

Regulatory Impact Statement

Australia’s accession to the *Nairobi International Convention on the Removal of Wrecks*

November 2022



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Cover Photo: Maheno Shipwreck, QLD © Tourism Australia

# Glossary

|  |  |  |
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| Term | Abbreviation | Definition |
| Australian Maritime Safety Authority | AMSA | Australia's national agency responsible for maritime safety, protection of the marine environment, and maritime aviation search and rescue. |
| *Convention on Limitation of Liability for Maritime Claims* | LLMC Convention | A Convention relating to ship owners, allowing them to limit their liability to pay compensation for general ship-sourced damage. |
| Coastal State |  | A term used in the *United Nations Convention on the Law of the Sea* when referring to a country with a sea coastline, which provides the country with a number of rights and obligations. |
| Coastal waters |  | A belt of water between the limits of the Australian states and the Northern Territory and a line 3 nautical miles seaward of the territorial sea baseline.  Jurisdiction over the water column and the subjacent seabed is vested in the adjacent state or territory as if the area formed part of that state or territory. |
| Domestic commercial vessels | DCVs | A vessel for use in connection with a commercial, governmental or research activity and only undertakes domestic voyages around Australia.  The full definition is provided in Schedule 1 of the *Marine Safety (Domestic Commercial Vessel) National Law Act 2012*. |
| Exclusive economic zone | EEZ | As defined in the *United Nations Convention on the Law of the Sea,* the area 200 nautical miles outwards from the baseline of the territorial sea. |
| Flag State |  | The country in which a ship is registered. The ship is deemed to have the nationality of that country. A ship can only be registered in one jurisdiction. |
| Foreign Vessel |  | A vessel that does not have Australian nationality and is not a recreational vessel.  The full definition is provided in s14 of the *Navigation Act 2012*. |
| Gross tonnage | GT | Gross tonnage is based on the moulded volume of all enclosed spaces of the ship. |
| Internal waters |  | Waters within the limits of a state or territory, including rivers and lakes. |
| The International Group Protection and Indemnity Clubs | P&I Clubs | The International Group of Protection and IndemnityClubs comprises 13 clubs that provide marine liability cover for approximately 90 per cent of global ocean‑going tonnage. The clubs cover a wide range of liabilities, including wreck removal. Individual clubs are generally ‘mutuals’ – owned and operated by their respective ship owners. |
| *Marine Safety (Domestic Commercial Vessel) National Law Act 2012* | The National Law | An Act to provide for a national law on marine safety, including the certification, construction, equipment, design and operation of domestic commercial vessels inside Australia’s exclusive economic zone. The National Law does not cover wreck incidents. |
| *Nairobi International Convention on the Removal of Wrecks 2007* | Nairobi Convention | A Convention providing the legal basis for State Parties to locate, mark and remove, or have removed, shipwrecks that pose a danger to navigation or have the potential to result in harmful consequences to the marine environment, or to damage the coastline. |
| Nautical mile | nm | A unit of distance equal to 1,852 metres. This value was adopted by the International Hydrographic Conference in 1929 and has subsequently been adopted by the International Bureau of Weights and Measures. |
| *Navigation Act 2012* | Navigation Act | An Act relating to maritime safety, the prevention of pollution of the marine environment, and related purposes inside and beyond Australia’s Exclusive Economic Zone. |
| *Protection of the Sea (Civil Liability) Act 1981* |  | An Act relating to civil liability for oil pollution damage and for related purposes. |
| *Protection of the Sea (Powers of Intervention) Act 1981* |  | An Act authorising the Australian Government to take measures for the purpose of protecting the sea from pollution by oil and other noxious substances discharged from ships, and for related purposes. |
| Protection of the Sea Levy |  | A charge against ships who have the potential to become polluters of the marine environment. The levy is paid by commercial shipping, where the ship is longer than 24 metres, or any other ship of that length carrying 10 tonnes or more of oil on board at any time during a calendar quarter.  The Protection of the Sea Levy funds the National Plan for Maritime Environmental Emergencies and clean-up costs. It is currently calculated at 11.25 cents per net ton per quarter, with a minimum of $10 per quarter and is reviewed annually. |
| Recreational vessels |  | Section 14 of the *Navigation Act 2012* defines a ‘recreational vessel’ as a vessel that is not for use in connection with a commercial, governmental or research activity.  This would include pleasure crafts and other small vessels, including power and sailboats. |
| Regulated Australian vessels | RAVs | A ship is a regulated Australian vessel if:   * under the *Shipping Registration Act 1981*, the vessel is registered, required to be registered or exempt under s13 of that Act from that requirement * the vessel is not a recreational vessel * any of the following apply: * the vessel is proceeding on an overseas voyage or is for use on an overseas voyage. * a certificate issued under the *Navigation Act 2012*, other than a non‑Convention tonnage certificate or a certificate prescribed by the regulations, is in force for the vessel.   The full definition is provided in s15 of the *Navigation Act 2012*. |
| Regulation impact statement | RIS | An assessment seeking to assist Australian Government officials to move towards ‘best practice’ regulatory design and implementation. It is generally undertaken when a decision is likely to have a regulatory impact on business, community organisations or individuals. |
| State Party |  | A country that has ratified or acceded to that particular treaty, and is therefore legally bound by its provisions. |
| Territorial sea |  | As defined in the *United Nations Convention on the Law of the Sea,* the area 12 nautical miles outward from the territorial sea baseline. |
| Territorial sea baseline |  | The line from which the seaward limits of Australia's maritime zones are measured. It generally aligns with the low water mark unless special considerations apply. |
| Twenty-foot equivalents units | TEUs | The measure of volume in units of twenty-foot long (6.1 meters) containers. |
| Discussion Paper: Australia's accession to the *Nairobi International Convention on the Removal of Wrecks 2007* | 2020 Discussion Paper | In August 2020, the Department of Infrastructure, Transport, Regional Development, Communications and the Arts released a discussion paper to inform an examination of whether accession to the *Nairobi International Convention on the Removal of Wrecks 2007* would benefit Australia. Further details including non‑confidential submissions are available on the Department’s website. |

1. Executive summary

Australia’s economy and standard of living is dependent on efficient and effective international maritime trade. Ships are our primary mode of transport for the import and export of goods and as demand grows so do their movements through Australian waters, including sensitive marine areas. When something goes wrong, ship and cargo wrecks have the potential to interrupt trade, threaten the safety of other ships, incur significant loss of life and property, and damage the marine environment.

Wreck clean-up and its associated costs often fall on the Australian, state or territory governments, which have difficulty recovering costs:

• where a foreign vessel creates a wreck within Australia’s Exclusive Economic Zone (EEZ) due to freedoms enshrined under international law.

• where any object from a foreign vessel or Regulated Australian Vessel (RAV) has sunk, become stranded or is adrift at sea from a ship that is not itself wrecked or in distress, including shipping containers.

* in most states and territories where legislation does not apply to Domestic Commercial Vessel (DCV) or recreational vessel wrecks beyond coastal waters.

To mitigate these issues, Australia could either strengthen the relevant current domestic legislation or utilise an internationally agreed liability framework – the *Nairobi International Convention on the Removal of Wrecks 2007* (Nairobi Convention).

All States are provided with freedoms on the high seas under the *United Nationals Convention on the Law of the Sea[[1]](#footnote-1)*, including freedom of navigation. These freedoms operate to prevent States from taking legal action against ships in the EEZ.

Some international agreements, including the Nairobi Convention, act as limits on those freedoms. The Nairobi Convention provides the legal basis for State Parties to remove, or have removed, wrecks in the EEZ that have the potential to adversely affect the safety of lives, goods and property at sea, as well as the marine environment. The right to freedom of navigation would otherwise prevent a State from taking action against a foreign wreck in the EEZ.

The Nairobi Convention applies to wrecks originating from ships, defined broadly to include, in the Australian context, foreign vessels, RAVs, DCVs and recreational vessels. The Nairobi Convention also makes ship owners financially liable, requiring them to take out insurance to cover the costs of wreck removal and provides State Parties with a right of direct action against insurers. These provisions can be extended to apply within the territorial sea, providing an alternative framework to any domestic legislation that currently operates.

The Nairobi Convention came into force in 2015 and currently 79.52 per cent of global shipping tonnage is flagged in countries that are a State Party to the Nairobi Convention, which is approximately 89.9 per cent of all ships coming to Australia based on ships that paid the Protection of the Sea Levy.[[2]](#footnote-2) The full list of State Parties can be found in **Appendix A**.

This Regulatory Impact Statement (RIS) assesses options for Australia to address the cost recovery issues outlined above, including accession to the Nairobi Convention. If Australia were to accede to the Nairobi Convention, the Australian Government would have clear internationally recognised powers allowing it cost recovery from a greater number of incidents, should the need arise. This analysis provides a sound basis on which to assess the financial and regulatory impacts, on key stakeholders and the Government of each policy option for implementation of the Nairobi Convention or for non-accession alternatives.

The RIS considers 4 options:

1. maintain the status quo.
2. amend the *Navigation Act 2012* (Navigation Act) consistent with the Nairobi Convention provisions but without accession.
3. Australia accedes to the Nairobi Convention and applies it to all ships in the EEZ.
4. Australia accedes to the Nairobi Convention and applies it to all ships in the EEZ and territorial sea.

Overall, this RIS found Option 3 (Australia acceding to the Nairobi Convention and applying it to all ships in the EEZ) would provide the greatest net benefit when compared to the other options. This option is found to:

* have high benefits for Australia, including broad economic benefits in all circumstances as it avoids disputes over responsibility for wreck incidents and so lowers legal and financial security-related costs.
* enhance and simplify the ability for the Australian Government to recover wreck-related costs, while ensuring we adopt international best practice and have flexibility to apply to the framework to emerging industries.
* provides certainty and greater clarity on obligations in the event of a wreck in Australian waters for ship owners that is consistent with and recognised internationally.
* provide the Australian Government with expanded criteria against which to determine a wreck has created a ‘hazard’ and to require removal at the ship owner’s cost, including economic, environmental and health impacts.
* broaden the types of actions for which the Australian Government may seek wreck‑related costs from the ship owner to include any form of prevention, mitigation or elimination of the hazard created by the wreck.
* capture DCV and recreational vessel wrecks in the EEZ that would otherwise have fallen through a legislative gap.

Option 4 did offer slightly higher economic benefits, however, Option 3 is considered the better option as:

* Option 4 would require application of the Nairobi Convention in the territorial sea and coastal waters, creating overlapping Commonwealth and state/territory wreck removal laws that would need to be resolved through complex and lengthy negotiations.
* Option 3 has minimal impact on DCVs and recreational vessels, which will remain largely regulated by state and territory government unless in the EEZ.

RAVs and foreign vessels can still be subject to a consistent wreck removal regulation wherever they are located in Australia by combining Option 3 with additional changes to the Navigation Act. For the benefit of providing a consistent regulatory framework whilst in Australian waters for ships on international voyages, the Department proposes that implementation of Option 3 is accompanied by reflection of the relevant Nairobi Convention provisions in the Navigation Act.

The Department consulted with stakeholders on the potential options for accession to the Nairobi Convention, to understand the costs and benefits of those options, and on the draft RIS and recommended option. The Department sought written submissions as well as meeting with stakeholders who had questions or concerns. Stakeholders generally favoured acceding to the Nairobi Convention.

1. Introduction

Australia depends on access to competitive and effective shipping, as over 99 per cent (by weight) of our international trade is transported by sea.[[3]](#footnote-3) The dollar value of Australia’s international sea freight continues to grow steadily. Figure 1 illustrates how the value of sea freight exports has grown from $190.9 billion dollars from 2007-2008 to $252.1 billion in 2016‑2017. The value of imports has also increased, valued at $191.0 billion in 2007-2008 to $193.1 billion in 2016‑2017.[[4]](#footnote-4) By comparison, Australia’s total exports in 2008 were worth $244.1 billion, increasing in value to $300.5 billion in 2017. Total imports in 2008 were worth $261.9 billion and rose to $298.3 billion in 2017. [[5]](#footnote-5)

Figure 1: Dollar value of sea cargo[[6]](#footnote-6)

Australia is the fifth largest user of shipping services,[[7]](#footnote-7) receiving over 32,000 port calls in 2016-2017, with ports handling over 1.6 billion tonnes of cargo on an annual basis. As illustrated in Figure 2, 5,845 uniquely identified cargo ships made a total of 32,801 calls at Australian ports from 2016-2017 and, due to the small size of Australia’s fleet, 5,743 were ships coming from overseas and are likely foreign flagged. This was an increase in calls by cargo ships of 4.1 per cent from the previous year and an increase of cargo ships from overseas of 3.3 per cent.[[8]](#footnote-8)

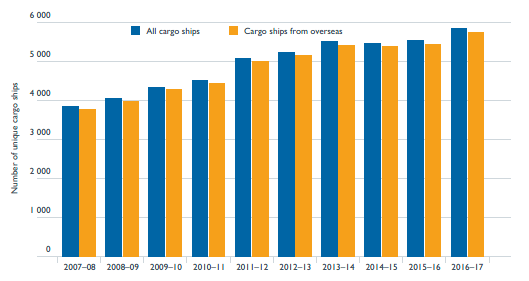


Figure 2: Total number of cargo ships that called at Australian ports[[9]](#footnote-9)

In 2020, the type of ships arriving most frequently at Australian ports were bulk carriers and container ships.[[10]](#footnote-10) Containers account for 52 per cent of the world maritime trade and according to the World Shipping Council (WSC) more than 194 million twenty‑foot equivalent units (TEUs) were shipped globally in 2016.[[11]](#footnote-11) Containerised trade has increased on a global scale and WSC data suggests this trend will continue to grow in the coming years. According to the United Nations Conference on Trade and Development’s Review of Maritime Transport 2019, the expected annual growth in containerised trade for the period 2019-2024 is 4.5 per cent with demand for container ships of large capacity (above 15,000 TEUs), growing by 33 per cent in 2018.[[12]](#footnote-12) The Bureau of Infrastructure, Transport and Regional Economics (BITRE) estimates that by 2029-2030 the number of containerised imports will double while the number of containerised exports will triple in Australia.

The major routes used by ships visiting Australia are through an environment that is home to some of the world’s most ecologically sensitive sea areas, and groundings by ships or accidents at sea in these areas would put extreme pressure on our marine environment. Australian species and our natural marine treasures—such as the Great Barrier Reef, Lord Howe Island, the Great Australian Bight and Ningaloo Reef—are icons of our national identity supporting important revenue from marine tourism. Importantly, the oceans and coasts provide a further $25 billion worth of essential ecosystem services, such as carbon dioxide absorption, nutrient cycling and coastal protection. Australia’s ocean species also directly and indirectly support commercial fisheries and aquaculture, worth $2.5 billion in 2013-2014, this is expected to more than double by 2029-2030. By 2025, maritime industries are expected to contribute around $100 billion each year to Australia’s overall economy.[[13]](#footnote-13) This is on top of the day-to-day enjoyment experienced by Australians in beach or water-related activities.

* 1. Problem

The reliability and efficiency of shipping directly affects Australia’s trade and by extension the Australian economy and standard of living. Any disruptions to maritime trade can be costly for industry and governments and, as described in Chapter 2, the scale of maritime trade and Australia’s dependence on it is growing significantly and therefore increasing our risk exposure. Wrecks of ships or objects lost from a ship (e.g. a container) have the potential to interrupt trade, threaten other ships, incur significant loss of life and property, and damage the marine environment. The consequences and costs of shipping incidents frequently fall on government when they cannot be resolved with ship insurance companies.

Jurisdictional boundaries

As illustrated in Figure 3, Australian waters are divided into different maritime zones based on the *United Nations Convention on the Law of the Sea*. The 2 key zones are the territorial sea and the EEZ. The territorial sea is a body of water surrounding Australia that reaches out to 12 nautical miles (nm) (22.2 kilometres) in which Australia has exclusive sovereignty. The EEZ is the water beyond the territorial sea extending to 200nm (370 kilometres) and while Australia does not own or have sovereignty over the entire EEZ, there are some rights in regards to natural resources, artificial structures, scientific research and the marine environment.

In Australia the territorial sea is divided into two areas: coastal waters (reaching out to 3nm from the territorial sea baseline) and the remainder of the territorial sea (from 3nm to 12nm). Under the Offshore Constitutional settlement, jurisdiction over the water column and the subjacent seabed in coastal waters is vested in the adjacent State or Territory. The Commonwealth’s sovereignty extends to the territorial sea, its seabed and subsoil, and to the air space above it. When the Nairobi Convention allows for extension to cover the territorial sea, in the Australian context that would include the territorial sea and coastal waters.

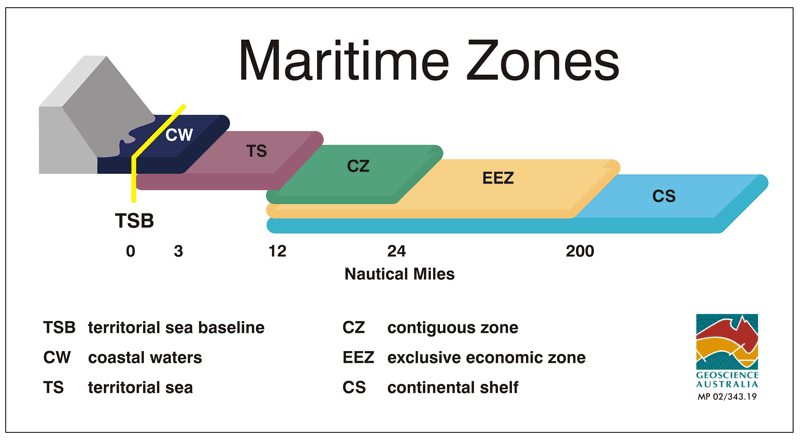


Figure 3: Australia's Maritime Zones[[14]](#footnote-14)

Presently, when a ship wrecks or spills its contents overboard in Australia’s EEZ and territorial sea, the Australian Government can use the the Navigation Act to require the owner to locate, remove, sink or destroy the wreck, and recover costs from liable parties if they do not do so. Under the Navigation Act, the Australian Government – through the Australian Maritime Safety Authority (AMSA) – responds to wrecks of:

* RAVs wherever it is situated, due to Australia’s responsibilities as a Flag State.
* foreign vessels only in the territorial sea due to their right to freedom of navigation in the EEZ and high seas.[[15]](#footnote-15)

When DCVs or recreational vessels create a wreck in the coastal waters, removal is the responsibility of the relevant state or territory government under subsection 6(2)(viii) of the *Marine Safety (Domestic Commercial Vessel) National Law Act 2012* (the National Law). Some jurisdictions also cover these vessels in the territorial sea and EEZ (e.g. New South Wales). These wreck incidents are not captured by the Navigation Act as it does not apply to DCVs.

There are several scenarios where the Australian, state and territory governments have difficulty recovering costs, including:

• where a foreign vessel creates a wreck within Australia’s EEZ.

• where any object from a foreign vessel or RAV has sunk, become stranded or is adrift at sea from a ship that is not itself wrecked or in distress, including containers.

* in jurisdictions where wreck legislation does not apply to DCV or recreational vessel wrecks beyond coastal waters.

Containers lost at sea

Lost containers, which can weigh up to 30,000 kilograms, can become major navigation hazards, as some containers float for several days or weeks. In this case, they are difficult to detect and likely to damage a ship in the event of a collision. Even after sinking, containers may pose a risk, particularly in case of snagging fishing nets, which can lead to loss of stability or capsizing for surrounding ships. Containers lost at sea may also have severe impacts on the marine environment, as containers fallen overboard contribute to marine litter as they break up and release their contents. The goods transported often contain plastics, contributing the proliferation of micro plastics. Some containers hold hazardous materials, such as flammable, explosive, toxic and infectious substances, as well as radioactive material. The spread of the contents of the container can take years depending on the degree of degradation of the container. The harmful effects of such a pollution can therefore be long‑lasting. Over the period 2008 to 2016, the WSC estimate that on average 1,582 containers were lost per year, across the world.[[16]](#footnote-16) The contents of lost containers can also wash up on shore resulting in state, territory and local governments launching significant clean up actions to remove hazards to marine operators (e.g. tourism companies and fisherpersons) and other recreational water and beach goers.

Recent incidents

Since 2018 there have been 3 wreck incidents involving international shipping in Australia, all of which have occurred in the EEZ and involved lost containers from foreign vessels – the *YM Efficiency*, *APL England* and *Navios Unite*.

* The *YM Efficiency* lost 81 shipping containers southeast of Newcastle in 2018. The location of the containers over the seabed in both the territorial sea and EEZ and ensuing community impact, clean-up, and engagement with the ship owner highlighted the complexity and uncertainty of recovering costs to clean up shipping containers under the Navigation Act. The recovery operation cost the federal government around $17 million. The ship’s owner, Taiwanese shipping company Yang Ming, has refused to pay the clean‑up and salvage costs. AMSA could not seek to recover these costs under the Navigation Act and so commenced legal proceedings in the Federal Court of Australia under the *Protection of the Sea (Civil Liability) Act 1982,* whichhas now been settled. Further information on this alternative cost recovery framework is included in Option 1.
* While travelling to Melbourne from Ningbo, China, the Singapore-flagged containership *APL England* lost about 50 containers overboard during heavy seas southeast of Sydney on 24 May 2020.  To date 15 of the 50 containers lost overboard have been recovered. APL England’s insurers, Steamship Mutual, reimbursed AMSA’s recovery costs of $22.5 million. The last sighting of a container confirmed to have come from the APL England was on the 31st of May 2020. The incident is still under investigation by the Australian Transport Safety Bureau and the Master faces charges of operating a ship in such a manner to cause pollution or environmental damage and operating an unseaworthy ship. This was the second incident for the *APL England*, in 2016 it lost 37 containers in the Great Australian Bight.
* On 25 June 2020, while travelling from Fremantle to Adelaide, the Liberian-flagged container ship *Navios Unite* lost 3 containers during rough seas about 33 kilometres south-west of Cape Leeuwin. The containers immediately sank without any potential impacts, therefore there are no indicative recovery costs to date.

Between 1 July 2018 and 24 March 2021, Maritime Safety Queensland’s War on Wrecks campaign removed a total of 592 wrecks, the vast majority being recreational vessels. It is not known how many of these wrecks would fall within the definition in the Nairobi Convention.

Increasing risk

The growth in containerised freight, combined with the COVID-19 pandemic and the surge in demand for e‑commerce has placed supply chains under increasing pressure. This is driving the demand for bigger containerships carrying containers to a greater height, travelling at full capacity and facing pressures to load/unload ships as quickly as possible.[[17]](#footnote-17) BITRE estimates that by 2029-2030 the number of containerised imports will double while the number of containerised exports will triple in Australia. Movements of containers between Australian ports are also estimated to at least double.[[18]](#footnote-18) Increasing ship size has been a trend experienced by the shipping industry since the introduction of containerisation. Improving economies of scale through the use of larger ships has contributed to new, large-ship ship building programs in recent years. The largest container ships currently used have a capacity of more than 20,000 TEUs, with ships with a capacity to carry 30,000 TEU’s under construction.[[19]](#footnote-19) Australia can currently accommodate container ships up to a maximum of approximately 8,000 TEU to 10,000 TEU at the Port of Melbourne, Port of Brisbane and Port Botany with a number of other ports looking to expand their operations.[[20]](#footnote-20) However, the larger container ships would still transit through Australia’s EEZ and territorial sea, potentially increasing the risk of larger container losses and the need for wreck recovery missions.

Climate change is increasing the severity and variability of weather, particularly in the Pacific Ocean and is claimed to have contributed to 3 significant container loss events since November 2020 – the *One Apus* lost 1,800 containers, the *Maersk Essen* lost 750 containers, and *Maersk Eindhoven* lost 260 containers.[[21]](#footnote-21)

AMSA conducts regular Port State Control inspections of ships entering Australia and has undertaken focused inspection campaigns to minimise the risk of container loss. Despite these efforts, AMSA continues to observe failures of fixed physical securing arrangements on board ships visiting Australia. A focused inspection campaign in 2010 found that 10 per cent of ships inspected had containers that were not lashed in accordance with the ship’s cargo securing manual. In 8 per cent of the ships inspected, the condition of the container lashings and fittings were a cause of concern. The most recent focused inspection campaign in 2020 on stowage and security of cargo containers found:

* in 6 per cent of inspections, container stacks exceeded the maximum permissible stack weight.
* in 4 per cent of inspections, cargo was not secured appropriately to prevent potential loss overboard.
* significant deficiencies in 2 ships which lead to their detention due to the incorrect use of portable lashing equipment and defective cargo securing pins.[[22]](#footnote-22)

With Australia’s increasing ship movements, including container ships, through our unique and highly valued marine environment it is important to have strong wreck-related laws for when incidents occur. The public will expect the shipping company to pay for the costs to clean up and wreck removal rather than the Australian, state or local governments.

Gaps in existing legislation

There are 3 legislative gaps where the wreck clean-up and its costs fall on the Australian, state or territory governments:

1. A foreign vessel creates a wreck within Australia’s Exclusive Economic Zone (EEZ): Under the Navigation Act AMSA only has powers over wrecks of foreign vessels when they are located in Australia’s territorial sea due to the freedom of navigation principles enshrined in international law.
2. An object (including shipping containers) from a foreign vessel or Regulated Australian Vessel (RAV) is wrecked. Under the Navigation Act, the definition ‘wreck’ does not cover goods or cargo fallen overboard from a ship that is not itself wrecked, derelict, stranded, sunk, abandoned, foundered or in distress.

These are significant gaps that have a real impact on the Australian Government’s ability to recover costs. AMSA have advised that half of the wrecks in the last 5 years have occurred in the EEZ and involved foreign container ships. While there is other legislation that can assist AMSA in responding to a wreck and seeking to recover wreck-related costs, they are not specifically designed to respond to such an incident so their suitability is therefore limited and untested in court:

* The *Protection of the Sea (Powers of Intervention) Act 1981* provides AMSA with powers to take measures, where they are necessary, to prevent or reduce pollution where oil or a noxious substance is escaping, has escaped or is likely to escape from any ship in Australia’s jurisdiction (including in the EEZ).
* Under the *Protection of the Sea (Civil Liability) Act 1981*, AMSA can recover from an owner of a ship any expenses or liabilities incurred in carrying out the measures taken under the *Protection of the Sea (Powers of Intervention) Act 1981*. Alternatively, where AMSA suffers any loss, damage, costs or expenses in preventing or mitigating any pollution damage or threat of pollution in the marine environment, AMSA may recover those amounts from the owner or Master. The pollution damage must be a result of a "discharge or disposal" from a ship and the amounts must be incurred by AMSA in the performance of its function under s6(1)(a) *Australian Maritime Safety Authority Act 1990*.

1. DCV or recreational vessel creates a wreck in the EEZ: AMSA does not currently have authority over DCV and recreational vessel *wrecks* under the Navigation Act. State and territory governments do not have authority for wrecks in the EEZ and territorial sea under the Offshore Constitutional Settlement.
   1. Case for Government Action

The Australian Government’s general approach is that polluters should be held financially responsible when their actions threaten navigational safety, Australia’s unique marine environment or maritime industries. This is evidenced in many environmental regulatory regimes, which require a company to hold financial surety for environmental costs in order to be permitted to operate (e.g. the *Offshore Petroleum and Greenhouse Gas Storage Act 2006*).

The Australian Government is the level of government best placed to address the problem described above given:

* the Australian Government has constitutional responsibility for international and interstate trade and the responsibility to manage the territorial sea (minus coastal waters) and EEZ.
* gaps in existing Commonwealth legislation are hampering the Australian Government’s ability to recover wreck‑related costs.
* only the Australian Government has the constitutional authority to accede to international conventions, if that is the preferred solution to the problem.
* where a shipping company does not take responsibility for a wreck, the Australian Government may have some recourse to recover the costs of locating, marking and removal of the wreck under other Commonwealth legislation if it can be proved the wreck has, or could, create marine pollution (e.g. the Protection of the Seas legislative framework). This will be discussed further in Option 1.

The role of the Australian Government to resolve this problem was recognised by the Senate Standing Committee on Rural and Regional Affairs and Transport. In the *Report on the policy, regulatory, taxation, administrative and funding priorities for Australian shipping*, the Senate Standing Committee requested the Australian Government consider accession to the Nairobi Convention and how it would improve the management of wreck identification and removal in Australia.[[23]](#footnote-23)

While attempts could be made to encourage shipping companies, ship owners or charterers to take responsibility for locating, marking and removal of the wrecks they create through a voluntary code of practice or similar non-binding framework, it is unlikely to result in adequate cost recovery because:

* past practice has indicated ship owners, and their insurers, have differing opinions from governments on what wrecks need to be removed, and will not contribute when they do not believe it is necessary. For example, differing opinions whether a shipping container can safety be left undisturbed or it constitutes marine pollution and poses a risk to local fishers and the community.
* it is unlikely ship owners or charters would be willing to make an open-ended commitment of this nature given the potential size of any financial liability. In the case of the *YM Efficiency*, the Australian Government sought to recover a debt of approximately $20 million, including the removal and disposal of the wreck. The amount could be significantly more if the incident occurred in a sensitive marine area like the Great Barrier Reef, involved a larger number of containers, or was of a particularly difficult nature to remove – such as a lost cargo of plastic pellets as occurred with the *MV X‑Press Pearl* in Sri Lanka.[[24]](#footnote-24)
* while an incident may fall within the scope of the voluntary code of practice, the situation may not be sufficient to trigger a payout under a ship owner’s wreck-related insurance policy. This could result in the situation where a ship owner may wish to pay for wreck removal but does not have the funds because the insurer has denied the claim.
  1. Objectives of the Regulatory Impact Statement

This RIS will assess the options to improve the Australian Government’s cost recovery measures following wrecks through accession to the Nairobi Convention against the following objectives:

* enhancing the ability to locate, mark or remove wrecks as effectively as possible from the territorial sea and EEZ.
* establishing a clear and internationally consistent regulatory framework for wreck removal.
* holding ship owners accountable for wrecks, including any object that has been on board the ship or is lost at sea from such a ship.
* recovering wreck‑related costs from ship owners in a simple and time-effective manner.
* ensuring any financial impacts and regulatory burdens on industry are proportionate to the risk of wrecks occurring in Australia’s jurisdiction.
* ensuring any changes do not prohibit new entrants to the market or disrupt maritime trade to Australia.
* improving safety and environmental protection from hazardous wrecks.

Potential barriers to achieving these objectives are:

* the limitations of Australian Government actions in the EEZ due to the sovereign rights of both Coastal and Flag States under the *United Nations Law of the Sea Convention*.
* if accession is proposed, Parliament does not recognise the benefits of the Nairobi Convention and so opposes the recommendation for accession or the enacting legislation is not passed.

The last potential barrier can be managed through meaningful and thorough stakeholder engagement.

1. Options

The Department of Infrastructure, Transport, Regional Development, Communications, and the Arts (the Department) has identified 4 policy options for consideration to improve the management of wreck location and removal in Australia, which were raised in the 2020 Discussion Paper on Australia’s possible accession to the Nairobi Convention (the 2020 Discussion Paper) released by the Department. The options are:

1. retain the status quo – maintain the existing framework under the Navigation Act.
2. make amendments to the Navigation Act that are consistent with the Nairobi Convention but without accession.
3. Australia accedes to the Nairobi Convention applying it to all ships in the EEZ.
4. Australia accedes to the Nairobi Convention and applies it to all ships in the EEZ and the territorial sea.

This RIS will consider the regulatory impacts of the options on the shipping industry, the Australian public and the Australian, state and territory governments.

## Option 1: Status quo

Foreign vessels and RAVs

The Navigation Act is Australia’s primary legislative tool covering international ship and seafarer safety and protects the marine environment where it relates to shipping and the actions of seafarers. Chapter 7 of the Navigation Act establishes the Commonwealth regulatory regime, implemented by AMSA, for notifying and dealing with any wreck of or from RAVs and foreign vessels.

The scope of AMSA’s powers differs for RAVs and foreign vessels:

* for a RAV, AMSA can require the legal owner to mark or remove a wreck of, or from, the ship wherever the wreck is situated.
* for a foreign vessel, AMSA only has powers over wrecks located in Australia’s territorial sea.[[25]](#footnote-25)

Under the Navigation Act, the definition ‘wreck’ does not cover goods or cargo fallen overboard from a ship that is not itself wrecked, derelict, stranded, sunk, abandoned, foundered or in distress.[[26]](#footnote-26)

The Navigation Act gives AMSA the powers to engage with wrecks. These include powers to require the legal owner of a wreck to remove or mark the wreck or to give AMSA financial security to fund the removal or marking (as described above).[[27]](#footnote-27) The Navigation Act does not define the term ‘legal owner’ but does define ‘owner’ of a ship as a person:

* who has a legal or beneficial interest in the ship, other than as a mortgagee
* with overall general control and management of the ship but is not the Master or Pilot, or
* who has assumed responsibility for the ship from a person referred to above.[[28]](#footnote-28)

AMSA can also mark or remove the wreck itself, using any method it sees fit, if:

* such actions are considered necessary to save human life, safe navigation of ships, or protect the marine environment
* when there is no legal owner of the wreck, or
* if a legal owner does not comply with a written notice to undertake these actions within a specified timeframe.[[29]](#footnote-29)

AMSA can additionally destroy or sink the wreck, or part of the wreck, if it believes it to be necessary for safety of navigation and environmental reasons. The Navigation Act also enables AMSA to recover any expenses incurred in locating, marking, removing, destroying or sinking the wreck from the legal owner.[[30]](#footnote-30) There is no limitation on the total wreck‑related costs AMSA may seek to recover, as Australia’s accession to the LLMC Convention reserved the right to seek unlimited wreck removal costs. A ship owner remains liable for any remaining costs incurred that their insurance will not cover.

The NavigationAct does not include any provisions that require the legal owner of either a RAV or foreign vessel to have insurance for removing a wreck in either Australia’s EEZ or territorial sea. Even if a ship’s legal owner has wreck-related insurance, AMSA has no powers under the Navigation Act to directly approach the insurer to recover wreck‑related costs.

As raised earlier there are 2 other pieces of legislation that may help AMSA in responding to a wreck and seeking to recover wreck-related costs – the *Protection of the Sea (Powers of Intervention) Act 1981* and the *Protection of the Sea (Civil Liability) Act 1981* – but they are untested in court.

The 3 most recent wreck incidents in the Commonwealth jurisdiction have all occurred in the EEZ and involved lost cargo from foreign vessels, so the cost recovery response occurred under the Protection of the Sea regulatory framework rather than the Navigation Act. If this trend continues as outlined in Chapter 2.1, it will result in ongoing reliance and pressure on the Protection of the Sea regulatory framework to recover wreck‑related costs.

In response to the 2020 Discussion Paper, a minority of the shipping industry responses favoured remaining with the status quo due to the resources required to re-educate/train employees. The majority of the shipping industry, as well as local government and academics noted their preference to extend the Australian Government’s authority, in order to see greater levels of consistency in Australia’s maritime legislation.

DCVs and recreational vessels

A DCV is a ship used in connection with a commercial, governmental or research activity and undertakes only domestic voyages around Australia. According to the Department of Infrastructure, Transport, Regional Development, Communications and the Arts, there are around 31,000 active DCVs in Australia.[[31]](#footnote-31) The term ‘recreational vessel’ captures pleasure crafts, including power or sailboats. It would also include super yachts and other large yachts. There is estimated to be 866,808 recreational vessels in Australia, further details are in Chapter 5.2.

When compared to foreign vessels and RAVS, these generally smaller vessels are a larger contributor of wrecks in Australia, although typically the consequential impacts are smaller. Using Queensland as an example, Maritime Safety Queensland reported that between 1 July 2018 and 24 March 2021 they removed a total of 592 wrecks, 82 of which were ex-commercial ships.[[32]](#footnote-32) During the same time period AMSA received reports of 2 wrecks, both container losses from foreign vessels – *APL England* and *Navios Unite*.

The regulation of DCVs is shared between state and territories and the Australian Government under the National Law, which is a type of legislation known as an applied law scheme – where one jurisdiction enacts a model law, which is then picked up or applied by another jurisdiction or group of jurisdictions. Subsection 6(2)(viii) of the National Law specifically states the National Law does not apply to DCV wreck and salvage issues.

Different wreck removal and cost recovery obligations are available in each jurisdiction, depending on the circumstances of the wreck and/or the type of ship involved. The state and territory acts managing DCV and recreational vessel wrecks are:

* New South Wales – *Marine Safety Act 1998.*
* Northern Territory – *Marine Act 1981 and the Ports Management Act 2015.*
* Queensland – *Transport Operations (Marine Safety) Act 1994.*
* South Australia – *Harbors and Navigation Act 1993.*
* Tasmania – *Marine and Safety Authority Act 1997.*
* Victoria – *Marine Safety Act 2010.*
* Western Australia – *Western Australian Marine Act 1982* and the *Navigable Waters Regulations 1958.*

In response to the 2020 Discussion Paper and the draft RIS, several state and territory governments asserted their wreck removal frameworks covering DCVs and recreational vessels were fit for purpose and did not require Commonwealth intervention to improve cost recovery outcomes.

Advantages

* Business as usual continues with no changes to existing processes, policies and procedures, and no implementation costs for industry.

Disadvantages

* The Navigation Act will continue to apply only to wrecks of foreign vessels when located in Australia’s territorial sea, noting this is the maritime zone with the greatest number of environmentally sensitive areas.
* The definition of ‘wreck’ in the Navigation Act will continue to exclude goods or cargo fallen overboard from a ship that is not itself wrecked, derelict, stranded, sunk, abandoned, foundered or in distress. As noted above, the last 3 wreck incidents in Australia managed by AMSA have exclusively involved the loss of cargo overboard.
* Issues regarding cost recovery for wreck removal will continue to arise in jurisdictions where legislation does not apply to Domestic Commercial Vessel (DCV) or recreational vessel wrecks beyond coastal waters.
* The Navigation Act contains no power allowing AMSA to directly approach the ship’s insurer to recover wreck‑related costs.
* There is no mechanism to ensure ship owners have appropriate and accessible assets in place to fund a wreck removal operation before an incident occurs. For example, while AMSA is entitled under s229(1)(e) Navigation Act to recover from the ship owner the expenses incurred in removing the wreck in the territorial sea, a practical difficulty arises in respect of a foreign ship owner with no assets in Australia, as was the case of the *MV Tycoon.*[[33]](#footnote-33)
* While there is currently an unlimited right of cost recovery for wreck removal, this has limited benefits where a foreign ship owner is responsible for the wreck because:
  + service of proceedings (e.g. to recover costs) cannot easily be undertaken in a foreign jurisdiction
  + there is uncertainty regarding the enforcement of any judgment against a ship owner in a foreign jurisdiction.
* The current alternative legislative options will not assist the Australian Government in recovering wreck‑related costs in the absence of marine pollution.

## Option 2: Amendments to the *Navigation Act 2012*

Australia can choose to amend the current wreck removal framework in the Navigation Act to incorporate many of the benefits offered by the Nairobi Convention but without acceding to it. Possible amendments could include:

* requiring compulsory wreck-related insurance for foreign vessels 300 gross tonnage (GT) and over in the territorial sea, and RAVs 300 GT and over regardless of location.
* expanding the definition of a ‘wreck’ to include any object is sunken, stranded or adrift at sea from any foreign vessel or RAV, including cargo.
* the power to recover wreck-related costs directly from a ship owner’s insurer.

Advantages

* This option has the quickest implementation timeline of all options for changes to the current wreck removal framework, as it would involve only legislative amendment.
* Australia would not be bound to adopt the full text of the Nairobi Convention. For example, Australia would be free to expand liability for the locating, marking, removing, destroying or sinking of wrecks beyond the ship owner to include ship operators or charterers. Being able to pursue multiple parties would provide AMSA with greater opportunities to hold someone accountable for the wreck‑related costs.
* Australia could retain any aspects of the Navigation Act seen as beneficial. For example, the lack of any time restriction on when AMSA can commence a cost recovery action, other than that imposed by the relevant court.
* Australia would reserve the right to choose the salvor of the operation, potentially enhancing conditions of employment and method of service delivery.

Disadvantages

* This option does not resolve the key problem of the Australian Government’s inability to recover costs when a foreign vessel creates a wreck in Australia’s EEZ – particularly in the situation where the ship is not making a call at an Australian port. Under international law, ships have the right to freedom of navigation passage in any EEZ. State Parties to the Nairobi Convention agree to accept the extension of the coastal State rights to impose obligations in the EEZ, which allows it to be used as a legal basis for cost recovery.
* There is uncertainty as to how an insurance requirement may operate in practice under this option. For example, a direct right of claim against an insurer may not be effective as it is uncertain if a foreign insurance company would recognise Australian law and accept service without an underpinning international convention.
* There is also uncertainty as to how to hold a foreign ship owner responsible for a wreck, where there are no assets directly available to Australia courts, including issues with:
  + serving proceedings (e.g. to recover costs), which cannot easily be undertaken in a foreign jurisdiction
  + uncertainty regarding the enforcement of any judgment against a ship owner in a foreign jurisdiction.
* This option would only apply to foreign vessels and RAVs, without covering DCVs and recreational vessels as they are not regulated by the Navigation Act.
* An amended Navigation Act would not strengthen the push for international uniformity of laws for the global shipping industry.

This option will not be considered further in this paper, including in the cost benefit assessment, as it is unable to deliver on all of the policy objectives outlined in Chapter 2.3, particularly the key issue of resolving the difficulty in recovering all wreck-related costs in the EEZ. Half of the AMSA managed wrecks in the last 5 years have occurred in the EEZ and involved foreign container ships. As outlined in Chapter 2.1 there is a significant risk the frequency of these types of wrecks will increase. As with Option 1, the Australian Government would have to continue to rely on cost recovery under the Protection of the Sea legislative framework for wreck incidents in the EEZ, which is not what it is designed to do and so it has limited suitability.

## Option 3: Australia accedes to the Nairobi Convention and applies it to all ships in the EEZ

A State Party to the Nairobi Conventionis able to order the ship owner to locate, mark and remove wrecks that pose a hazard in the Convention Area, defined as the EEZ of a State Party established in accordance with international law.[[34]](#footnote-34) Australia’s EEZ is one of the largest in the world with a total marine area of approximately 10 million square kilometres, which includes 2 million square kilometres off the Australian Antarctic Territory.[[35]](#footnote-35)

The Nairobi Convention defines a ‘ship’ as “a sea going vessel of any type whatsoever and includes hydrofoil boats, air‑cushion vehicles, submersibles, floating craft and floating platforms, except when such platforms are on location engaged in the exploration, exploitation or production of seabed mineral resources”.[[36]](#footnote-36) Notable exclusions are warships or any other ships operated by a State Party and used for government non-commercial service.[[37]](#footnote-37) This broad definition means that if Australia exceeds to the Nairobi Convention it must apply it to all sea going vessels including DCVs and recreational vessels.

The Nairobi Convention defines what may constitute a wreck quite broadly and would cover scenarios where a ship’s cargo is lost at sea, with the condition that the wreck must have followed a ‘maritime casualty’. A ‘maritime casualty’ is defined as a “a collision of ships, stranding or other incident of navigation, or other occurrence on board a ship or external to it, resulting in material damage or imminent threat of material damage to a ship or its cargo”.[[38]](#footnote-38) For example, failed lashings due to inadequate operation or damage due to heavy seas could be considered a maritime casualty, and shipping containers that were subsequently lost overboard could be considered a wreck. Similar to the Navigation Act requirement to notify AMSA, the Nairobi Convention requires the Master and operator of a ship flying the flag of a State Party to notify the affected State Party if they are involved in a maritime casualty resulting in a wreck. For Australia, AMSA would continue to act as the appropriate government authority.

A wreck must be marked and removed if the affected State Party makes a determination that the ship or the object is a ‘hazard’.[[39]](#footnote-39) This means that wreck removal under the Nairobi Convention operates upon a dual-trigger to action, where both a maritime casualty and hazard must be established before an affected State Party can mandate any activity related to a wreck. A ‘hazard’ is broadly defined, and is determined in relation to the risk posed to navigation, the environment and other related inters such as fishing, tourism, health and offshore and underwater infrastructure.[[40]](#footnote-40)

Under the Nairobi Convention, the ship owner is defined as the “person or persons registered as the owner of the ship or, in the absence of registration, the person or persons owning the ship at the time of the maritime casualty”.[[41]](#footnote-41) The ship owner is strictly liable for the costs of locating, marking and removing the associated wreck, subject to defences related to extreme circumstances such as war, exceptional weather, third party intervention or government negligence.[[42]](#footnote-42) Liability is also waived under the Nairobi Convention to the extent it would conflict with other international conventions.[[43]](#footnote-43)

To assist in cost recovery, the Nairobi Convention mandates owners of ships over 300 GT must hold wreck-related insurance up to the appropriate limit set out in the *Convention on Limitation of Liability for Maritime Claims* (the LLMC Convention). The LLMC Convention acts to limit the liability of ship owners to pay compensation for claims of loss of life or personal injury, and property claims (e.g. damage to other ships, property or harbour works).

Australia is a party to the LLMC Convention, which is implemented into domestic legislation through the *Limitation of Liability for Maritime Claims Act 1989*. The LLMC Convention liability limits include claims relating to wreck removal, however, Australia has lodged a reservation excluding its application in that situation. The effect of the reservation in Australia is that a ship owner is liable for all expenses associated with the removal of a wreck, which is reflected in the Navigation Act. If Australia were to accede to the Nairobi Convention, the reservation would not change the insurance amount a ship owner must have in place under the Nairobi Convention, nor the amount that could be claimed against an insurer. The ship owner would, however, remain liable for any additional costs above their insurance amount.

**Example**

On 1 June 2018, the *YM Efficiency* - a Liberian flagged containership carrying 2,249 containers on its way to Port Botany from Taiwan encountered rough weather, resulting in the loss of 81 containers overboard. The Taiwanese owner of the *YM Efficiency* and its insurer have refused to pay for the clean-up operations so AMSA commenced legal action to recover the wreck‑related costs, of approximately $20 million. This case has now been settled.

Liberia is a party to the Nairobi Convention, meaning the *YM Efficiency* would have had insurance in place up to the LLMC Convention limit. As the *YM Efficiency* is 42,741 GT, under the LLMC Convention it would be required to have insurance up to 24,192,616[[44]](#footnote-44) Special Drawing Rights (SDR),[[45]](#footnote-45) which is approximately $44,460,360.31.[[46]](#footnote-46) If Australia had been a party to the Nairobi Convention at that time, AMSA may have been able to recover the costs of the clean-up directly from the insurer for any hazardous wrecks and thus avoided some or all of the litigation that followed.[[47]](#footnote-47)

State Parties issue certificates of insurance to its flagged ships if the ship owner provides evidence they hold wreck‑related insurance. For example, a ‘Blue Card’ issued by a ship owner’s marine insurance provider verifies they have the required compulsory insurance coverage. State Parties, through their Port State Control, must also ensure foreign flagged vessels visiting their ports are carrying the relevant certificates of insurance.

Other key aspects of the Nairobi Convention that need consideration are:

* it requires an affected State Party to take cost recovery action within 3 years of a wreck being determined to pose a hazard, and a maximum of 6 years from the date of the maritime casualty.[[48]](#footnote-48)
* where the ship owner takes control of the wreck removal operation they have the freedom to choose their salvor – the affected State Party may, however, set conditions on the removal process, but only to ensure it proceeds in a manner consistent with domestic safety and marine environment protections.[[49]](#footnote-49)
* cost recovery for wreck removals can only be enforced against ships registered to a State that is also a party to the Nairobi Convention. This is based on the international law rule in the *Vienna Convention on the Law of Treaties* that states a treaty does not create either obligations or rights for a State without its consent.[[50]](#footnote-50) For the foreign vessels not captured by the Nairobi Convention, Australia to ensure an appropriate wreck removal framework was in place.

When the Department raised this option in the 2020 Discussion Paper, the majority of stakeholders were firmly in favour of acceding to the Nairobi Convention and so expanding the Australian Government’s powers to remove wrecks in the EEZ. Concerns were raised about the application of the Nairobi Convention on DCVs and recreational vessels as wreck removal is currently governed by state and territory legislation, however, these legislative frameworks do not apply in the EEZ.

It is important to note accession to the Nairobi Convention would not change the overall likelihood of wreck events occurring in the future. Australia’s robust regulatory regime and strong Port State Control mechanisms would have a more practical impact in this space.   
  
Given the usual sensitivities around liability settlements and insurance payouts, and the relatively recent entry into force of the Convention in April 2015, it is not publicly known whether a State party has used the Nairobi Convention to recover the costs of a wreck removal. It may be some time before some information relating to States’ use of the Convention becomes available.

Advantages

* Expanding the Australian Government wreck removal framework, based on the Nairobi Convention, to include DCVs and recreational vessels would create a single, uniform set of rules for all ships in Australia’s EEZ. The framework would also be consistent with modern international rules, creating administrative efficiencies for government and ship owners
* Acceding to the Nairobi Convention in the EEZ and retaining an amended legislative framework for RAV and foreign vessel wrecks in the territorial sea would establish expanded and uniform powers for AMSA in the EEZ, while not restricting the actions that can be taken in the territorial sea. It would also not impact on state and territory legislation governing wreck removal for DCVs and recreational vessels.
* Beneficial provisions in the Nairobi Convention can still be applied in the territorial sea by Australian, state or territory governments through legislative amendments.
* All DCV and recreational vessel owners would now be strictly liable for any wreck-related costs, if the wreck occurred in the EEZ (approximately 893,808 ship owners). Owners of DCVs and recreational vessels 300 GT and over would also be required to hold wreck-related insurance (approximately 381 ship owners). While this is a small number of vessels, it would capture those of a significant size that would most likely to pose a hazard if wrecked.
* The definition of ‘wreck’ under the Nairobi Convention is broader than the Navigation Act and covers goods or cargo that have fallen overboard from a ship, including shipping containers.
* The Nairobi Convention places financial responsibilities for wreck‑related costs on the party best placed to mitigate them through insurance, the ship owner. The *International Convention on Civil Liability for Bunker Oil Pollution Damage 2001* (the Bunker Convention) operates in a similar manner.
* The Nairobi Convention holds the ship owner strictly liable for the wreck‑related costs resulting in more straightforward and easily resolved claims as:
  + the ship owner is identifiable through ship registration records in the Flag State and in the wreck incident report
  + Australia would not be required to prove any negligence or other failure on the part of the ship owner.
* When assessing the potential hazards of a wreck, the Nairobi Convention provides a broader range of criteria that may be considered. The Navigation Act limits its assessment to whether the wreck removal will save human life, secure safe navigation or protect the marine environment. The Nairobi Convention allows for the assessment of economic impacts as well as conservation of marine living resources and wildlife, health, and infrastructure considerations.
* The Nairobi Convention provides greater opportunities for cost recovery through direct access to the insurers of ships 300 GT and above, up to the relevant limit in the LLMC Convention. For example, while AMSA may be currently entitled under s229(1)(e) Navigation Act to recover from the ship owner all expenses incurred in removing the wreck in the territorial sea, a practical difficulty arises in respect of a foreign ship owner with no assets in Australia, as was the case of the *MV Tycoon*.
* The Australian Government may still need to take court action against a ship owner to gain access to the insurers but it is likely to be a simpler action given the strict liability provision, compulsory insurance, the limited defences available and the broader definition of what constitutes a ‘wreck’ in the Nairobi Convention.
* The costs recoverable under the Nairobi Convention are potentially greater than those under the Navigation Act. Under the Nairobi Convention ‘removal’ means “any form of prevention, mitigation or elimination of the hazard created by the wreck”, which would capture costs for all aspects of wreck removal operations, not just the removal of the wreck itself.[[51]](#footnote-51) Under s229(1)(e) Navigation Act, AMSA can only recover "expenses incurred … in connection with locating, marking, removing, destroying or sinking the wreck".
* The definition of ‘ship’ would include floating platforms when used for offshore renewable energy production (e.g. offshore wind turbines) as opposed to the “exploration, exploitation or production of seabed mineral resources”.[[52]](#footnote-52) There is increasing interest in offshore wind energy projects in Australia with a number of companies looking to invest in the next 10 years.[[53]](#footnote-53) To meet this growing interest the Department of Industry, Science, Energy and Resources has developed an Offshore Electricity Infrastructure regulatory regime.[[54]](#footnote-54) The ability to utilise the Nairobi Convention to manage wreck removal for these types of floating platforms will assist the Australian Government in managing this industry and holding them accountable for any wrecks they produce including the platform itself.

Disadvantages

* The application of the Nairobi Convention framework in the EEZ, while retaining the Navigation Act provisions in the territorial sea, would create a dual regulatory system with differing rights and obligations, depending on the location of the wreck. This may result in confusion for the regulators, compliance officers and industry. This could be solved through additional amendments to the Navigation Act targeting foreign vessels and RAVs to create a single regulatory system for them.
* Australia will need to ensure the regulatory framework continues to govern foreign vessels flagged to countries who are not State Parties to the Nairobi Convention.
* The marking and removal of a wreck can be pursued only after the affected State Party has determined it meets the ‘hazard’ threshold. If there is no hazard, the ship owner will not be liable for any wreck removal activities pursuant to the Convention and any costs recovery would have to be pursued under national pollution legislation.
* A wreck would need to be preceded by a ‘maritime casualty’, which could operate to limit the circumstances when the Nairobi Convention may apply depending on the situation.
* An affected State Party has limited ability to influence the salvage operation if it is being undertaken by the ship owner in the EEZ as the ship owner can choose the salvor. This is only partly mitigated by the affected State Party being able to set some conditions on the wreck removal.
* An affected State Party’s right to recover wreck‑related costs is limited to actions taken within 3 years of a wreck being determined to pose a hazard, and a maximum of 6 years from the date of the maritime casualty. While there are no time limitations in the Navigation Act, the most recent wreck removal operations would have fallen with these deadlines.
* The requirement for removal actions to be ‘proportional’ is vague and may lead to disputes between ship owners and the affected State Party. This risk will diminish as more States accede to the Nairobi Convention.
* Accession to the Nairobi Convention will place additional regulatory functions on the Australian Government (e.g. the issuing and compliance checking of certificates of insurance) but they can be cost recovered.
* The liability of insurers is capped and if the wreck-related costs are significant the Australian Government may still need to pursue the ship owner directly for the excess costs. Ship owners may continue to be difficult to pursue when based overseas.
* There will be inconsistent regulation of DCV and recreational vessel wrecks in the 3-12 nm part of the territorial sea as not all state and territory jurisdictions regulate this space and the Commonwealth will not seek to step in.
* Adopting the Nairobi Convention framework for DCVs and recreational vessels would require consideration of how the 300 GT requirement would be assessed, as DCVs and recreational vessels are currently registered by length, not by gross tonnage.
* The requirement for DCVs and recreational vessels over 300 GT and travelling into the EEZ to hold wreck-related insurance will be a new cost for owners who do not currently undertake international voyages to Member States (approximately 381 ship owners). The average P&I insurance premium is $2.3/GT. While a DCV owner may be able to pass on any additional cost, a recreational vessel owner could not. It would also create a new regulatory cost for AMSA in checking that appropriate insurance is held.
* The insurance requirement may have little practical effect, as only a smaller percentage of DCVs and recreational vessels will meet the 300 GT threshold. Maritime Safety Queensland advised the majority of abandoned or wrecked ships removed through the War on Wreck Program would be under 300 GT[[55]](#footnote-55) and so would not have been required to hold insurance under a Nairobi Convention framework.
* It is likely DCV and recreational owners would seek fixed premium insurance policies, rather than a policy from a P&I Club. In the response to the 2020 Discussion Paper, several stakeholders raised concerns about fixed premium insurance claiming these types of insurers would be less likely to pay out in the event of a wreck.
* Wrecks from recreational vessels are frequent and jurisdictions such as QLD have sought to remove a large number from their waterways in recent years. As recreational vessels are generally privately owned, the liability for a wreck removal may place the owner under significant financial strain and could result in bankruptcy, particularly if they do not have insurance in place due to their small size.
* The Nairobi Convention establishes a framework for wreck-related incidents that presumes a high level of sophistication from industry, which may be absent from some parts of the recreational vessel sector. While a public education program would build capability of recreational vessel owners, it would be unlikely to result in owners feeling confident or capable of organising the salvage of any ship or object lost at sea.
* In the past, ship owners and insurers have been open to working with governments to clean up beyond their limit of liability after particularly hazardous wrecks (e.g. Costa Concordia[[56]](#footnote-56) – approximately US$1.5 billion or *Rena*[[57]](#footnote-57) – over NZD$500 million). This may be less likely to occur if an incident happened in Australia once the Nairobi Convention was adopted.

## Option 4: Australia accedes to the Nairobi Convention and applies it to all ships in the EEZ and the territorial sea

Wrecks would pose the greatest hazard to navigation or the environment when they are located in the territorial sea due to the shallower water and greater number of obstacles/ship interactions (e.g. concentrated ship traffic, reefs, etc.). The Nairobi Convention includes an optional clause enabling a State Party to extend its framework to wrecks in their territorial sea. As of January 2021, 20 countries have assented to the territorial sea extension, including Canada, Denmark, Finland, France, Panama, Sweden and the United Kingdom. A full list is at **Appendix A**. Denmark publicly attributed their extended application of the Convention to the territorial sea to the frequency of incidents that occur there. Although other States have not publicly indicated why they adopted the territorial sea extension, it is believed to be motivated by the frequency of territorial sea incidents and in the interests of international legal unity. It is not publicly known if a State has applied the Convention to wreck in the territorial sea.

The optional extension of the Nairobi Convention into the territorial sea was intended to be a compromise between the creation and adoption of uniform international rules while reserving a State’s freedom to exercise its sovereign rights in the territorial sea. Conditions similar to those in the Nairobi Convention may otherwise be enforced by a State Party in their territorial sea against all foreign vessels, regardless if they are flagged to a State Party, because of this sovereign right.

The Nairobi Convention does not alter or limit these sovereign rights but does constitute an agreement to exercise them in a uniform manner – hence its application can operate differently in the territorial sea.[[58]](#footnote-58) For instance:

* an affected State Party may take or require measures other than the locating, marking or removing the wreck. For example, the United Kingdom includes paying the costs to survey a wreck and monitor its condition, or the power to sell the wreck.
* an affected State Party may remove, or order removal of, a wreck without having to observe certain obligations, such as, informing the owner and Flag State when a wreck has been determined to be a hazard.
* the power of an affected State Party to undertake its own wreck removal measures is not restricted to cases where the owner cannot be contacted, or fails to remove the wreck within a set dead-line, or where the circumstances are urgent.
* the owner’s choice of salvor is subject to the national law of the State Party, which may include imposing conditions such as the engagement of a designated contractor.

The State Party remains bound by the Nairobi Convention’s requirement that any measures taken in the territorial sea be proportionate to the hazard and not go beyond what is reasonably necessary to remove the wreck.[[59]](#footnote-59)

If a State Party does not adopt the Nairobi Convention, or does not agree to extend it to the territorial sea, incidents in that maritime zone will remain subject to domestic law.

The majority of responses to the 2020 Discussion Paper supported the extension of the Nairobi Convention framework into the territorial sea in order to create a consistent approach to the regulation of all wrecks originating from all ships – essentially replacing all current wreck removal legislation in Australia. Some stakeholders did acknowledge the complexity with this option given the need to amend/replace Commonwealth, state and territory legislation and potentially restructure maritime safety authorities but they felt it would create a clearer outcome for industry.

Advantages

* Advantages to this option would be the same as Option 3. For example, requiring ship owners to maintain insurance to cover wreck-related costs.
* Some of these advantages may be more important in a territorial sea context as it includes a greater number of environmentally sensitive areas such as the Great Barrier Reef Marine Park and the Torres Strait. The Great Barrier Reef is a UNESCO world heritage listed area, attracting international legal responsibility to protect and conserve it. It is believed to contribute around $6.4 billion to the Australian economy each year. The Great Barrier Reef and the Torres Strait are sites of significant cultural and socio-economic value to Australian Aboriginal and Torres Strait Islanders. The Great Barrier Reef presents a significant challenge to anyone attempting to undertake a large-scale salvage or wreck removal operation and could lead to significant costs should the need arise for the Australian Government to urgently respond to prevent environmental damage.
* Consistent application of the Nairobi Convention between the EEZ and the territorial sea promotes increased safety of navigation, boosted environmental protection and harmonised liability and compensation regimes. Consistent law also boosts increased economic activity by encouraging investment and reducing regulatory and administrative costs.
* The financial security requirement in the Navigation Act for the owners of foreign vessels in the territorial sea will be simplified, as the certificate of insurance would be sufficient.[[60]](#footnote-60)
* Australia continues to have the ability to locate, mark and remove wrecks created by transiting foreign vessels in the territorial sea, subject to the requirements of the Nairobi Convention, and ship owners would be obligated to remove any hazardous wrecks.
* DCVs and recreational vessels would be covered by the Nairobi Framework whenever they undertake a voyage beyond internal waters, including in coastal waters – which internationally are considered part of the territorial sea.

Disadvantages

* Disadvantages to this option would be the same as Option 3. For example, the Nairobi Convention imposes time limits on cost recovery actions where none currently exist within the Navigation Act.
* Australia would lose some flexibility in designing the regulatory framework in the territorial sea, given it must be consistent with the requirements of the Nairobi Convention.
* Foreign vessels transiting through Australia’s territorial sea (e.g. the Torres Strait) could not be required to hold insurance as they are not visiting an Australian port. As these ships are not visiting Australian ports and so are not engaging with Australia’s Port State Control there is no reliable data on the number and Flag State of this cohort. Given 79.5 per cent of the global fleet by tonnage is registered to a State Party to the Nairobi Convention, it is likely many of these foreign vessels in transit would already hold wreck-related insurance.
* An abandoned ship would only meet the definition of a ‘wreck’ if the abandonment followed upon a maritime casualty as defined by the Nairobi Convention. This would need to be determined on a case by case basis, depending on whether the maritime casualty event created material damage to the ship or the threat of it.[[61]](#footnote-61) State and territory legislation currently covers abandoned wrecks as many smaller ships are abandoned or dumped by their owners when maintenance costs become too high. Any Commonwealth legislation would need to either: maintain current state and territory legislation regarding abandonment/dumping situations, or include additional provisions beyond the scope of the Nairobi Convention to ensure continued cost recovery for abandoned ships.
* Adopting the Nairobi Convention framework in the territorial sea would create a regulatory overlap between Commonwealth and state/territory law. While coastal waters are within the internationally recognised territorial sea, in Australia they are governed by the states and territories under the Offshore Constitutional Settlement.[[62]](#footnote-62) In order to include all ships within the Nairobi Convention, the Commonwealth would need to either: supersede state and territory law, or implement an applied law scheme similar to the National Law that would implement a specific DCV and recreational vessel framework in state and territory law. This would result in a lengthy period of implementation and a highly complex regulatory framework for government to implement.

1. Consultation

The Department has undertaken thorough public consultation in regards to Australia’s possible accession to the Nairobi Convention to ensure consideration was given to the likely impacts of any potential regulatory change for each practical and viable policy alternative.

The core objectives of the stakeholder engagement for this RIS were to:

* thoroughly understand the impacts from current regulatory approach to wreck locating, marking and removal in Australia.
* understand the existing insurance arrangements to evaluate how accession to the Nairobi Convention could impact insurance premiums.
* obtain data to input into the cost benefit analysis calculations.
* where data could not be obtained, understand the various impacts and benefits of each option for key stakeholders.

The full list of stakeholders consulted is at **Appendix B** – those who have provided input are subsequently identified.

* 1. Means of consultation

Discussion paper

On 11 August 2020, the Department publicly released a discussion paper to inform an examination whether accession to the Nairobi Convention would benefit Australia (the 2020 Discussion Paper). The paper was published on the Department’s website and sent directly to a wide range of stakeholders, including key industry bodies, state and territory government representatives, legal professionals and academics. AMSA also promoted the 2020 Discussion Paper on its website and with its key state and territory contacts. Twelve submissions were received and are available on the Department’s website. The submissions were generally supportive of accession to the Nairobi Convention, with broad approval for its application in the EEZ and the territorial sea.

Draft RIS

The Department engaged ACIL Allen to undertake the cost benefit analysis, including a targeted stakeholder consultation based on responses to the 2020 Discussion Paper. These discussions aimed to understand the costs for industry of the Nairobi Convention framework. Stakeholders consulted included AMSA, Shipping Australia, International Group of P&I Clubs, and International Chamber of Shipping. Data was also supplied by Maritime Safety Queensland.

Consistency in the stakeholders consulted has been a key factor throughout the RIS process to maintain ongoing relationships and ensure any concerns raised are suitably addressed. On 8 September 2021, the Department sent the draft RIS to inform the examination of the options considering Australia’s accession to the Nairobi Convention to the same stakeholders who had received the Discussion paper.

It was decided not to publish the draft RIS on the Department’s website as:

* the stakeholder list was wide and diverse.
* Only one stakeholder responded to the public release of the 2020 Discussion Paper who was not directly invited – they were invited to comment on the draft RIS.
* there was a concern the publication of the draft RIS and submissions would be confusing for the public later when the final RIS was published by the Office of Best Practice Regulation.

The Department received 10 responses to the draft RIS. The responses were generally in agreement with acceding to the Nairobi Convention, with continuing general approval for its application in the EEZ and the territorial sea. The feedback provided can be classified into the following matters:

* new ideas and concerns, which required further discussion and legal consultation.
* questions on the practical implementation of the Nairobi Convention which will be examined as the project moves forward.
* editorial input which has been considered and included throughout the RIS.

Amended draft RIS

The submissions received in response to the first draft RIS raised questions and issues about the scope of some options. While there was significant support for Option 3B (accession to the Nairobi Convention and its application in the EEZ and the territorial sea), further lines of inquiry and research undertaken by the Department showed it was necessary to replace options 3A, 3B and 4. The inclusion of DCVs and recreational vessels in a Nairobi Convention framework could no longer be considered separately, but rather was required as part of each accession option.

The amended options for the RIS are now:

1. maintain the status quo
2. amend the Navigation Act 2012 (Navigation Act) consistent with the Nairobi Convention but without accession.
3. Australia accedes to the Nairobi Convention and applies it to all ships in the EEZ.
4. Australia accedes to the Nairobi Convention and applies it to all ships in the EEZ and territorial sea.

On 18 March 2022, the Department sent the amended draft RIS to the same cohort of stakeholders who received the draft RIS. The Department received 5 submissions in response to the amended draft RIS. The submissions were generally supportive of the new recommended option with feedback tending to focus on implementation issues to be examined in the next stage of the project.

* 1. Key issues raised in consultation

Registered owner

There were divided opinions in the submissions to the 2020 Discussion Paper on whether the ‘registered owner’ of a ship was the most appropriate party to be held strictly liable for wreck-related costs. Some submissions suggested charterers and/or ship operators may be just as appropriate and better placed to pay for any wreck‑related costs.

The Department has chosen to present options in this RIS that do not amend the text of the Nairobi Convention to ensure international consistency. Under international law, any deviation from the Nairobi Convention text would only apply where the Australian Government has the power to legislate under the Constitution. Adopting a broader liability provision would create a dual system for foreign vessels where the ship owner alone is liable for wrecks in the EEZ, while the owner, charter and/or operator would be liable for wrecks in the territorial sea. This would unnecessarily complicate the legislative framework.

The Department also believes holding the registered owner of a ship strictly liable would facilitate timely notifications and cost recovery actions, as the owner can be easily identified through the appropriate Flag State registry or directly from the ship operator/Master. There is also nothing preventing a ship owner from then seeking reimbursement for any wreck-related costs from the ship charterer or operator through their commercial contractual arrangements.

Lowering the GT threshold to hold insurance

Several submissions expressed the view that the insurance threshold should be lowered to increase the number of ships covered and so enhance the Australian Government’s ability to cost recover after a wreck incident. The Department does not agree with this proposal as:

* Australia should implement the original Nairobi Convention text to ensure international consistency and for the reasons on minimal cross-subsidisation outlined above.
* smaller ships would be likely to purchase fixed premium insurance policies, rather than P&I Club policies, which can be of questionable quality and value in a wreck situation.

For example, Queensland legislation requires ships over 15 metres in length to hold wreck-related insurance to cover both the clean-up costs of pollutants discharged from the ship into coastal waters and the costs of salvage or removal of a ship in the event it is wrecked or abandoned in coastal waters. Coverage limits are set out in the Transport Operations (Marine Pollution) Regulations 2018 (Qld). Maritime Safety Queensland outlined in their submission that ship owners generally purchase fixed premium policies that frequently refuse wreck-related claims due to factors such as seaworthiness of the ship. They have also found most wrecked ships caused a hazard after they are abandoned and at that point there is rarely an active insurance policy in place to enable cost recovery.[[63]](#footnote-63)

Insurance for DCVs

As stated previously, the definition of ‘ship’ in the Nairobi Convention is broad enough to allow the Australian Government to consider expanding its wreck removal legislation to include DCVs. Currently, the wreck removal provisions contained in the Navigation Act only apply to foreign vessels and RAVs. Non-safety regulation of DCVs falls to state and territory governments, which has created a number of jurisdictional variations.

The submissions to the 2020 Discussion Paper agreed there are no practical impediments to creating a requirement that DCVs and recreational vessels 300 GT and over hold wreck-related insurance. This insurance is currently available and some owners may already be covered if they hold P&I Club policies.

There was disagreement whether requiring relevant DCVs to hold wreck-related insurance would distort the market. A submission from Shipping Australia raised concerns foreign vessels and RAVs would pay more in insurance premiums and make fewer claims, and so subsidise the insurance claims of smaller vessels who would have cheaper premiums given their size but would be likely to make more claims. The Nairobi Convention broadly defines ships and accession would require Australia to include DCV’s within its regulatory framework. The Department considered the concern raised by the shipping sector, however, does not believe including DCVs would cause distortion to occur given the relatively small number of DCVs and recreational vessels that would meet the 300 GT threshold for mandatory insurance and the likelihood insurers would include incident rates when calculating premiums.

Interoperability with existing frameworks

Stakeholders raised concerns in response to the draft RIS over the interoperability of the Nairobi Convention with existing wreck removal frameworks. Specifically, the wreck removal powers of the Great Barrier Reef Marine Park Authority (GBRMPA) and state and territory wreck legislation operating in coastal waters.

##### Great Barrier Reef Marine Park

GBRMPA manages a wreck removal framework that provides a number of mechanisms to minimise environmental harm to the Great Barrier Reef by:

* controlling when use of or entry into the Great Barrier Reef Marine Park is allowed.
* issuing directions on conduct within the Great Barrier Reef Marine Park.
* ordering the removal of abandoned, sunk, stranded, unpermitted property, as well as property with a potential to cause damage.
* remediating or preventing damage to the marine environment through a cost recovery mechanism upon conviction of an offence, with no legislated cap.
* the Minister can also take steps to remove the property, as well as to repair, mitigate and prevent damage.

The concerns centred on how the GRMPA regulatory framework and the Nairobi Convention could co-exist in a complementary and effective way.

The Department has considered this issue and does not believe accession to the Nairobi Convention would require changes to the GBRMPA legislative framework. Currently, if an incident were to occur that could be managed by either the Commonwealth or GBRMPA wreck removal frameworks, the Australian Government would consider which system would provide the best outcome on a case-by-case basis. Accession would not change this relationship as the wreck removal provisions in the GBRMPA legislative framework are consistent with the Nairobi Convention.

##### State and territory wreck removal legislation

Some state and territory wreck removal legislation applies to foreign vessels and RAVs when they create a wreck within coastal waters. Stakeholders raised concerns about the application of the Nairobi Convention in that circumstance. The Department has considered this issue and does not believe accession to the Nairobi Convention would change how the Navigation Act and the state and territory wreck removal legislative frameworks intersect. Currently, if an incident were to occur that could be managed by either wreck removal framework, the Australian Government and relevant state or territory department would consider which system would provide the highest chance of cost recovery on a case-by-case basis. Similar to the GBRMPA issue above, accession to the Nairobi Convention would amend the Navigation Act, not the relationship between the 2 regulatory frameworks.

There are also concerns the Nairobi Convention may create a gap in regards to insurance requirements. In some jurisdictions (e.g. Queensland), ships over 15 meters long operating in their coastal waters are required to hold insurance for pollution clean-up and salvage and wreck removal incidents – up to $10 million depending on the type of ship. This provision applies to all ships including recreational vessels, DCVs, RAVs and foreign vessels, regardless of whether they are a party to the Nairobi Convention. The Nairobi Convention only requires RAVs and foreign vessels 300 GT and over to hold insurance – ships approximately 35 meters in length. Consequently, there may be some DCVs and recreational vessels that are required to hold wreck insurance in coastal waters under State law, but not have insurance in the territorial sea and EEZ under the Nairobi Convention and Commonwealth law, which only applies to RAVs and foreign vessels. There may also be vessels that although are under Nairobi’s 300GT threshold must hold insurance in State coastal waters as the State applies a different threshold, such as QLD’s 15m threshold. The Department recognises this is less than ideal but understands the Commonwealth and state/territory legislation can coexist.

The Department will continue to consult with stakeholders when it enters the change and implementation phases to determine if these issues can be mitigated further.

Compulsory insurance provisions

In response to the draft RIS, stakeholders raised a concern regarding the compulsory insurance regime, its application on RAVs and the implications for fixed premium insurance providers. The specific concerns were:

* the ability to recover wreck related costs directly from an insurer under the Nairobi Convention should be subject to terms, limitations and exclusions of the insurance policy (e.g. acts of wilful misconduct performed by the registered owner). These conditions of insurance are necessary for fixed premium providers to manage their risk given they do not have the same access to capital as the P&I Clubs who can better spread the risk.
* Article 12(10) of the Nairobi Convention states that insurers may require the registered owner to be joined in court proceedings. Stakeholders believed this requirement would need further clarification in the enabling legislation to ensure the exclusions in fixed premium insurance policies could be activated

The Department recognised the issues raised by the insurance provider, however, considers Option 3 (accession to the Nairobi Convention, applying it in the EEZ) remains as the best option. The Department will continue to consult with stakeholders when it enters the change and implementation phases to determine if these issues can be mitigated further.

1. Cost benefit analysis

The full *Indicative Cost Benefit Analysis on Australia’s possible accession to the Nairobi Convention*, including assumptions and explanations of underlining data is at **Appendix C**. Some of the key findings of the cost benefit analysis are summarised below.

It is difficult to undertake a typical cost benefit analysis of accession of the Nairobi Convention. This is primarily because the infrequent occurrence of incidents makes it difficult to quantify many of the key benefits – most of which are only brought to light when a wreck occurs and are specific to that circumstance.

Figure 4 summarises the key impacts of accession, with the elements split between those that are associated with ongoing expenses and those related to when a wreck incident occurs. The key economic benefits of accession arise when an incident occurs. Many other cost impacts are associated with movements of costs between parties (that is, distributional effects) rather than providing net economic benefits.

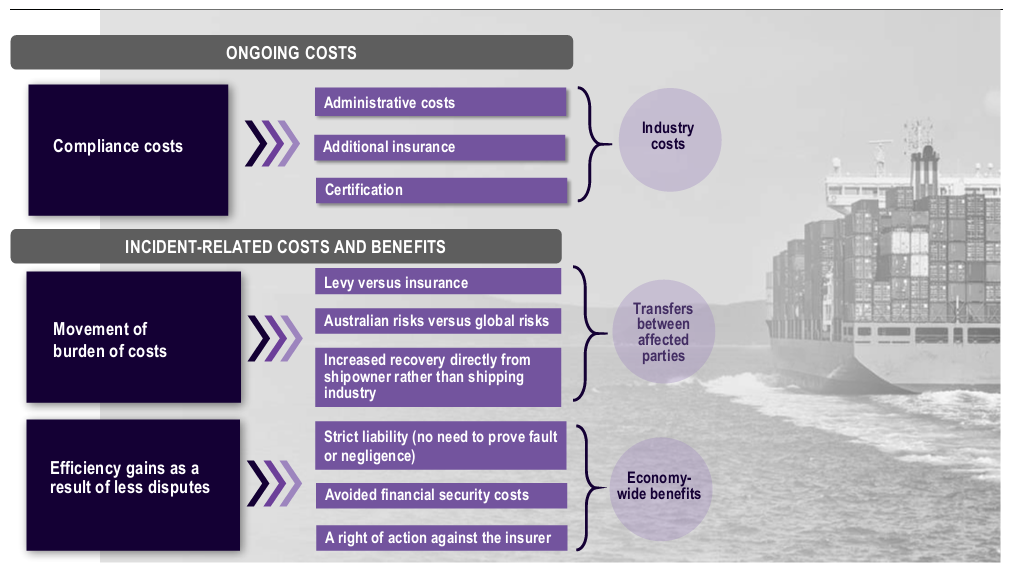


Figure 4: Analytical framework[[64]](#footnote-64)

There are a range of ongoing expenses associated with accession that can be estimated with a medium to high level of certainty. These expenses differ based on the specific option but involve the number of ships that will need to purchase compulsory insurance, maintain the annual certificate of insurance from a State Party, and incur additional administrative costs associated with demonstrating compliance. These costs will fall primarily on the shipping industry.

The uncertain costs relate to those that would be incurred in wreck removal operations in the future. These expenses are highly uncertain due to the variation in number, type, scale and location of wrecks each year in the territorial sea and EEZ. The impact of accession to the Nairobi Convention on these costs, however, is primarily related to transfers between the Australian Government, insurers, ship owners, and the general shipping industry with the risk creator (ship owner or insurer) becoming the ultimate holder of any costs. That is, it is highly likely that the total cost of wreck removal operations will be unchanged under all options. Who would incur those costs, however, would change as result of the accession to the Nairobi Convention.

The cost neutrality assumption of accession to the Nairobi Convention compared to the existing framework could be impacted:

* positively by the increased involvement of insurers in salvage operations – the compulsory insurance requirement may facilitate additional transfer of knowledge and technology related to how to undertake cost-effective clean-up operations for these events.
* negatively if the time limits on cost recovery actions under the Nairobi Convention (compared to no time limits currently under the Navigation Act), resulted in AMSA being extra cautious in determining that a wreck is a hazard, thereby ordering more removals than would otherwise occur.

Unlike the cost side, quantitative estimates of the benefits (either by specific parties or in total) are all highly uncertain and are linked to wreck incidents that result in a legal dispute under the current regulatory regime. For example, a key benefit of accession to the Nairobi Convention is related to an expected reduction in legal costs because of strict liability rules, compulsory insurance, and a broader definition of what constitutes a ‘wreck’. In particular, the extra clarity around what powers the Australian Government has and who is liable in the event of a wreck in the EEZ will reduce the number of disputes, which, in turn, should reduce the cost of dealing with future wrecks by reducing the amount of legal costs associated with disputes.

Another key benefit of the reduction in the number of disputes associated with accession to the Nairobi Convention is that the Australian Government should be less likely to need to use its powers to seize and hold assets of the ship owner as collateral until the dispute is resolved. In the case of a sister ship being seized as collateral, for example, this can result in significant costs for the ship owner due to the inability to transport cargos for a potentially significant amount of time and may have a disruptive effect on Australian imports/exports. Similar to the expected reduction in legal costs, estimating such costs is very difficult as it will only occur in particular circumstances, and the nature of the assets detained and held can vary substantially.

For the purposes of the economic analysis, the ongoing costs associated with accession to the Nairobi Convention have been calculated over a 10-year time frame. These have been compared to the potential benefits over the same timeframe that could arise in the event of a single incident (in the first year) involving different vessel types based on the assumptions reported in **Appendix 3.**

Following the Office of Best Practice Regulation guidelines, the costs and benefits are calculated using a central discount rate of 7 per cent real. Further, to assess the sensitivity of the results to the discount rate, this study also conducts a sensitivity analysis of the results using a lower bound discount rate of 3 per cent and an upper bound discount rate of 10 per cent.

* 1. Who is impacted and what is the impact

An incidence of costs and benefits of accession to the Nairobi Convention is summarised in Table 1. Not all the costs and benefits are quantified in this study due to the lack of data and empirical evidence of the impacts. While not quantified, they are briefly discussed.

Table 1: Incidence of costs and benefits[[65]](#footnote-65)

|  |  |  |  |
| --- | --- | --- | --- |
| Costs | Who will be affected | Benefits | Who will benefit |
| Change in regulations | Australian, state and territorial governments  Ship owners  Ship insurers | Expanded definition and broader scope | AMSA  Shipping industry  Fishing industry  Community and environment |
| Cost recovery | Australian, state and territorial governments | Improved cost recovery | Australian, state and territorial governments |
| Compliance costs   * administrative costs * financial costs * delay costs | Ship owners  Ship insurers  AMSA | Administrative efficiencies | AMSA  Ship owners |
| Judicial costs | Australian, state and territorial governments  Ship owners | Improved environment | Community and environment |
| Financial security costs | Ship owners | Cost is transferred to the risk creator | Shipping industry |

The Nairobi Convention requires ship owners to maintain insurance through a single simple certification process leading to certainty for governments and businesses alike. Administrative costs are costs incurred by vessel owners primarily to demonstrate compliance with the regulation. Administrative costs include the time taken to demonstrate compliance with the regulation. Some examples include:

* costs of making, keeping and providing records, particularly carrying a certificate of insurance.
* costs of notifying the government of a wreck.
* compliance costs associated with financial costs, including the insurance costs incurred in complying with the Nairobi Convention.

There would be administrative efficiencies also from more international jurisdictions having the same regulations in place for wreck removal. Applying the Nairobi Convention to the territorial sea would slightly increase this efficiency gain.

The Nairobi Convention provides a cleaner, simpler and more certain approach to recovering costs for the Australian Government. For example, a UK study reported that, cost recovery improved from around 70 per cent to around 90 per cent, however, the exact parallels in the Australian regulatory application is uncertain.[[66]](#footnote-66)

* 1. Expected ongoing compliance costs under Options 3 and 4

Introducing any new regulation typically incurs costs to both government and industry. Consultation with AMSA indicates that the additional costs to the Australian Government for issue of certification to Australian vessels and checking foreign vessel certification would be negligible and these costs could be absorbed within AMSA. However, ship owners would incur some compliance costs on an ongoing basis. They include:

* administrative costs – costs of marking, showing and keeping various records.
* maintaining annual certificate of insurance from a State Party and its fee.
* compulsory insurance and additional annual premiums.

##### RAVs and foreign vessels

Based on data from the Protection of the Sea Levy database, over the past 2 years, 89.9 per cent of all ships that paid the levy were flagged in countries who are State Parties to the Nairobi Convention. Of the remaining 10.1 per cent (equal to 590 ships), 125 ships (and 2 percent of the overall ships that paid the levy) were flagged in Australia.[[67]](#footnote-67)

Given the large proportion of international shipping industry that already maintain relevant wreck removal insurance and that the marginal cost impacts on those ships that visit Australia it is expected the above costs would only accrue to the ships not already covered. Further, the foreign ownership of the vast majority of the ships that visit Australia means that any cost impacts will accrue to overseas companies with a secondary impact on the Australian economy of the potential of increased owner cost recovery through freight charges.

Table 2 presents the anticipated compliance costs for RAVs and foreign vessels under Options 3 and 4, with details regarding the calculations provided in the following chapters. In total, over the first 10 years, compliance costs under Option 3 and 4, relative to Option 1, are estimated to be $2.6 million and $3 million, respectively (or $1.8 million and $2.1 million in net present value terms using a 7 per cent discount rate).

Table 2: Compliance costs for RAVs and foreign vessels under Options 3 and 4, relative to Option 1 over a 10-year period[[68]](#footnote-68)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Costs | Option 3 |  | Option 4 |  |
|  | Undiscounted | NPV (7% discount) | Undiscounted | NPV (7% discount) |
|  | 2020 real $m | 2020 real $m | 2020 real $m | 2020 real $m |
| Administration costs | 2.3 | 1.6 | 2.3 | 1.6 |
| Certificate costs | 0.3 | 0.2 | 0.3 | 0.2 |
| Mandatory insurance costs | 0 | 0 | 0.4 | 0.3 |
| Total compliance costs | 2.6 | 1.8 | 3.0 | 2.1 |

##### DCVs and recreational vessels

There are around 31,000 DCVs currently in Australian waters. Only a portion of these – 251 DCVs – are estimated by AMSA to be over 300 GT and so would require compulsory insurance.

There are estimated to be 866,808 recreational vessels in Australia based on the various public data sources available for each state and territory – minus the ACT, which does not register vessels. It is difficult to ascertain the exact number of recreational vessels in Australia as not every jurisdiction publishes registration data. Table 3 outlines the registration data available in each jurisdiction.

Only recreational vessels 300 GT and over would require compulsory insurance and incur compliance costs related to the Nairobi Convention. Again, it is difficult to ascertain an exact number of recreational vessels over 300 GT as:

* only 2 states report on registered recreational vessel length (as reflected in Table 3)
* the data is based on the length of the vessel not the GT
* the largest cohort reported is 25 meters and over – ships over 35 meters in length are generally considered to weigh 300 GT.

It is understood 130 recreational vessels may be impacted by Australia’s accession to the Nairobi Convention. This is based on conservative assumptions that all recreational vessels over 25 meters weigh 300 GT and over and that 0.015 per cent of the 866,808 vessels will be 25 meters in length - the average percentage of registered recreational vessels 25 m in length as outlined in Table 3.

Table 3: Overview of recreational vessel numbers

|  |  |  |  |
| --- | --- | --- | --- |
| Jurisdiction | Number of Registered Recreational Vessels | Number of Registered Recreational Vessels over 25m | Percentage of Registered Recreational Vessels over 25m |
| New South Wales[[69]](#footnote-69) | 220,129 (2022) | N/A | N/A |
| Northern Territory | N/A | N/A | N/A |
| Queensland[[70]](#footnote-70) | 264,547 (2018) | 43 | 0.02% |
| South Australia[[71]](#footnote-71) | 54,225 (2021) | 3 | 0.01% |
| Tasmania[[72]](#footnote-72) | 30,907 (2020) | N/A | N/A |
| Victoria[[73]](#footnote-73) | 197,000 (2019) | N/A | N/A |
| Western Australia[[74]](#footnote-74) | 100,000 (2022) | N/A | N/A |
| TOTAL | **866,808** | **46** | **0.015% (average)** |

There is no way to distinguish between DCVs and recreational vessels that travel in the EEZ and territorial sea, or only the territorial sea. Therefore, all DCVs and recreational vessels 300 GT and over will be considered to be impacted by Australia’s accession to the Nairobi Convention for both Options 3 and 4.

Table 4 presents the anticipated compliance costs for DCVs and foreign vessels under Options 3 and 4, with details regarding the calculations provided in the following chapters. In total, compliance costs under Option 3 and 4, relative to Option 1, are estimated to be $2.07 million and $1.07 million per year, respectively.

Table 4: Estimated compliance costs annually for DCVs and recreational vessels under Options 3 and 4 over a 10-year period [[75]](#footnote-75)

|  |  |  |
| --- | --- | --- |
| Costs | DCVs | Recreational vessels |
|  | 2020 real $m | 2020 real $m |
| Administration costs | 1.0 | 0.5 |
| Certificate costs | 2.7 | 1.4 |
| Mandatory insurance costs | 1.7 | 0.88 |
| Total compliance costs | 5.4 | 2.78 |

Source: ACIL Allen estimates from various assumptions and DITRDC

Administrative Costs

Under the Nairobi Convention, all ship owners would be liable for costs associated with locating, marking and removing wrecks. However, the compulsory insurance provisions would apply only to ships of 300 GT and above. The owners of ships 300 GT and over are assumed to incur additional administrative expenses of 7 hours per year to understand and demonstrate compliance with the Nairobi Convention requirements, including sourcing appropriate wreck removal insurance. At the average wage rate assumed in Table 3.6 of **Appendix C**, this implies an additional administrative cost burden to ship owners of $396 per ship per year. This cost applies to both Option 3 and 4.

Conservatively using the levy data, this is considered a new cost to Australian ships and foreign vessels not flagged to a State Party of the Nairobi Convention. It is possible where those ships have voyaged to a Nairobi Convention State Party they will already have wreck-related insurance.

Certificate costs

The owners of ships of 300 GT and above must maintain insurance or other financial security to cover their liabilities in the event of wreck and obtain a certificate from a State Party attesting to the effectiveness of the insurance or financial security.

For Australian ships and foreign vessels not flagged in counties who are a State Party to the Nairobi Convention, they will need to obtain a certificate of insurance from a State Party.

As noted in assumptions Table 3.6 in **Appendix C**, it is likely they would be between $40 for renewing and $70 for a new card similar to the certificates issued by AMSA to show compliance with the insurance requirements in the Bunker Convention*.* For calculation purposes, a new certificate of insurance is assumed to be issued to all ships 300 GT and over for $70 in the first year, with all of these ships paying a renewal fee of $40 (in real terms) in following years. This cost applies to both Option 3 and 4.

Compulsory insurance costs

Under Option 3, all ships over 300 GT and that operate in the EEZ would require wreck-related insurance if intending to visit an Australian port or offshore facility in the territorial sea.

Stakeholder discussions and a review of literature on similar international conventions, such as the Bunker Convention, suggest that all ships over 1,000 GT entering or leaving Australian ports already have coverage for wreck removal in their insurance. Therefore, the only ships likely to not already hold wreck-related insurance would be ships between 300 GT and 1,000 GT. Consequently, most of the foreign vessels that called at Australian ports would already have the required insurance since they are more than 1,000 GT and most of them are State Parties under the Nairobi Convention. Therefore, it is considered that the number of ships which will require additional insurance would be negligible under Option 3. There are currently around 31 Australian owned general cargo ships which are not currently subject to compulsory insurance requirements. Whether these ships currently have maritime liability insurance that includes wreck removal is unknown.

All DCVs and recreational vessels 300 GT and over are presumed to require wreck removal insurance, even though it is possible some ship owners already have this insurance as they have undertaken overseas voyages.

For the purposes of these calculations, it has been conservatively assumed that, under Option 4, all of these ships will have to acquire additional insurance at a real cost of $2.3/GT (see **Appendix C**). This implies a total cost to RAV and foreign vessel ship owners under Option 4 of $0.4 million, undiscounted, over the first 10 years.

* 1. Costs and benefits in the event of an incident
     1. Option 1 (counterfactual) costs

If an incident happens under the current regulatory regime that results in a legal dispute, a number of hidden costs will be incurred both by the Australian Government and the vessel and legal owners.

Foreign vessel owners may have to provide a financial security of some sort while the legal dispute is being resolved, which would incur costs over and above those related to the wreck removal. In some incidents, the government may not be able to find an appropriate financial security in Australia’s legal jurisdiction. This occurred in the *MV Tycoon* incident at Christmas Island in 2012.

In these circumstances the government would still remove the wreck with costs being paid by consolidated revenue or through the Protection of the Sea Levy if the incident created marine pollution. Further information on the Protection of the Sea Levy is in **Appendix C**.

Retaining the existing framework would continually incur the following costs:

* judicial, legal and court related costs to both the Australian, state or territory government and the ship owners, can extend more than 6 years (ongoing costs).
* financial security costs to foreign vessel owners involved in disputes.
* wreck removal costs not recovered from ship owners and potentially borne by the shipping industry.
  + 1. Option 3 relative to Option 1

Accession to the Nairobi Convention would reduce or eliminate the costs reported in **Appendix C**. These avoided costs would be benefits of accession to the Nairobi Convention.

##### Avoided legal costs

Both the Australian, state or territory governments and the ship owner incur legal costs if a dispute arises under current regulatory arrangements. These costs have been assumed to be proportional to the value of the wreck removal costs which differ based on vessel type, location and scale of the incident.

As per assumptions in Table 3.6 in **Appendix C**, the estimated legal costs under Option 3 are calculated as 2.5 per cent of the wreck removal costs each year for 6 years after the incident. It is assumed that the legal costs are equally borne by government and the ship owner. For example, wreck removal costs of a container vessel in the EEZ are assumed to average around $24 million. Total avoided legal costs under Option 3 are therefore $0.60 million per year – of which $0.3 million per year is avoided legal cost by the Australian Government and $0.3 million per year is avoided legal costs by the ship owner. Over the assessment period for this study, this gives total avoided legal costs of $3.6 million (undiscounted), split equally between the Australian, state or territory governments and the ship owner.

##### Financial security benefits

Based on the Australian Government’s use of detention powers in connection to previous wreck incidents, it is assumed for the cost benefit analysis that 1 in 2 wreck incidents will result in the seeking of financial security from a ship owner, which would incur an opportunity cost for that ship owner of 10 per cent per year. It is assumed that the financial security is held by the Australian Government for 3 years. Further information on financial security costs are in **Appendix C**.

These costs would be avoided under accession to the Nairobi Convention under Option 3. For example, wreck removal costs of a container vessel in the EEZ are assumed to be $24 million as reported in Table 3.6 in **Appendix C**. Total avoided financial security costs are therefore $1.2 million per year (50 per cent x 10 per cent x $24 million). Over the assessment period, this gives a total avoided financial security cost of $3.6 million (undiscounted), which accrues directly to the ship owner.

##### Cost recovery transfers

Consistent with stakeholder consultations, it is conservatively assumed that the Australian, state and territory governments will improve their ability to cost recover directly from the ship owner involved in the incident from 70 per cent under current regulatory arrangements to 80 per cent under Option 3. This cost recovery is largely a reduction in the amount of transfers from the general shipping industry rather than a financial benefit to government or the Australian taxpayer.

Based on the assumed cost recovery rates, for a wreck incident involving a container vessel, the responsible ship owner will pay an additional $2.4 million with the general shipping industry receiving a benefit of $2.4 million as a result of accession to the Nairobi Convention under Option 3. That is, in net terms, there is no economic benefit. Rather there is a distributional effect.

An estimated net benefit of Option 3 relative to Option 1 is summarised in Figure 5. This indicates if a wreck incident happens to a vessel in Year 1 in the EEZ, the estimated net benefits of accession to the Nairobi Convention under Option 3 relative to Option 1 for Bulk carriers would be around $33.4 million ($27.3 million at 7 per cent discount rate) and for container carriers would be around $4.6 million ($4 million at 7 per cent discount rate). As can be seen, a disputed incident involving all vessel types are expected to result in a net benefit to the economy.

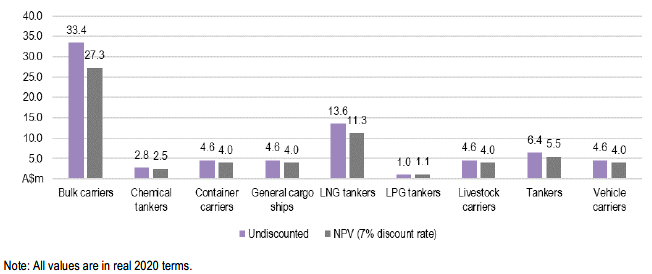


Figure 5: Net benefits of Option 3 relative to Option 1 over a 10-year period[[76]](#footnote-76)

The estimated incidence of costs and benefits of Option 3 relative to Option 1 are summarised in **Appendix 3**. A key distributional benefit is that the direct ship owners (or their insurers) involved in the incident are expected to directly bear the cost of clean-up operations rather than these costs being borne by the shipping industry more generally.

Due to the avoided legal costs, the Australian Government is expected to be a net beneficiary of accession to the Nairobi Convention under Option 3, relative to Option 1. Similarly, due to the avoided legal costs and the financial security benefits, the shipping industry is expected to be a net beneficiary of accession to the Nairobi Convention under Option 3, relative to Option 1. However, there will be some transfers from specific shipping owners involved in incidents to the shipping industry in general.

The estimated quantifiable Benefit Cost Ratio (BCR) varies between 1.4 and 13.9 (undiscounted), depending on the nature of the vessel involved in the disputed incident.

##### Sensitivity analysis

As discussed earlier, the compliance costs associated with Option 3 have been estimated with medium to high certainty, and these will happen on a recurring basis. There is, however, high uncertainty around the key sources of economic benefit (namely the financial security benefits and the avoided legal costs), particularly because these are linked to specific circumstances of a wreck incident, which result in a ship owner disputing the government’s right to force payment for wreck-related costs.

Based on a single incident occurring, the above analysis calculates that accession to the Nairobi Convention is broadly economically beneficial. Separate to whether there is a net economic benefit, the distributional analysis of accession, is showing that there will be a beneficial social impact in terms of holding polluters financially responsible when their actions threaten navigational safety, Australia’s unique marine environment or maritime industries.

If there are multiple disputed incidents or an incident with a high cost, the estimated benefits would be much larger without a concomitant change in the compliance costs. Similarly, if the assumed cost recovery increases above 80 per cent, the estimated benefits will be much larger than the estimated compliance costs. This implies the finding that Option 3 will result in a net economic and social benefit should be reasonably robust. A full sensitivity analysis is in **Appendix 3**.

##### DCVs and recreational vessels

There is no information available regarding the current extent of legal disputes relating to wreck-related costs or the potential reduction in legal disputes that may occur with moving to a Nairobi Convention wreck removal framework. Similarly, it is uncertain whether there will be any additional cost recovery benefits associated with this Option compared to the current regulatory regimes. It is assumed the benefits will be of a proportion to RAVs and foreign vessels.

* + 1. Option 4 relative to Option1

An estimated net benefit of Option 4 relative to the Option 1 is summarised in Figure 6. The net benefits are broadly similar to Option 3.

This indicates if a wreck incident happens to a vessel in Year 1 in either territorial sea or EEZ which results in a dispute, the estimated net benefits of accession to the Nairobi Convention under the Option 4 relative to the Option 1 for bulk carriers would be around $48 million ($38.2 million at 7 per cent discount rate) and container carriers would be around $7.2 million ($6 million at 7 per cent discount rate. As can be seen, on an undiscounted basis, a disputed incident involving any vessel types are expected to result in a net benefit to the economy.

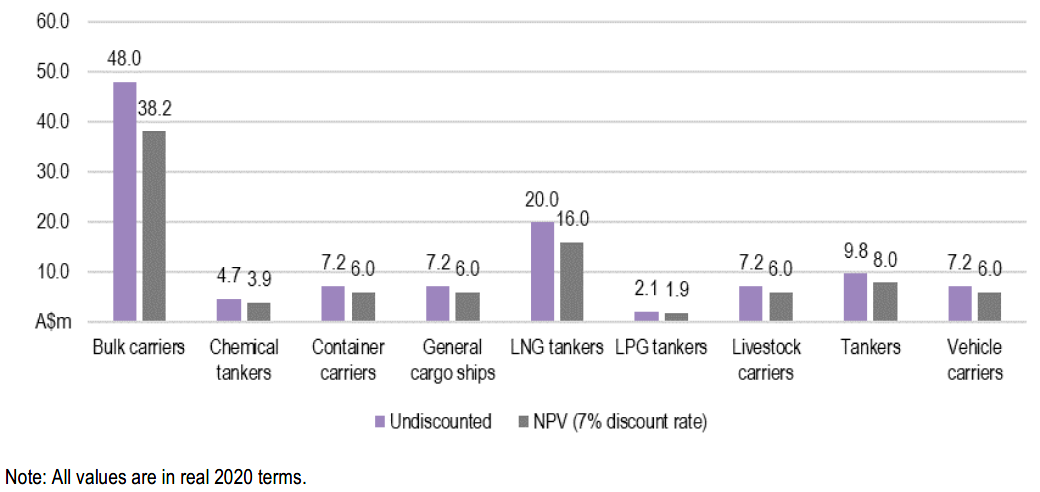


Figure 6: Net benefits of Option 4 relative to Option 1 over a 10-year period[[77]](#footnote-77)

The estimated incidence of costs and benefits of Option 4 relative to Option 1 are summarised in Table 5. The allocation of benefits between the Australian Government, ship owners and the general shipping industry are unchanged relative to Option 3. It is conservatively assumed the government’s ability to cost recover would slightly increase to 85 per cent, up from 80 percent under Option 3. A relatively higher economy-wide benefit occurs under this scenario due to the consistency and uniformity laws for the territorial sea and EEZ. The estimated quantifiable BCR varies between 1.7 and 17.2 (undiscounted), depending on the nature of the vessel involved in the disputed incident.

The estimated incidence of costs and benefits of Option 4 relative to Option 1 are summarised in **Appendix 3**.

##### Sensitivity analysis

As per the sensitivity analysis for Option 3, the compliance costs associated with Option 4 have been estimated with medium to high certainty, and these will happen on a recurring basis. There is, however, high uncertainty around the key sources of economic benefit, namely the financial security benefits and the avoided legal costs, because these are linked to specific circumstances of a wreck incident which result in a ship owner disputing the Australian Government’s right to force payment for clean-up.

As per the Option 3 findings, based on a single incident occurring, the above analysis calculates that accession to the Nairobi Convention under Option 4 is broadly economically beneficial, with the distributional analysis showing that there will be a beneficial social impact in terms of holding polluters financially responsible for the incidents they cause.

This implies the finding of Option 4 resulting in a net economic and social benefit should be reasonably robust.

A full sensitivity analysis is in **Appendix 3**.

##### DCVs and recreational vessels

As with Option 3, there is no information available regarding the current extent of legal disputes relating to wreck-related costs or the potential reduction in legal disputes that may occur with moving to a Nairobi Convention wreck removal framework. Similarly, it is uncertain whether there will be any additional cost recovery benefits associated with this Option compared to the current regulatory regimes. It is assumed the benefits will be of a proportion to RAVs and foreign vessels.

* 1. Environmental and social impacts

Wrecks can cause massive environmental damage by contaminating water with polluting substances and physical waste, impacting marine environments. Wrecks may also burden communities by closing beaches, creating unpleasant sights and smells, and impact recreational and commercial fishing. These costs and avoided benefits are difficult to quantity and they depend on the number and severity of factors. AMSA is the Australian Government agency responsible for minimising any such marine costs and this responsibility will not change as a result of accession to the Nairobi Convention.

Under the Nairobi Convention, a ship owner must remove the wreck and AMSA may act when a wreck constitutes a hazard, which may reasonably be expected to result in major harmful consequences to the marine environment damage to coastal areas, port activities, fisheries, tourist activities and impact other areas of economic and biological interest. This wider definition under the Nairobi Convention would allow the Australian Government to have clear powers to act upon any threat to the environment, where the Nairobi Convention thresholds were met. It would also allow the Australian Government to respond quickly to lessen the impacts.

Stakeholders collectively expressed their disbelief that accession to the Nairobi Convention would lead to significant change in shipping behaviour or reduce the incidence and frequency of wreck events.

Environmental and social impacts are assumed to be the same between all Options involving change and so have not been quantified in this study.

* 1. Caveats of analysis

A key purpose of this RIS is to quantify potential impacts of Australia’s accession to Nairobi Convention under different options. Based on the available data and assumptions, this study finds that there would be net benefits of Australia’s accession to the Nairobi Convention. Option 4 is acceding to the Nairobi Convention and applying it to the EEZ and territorial Sea, replacing the current regulatory framework and providing relatively more net benefits compared with Option 1 where the existing framework remains and Option 3 where the existing framework remains in the territorial Sea.

The costs incurred in wreck removal operations in the future are very uncertain due to the high variation in the number and circumstances of wrecks in each year. To provide an indicative illustrative analysis, this study employed ‘what if’ analysis. This ‘what if’ analysis is based on the assumption that if a wreck related to a particular type of vessel happens in either the territorial Sea or EEZ what would be the costs and benefits over a 10-year period. The estimates of the monetised costs and benefits are very sensitive to the assumptions and should therefore be treated as illustrative orders of magnitude.

A range of caveats and assumptions were applied to the estimates and used in the analysis, including the following:

* The true powers of the Australian Government, and hence the cost of disputes, can change radically based on a court precedent. Such a precedent could either reduce or increase powers under the existing regulatory regime compared to the Nairobi Convention.
  + Impact: Uncertain but is likely to reduce the number and costs of legal disputes under Option 1, but with uncertainty around whether direct ship owners will be more or less liable for particular wreck incidents.
* This RIS does not incorporate the Protection of the Sea Levy dynamics in the above economic analysis. The introduction of strict liability, clearer and wider definitions of wrecks and mandatory insurance may reduce the need to recover expenses related to particular incidents through the levy. It is possible over time this could result in the total cost of the levy falling.
  + Impact: Neutral or increased benefits approximately equal to the value of any decrease in the Protection of the Sea Levy.
* Movement of liability to include more parties could result in a lower cost of salvage through additional productivity benefits. These are not included in the analysis due to the uncertainties associated with these cost savings.
  + Impact: Neutral or increased benefits associated with a reduction in the cost of clean-ups.
* The shipping insurance arrangement under the Nairobi Convention will be linked to global incidents rather than Australian incidents. Costs therefore could either rise or fall depending on international wreck events.
  + Impact: Uncertain impacts on the relative cost of insurance.
* Due to the significant uncertainty, no account has been taken of possible future increases in safety or technology that could decrease the number of wrecks going forward. The analysis is based on what if an incident happens based on the indicative costs for illustrative purposes. Offsetting this effect, however, is the fact that the analysis does not include any quantification of the likely increase in the number of ship movements, increasing the future number of wreck incidents with disputed cost recovery from the ship owner.
  + Impact: Uncertain – Reduced benefits due to reduced number of wreck incidents in the future due to greater safety offset by increased number of ship movements increasing the future number of wrecks.
* No account was made of the potential impact of time limits on cost recovery actions under the Nairobi Convention (compared to no time limits currently under the Navigation Act). In terms of economic impacts, this may result in AMSA being extra cautious and determining that a wreck, which is not immediately a hazard, is a hazard in case the time window for providing directions closes.
  + Impact: Uncertain, but potentially increased costs due to more wreck removals being ordered to be cleaned-up than would otherwise occur.
* The additional cost recovery from ship owners under Options 3 and 4, were conservatively assumed to be 80 per cent and 85 per cent, respectively. The clearer definitions and strict liability provisions under the Nairobi Convention could be expected to increase cost recovery.
  + Impact: Increased social benefits due to increased payments for wreck recovery operations by the ship owner directly involved in an incident.
* The analysis that has been undertaken has focused on costs and benefits to the shipping industry (and direct ship owners). In practice, the majority of the shipping industry is owned and/or operated by foreign residents. The guidance by the Office of Best Practice Regulation is, as far as practical, to count the costs and benefits to all people residing in Australia, rather than measuring international impacts. Data limitations have precluded such analysis. However, as the shipping industry is providing services to Australian residents, changes in the costs and benefits to international providers are likely to be reflected in the future cost of their services and products to Australians.

1. Recommended option

The recommended option is Option 3 – Australia acceding to the Nairobi Convention and applying it to all ships in the EEZ. Australia will also look to mirror the requirements of the Nairobi Convention in the territorial sea for foreign vessels and RAVs through Commonwealth legislation but without accession. After Option 3 has been implemented, Australia can revisit if there is an additional need or desire to expand accession into the territorial sea so as to capture DCVs and recreational vessels.

**Option 3 has high net benefits**

Option 3 provides a high benefit, including broad economic benefits in all circumstances as it avoids disputes over responsibility for wreck incidents and so lowers legal and financial security-related costs. Even the cost-benefit ratios calculated that are at the lower end of the range show there is sufficient benefit to justify action to ratify the Nairobi Convention. There are continuing uncertainties surrounding the economic benefits of Option 3 as they depend on the circumstances of the individual wreck incident.

Option 3 does result in a transfer of wreck‑related costs from the Australian Government to ship owners (the risk creators) but this is not expected to disrupt maritime trade or act as a barrier to new entrants because:

* Australia will be adopting a widely accepted international standard, which many ship owners already comply with. According to the Protection of the Sea Levy data, an estimated 89 per cent of ships visiting Australia already comply with the Nairobi Convention.
* compliance-related costs (e.g. insurance premiums) may be passed on by commercial ship owners to freight forwarders, the charterers or ship operators, or the ship owner can seek reimbursement of any wreck‑related costs from the party operating the ship through their contractual arrangements.

Option 4 does offer slightly higher benefits, however, Option 3 is considered the better option because:

* RAVs and foreign vessels will be subject to consistent wreck removal regulations wherever they are located in Australian waters through accession to the Nairobi Convention combined with changes to the Navigation Act.
* DCVs and recreational vessels will remain largely regulated by state and territory governments unless in the EEZ where ship owners will be responsible for wrecks and need insurance for vessels 300GT and over. While this is a new regulatory burden for these stakeholders it is a small cost that is commensurate to the risk they pose given their increased ability to create a hazardous wreck given their size. It is also possible these ships will be travelling international and so already hold wreck removal insurance given the large percentage of States who are a party to the Nairobi Convention.
* while the accession and application of the Nairobi Convention in the territorial sea would create a single, consistent wreck removal framework for industry, it would create overlapping legislative frameworks making implementation complex and resulting in a significant impact on regulators.

Option 4 results in a regulatory overlap between Commonwealth and state/territory law in coastal waters that would require complex and lengthy negotiations to resolve before implementation of the Nairobi Convention could commence. It creates the situation where the Australian Government would need to override state and territory law, or implement a scheme similar to the National Law that would implement a consistent DCV and recreational vessel wreck removal framework in the states and territories. It also creates the scenario where the responsibilities for ocean wrecks would transfer from state and territories to AMSA, causing wide spread administrative and practical disruptions to all of Australia’s maritime safety organisations. AMSA would need resources to respond to the significant increase in ensuring compliance with insurance requirements and managing wrecks, while state and territories would still need to maintain some capacity to respond to abandoned ships that did not meet the definition of a ‘wreck’ and wrecks in inland waters. Existing cost efficiencies for states and territories would be lost with this shrinking of responsibilities.

**Option 3 enhances the ability for the Australian Government to remove wrecks and recover costs**

As shown in Table 6, Option 3 offers the Australian Government a good opportunity to recover unpaid wreck-related costs in more circumstances, limiting the need to use the Protection of the Sea regulatory framework depending on the circumstances. It also minimises the impact on existing state and territory wreck removal frameworks and the potential for clashes between those frameworks and the Commonwealth legislation.

Table 6: Ability for the Australian Government to recover costs associated with wrecks[[78]](#footnote-78)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Where the incident occurs | Nature of the wreck | Type of the ship | Option 1 | Option 3 | Option 4 |
| Territorial sea (as defined by the Nairobi Convention) | Ship | RAV  DCV & recreational vessel  Foreign | ✓  State & territory legislation (if applicable)  ✓ | ✓  State & territory legislation (if applicable)  ✓ | ✓  ✓  ✓\* |
|  | Object overboard | RAV  DCV & recreational vessel  Foreign | ?#  State & territory legislation (if applicable)  ?# | ✓  State & territory legislation (if applicable)  ✓ | ✓  ✓  ✓\* |
| EEZ | Ship | RAV  DCV & recreational vessel  Foreign | ✓  🗴  ?# | ✓  ✓  ✓\* | ✓  ✓  ✓\* |
|  | Object overboard | RAV,  DCV & recreational vessel  Foreign | ?#  🗴  ?# | ✓  ✓  ✓\* | ✓  ✓  ✓\* |

# Cost recovery may be possible under the Protection of the Sea regulatory framework depending on the circumstances of the wreck and if it has created marine pollution.

\* The Nairobi Convention requirements will also apply to foreign vessels transiting through Australian waters, aside from the requirement to hold insurance for ships 300 GT and over.

In addition, the new framework will:

* provide the Australian Government with expanded criteria against which to determine a wreck has created a ‘hazard’ and to require removal at the ship owner’s cost, including economic, environmental and health impacts.
* broaden the types of actions for which the Australian Government may seek wreck‑related costs from the ship owner to include any form of prevention, mitigation or elimination of the hazard created by the wreck.
* capture DCV and recreational vessel wrecks in the EEZ that would otherwise have fallen through a legislative gap.

These benefits outweigh the constraints the Nairobi Convention imposes on when and how wreck recovery operations occur in Australia, which include but are not limited to:

* cost recovery powers are only activated when a maritime casualty has caused a wreck, which has then created a hazard. These preconditions are unlikely to prevent cost recovery in the vast majority of incidents as ‘maritime casualty’ is broadly defined to include an incident of navigation, normal weather events but also occurrences on board or external to the ship.
* time limits will be imposed, requiring cost recovery actions to be commenced within 3 years of a wreck being determined to pose a hazard, and 6 years from the date of the maritime casualty. The Navigation Act as currently drafted does create the ability for the Australian Government to impose time limits on commencing cost recovery actions in regulations though none have been set.
* wreck removal activities must be proportional to the hazard, which is a vague standard and may lead to disputes between a ship owner and the Australian Government.
* limitations on the ability to influence salvage operations. Where the ship owner has contracted the salvor, the Australian Government would only be able to impose conditions on the wreck removal process to the extent necessary for safety and the protection of the marine environment. This would still allow the Australian Government to impose specific environmental conditions in sensitive areas, such as the Great Barrier Reef.

**Option 3 will simplify cost recovery**

Option 3 will also make the recovery of wreck‑related costs from ship owners simpler and more time-effective. Ship owners will be held strictly liable for the costs associated with wrecks they own. Making a single, clearly identifiable party liable for all wreck-related costs will make claims more straightforward and easier to resolve.

Ship owners will also be required to hold wreck-related insurance policies for ships 300 GT and above. The Australian Government can then engage directly with the insurer to recover monies up to the relevant LLMC limit. This increases the likelihood of assets being available to the Australian Government, as there are a number of practical difficulties when trying to recover costs when there are no assets in Australia. Where there is a dispute, the Australian Government may still need to undertake court action against the insurer to access the funds and may still not be able to recover all wreck-related costs if the total exceeds the insurance policy unless the ship owner has onshore assets.

**Australia will adopt international best practice while retaining autonomy in the territorial sea**

Australia’s accession to the Nairobi Convention in the EEZ will result in the adoption of an internationally consistent regulatory framework for the removal of wrecks. With 79.5 per cent of the global commercial shipping tonnage flagged to a State Party of the Nairobi Convention, this will simplify the operations of shipping companies and provide the industry with legal certainty and consistency. This may in turn boost economic activity by encouraging investment and reducing administrative costs.

Australia can then make its own decisions as to how to apply the principles of the Nairobi Convention within the territorial sea, including which ships may be covered. This continues to allow existing State and Territory regimes and the potential impact on near coastal operating vessels to be considered.

There are drawbacks:

* the Nairobi Convention has limited application for foreign vessels transiting through the EEZ. The Australian Government would not be able to require these ship owners to hold wreck-related insurance but they would remain liable for the wrecks they create.
* Australia will still need to have a system to respond to wrecks from foreign vessels flagged to countries that are not State Parties when they create a wreck in the EEZ.

**Option 3 benefits future industries**

Offshore wind farms are growing in popularity as corporations and States transition to a carbon neutral position. Option 3 will assist the Australian Government in managing the burgeoning offshore renewable energy production industry (including offshore wind turbines), holding them accountable for any wrecks they own.

Stakeholder feedback

As mentioned above, stakeholder consultation in response to the 2020 Discussion paper and the draft RIS resulted in overall support of Australia acceding to the Nairobi Convention and applying it in the EEZ and territorial sea.

The key reasons for supporting Option 3 were:

* a simplified cost recovery mechanism for the Australian Government following wreck incidents, including objects falling overboard in the territorial sea and EEZ.
* enhanced ability for the Australian Government to remove wrecks and determine a wreck has created a hazard depending on its economic, environmental, or health impacts.
* the adoption of a widely used and internationally consistent standard.
* the avoidance of duplicative regulatory regimes.

1. Implementation and evaluation

Implementation

Accession to the Nairobi Convention will require the Australian Government to institute domestic legislation to meet the new obligations. Pending consultation with the Office of Parliamentary Counsel, the Department understands the simplest and clearest way to implement the obligations under the Nairobi Convention would be through new, dedicated legislation or amendments to the Navigation Act.

Guidance and information on the new regulations will be provided to industry through relevant industry representative groups and a direct mail out to Australian ship owners. The Department and AMSA will also release communications to the public to increase the awareness of the changes and counter the limited possibility of some disaffected stakeholders generating unfounded public opposition.

There are 2 primary risks to successful implementation of the obligations under the Nairobi Convention – the legislation does not pass Parliament and ship owners are not aware of the reform and so do not understand and comply with their new obligations.

The Department, in partnership with AMSA, will address these risks by:

* continuing to work with industry directly and through industry groups on the implementation of the Nairobi Convention and the nature of any transition provisions.
* working with the Minister’s office on the introduction of the any Bill to Parliament.
* creating a public communications strategy to highlight the new obligations and benefits as a party of the Nairobi Convention.
* clearly linking Australia’s accession to the Nairobi Convention as meeting Recommendation 17 of the Senate Standing Committee on Rural and Regional Affairs and Transport’s report on its inquiry into the policy, regulatory, taxation, administrative and funding priorities for Australian shipping.

Transitional arrangements

The Department expects there will be a 12-month transition period after the legislative amendments come into force, however, further consultation with industry and AMSA will be required before a timeframe is confirmed. The transition period will provide ship owners time to obtain appropriate wreck-related insurance before it becomes a requirement and before strict liability for wreck-related costs is imposed.

The amendments will not be retroactive and cost recovery actions related to wrecks currently underway will be finalised under the current legislation framework.

Evaluation

The purpose of the evaluation will be to assess the impact of the regulatory changes, whether the benefits have been realised, the impact on key stakeholders, and effectiveness of cost recovery actions. In addition, lessons learnt from other regulatory changes will be incorporated into the implementation and evaluation processes.

The legislative amendments can be evaluated against the following considerations:

* + the certificates of insurance issued by AMSA to understand how many and what type of industry participants were impacted by the new requirements.
  + wreck incidents in Australia to facilitate calculations of the impact of regulatory changes per event.
  + wreck removal cost recovery actions launched by AMSA, including the number of incidents where:
    - costs were recovered from insurers, and
    - costs exceeded the insured amount.
  + compliance breaches by vessels who do not hold wreck-related insurance once it is mandatory.
  + DCV and recreational vessel wrecks in the territorial sea (3nm to 12nm).
  + The length of time and cost to resolve each wreck-related cost recovery action.

Given the irregular nature of wreck incidents, the Department intends to conduct an evaluation of the legislative amendments enacting the Nairobi Convention in Australia 5 years after they have come fully into force. At this time the Department will also determine if there is appetite, now the changes have been implemented, to expand Australia’s accession to the Nairobi Convention into the territorial sea.

1. State Parties to the Nairobi Convention

|  |  |  |
| --- | --- | --- |
| Country | Party to the Nairobi Convention | Accession in the territorial sea |
| Albania | Yes | Yes |
| Antigua and Barbuda | Yes | Yes |
| Bahamas | Yes | Yes |
| Belarus | Yes |  |
| Belgium | Yes |  |
| Belize | Yes | Yes |
| Bulgaria | Yes | Yes |
| Canada | Yes | Yes |
| China | Yes |  |
| Comoros | Yes |  |
| Congo | Yes |  |
| Cook Islands | Yes |  |
| Croatia | Yes | Yes |
| Cyprus | Yes | Yes |
| Democratic People’s Republic of Korea | Yes |  |
| Denmark | Yes | Yes |
| Estonia | Yes |  |
| Finland | Yes | Yes |
| France | Yes | Yes |
| Gabon | Yes |  |
| Germany | Yes |  |
| Guinea-Bissau | Yes |  |
| Guyana | Yes |  |
| Honduras | Yes |  |
| India | Yes |  |
| Indonesia | Yes |  |
| Iran (Islamic Republic of) | Yes |  |
| Japan | Yes |  |
| Jordan | Yes |  |
| Kazakhstan | Yes | Yes |
| Kenya | Yes | Yes |
| Liberia | Yes | Yes |
| Luxembourg | Yes |  |
| Madagascar | Yes |  |
| Malaysia | Yes |  |
| Malta | Yes | Yes |
| Marshall Islands | Yes | Yes |
| Morocco | Yes |  |
| Nauru | Yes |  |
| Netherlands | Yes | Yes |
| Nigeria | Yes |  |
| Niue | Yes | Yes |
| Oman | Yes |  |
| Palau | Yes |  |
| Panama | Yes | Yes |
| Portugal | Yes |  |
| Romania | Yes |  |
| Russian Federation | Yes |  |
| Saint Kitts and Nevis | Yes |  |
| Saint Lucia | Yes |  |
| Saint Vincent and the Grenadines | Yes |  |
| San Marino | Yes |  |
| Sao Tome & Principe | Yes |  |
| Saudi Arabia | Yes |  |
| Sierra Leone | Yes |  |
| Singapore | Yes |  |
| South Africa | Yes |  |
| Sweden | Yes | Yes |
| Switzerland | Yes |  |
| Togo | Yes |  |
| Tonga | Yes |  |
| Tuvalu | Yes |  |
| United Kingdom | Yes | Yes |

Reference: International Maritime Organization, Status of Conventions - Comprehensive information including Signatories, Contracting States, declarations, reservations, objections and amendments, IMO, 2021, accessed 22 August 2022.

1. Stakeholders consulted

The Department engaged with a number of stakeholders in developing this Regulatory Impact Statement, the full list is below.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Academics | Australian Government | State and Territory Governments | Local Government | Industry |
| Deakin University | Australian Maritime Safety Authority\*#^ | Department of Infrastructure and Transport (SA) | Australian Local Government Association | Australian Aluminium Council |
| Melbourne Maritime Heritage Network | Australian Transport Safety Bureau | Department of Infrastructure, Planning and Logistics (NT)\*^ | Sydney Coastal Councils Group\*^ | Australian Cruise Association |
| RMIT | Department of Agriculture, Water Resources and the Environment\*^ | Department of Primary Industries, Water and Environment (Tas) |  | Australian Industry Group |
| University of Queensland\*^ | Great Barrier Reef Marine Park Authority^ | Department of Transport (NT) |  | Australian Institute of Petroleum Ltd |
|  |  | Department of Transport (Vic) |  | Australian Mines & Metals Association |
|  |  | Department of Transport (WA) |  | Australian Peak Shippers Association Inc. |
|  |  | EPA Tasmania |  | Bulk Liquids Industry Association |
|  |  | Marine & Safety Tasmania\*^ |  | Cement Industry Federation |
|  |  | Maritime Safety Queensland\*#^ |  | Cocks Macnish |
|  |  | Northern Territory EPA |  | Colin Biggers & Paisley\* |
|  |  | Transport for NSW |  | Container Transport Alliance Australia |
|  |  | Transport Safety Victoria |  | Cruise Lines International Association |
|  |  |  |  | Customs Brokers and Forwarders Council of Australia |
|  |  |  |  | Freight and Trade Alliance and Australian Peak Shippers Association |
|  |  |  |  | Insurance Council of Australia^ |
|  |  |  |  | International Chamber of Shipping\*#^ |
|  |  |  |  | International Group of P&I Clubs\*#^ |
|  |  |  |  | Maritime Industry Australia Ltd\* |
|  |  |  |  | Maritime Law Association of Australia and New Zealand\*^ |
|  |  |  |  | Meat and Livestock Australia |
|  |  |  |  | Minerals Council of Australia |
|  |  |  |  | National Farmers Federation |
|  |  |  |  | Shipping Australia Limited\*# |
|  |  |  |  | South Australian Freight Council |
|  |  |  |  | Superyachts Australia |
|  |  |  |  | Tasmanian Logistics Committee |
|  |  |  |  | Tourism and Transport Forum |

\* Stakeholder provided a public submission in response to the 2020 Discussion Paper.

# Stakeholder engaged as part of the cost benefit analysis development process.

^ Stakeholder provided a non-confidential submission in response to the draft or revised regulatory impact statement.

1. Cost benefit analysis
2. *Nairobi International Convention on the Removal of Wrecks*

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2. International Maritime Organization, Status of Conventions - Comprehensive information including Signatories, Contracting States, declarations, reservations, objections and amendments, IMO, 2021, accessed 10 March 2022. [↑](#footnote-ref-2)
3. Former Department of Infrastructure, Transport, Regional Development and Communications, Australian Infrastructure Statistics—Yearbook 2020, DITRDC, 2020, accessed 12 January 2021. [↑](#footnote-ref-3)
4. Bureau of Infrastructure, Transport and Regional Economics,https://www.bitre.gov.au/publications/2019/australian-sea-freight-2016-17, BITRE, 2019, accessed 28 January 2021. While the Australian sea freight 2018 to 2019 report has now been released, the 2016 to 2017 report was the most recent at the time of drafting and undertaking the cost benefit analysis. [↑](#footnote-ref-4)
5. World Integrated Trade Solution, Australia Exports 2017,WITS,2021, accessed 7 July 2021. [↑](#footnote-ref-5)
6. BITRE,Australian sea freight 2016–17, BITRE, 2019, accessed 28 January 2021. [↑](#footnote-ref-6)
7. PriceWaterhouseCoopers, The economic contribution of the Australian maritime industry, Australian Shipowners Association, 2015, accessed 16 June 2021. [↑](#footnote-ref-7)
8. BITRE, loc. cit. [↑](#footnote-ref-8)
9. ibid. [↑](#footnote-ref-9)
10. Australian Maritime Safety Authority,Analysis of 2020 Inspection Results, AMSA, 2021, accessed 8 July 2021. [↑](#footnote-ref-10)
11. Vanuatu (2020) ‘Work Programme: Proposal for a new output on containers lost at sea in application of the action plan to address marine plastic litter from ships’, *International Maritime Organization Maritime Safety Committee*, MSC 1-2/21/13. [↑](#footnote-ref-11)
12. United Nations Conference on Trade and Development, Review of Maritime Transport 2019, UNCTAD, 2021, accessed 15 June 2021. [↑](#footnote-ref-12)
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14. Geoscience Australia, Maritime Boundary Definitions, Geoscience Australia, accessed 23 March 2021. [↑](#footnote-ref-14)
15. Subsections 229(2)(b) and (3)(b) *Navigation Act 2012*. [↑](#footnote-ref-15)
16. BITRE,loc. cit. [↑](#footnote-ref-16)
17. Ann Koh, Shipping Containers Fall Overboard at Fastest Rate in Seven Years, Bloomberg, 2021, accessed 28 May 2021. [↑](#footnote-ref-17)
18. BITRE, loc. cit. [↑](#footnote-ref-18)
19. Jean-Paul Rodrigue, Evolution of the Containership, The Geography of Transport Systems, 2020, accessed 7 July 2021. [↑](#footnote-ref-19)
20. Houston Kemp, Containerised trade trends and implications for Australian ports, NSW Parliament, 2019, accessed 12 July 2021. [↑](#footnote-ref-20)
21. Ann Koh, loc. cit. [↑](#footnote-ref-21)
22. AMSA, Historical focused inspection campaigns, AMSA, 2021, accessed 28 May 2021. [↑](#footnote-ref-22)
23. Rural and Regional Affairs and Transport References Committee, Policy, regulatory, taxation, administrative and funding priorities for Australian Shipping, Parliament of Australia, 2020, accessed 11 December 2020. [↑](#footnote-ref-23)
24. A fire erupted on the *MV X-Press Pearl* on 20 May 2021 before it sank on 2 June 2021 as a salvage crew tried to tow the vessel away from the coast of Sri Lanka. It was carrying chemicals, nitric acid and a large amount of micro plastics. The tiny polyethylene pellets have threatened beaches popular with tourists as well as shallow waters used by fish to breed. Sri Lanka is not a party to the Nairobi Convention. [↑](#footnote-ref-24)
25. Subsections 229(2)(b) and (3)(b) *Navigation Act 2012*. [↑](#footnote-ref-25)
26. Section 14 *Navigation Act 2012*. [↑](#footnote-ref-26)
27. Subsections 229(1)(a) and (b) *Navigation Act 2012*. [↑](#footnote-ref-27)
28. Section 14 *Navigation Act 2012*. [↑](#footnote-ref-28)
29. Subsection 229(1)(c) *Navigation Act 2012*. [↑](#footnote-ref-29)
30. Subsection 229(1)(e) *Navigation Act 2012*. [↑](#footnote-ref-30)
31. As at August 2022. [↑](#footnote-ref-31)
32. These wrecks were located as part of the War on Wrecks program, which targets derelict and/or abandoned vessels, as such these ships may not meet the definition of a ‘wreck’ under the Nairobi Convention. [↑](#footnote-ref-32)
33. The *MV Tycoon* was a cargo ship that broke free from its mooring on Christmas Island spilling oil and phosphate into the sea. The Taiwanese owners did not take any practical actions to commence salvage or wreck removal, forcing the Australian Government to coordinate and fund the operation. [↑](#footnote-ref-33)
34. Article 1(1) *Nairobi International Convention on the Removal of Wrecks.* [↑](#footnote-ref-34)
35. Geoscience Australia, *Oceans and Seas*, Geoscience Australia, accessed 25 January 2021. [↑](#footnote-ref-35)
36. Article 1(2) *Nairobi International Convention on the Removal of Wrecks.* [↑](#footnote-ref-36)
37. Article 4(2) *Nairobi International Convention on the Removal of Wrecks.* [↑](#footnote-ref-37)
38. Article 1(3) *Nairobi International Convention on the Removal of Wrecks*. [↑](#footnote-ref-38)
39. Articles 8(1) and 9(2) *Nairobi International Convention on the Removal of Wrecks*. [↑](#footnote-ref-39)
40. Article 1(5) *Nairobi International Convention on the Removal of Wrecks*. [↑](#footnote-ref-40)
41. Article 1(8) *Nairobi International Convention on the Removal of Wrecks*. [↑](#footnote-ref-41)
42. Article 10(1) *Nairobi International Convention on the Removal of Wrecks*. [↑](#footnote-ref-42)
43. Article 11 *Nairobi International Convention on the Removal of Wrecks*. [↑](#footnote-ref-43)
44. The 24,192,616 SDR is calculated, using the liability limits for property claims, as:

    1,510,000 SDR – for the first 2,000 GT

    16,911,396 SDR – 604 SDR for each ton from 2,001 to 30,000 GT

    5,771,220 SDR – 453 SDR for each ton from 30,001 to 42,741 GT. [↑](#footnote-ref-44)
45. The SDR serves as the unit of account of the International Monetary Fund and other international organisations. [↑](#footnote-ref-45)
46. At 31 March 2022. [↑](#footnote-ref-46)
47. More information on the LLMC Convention calculations can be found on the Department’s website. [↑](#footnote-ref-47)
48. Article 13 *Nairobi International Convention on the Removal of Wrecks*. [↑](#footnote-ref-48)
49. Article 9(4) *Nairobi International Convention on the Removal of Wrecks*. [↑](#footnote-ref-49)
50. Article 34, *Vienna Convention on the Law of Treaties*, opened for signature 23 May 1969, 1155 UNTS 331 (entered into force 27 January 1980). [↑](#footnote-ref-50)
51. Article 1(7) *Nairobi International Convention on the Removal of Wrecks*. [↑](#footnote-ref-51)
52. Article 1(2) *Nairobi International Convention on the Removal of Wrecks*. [↑](#footnote-ref-52)
53. Rebecca Turner, Companies eye off WA coast for offshore wind energy project sites, ABC News, 2021, accessed 1 May 2021. [↑](#footnote-ref-53)
54. Department of Industry, Science, Energy and Resources, Offshore renewable energy*,* DISER, accessed 1 May 2021. [↑](#footnote-ref-54)
55. Recreational vessels are surveyed and measured by length, not gross tonnage, so the gross tonnage of the ships must be inferred from their length. [↑](#footnote-ref-55)
56. On 13 January 2012, the cruise ship *Costa Concordia* ran aground, capsized, and later sank in shallow waters after striking an underwater rock off Tuscany, resulting in 32 deaths. [↑](#footnote-ref-56)
57. The *Rena* ran into the reef in the middle of the night on October 5, 2011, leading to New Zealand's worst maritime environmental disaster as 300 tonnes of oil leaked into the ocean, killing marine life and washing up along the coastline. [↑](#footnote-ref-57)
58. Article 4(4) *Nairobi International Convention on the Removal of Wrecks*. [↑](#footnote-ref-58)
59. Articles 2(3) and (4) *Nairobi International Convention on the Removal of Wrecks*. [↑](#footnote-ref-59)
60. Subsections 229(1)(a)(ii) and (b)(ii) of the *Navigation Act 2012*. [↑](#footnote-ref-60)
61. Article 1 *Nairobi International Convention on the Removal of Wrecks*. [↑](#footnote-ref-61)
62. The Offshore Constitutional Settlement deals with Commonwealth and state jurisdiction in the waters to the edge of the territorial sea. The settlement also includes arrangements on managing oil, gas and other seabed minerals, the Great Barrier Reef Marine Park, other marine parks, historic shipwrecks, shipping, marine pollution and fishing. In general, the states have responsibility for areas up to 3 nm from the territorial sea baseline, which are termed 'coastal waters'. [↑](#footnote-ref-62)
63. Maritime Safety Queensland, Submission in response to Discussion paper: Australia’s accession to the Nairobi International Convention on the Removal of Wrecks, Department of Infrastructure, Transport, Regional Development and Communications, 2020, accessed 20 September 2020. [↑](#footnote-ref-63)
64. Appendix C: ACIL Allen (2021) A cost benefit analysis on Australia’s possible accession to the Nairobi Convention, Final Report prepared for the Department of Infrastructure, Transport, Regional Development and Communications, Australian Government (p33). [↑](#footnote-ref-64)
65. ibid., p 21. [↑](#footnote-ref-65)
66. UK Department of Transport, Impact Assessment of the Wreck Removal Convention Bill, UK Department of Transport, 2010, accessed 21 February 2021. [↑](#footnote-ref-66)
67. This figure includes RAVs and may include DCVs and recreational vessels if they meet the threshold to pay the Protection of the Sea Levy. This would most likely occur where the vessel is over 300 GT. [↑](#footnote-ref-67)
68. Appendix C, op. cit., p 35. [↑](#footnote-ref-68)
69. NSW Government, NSW Boat Registrations and licences, Open Data, accessed 17 February 2022. [↑](#footnote-ref-69)
70. Queensland Government, Length of marine vessels registered by local authority, Open Data Portal, accessed 17 February 2022. [↑](#footnote-ref-70)
71. South Australian Government, Boat Registrations 2020-21, Data.SA, accessed 17 February 2022. [↑](#footnote-ref-71)
72. Maritime and Safety Tasmania, Annual Report 2019-20, accessed 18 February 2022. [↑](#footnote-ref-72)
73. Victoria State Government, Fishing and Boating, Department of Transport, accessed 17 February 2022. [↑](#footnote-ref-73)
74. Government of WA, Recreational boating advice, Department of Transport, accessed on 17 February 2022. [↑](#footnote-ref-74)
75. Ibid., p 44. [↑](#footnote-ref-75)
76. Ibid., p 38. [↑](#footnote-ref-76)
77. Ibid., p 41. [↑](#footnote-ref-77)
78. Ibid., p 8. [↑](#footnote-ref-78)