less in the context of a global fuel oil sulphur limit of 0.5 per cent and analysis of the effect of establishing any ECAs in Australian waters will need to consider this.

6.5 National Plan for Maritime Environmental Emergencies

The National Plan for Maritime Environmental Emergencies (National Plan) sets out the national arrangements, policies and principles for the management of maritime environmental emergencies such as oil spills and spills of other hazardous and noxious substances. The National Plan has been in operation since 1973 and is characterised by the

willing and effective cooperation of Australian governments and industry. The National Plan gives effect to several international conventions relating to oil pollution, and integrates various Australian emergency management arrangements through a single document to protect the community, environment, maritime industries and cultural and heritage resources from the impacts of maritime environmental emergencies. Based on a risk management approach, the National Plan implements the 'polluter pays' principle to enable the recovery of costs for emergency response activities. A copy of the National Plan is available on AMSA's website.[67]

While the National Plan is managed by AMSA, the Department chairs its Strategic Coordination Committee (NPSCC), which reports to the Transport and Infrastructure Council through the Transport and Infrastructure Senior Officials Committee. The NPSCC is responsible for setting the broad policy direction of the National Plan, overseeing its implementation and ensuring the effectiveness of its arrangements. In support of these functions, the Department works closely with AMSA on policy matters that arise from the review and maintenance of the National Plan, with the aim of ensuring that Australia's emergency response capability is in line with best practice and remains efficient and effective.

[67] Australian Maritime Safety Authority, *National Plan for Maritime Environmental Emergencies* (2019).

7. Port Infrastructure and the Shipping Industry

The responsibility for the establishment, operation and regulation of ports rests with state and territory governments[68].

There are over 60 gazetted[69] ports across Australia. The Bureau of Infrastructure, Transport and Regional Economics (BITRE) has identified 17 nationally significant ports[70] based on activity measures, namely ship calls or visits, throughput, and international sea trade values (the sum of inbound and outbound trade).

Australian ports vary in their scale of operation and characteristics, and can be grouped into three types: specialised bulk ports, regional ports and mixed multicargo ports.

In general, specialised bulk ports focus on one or two export bulk commodity operations and transfer little cargo for the general community, and are more likely to be privately operated. These ports generally have specialist infrastructure dedicated to each bulk cargo type and are located close to agricultural production areas, mines or manufacturing facilities.

Regional seaports are typically state government owned and dominated by a number of bulk commodities, but also provide facilities for general cargo that may include containers and may provide services for fishing fleets or offshore oil and gas supply vessels. Due to their location, regional seaports may also be central to a region's tourism efforts by providing water-based recreational facilities such as marinas and cruise ship facilities.

Mixed multicargo ports tend to be capital or major city based and have high trade throughput, particularly in relation to containers and break bulk cargoes such as automotive vehicles and heavy machinery, although bulk commodities are also often handled. As they are usually managed as landlord ports, mixed multicargo ports offer a more diverse range of services and, as such, a broader mix of public and private investment exists.

7.1 Capacity and Planning

Beyond ensuring Australian ports are capable of delivering services reliably and efficiently, a key concern for governments is to ensure that ports have adequate capacity to handle forecast trade. Feedback from Ports Australia received during the Commonwealth's Inquiry into National Freight and Supply Chain Priorities[71] (the Freight Inquiry) concluded that terminal capacity at most ports across Australia can meet needs for the next 20 years with reasonable investment. However, the ports industry remains concerned that more needs to be done to prevent urban encroachment and other developments from impeding the efficient functioning of our ports.

The sustainable development of the port sector depends to a large extent on the relationship and interaction between the sector and the planning system. Ports, which in many cases may be in or near to major urban centres, generate large volumes of traffic, noise and emissions and are often located at a unique interface between sensitive land and marine environments. This can lead to the important role of ports in facilitating economic activity being overshadowed by the seemingly conflicting demands of a port's development, the development of the city, and protecting the marine environment.

The National Ports Policy (NPP) recognises this planning issue and encouraged the long-term planning of all nationally significant ports. Since the release of the NPP most port operators have completed masterplans and sought to integrate them within the existing planning hierarchy to offer clarity to all stakeholders regarding the future development plans

[68] *Note: The Department has responsibility for ports in the Indian Ocean Territories and on Norfolk Island.*
[69] *Note: 'Gazetted' means a notice published in the Australian Government 'Government Notices Gazette'.*
[70] BITRE, *Information Sheet – Ports: Job Generation in the Context of Regional Development* (2014), 1.
[71] Department of Infrastructure, Regional Development and Cities, *Inquiry into National Freight and Supply Chain Priorities* (2018).

for each port. However, progress has been difficult and a key outcome of the Freight Inquiry was the desire from industry for governments to better reflect future port requirements in local and regional planning systems.

7.1.1 Congestion

Increases in container throughput at Australian ports have contributed to high levels of traffic congestion in port-linked road systems[72] and amenity and road safety concerns for residents in adjacent communities. Reasons for these outcomes are shared between:

- the management of peak demand for container pick up and drop off;
- truck turnaround times at the port;
- congestion at the port and in the areas around the port; and
- the relatively low mode share of rail haulage of containers.

Growth in the number of inbound and outbound containers moved into and from the port, and in the distances travelled, also creates conflicts with other users[73] of the transport network and other land uses more broadly.

7.1.2 Dredging

Few Australian ports are naturally deep and a key service that ports provide is to dredge access channels and turning basins to provide appropriate water depths along waterside facilities. Over the last two decades many Australian ports have also needed to dredge access channels to cater to the growth in the size of bulk and container vessels. However community opposition and efforts by authorities to protect coastal ecosystems have led to environmental controls on dredging operations to become more stringent, with the potential to increase costs particularly at ports where dredged materials must be now be disposed of on land as opposed to sea as has traditionally been the case. In some locations, such as the Port of Melbourne, the length of shipping channels and local geology can make dredging very costly.

7.1.3 Encroachment

The sustainable development of the port sector depends to a large extent on the relationship and interaction between the sector and the planning system. Ports, which in many cases may be in or near to major urban centres, generate large volumes of traffic, noise and emissions and are also located at a unique interface between often sensitive land and marine environments. This can lead to the important role of ports in facilitating economic activity being overshadowed by the seemingly conflicting demands of a port's development, the development of the city and protecting the marine environment.

Many ports, such as the Port of Melbourne, are experiencing geographic constraints on their capacity to accommodate larger vessels. Over the next 40 years, the Port of Melbourne is expected to almost triple its throughput of containers. Moreover, some 80,000 people have taken up residence near the Port.

Industry is concerned this residential development within Fishermans Bend (located near the Port of Melbourne) will inhibit the ability of the port to operate 24 hours a day, 7 days a week. The critical freight infrastructure required for a truly efficient supply chain requires round-the-clock operational flexibility so that freight movement can to occur at all times and operators can take advantage of off-peak road traffic volumes. In addition, the movement of residents

[72] Independent Pricing and Regulatory Tribunal of New South Wales, *Reforming Port Botany's Links with Inland Transport* (2008), 1.
[73] O'Connor, K. & Parsons, H. *The Impact of Logistics Activities on Cities* (2004).

and workforce into and out of the region will use the same transport infrastructure as port traffic causing additional congestion.[74]

7.2 Port Charges

Charges are typically incurred for all ships entering a port and are based on tonnage and volume and the duration of time spent in port. A summary of charges is set out in **Table 3**.

Table 3 – Port Charges[75]

Ship-Based Charges: *Charges that ship owners pay for a port visit by the ship once they come into harbour.*	
Detailed Charges / Assumptions	**Description**
Conservancy / Navigation	Navigation service charges levied by public authorities, which cover calls by a vessel at one or more ports over a specified period.
Pilotage	Paid per movement when using the services of a marine pilot in a pilotage area.
Towage	Levied by tug boat operators for tugs required for berthing, unberthing and shifting inside the harbour.
Mooring/Unmooring (Line Handling)	Charged to vessels using mooring and unmooring services when entering or leaving the port, or for movements in the port, levied by the port authority, stevedoring company or other providers.
Tonnage	Based on the gross tonnage of the vessel levied by the port authority to recover costs and resources associated with provision and maintenance of port and harbour facilities.
Berth Hire / Site Occupation	Charged to vessels that remain alongside a port berth, including time when not working cargo. May be included in stevedore charge.
Security	Recovery of cost of providing maritime security of common user and waterside areas.

Cargo-Based Charges: *Charges levied on the volume of cargo to be loaded.*	
Detailed Charges / Assumptions	**Description**
Wharfage	Levied by the port authority on each unit of cargo for accommodation at wharf provided during loading or storage.

[74] Australian Logistics Council, *'Freight Doesn't Vote' Submission to the Inquiry into the National Freight and Supply Chain Priorities* (2017), 11.
[75] Australian Bureau of Agricultural and Resource Economics and Sciences, *Shipping and Handling Costs for Australia's Wood Product Exports: Data Availability and Methodological Issues* (2016).

Cargo storage	Levied by port authority on goods remaining on the wharf, berth or separate from the port. May involve additional loading expenses.
Port Access Charge / Harbour Dues	Levied on specific commodities that have required investment in significant capital projects.
Stevedoring	Levied by stevedoring companies for handling cargo.

A 2007 study that attempted to benchmark port prices in Australia noted that in regards to cost allocation procedures, particularly in complex urban ports, "a significant share of total costs —commonly up to 50 per cent of total costs — cannot be directly attributed to any particular trade passing through the port. The allocation of these costs to particular users is therefore essentially discretionary. Some ports go about this differently, and many do not do it systematically at all. The choices that are made in this regard by the port operator can significantly influence the prices charged to particular users."[76] The report also indicated that there was considerable variability in relative port prices between cargo types.

Port operators may also earn income from leasing land and facilities to port tenants including terminal operators, stevedoring firms, cargo handling companies, tugboat operators and mooring service providers, who in turn charge users on a fee for service basis.

Ships accessing Australian ports will likely also incur charges for pilotage. The requirements for the use of pilotage services, and the providers of the service, are typically outlined in instructions issued publicly by the relevant port's harbourmaster, a position appointed by state and territory governments. In addition, pilotage is mandatory for ships transiting in a number of areas in the Great Barrier Reef, the Torres Strait and the Coral Sea which are particularly sensitive environments with significant navigation hazards.[77]

7.2.1 Container Stevedore Charges

Stevedores are part of the broader container supply chain which moves containerised freight.

In Australia, stevedores and lines negotiate agreements generally for a 2 or 3 year term and, for the same service, use the same stevedore in all Australian ports. This is due to the favourable rates offered for volume as well as a view that this model allows the lines to gain better berthing windows.[78] In advice prepared for Infrastructure Victoria in 2017, shipping consultants Drewry noted that although shipping lines will not discuss their intent to re-sign contracts, and in the absence of considerable dissatisfaction or a compelling alternative, they tend to re-sign rather than change stevedore.[79] Moreover, as lines and stevedores are almost always aware of competitors' stevedoring prices, there tends to be limited variation for similar commercial conditions.

Traditionally the costs associated with the agreements the shipping lines made for contracting and charging for stevedore services were recovered by the shipping lines through commercial arrangements with the shipper (importing and exporting firms). However since 2010, some stevedores have begun rebalancing stevedore charges towards an increased proportion of revenue recovered from infrastructure surcharges (i.e. recovering

[76] Meyrick & Associates, *Benchmarking of Port Prices in Australia — Final Report prepared for Essential Services Commission of South Australia* (2007).
[77] IMO, *Particularly Sensitive Sea Areas* (2019).
[78] Drewry, *Container Ship Fleet Forecast and Maritime Economic Assessment - Prepared for Infrastructure Victoria* (2017).
[79] Drewry, *Container Ship Fleet Forecast and Maritime Economic Assessment - Prepared for Infrastructure Victoria* (2017).

more of their total revenue from land-side services).[80] In response, there have been increased calls by cargo owners for some form of competition regulation to manage rising supply chain costs. The ACCC has noted that while there may be some justification for the use of infrastructure charges, they may require a more detailed examination by state governments and if warranted, a regulatory response. [81]

7.2.2 Economic Regulation of Port Charges

The primary responsibility for economic regulation of charges at ports rests with the appropriate state or territory government. Regulatory oversight arrangements for ports differ across jurisdictions, but there is a general preference for price monitoring and transparency arrangements rather than economic regulation, with the potential for economic regulation in the future if required. The ACCC has noted that monitoring regimes provide a level of transparency to stakeholders over certain charges set by port operators and may be useful for informing policy and planning, but they are not a substitute for economic regulation and, in most cases, do not present an effective constraint on the exercise of market power. [82]

In addition to state and territory regulation of ports, the ACCC has responsibilities for:

- Monitoring the prices, costs and profits of container terminal operator companies at the ports of Adelaide, Brisbane, Burnie, Fremantle, Melbourne and Sydney (Botany) through a direction from the federal Treasurer under Part VIIA of the *Competition and Consumer Act 2010*.
- Monitoring and enforcing the Port Terminal Access (Bulk Wheat) Code of Conduct, a mandatory Code prescribed under the *Competition and Consumer Act 2010* which regulates the conduct of bulk wheat port terminal operators.

7.4 Growing Ship Sizes – 'Neo-Panamax' and 'Post-Panamax'

Increasing vessel size has been a trend experienced by the shipping industry since the introduction of containerisation. International shipping is an extremely competitive industry and shipping rates experience constant market pressure. Improving economies of scale through the use of larger vessels has contributed to new, large-vessel ship building programs in recent years.

Australian ports and port operations may need to make significant adjustments and investment to accommodate future demand for larger ships. Larger ships require deeper waters and longer berths, as well as wider channels and fit-for-purpose loading and unloading facilities and handling capacity. This may place new demands for upgraded port infrastructure, such as cranes, and maintenance, such as dredging. Physical and geographic constraints at some ports may also not be able to accommodate the access requirements for larger ships. Some of Australia's key bulk ports such as Port Hedland (Western Australia) and Hay Point (Queensland) are already facing the challenge of larger vessels, and are regularly handling ships with draughts exceeding 18 metres.[83]

7.5 Shipping Industry Consolidation

Industry consolidation via mergers and takeovers has been a theme in international liner shipping since the early 1990s. A record downturn in container rates in early 2016

[80] Farrierswier, *It is unsurprising that stevedore charges are being rebalanced – commercial arrangements will need to adapt* (2018).

[82] Australian Competition and Consumer Commission, *Ports: What measure of Regulation?* (2016).
[83] Department of Infrastructure, Regional Development and Cities, *Inquiry into National Freight and Supply Chain Priorities, Supporting Paper No. 2 – Maritime Freight* (2018), 11.

contributed to further industry consolidation. In 2016, 16 large multinational companies dominated global liner shipping in 2016, down from 25 in 2011.[84]

Since the Global Financial Crisis, demand for container shipping has been slow to pick up. However, there was an influx of new (usually larger) ships that were ordered in the preceding boom. This has caused an oversupply of container slot capacity, meaning ships are not always operating at full capacity, placing downward pressure on freight rates. The downturn and overcapacity within the industry has led to significantly cheaper rates for Australian shippers seeking to transport goods overseas.

These benefits may lessen over time if consolidation within the industry results in less competition and if international maritime trade growth picks up and increases demand for liner shipping services.

[84] Department of Infrastructure, Regional Development and Cities, *Inquiry into National Freight and Supply Chain Priorities, Supporting Paper No. 2 – Maritime Freight* (2018), 12.

Attachment A – International Shipping

Shipping plays a vital role in the global economy, with approximately 80 per cent of global trade by volume handled by ports and carried by sea.[85] International trade continues to grow, particularly as demand for raw materials (such as energy and mineral resources) from China and India increases.

Australia's maritime trade is dominated by the export of mining and agricultural products shipped in bulk. Australia is among the top five international exporters of bauxite, alumina, iron ore, coal, and liquefied natural gas.

In 2015-16:

- 1,597 million tonnes of cargo moved across Australian wharves, an increase of 3.1 per cent on the previous financial year.[86]
- The combined value of Australia's seagoing international imports and exports was over $400 billion.[87]
- There were 30,056 arrivals by 5,540 individual international ships to Australian ports.[88]

International Trade Routes

Global trade patterns, illustrated at **Figure 8**, are dominated by east-west flows. This affects the availability of container shipping services to and from Australia. Australia's share of global container traffic is also relatively small (approximately 1.5 per cent). In general terms, Australia's geography limits its access to core container shipping routes, which impacts the economy in two key ways:

1. Australia has a lower frequency of liner shipping services, meaning it can be challenging to access container shipping services of adequate frequency and reliability; and
2. A larger amount of Australian container imports and exports transition through transhipment hubs such as Singapore, where delays may place additional cost on Australian import/export supply chains.

Australia exports a significant volume of bulk cargo including commodities such as coal and iron ore. These bulk commodities generally involve chartering a ship for a specific voyage or series of voyages to a specific place. As a result, Australia does not have issues accessing adequate bulk ship services.[89]

Low Frequency of Liner Shipping Services

Australia has relatively low frequency of liner shipping services in the context of global maritime trade. As a result, Part X of the *Completion and Consumer Act 2010* operates to ensure international liner cargo operators have continued access to liner cargo shipping serves of adequate frequency and reliability at freight rates that internationally competitive. Importers are also covered by Part X, but to a more limited extent than exporters.

[85] United Nations Conference on Trade and Development, *Review of Maritime Transport 2017* (2017), X.
[86] BITRE, *Australian Seafreight – Statistical Report 2015-16* (2018), V.
[87] Department of Infrastructure, Regional Development and Cities, *Inquiry into National Freight and Supply Chain Priorities, Supporting Paper No. 2 – Maritime Freight* (2018), 2.
[88] BITRE, *Australian Seafreight – Statistical Report 2015-16* (2018), 56.
[89] World Shipping Council, *About the Industry – Trade Statistics*, (2014).

Part X, which is administered by the Department, establishes a system for regulating international liner cargo shipping services, which includes:

- registration of Conference Agreements – liner shipping companies proposing to make an agreement with another shipping company are required to register the agreement;
- regulation of Non-Conference Ocean Carriers with Substantial Market Power – ocean carriers with a major market share of a trade area are required to be registered;
- regulation of Unfair Pricing Practices – the Minister may order a liner shipping company not to engage in unfair pricing practices; and
- registration of Agents of Ocean Carriers – ocean carriers are required to register an Australian agent.

The parties to a conference agreement are required to negotiate with, and provide information to, representative shipper bodies who are registered under Part X. If the conference agreement is registered, the parties will be given partial and conditional exemptions from cartel conduct, contracts that restrict dealings or affect competition and exclusive dealings.

Access to International Markets

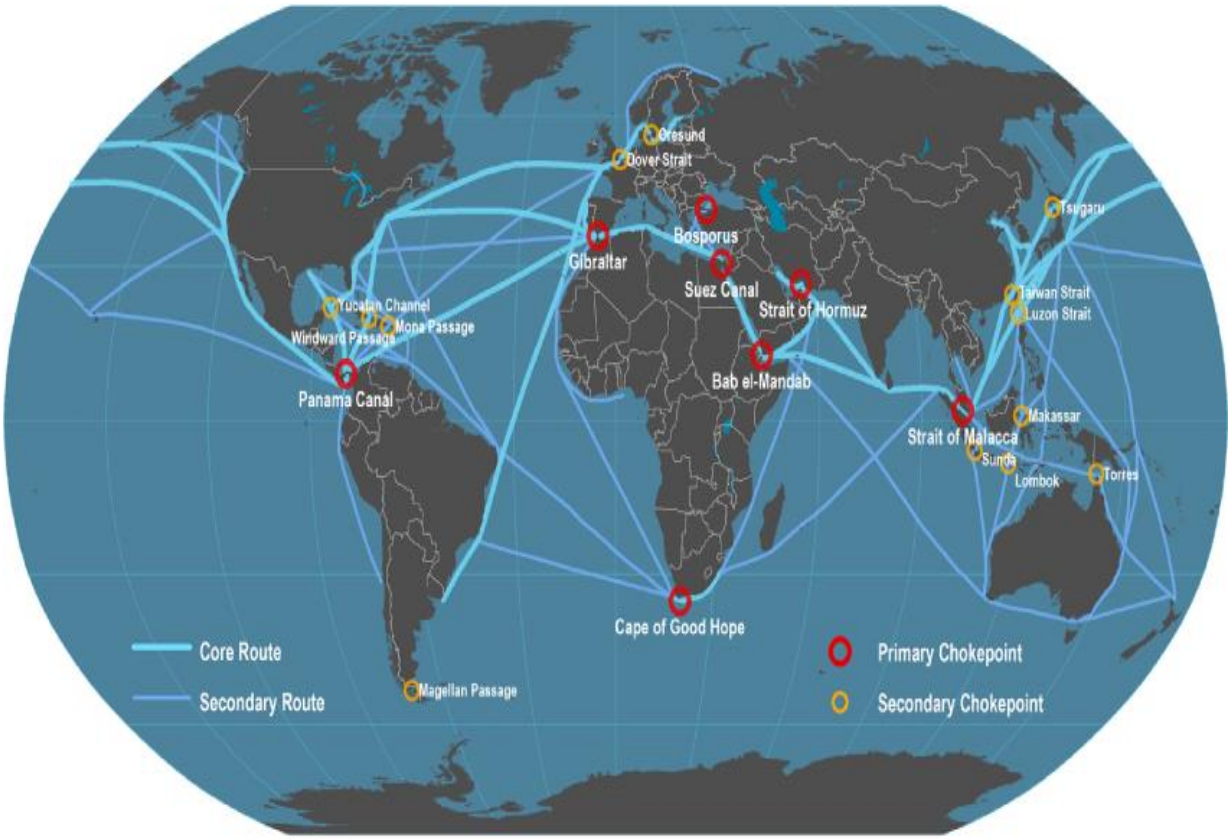
Australia's geography limits our access to core shipping routes. Five of the world's largest transhipment ports, including Singapore, Hong Kong, Shanghai, Busan and Dubai, are also among the world's largest container ports.

Conversely, Australia's bulk shipments are strengthened by significant freight time advantages. For example, Australia's major iron ore ports are close to the largest iron ore importers in Asia, reducing shipping costs relative to competitors. Similarly, Australia also has significant freight advantage over its competitors with regard to shipping grain to North and South-East Asia. Sea transit time to Indonesia is 6.5 days from south west Western Australia and 13.5 days from New South Wales. This equates to 25-50 per cent of the transit time from the US, Canadian and European ports to Indonesia. As a result Australian freight rates are a third to half those from the Americas.[90]

As Australia's maritime trade is dominated by bulk shipping, Australia's share of global container traffic is relatively small (estimated at approximately 1.5 per cent). More container goods are imported into Australia than exported, meaning shipping firms face lower utilisation rates on northbound trades and are often forced to reposition empty containers to other markers because cargo cannot be found for a return leg. This has often worked to Australia's advantage as shipping lines may offer cheap rates to attract cargo just to cover the cost of shipping empty containers back to Asian hubs.

[90] Stretch, T. & Carter, C. *The cost of Australia's bulk grain export supply chains* (2014).

Figure 4 – Main Shipping Routes[91]



[91] Rodrigue, J. *The Geography of the Transport System – Fourth Edition* (2018).

Attachment B – Freight Task

Australia's domestic freight task is expected to grow by 80 per cent between 2010 and 2030.[92] This is underpinned by strong growth in movements of bulk commodity exports which are mostly transported by rail, and by the continuing growth in road freight,[93] carrying over three quarters of Australia's non-bulk freight.[94]

Australia's domestic freight network moved some 738 billion tonne kilometres (TKM) of freight in 2015-16. Of that:

- Rail transport carried 56 per cent;
- Road freight carried 29 per cent; and
- Coastal sea freight 15 per cent.
- Air freight comprises less than 0.01 per cent total freight by weight.[95]

In general terms, each freight mode can be complementary as rail and shipping for example, will generally require road freight at either end of the supply chain.

Figure 5 – Actual and Projected Domestic Freight Task, By Mode 1972 to 2040[96]

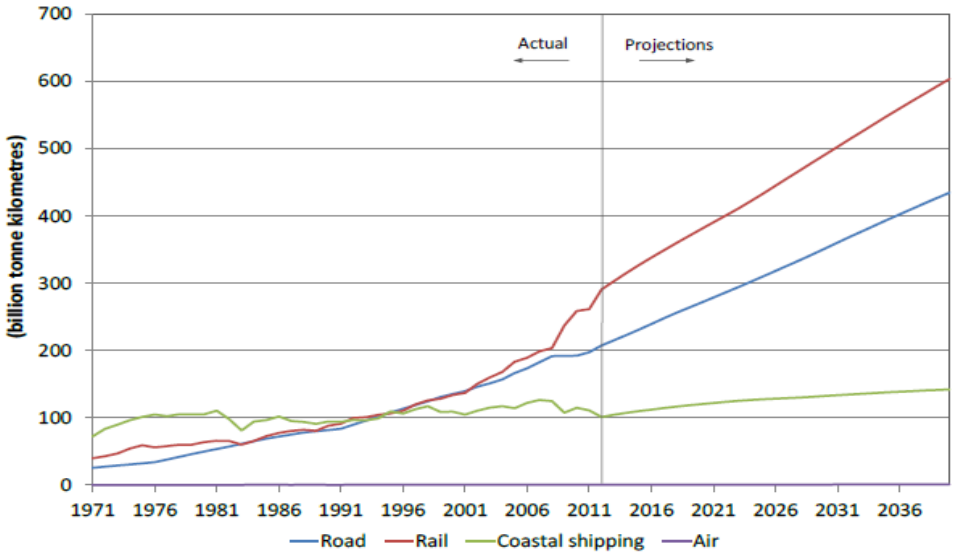


Figure 5 shows that while road' and rail's shares of the domestic freight task have grown exponentially over the last twenty years, coastal shipping's mode share has remained stable. Coastal shipping is generally used to move the same types of freight around the same routes and there has historically been minimal competition between coastal shipping and road and rail transport. Nevertheless, given the recent rapid and projected increase in the domestic freight task, the environmental benefits of shipping (relative to road and rail) and Australia's extensive coastline and broad network of ports, there is potential for coastal shipping to play a greater role.

Shipping is predominantly used to transport bulk commodities such as iron ore, petroleum, cement and alumina across long distances. As outlined above, rail freight is the dominant mode for transporting bulk freight over long distances. In particular, it is used to transport Australia's major mining outputs such as coal and iron ore from mine to port for export.

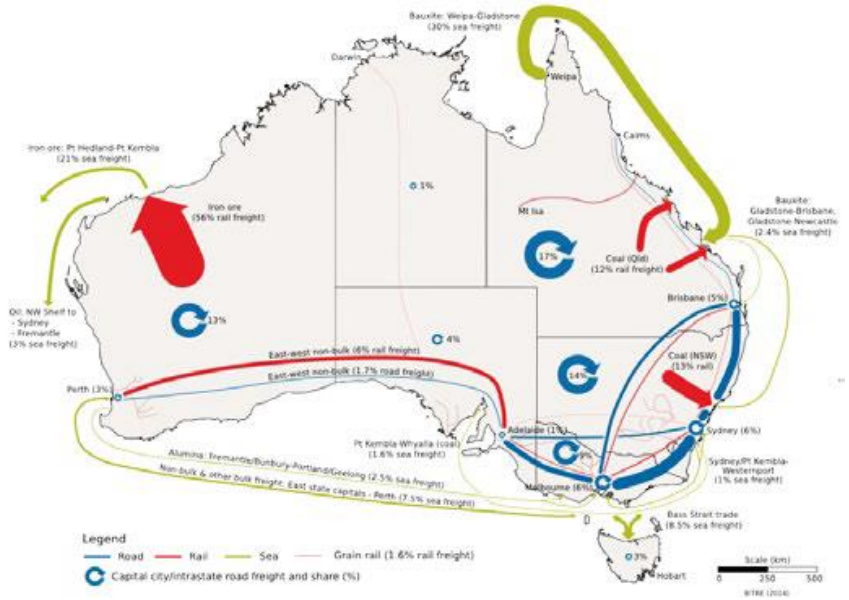
[92] BITRE, *Freightline 1 – Australian Freight Transport Overview* (2014), 8.
[93] BITRE, *Freightline 1 – Australian Freight Transport Overview* (2014), 8.
[94] BITRE, *Australian Infrastructure Statistics – Yearbook 2015* (2015), 33.
[95] BITRE, *Australian Infrastructure Statistics – Yearbook 2018* (2018), 67.
[96] BITRE, *Freightline 1 – Australian Freight Transport Overview* (2014), 9.

There is potential for shipping to take more cargo, in particular for non-urgent, high volume shipments. Shipping is also the primary transport mechanism where there is no road or rail, such as shipping to Tasmania across Bass Strait, and servicing remote communities in Northern Australia where road transport is disrupted due to the wet season and road quality is poorer.

Rail and road freight modes compete strongly for long-distance non-bulk freight, but as distances increase, rail's competitiveness increases. Road freight in Australia specialises in delivering time-sensitive or perishable commodities such as fresh fruit and groceries, consumer goods such as whitegoods and electronics, and construction material such as steel, concrete and timber. [97]

Figure 6 outlines the major freight flows across the road, rail and shipping modes. Around 8 per cent of Australia's non-bulk rail freight is carried on three main corridors, namely between the eastern states and Perth, between Melbourne and Brisbane, and between Brisbane and northern Queensland.[98]

Figure 6 – Major Freight Flows in Australia, 2011–12



Note: Line widths show relative freight volume (tonnes). Share estimates related to freight tonne kilometres.
Source: ABS (2013), ARA (2013), BITRE (2010b, 2013a, 2013b) and BITRE estimates.

[97] National Transport Commission Australia, *Who Moves What Where – Freight and Passenger Transport in Australia – Final Report* (2016), 15.
[98] National Transport Commission Australia, *Who Moves What Where – Freight and Passenger Transport in Australia – Final Report* (2016), 89.

Rail Freight Transport

Rail freight transports about 56 per cent of total tonne-kilometres of the domestic freight task in Australia.[99] Rail freight primarily moves bulk mining and agricultural commodities such as iron ore, coal, grains, sugar, fertilizers and mineral sands, over long distances. The majority of this task is moving these bulk commodities from mine or paddocks to port for export. Rail also plays a specialised role in servicing ports and other dedicated facilities where operators favour rail over road.[100]

In volume terms, around 98 per cent of rail's freight task relates to the movement of bulk freight and 2 per cent is intermodal freight (see **Figure 7** below). While smaller in absolute size, intermodal traffic tends to be moved over comparatively longer distances.[101]

The non-bulk or intermodal freight segment mainly consists of general and containerised freight. Containerised freight refers to goods transported in standard sized shipping containers, which reduces associated handling costs. General freight includes items that do not fit safely inside containers due to their mass or dimensions such as steel products and large machinery.[102]

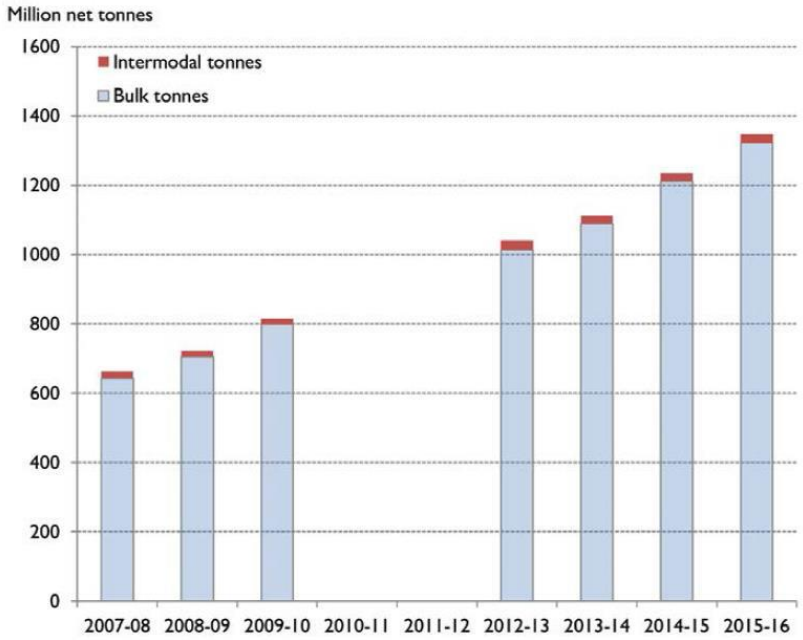
The ownership and management arrangements for Australia's rail infrastructure and rail operations are generally divided into 'below rail' (track management) and 'above rail' (operators of trains and rollingstock).[103]

As shown in **Figure 7** below, there are two broad above rail freight markets in Australia:

- resource networks moving predominately bulk freight which tend to be operated by the private sector with minimal government involvement and generate commercial returns.
- interstate and intrastate mixed use lines have greater government involvement and often do not have commercially profitable traffic volumes. These lines move both non-bulk and bulk freight, including containerised intermodal freight.[104]

[99] BITRE, *Freightline 1 – Australian Freight Transport Overview* (2014), 1.
[100] Infrastructure Partnerships Australia, *Fixing Freight: Establishing Freight Performance in Australia* (2018), 13.
[101] BITRE, *Trainline 5 – Statistical Report* (2017), 5.
[102] IBISWorld, *Industry Report I4710: Rail Freight Transport in Australia* (2018), 5.
[103] Department of Infrastructure, Regional Development and Cities, *Background – Organisation of Australia's Railways* (2015).
[104] Department of Infrastructure, Regional Development and Cities, *Inquiry into National Freight and Supply Chain Priorities, Supporting Paper No. 3 – Road and Rail Freight* (2018), 3.

Figure 7 – National Rail Freight task, 2007-08 to 2015-16[105]



Rail freight faces strong competition within the non-bulk freight services segment from road freight services. Road freight has been able to capture market share from rail with the introduction of larger, higher productivity vehicles (HPVs).[106] Rail freight is less competitive when speed of delivery is required. Rail networks have few terminals that are often a considerable distance from both the source and destination of the goods being freighted. To overcome this restriction goods must be handled multiple times and transferred between different modes of transport. This increases transportation costs and time, reducing the effectiveness of rail freight.[107] Bulk freight on rail is predominantly moving bulk commodities from mine to a port for loading onto ships for export.

Road Freight Transport

Road freight transport can be more effective than other modes when the freight task requires flexibility, timely delivery, and ability to respond flexibly to peak demands.[108] Large trucks including B-doubles and HPVs transport goods between and across states, competing successfully with rail, shipping and air freight industries. In cities, light commercial vehicles are the dominant form of transport for the final stage of delivery.[109]

Larger trucks such as HPVs (i.e. B-triples and quad road trains) are more fuel-efficient per load and make fewer trips to carry the same volume of freight, reducing costs, carbon emissions and traffic congestion.[110] However, many road network standards or local regulations currently limit or disallow HPV use.[111]

[105] BITRE, *Trainline 5 – Statistical Report* (2017), 6.
[106] Infrastructure Partnerships Australia, *Initial Submission on Priorities for the Inquiry into National Freight and Supply Chains* (2017), 14.
[107] Infrastructure Partnerships Australia, *Initial Submission on Priorities for the Inquiry into National Freight and Supply Chains* (2017), 19.
[108] Department of Infrastructure, Regional Development and Cities, *Inquiry into National Freight and Supply Chain Priorities, Supporting Paper No. 3 – Road and Rail Freight* (2018), 4.
[109] IBISWorld, *Industry Report I4610: Road Freight Transport in Australia* (2018), 4.
[110] IBISWorld, *Industry Report I4610: Road Freight Transport in Australia* (2018), 12.
[111] Department of Infrastructure, Regional Development and Cities, *Inquiry into National Freight and Supply Chain Priorities, Supporting Paper No. 3 – Road and Rail Freight* (2018), 3.

Within non-bulk freight markets, road freight transport is the dominant mode in all but the longest routes, such as Melbourne to Perth, where rail freight is more economical. Rail freight transport is highly competitive in terms of price, speed and reliability.[112]

The ports of Melbourne, Sydney and Brisbane are the primary entry points for Australia's container freight, which is then trucked interstate between major population centres throughout the country.[113] Large trucks including HPVs are used for this task as the long distances make it more economical to transport as much freight as possible per journey. [114]

While road freight transport is the dominant mode for the transportation of non-bulk freight, road congestion in cities is a significant constraint faced by the industry. Road congestion, increasingly limits road freight productivity especially in port areas.

[112] IBISWorld Report I4610, *Road Freight Transport in Australia*, November 2018, p12.
[113] IBISWorld Report I4610, *Road Freight Transport in Australia*, November 2018, p12.
[114] IBISWorld Report I4610, *Road Freight Transport in Australia*, November 2018, p12.

Attachment C – History of Coastal Trading in Australia

History of Australian Shipping Policy

The current Coastal Trading regime has evolved over a rich history of the regulation of Australian coastal trade since Federation. Historically, coastal trade (along with a range of aspects of maritime navigation) was regulated by the *Navigation Act 1912* (1912 Act).

The 1912 Act contained Australia's cabotage regime and sought to balance the need for services with the availability of British and then Australian ships. Under the 1912 Act, all ships engaging in coastal trading were required to hold a licence. At the time of commencement of the 1912 Act, the conditions placed on licence holders related to standardised pay, seafarer conditions, and employment levels. The Governor-General also had the ability to declare certain voyages not to be coastal trading.

Single and continuing voyage permits, allowing an unlicensed British ship to engage in coastal trading, were first introduced in 1921. These permits were only available where the Minister was satisfied that no licensed ship was available or that the service as carried out by a licensed ship or ships would have been inadequate. Permits could be issued unconditionally or subject to any condition the Minister saw fit.

Further amendments were made from the 1920s to 2006 that had the practical effect of progressively easing access to the coastal trades for foreign-flagged ships, where supplementation of the Australian fleet was seen to be necessary.

Commencing in 2012, the Coastal Trading Act replaced the single and continuing voyage permit system of the 1912 Act with a three tiered licence system, giving Australian-flagged ships unlimited access to the coastal trade and permitting foreign-flagged ships to operate under Temporary Licences for up to 12 months. Only consequential amendments have been made to the Coastal Trading Act since it entered into force in 2012.

Shipping Legislation Amendment Bill

In 2015, following extensive consultation with industry, the Government attempted to reform the coastal shipping sector through the Shipping Legislation Amendment Bill 2015 (the SLAB). The SLAB would have created a single permit system and removed the competitive process and three tier licensing system in the Coastal Trading Act. The Bill was defeated in the Senate in November 2015.

Coastal Trading (Revitalising Australian Shipping) Amendment Bill 2017

In 2017 the Government introduced the Coastal Trading (Revitalising Australian Shipping) Amendment Bill (the Coastal Trading Amendment Bill). The Coastal Trading Amendment Bill is intended to remove aspects of the regulatory framework reported as being unreasonably limiting, inflexible or onerous for industry, without fundamentally changing the basic structure of the regulatory regime. It also contains a number of provisions designed to encourage superyacht visitation to Australia. The Coastal Trading Amendment Bill passed the House of Representatives on 15 August 2018 and is available for debate in the Senate.

Cabotage

Regulation of maritime cabotage varies significantly around the world, with countries' approaches ranging from 'open coastline' arrangements, where unrestricted foreign access to cabotage services is allowed, to 'closed coastline' arrangements, where foreign companies are banned from engaging in maritime cabotage. The nature of cabotage laws can vary, the stated intentions include protecting local shipping industries, retaining skilled maritime workers and the preservation of maritime knowledge and technology, safeguarding fair competition and bolstering national security.

The approach taken by the United States of America (the USA) under the *Merchant Marine Act of 1920* (known as the Jones Act) is an example of a regime of strict cabotage regime. It requires all domestic cargoes to be carried by USA built vessels that are registered in the USA, and owned and operated by USA citizens. The *Passenger Vessel Services Act of 1886* states that no foreign vessels shall transport passengers between ports or places in the USA, either directly or by way of a foreign port.

In 2005, after previously allowing foreign-flagged vessels to undertake maritime cabotage, Indonesia issued *Presidential Instruction No. 5 of 2005* concerning the Empowerment of the Shipping Industries. This, in conjunction with *Maritime Law No. 17 of 2008*, implemented cabotage principles, reserving coastal trades for Indonesian-flagged vessels.

In Canada, a system is in place similar to that in Australia whereby coastal trading licences are issued by the Minister of Public Safety to Canadian residents who have applied for permission to bring a foreign flagged vessel into Canadian waters to perform a service or activity over a specified period of time. A coasting trade licence is issued when there are no suitable Canadian vessels available to perform the service or activity. Approved vessels are allowed to operate in Canadian waters, but operate under their flag state's labour rules, with their crews being granted temporary foreign worker permits. As Canada, like Australia, has a small merchant fleet there are often no available Canadian ships to move domestic cargo or passengers.

In some cases, countries have chosen to simply ease cabotage restrictions. China eased its cabotage regulations in 2003 to allow foreign lines to ship empty containers between ports on its coast. Empty containers were considered as domestic cargoes and therefore subject to cabotage regulations. However, the amendments only applied to shipping companies of countries that have signed relevant bilateral agreements with China.

In the same year, the Korean government abolished its trans-shipment fees and relaxed cabotage regulations. The reason behind the relaxation was to make Korean ports more attractive as a northern hub for container traffic in Asia.

For Brazil, in its relaxation policy, foreigners and foreign-flagged vessels can have rights of cabotage in its ports but only port support and maritime support navigation when such foreign-flagged vessels are chartered by a Brazilian shipping company, and provided that there are no Brazilian-flagged vessels available. Foreigners would also enjoy rights of cabotage in Brazilian ports if it is a matter of public interest, or the foreign vessel is being chartered as a substitute for a vessel owned by the Brazilian shipping company under construction at a Brazilian shipyard.

The countries that now have no cabotage restrictions include the UK, the Netherlands, Denmark, New Zealand (NZ) and South Africa.

In practice, NZ has an open coast. Coastal shipping is regulated under Section 198 of the *Marine Transport Act 1994* that grants access to coastal trade to:

- NZ registered ships;
- Foreign ships on a demise charter to a NZ based operator; and
- Foreign ships passing through NZ waters while on a continuous journey from a foreign port to another foreign port, and stopping in NZ to load or unload international cargo.

It should be noted that the conditions for a foreign ship to be a continuous journey from a foreign port to another foreign port do not generally apply to vessels trading on the Australian coast.

Consultation History

Date	**Consultation**
April 2014	Release of a Regulation of Coastal Shipping Options Paper to canvas ideas to amend the 2012 regulatory regime.
May 2014	One on one meetings with industry stakeholders and open consultation sessions in Melbourne, Perth, Brisbane and Sydney to discuss the options paper.
June 2014	Industry survey to inform the Regulatory Impact Statement for the *Shipping Legislation Amendment Bill 2015* (SLAB).
	The Productivity Commission's inquiry into Tasmanian Freight and Shipping was released which called for coastal shipping reform.
February 2015	An industry roundtable was held with to finalise aspects of the SLAB. The Bill was referred to a Senate Committee for their consideration.
March 2015	The Competition Policy Review was released also calling for reform to coastal shipping.
April 2016	One on one meetings with unions and peak industry bodies and roundtables with users of coastal shipping.
March 2017	Coastal Trading Reform Discussion Paper was released. 67 Submissions were received.
September 2017	Phone briefing provided on the draft *Coastal Trading (Revitalising Australian Shipping) Amendment Bill 2017* (the Amendment Bill) to selected peak bodies and large coastal trading users.
October 2017	The Senate Selection of Bills Committee referred the provisions of the Amendment Bill to the Rural and Regional Affairs and Transport Legislation Committee The Committee received 19 submissions to the inquiry from industry peak bodies, unions and individuals. The Department of Infrastructure, Regional Development and Cities and Austrade provided government submissions.
December 2017	The Committee published its report with additional comments provided by Senator Eric Abetz, and dissenting reports from Labor Senators Sterle and McCarthy. A second dissenting report was provided by Greens Senator Janet Rice. The Committee recommended that the Bill be passed.

Attachment D – Shipping Legislation and Conventions Administered by the Department of Infrastructure, Regional Development and Cities and the Australian Maritime Safety Authority

Legislation

- *ANL Act 1956*
- *Australian Costal Shipping Commission Act 1964*
- *Coastal Trading (Revitalising Australian Shipping) Act 2012*
- *Shipping Registration Act 1981*
- *Carriage of Goods by Sea Act 1991*
- *Limitation of Liability for Maritime Claims Act 1989*
- *Navigation Act 2012*
- *Protection of the Sea (Civil Liability for Bunker Oil Pollution Damage) Act 2008*
- *Protection of the Sea (Civil Liability) Act 1981*
- *Protection of the Sea (Harmful Anti-fouling Systems) Act 2006*
- *Protection of the Sea (Imposition of Contributions to Oil Pollution Compensation Funds—Customs) Act 1993*
- *Protection of the Sea (Imposition of Contributions to Oil Pollution Compensation Funds—Excise) Act 1993*
- *Protection of the Sea (Imposition of Contributions to Oil Pollution Compensation Funds—General) Act 1993*
- *Protection of the Sea (Oil Pollution Compensation Funds) Act 1993*
- *Protection of the Sea (Powers of Intervention) Act 1981*
- *Protection of the Sea (Prevention of Pollution from Ships) Act 1983*
- *Submarine Cables and Pipelines Protection Act 1963*
- *Australian Maritime Safety Authority Act 1990*
- *Marine Navigation (Regulatory Functions) Levy Act 1991*
- *Marine Navigation (Regulatory Functions) Levy Collection Act 1991*
- *Marine Navigation Levy Act 1989*
- *Marine Navigation Levy Collection Act 1989*
- *Marine Safety (Domestic Commercial Vessel) National Law (Consequential Amendments) Act 2012*
- *Marine Safety (Domestic Commercial Vessel) National Law Act 2012*
- *Protection of the Sea (Shipping Levy Collection) Act 1981*
- *Protection of the Sea (Shipping Levy) Act 1981*

- *Part X of the Competition and Consumer Act 2010*
- *Shipping Reform (Tax Incentives) Act 2012*

Conventions

Note: this list contains Conventions only and does not give reference to any amendments, codes, protocols or other instruments that may otherwise be attached to a Convention.

- The Convention on the International Maritime Organization, 1948;
- International Convention on Load Lines, 1966;
- International Convention for the Safety of Life at Sea, 1974;
- International Convention on Standards for Training, Certification and Watchkeeping for Seafarers;
- International Convention on Tonnage Measurement of Ships, 1969;
- International Convention for Preventing Collisions at Sea, 1972;
- International Convention on Maritime Search and Rescue, 1979;
- International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990;
- International Convention on Safe Containers, 1972;
- Maritime Labour Convention, 2006;
- International Convention on Civil Liability for Bunker Oil Pollution Damage, 2001;
- International Convention for the Prevention of Pollution from Ships, 1983 (MARPOL)*;
- International Convention for Limitation of Liability for Maritime Claims, 1976;
- Convention on Facilitation of International Maritime Traffic, 1965 (FAL)*; and
- United Nations Convention on the Law of the Sea, 1982 (UNCLOS)**;

* The Department attends the IMO's Marine Environment Protection Committee and Facilitation Committee, which are responsible for maintaining these Conventions respectively.

** Although UNCLOS is not an IMO Convention, its provisions are closely linked to IMO Conventions.

Attachment E – International Maritime Organization Standard Setting for Maritime Safety and Environmental Protection

Shipping is a global industry that transports more than 80 per cent of global trade to people and communities all over the world.[115] Maintaining efficient global trade relies on the regulatory framework set by the International Maritime Organization (IMO) – the United Nations specialized agency with responsibility for the safety and security of shipping and the prevention of maritime and atmospheric pollution by ships. As the global standards setting authority for shipping, the IMO's main role is to create an international regulatory framework for the shipping industry that is fair and effective, universally adopted and universally accepted.

The Department, in partnership with AMSA, actively engages in the deliberations of the IMO and leads the implementation of agreed international standards for shipping in Australia's domestic legislative framework. This collaborative model of developing and improving global shipping standards helps to ensure that Australian ships and ships visiting Australia align with the globally agreed standards. Australia has typically applied new requirements in line with international changes, rather than act unilaterally to impose different regulatory treatments on ships. Unilateral action may restrict the availability of shipping services and risk significant adverse impacts on trade.

Influencing outcomes at the IMO is critical to Australia's national interest because coastal states, such as Australia, would otherwise have limited power to individually regulate international shipping. Australia's ongoing work at IMO allows us to achieve important domestic and regional outcomes that would otherwise not be possible, such as the IMO-designated Particularly Sensitive Sea Areas in the Great Barrier Reef, Torres Strait and Coral Sea or the newly developed strategy to reduce greenhouse gas emissions from ships.

Australia is represented by the Department and AMSA at the IMO Assembly (the highest governing body of the IMO consisting of all the member states) and at the Council (the executive organ of the IMO, responsible for supervising the work of the organization). The Council consists of 40 member states, elected by the Assembly - representing ten states with the largest interest in providing international shipping services (Category A), ten states with largest interest in international seaborne trade (Category B) and 20 states with special interests in maritime transport or navigation and ensuring representation of geographical areas of the world.[116] Australia has been on IMO Council for 50 years. In 2017 Australia stood for election to Category B of Council and became the first nation to successfully move from Category C to Category B. In September 2018, the Government announced its intention to seek Australia's re-election to Category B for the 2020-21 biennium.

The Department represents Australia on two of the five committees that undertake the work of the IMO - the Facilitation Committee and, in conjunction with AMSA, the Maritime Environmental Protection Committee (MEPC).

The Department is the policy lead on considering the ratification (or accession, as relevant) of certain IMO Conventions and their subsequent implementation through Australian

[115] International Maritime Organization, *Introduction to the IMO* (2019).

[116] *Note: Further information is available from the IMO website.*

legislation. A full list of the shipping related IMO conventions that the Department administers is at **Attachment D**.

Marine Environmental Protection Committee

MEPC of the IMO is the key international committee considers the environmental sustainability of shipping. MEPC provides for the international regulation of environmental issues under IMO's remit through the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the protocol of 1978 (MARPOL). MARPOL describes the regulations relating to oil, chemicals carried in bulk, sewage, garbage and emissions from ships - including air pollutants and greenhouse gas emissions. Other matters covered include ballast water management, anti-fouling systems, ship recycling, pollution preparedness and response, and identification of special areas and sensitive sea areas.

The Department works closely with AMSA in representing Australia at MEPC and participating in its subgroups. This joint participation has enabled Australia to be involved across the breadth of the Committee's work and influence significant agreements including the initial strategy on the reduction of greenhouse gas (GHG) emissions from ships, adopted in April 2018. The initial strategy sets a pathway to emissions reduction for the international shipping sector that is consistent with temperature goals under the 2015 Paris Agreement. Also of significance is the Committee's work on sulphur emissions, as illustrated through its decision in 2008 to reduce the global sulphur limit for marine fuel oil from 3.5 per cent to 0.5 per cent from 1 January 2020, a reduction of more than 85 per cent that is expected to deliver significant environmental and human health benefits. The Department is monitoring developments across the shipping sector to comply with the new sulphur limit given its potential to cause major implementation challenges across the global shipping fleet.

Maritime Safety Committee

Internationally, the Maritime Safety Committee of the IMO maintains safety related standards and conventions, including in relation to navigation, construction, crewing and safety procedures as well as addressing maritime security issues and piracy and armed robbery against ships.

The Department, in partnership with AMSA, actively engages in the deliberations of the IMO and leads the implementation of agreed international standards for shipping in Australia's domestic legislative framework. This collaborative model of developing and improving global shipping standards helps to ensure that Australian ships and to ships visiting Australia align with the globally agreed standards.

In Australia, AMSA conducts flag State and port State control inspections to ensure Australian ships and international ships comply with the same internationally agreed standards and do not pose threats to ship and crew safety or to the marine environment.[117]

Other IMO Committees, International Conventions and Agreements

The Department participates and in and supports Australia's involvement in other IMO Committees and administers a range of domestic legislation that indirectly affects the environmental sustainability of shipping, including in relation to the safe operation of ships, facilitation of international maritime trade, and liability and compensation arrangements for

[117] Australian Maritime Safety Authority, *What is port State control?* (2018).

marine incidents. The Department also considers these matters in its support for the Department of Foreign Affairs and Trade to ensure Australia's maritime interests, including environmental sustainability, are reflected in Australia's free trade agreements.