



## Options Paper

# What does it look like for Australia to be a... Partner on Maritime Safety with the Pacific

**SUPPORTED BY**



Australian Government  
Department of Foreign Affairs and Trade

# Executive Summary



✉ Secretariat@asiapacific4d.com

🖱 [www.asiapacific4d.com](http://www.asiapacific4d.com)

🐦 @AsiaPacific4D

🌐 <https://au.linkedin.com/company/asia-pacific-development-diplomacy-defence-dialogue>

📺 <https://www.youtube.com/@Asia-Pacific4d>

© Asia-Pacific Development, Diplomacy & Defence Dialogue 2023.

This work is licensed under a Creative Commons license. You can reprint or republish with attribution.

You can cite this paper as: Asia-Pacific Development, Diplomacy & Defence Dialogue, What does it look like for Australia to be a Partner on Maritime Safety with the Pacific (Canberra 2023): [www.asiapacific4d.com](http://www.asiapacific4d.com)

First published June 2023

ISBN: 978-0-6458800-7-6 (online)

ISBN: 978-0-6458800-6-9 (print)

## DISCLAIMER

While every care has been taken in the preparation of the materials contained within this publication, AP4D will not be held liable or responsible for any loss, damage or other inconvenience caused as a result of any inaccuracy or error within the pages of this publication. This publication is not a substitute for independent professional advice and you should obtain any appropriate professional advice relevant to your particular circumstances. Views expressed cannot be attributed to any individuals or organisations involved in the process.

Ships and seafaring are fundamental Pacific traditions, but Pacific Island countries have the most expensive shipping in the world, the longest transport routes, and often the oldest and least energy efficient ships. Given that the ocean is the most significant geographical feature of the Blue Pacific continent, access to safe and reliable transport is a crucial societal need and an important enabler for many of the Sustainable Development Goals.

Efficient, safe, affordable and accessible transportation systems not only promote economic productivity and create jobs but can increase access to employment, recreational and other essential life-shaping opportunities that enable people to improve their living conditions and escape poverty. Predictable trade flows facilitated by reliable and timely shipping services contribute to improved food security, especially in remote or outer island communities.

Domestic Pacific shipping fleets are often in very poor repair. Political and commercial pressures, ineffective compliance and enforcement, and a lack of supply and servicing capability for machinery and lifesaving equipment mean that Pacific Island countries are often trapped in a vicious cycle of old, badly maintained vessels being replaced by more of the same. Tragically, the region experiences the highest per capita fatality rate in the world from maritime incidents, many of which could have been prevented with adequate investment.

There is a clear, urgent need to upgrade domestic vessels in the region to ensure all Pacific peoples have access to safe maritime transport.

This must be balanced with a regional desire for a fossil fuel free Pacific, which will require decarbonisation of fleets. Some within the region fear that bigger nations will transition to zero or low carbon vessels while leaving the Pacific stranded with aged, inefficient and increasingly expensive-to-operate fleets. The Pacific will need ongoing support from international partners to realise its ambitions for decarbonisation.

While there are commonalities in needs across the region, Pacific Island countries are diverse in personnel, capacity and finances, meaning there is no one-size-fits-all approach to maritime safety in the Pacific. It is crucial that solutions are tailored to specific countries' circumstances and priorities.

Australia is a committed maritime partner with the Pacific. Improving domestic passenger safety is a priority need for the Pacific that Australia supports – it has a mutual interest in ensuring that the ships in the region are seaworthy, have competent crews and are able to safely navigate through sensitive marine areas.

There is scope for Australia to build on existing programs and strengthen maritime safety in the region by leveraging the expertise and capacity of regional organisations and other partners.

## PATHWAYS FOR AUSTRALIA TO BE A PARTNER ON MARITIME SAFETY WITH THE PACIFIC

### Access to safe and reliable passenger vessels

There are at least three options:

- Australia could donate a fleet of modern ferries to the Pacific, modelled on the Pacific Maritime Security Program patrol boat program.
- Australia could provide support for creating a shipbuilding industry within the Pacific region.
- Australia could work with the Pacific to leverage climate financing to replace or retrofit vessels to create a low or zero carbon fleet.

### Support for decarbonisation of shipping in the Pacific

- Australia can work with the Pacific to support the transition to a fossil fuel free Pacific.
- This could include supporting options for zero-emissions cargo transport such as uncrewed surface vessels powered by solar.

### Regulation

- Australia can contribute to common standards across all Pacific Island countries to access Maritime Domain Awareness (MDA) for safety purposes through expanding the use of MDA platforms.
- Australia can provide support, bilaterally or through regional organisations, to implement the IMO Model Regulations on Domestic Ferry Safety.
- Australia can support regulatory reform across the Pacific, sharing lessons learned from its involvement in the development of PNG's Small Craft Act.

### Donor-coordination and strengthened partnerships

- Australia can support efforts to use climate financing to provide the funding and investment in secure and safe shipping.
- Australia should support strong partnerships between key agencies to maximise available resources and improve donor coordination.
- There is scope for Australia to partner with New Zealand to replicate the Pacific Maritime Safety Program in countries which are not currently covered
- Australia should consider providing long-term and consistent funding for the SPC Pacific Domestic Ships Safety program, ensuring adequate support and resourcing for key programs.

### Private sector engagement

- Australia can partner with the private sector to encourage investment in transport and servicing centres and support service organisations to establish a presence in the region.

### Capacity-building

- Australia can support capacity development and training to deliver the skills needed to address each country's own unique safety challenges through partnering with regional and international organisations.
- Existing successful programs should be offered to the rest of the Pacific.

## MARITIME SAFETY IS ONE ASPECT OF MARITIME SECURITY

Maritime security is a broad concept that spans different domains. It includes traditional state-based military threats and the protection of national interests and sovereignty at sea as well as security challenges such as piracy, maritime terrorism, climate change, illegal fishing, the introduction of foreign pests, marine pollution and the smuggling by sea of drugs, arms and people. It also includes the security risks associated with maritime safety and search and rescue. Problems at sea are invariably interrelated.<sup>1</sup>

Maritime safety concerns the regulation of **shipping, port security, the safety of seafarers, search and rescue provision and the protection of the marine environment.**<sup>2</sup>

<sup>1</sup> Anthony Bergin, David Brewster and Aakriti Bachhawat Australian Strategic Policy Institute, Strengthening maritime security in Indo-Pacific Island states, 2019: <https://www.jstor.org/stable/pdf/resrep23122.4.pdf>

<sup>2</sup> Neural Guard, What you need to know about maritime safety and security, 2021: <https://www.neuralguard.com/maritime-safety-and-security/>

## SHIPPING IN THE PACIFIC


### International

- 60 international ports in the Pacific
- Approximately 18 private shipping lines servicing Pacific Island countries
- Routes transit between France (mainly territories of New Caledonia and French Polynesia), East Asia (Japan Taiwan, China, Singapore), Australia, New Zealand and the United States (including Guam and Hawaii)
- Regularity varies from 1 week to 2 months depending on company and route

### Regional

- Approximately 80 shipping companies operating in Pacific Island countries
- Nine Pacific governments operating shipping lines: Fiji, Federated States of Micronesia, Kiribati, Palau, Republic of the Marshall Islands, Samoa, Tokelau, Tonga and Tuvalu
- Within most Pacific Island countries the main or larger island(s) act as a hub for smaller islands
- Local shipping companies are often family, church, island community owned/operated with local crews that may not have formal training
- Inter-island ships tend to be donated by partners or purchased second-hand, with some more than 50 years old
- Maintenance suffers due to low profit margins and inability to locally source supplies/technical capacity

Source: UNCTAD Sea Transport in the Context of Small Island Developing States 2016: <https://unctadsoftportal.org/stftoolkit/>



“Our vast Blue Pacific covers over 42 million square kilometres of ocean and where more than 50% of the population lives on remote outer islands. This remoteness makes maritime transport the only means of transportation for most of our Pacific peoples.”

*Mereseini Rakuita, Pacific Community (SPC), official opening of the 5th Pacific Regional Energy and Transport Ministers Meeting, May 2023*

“Transport needs in the Pacific cannot be de-humanised”

*AP4D Dialogue Participant*

“[We] reaffirm that climate change remains the single greatest existential threat facing the Blue Pacific. The effects of climate change are real, appalling and existential in Pacific Island societies today. This defining issue worsens daily without urgent action to address the source of emissions.”

*Fifth Pacific Regional Energy and Transport Ministers' Meeting: EFATE outcome statement, May 2023*

## Why it Matters

The ocean is the most significant geographical feature of the Pacific region. Ships and seafaring are fundamental Pacific traditions with many Pacific Island people relying on the sea for both sustenance and employment. The Pacific has a high level of dependence on inter-island transport for the movement of goods and people as well as the provision of essential services and humanitarian and disaster relief efforts. Sustainable and affordable shipping is critical to Pacific Island countries which are dependent on shipping for as much as 80% to 90% of all goods needed to sustain their population and economies. All Pacific peoples benefit from access to affordable, safe and reliable sea transport.<sup>3</sup>

The Pacific presents a unique shipping scenario with constraints found in few other global locations. These require bespoke solutions based on dedicated analysis. Pacific Island countries have the most expensive shipping in the world, the longest transport routes, and often the oldest and least energy efficient ships.<sup>4</sup> The inherent imbalance between inbound and outbound cargo is extreme and illustrates that most of these routes can never be considered as economically viable. This simple fact explains why the Pacific is in a cycle of using old, inefficient, poorly maintained and crewed ships and is dependent on externally provided search and rescue response. Addressing the real source of the maritime safety issue – the lack of available ongoing economic investment – means rethinking the priority placed on shipping as an essential societal need and valuing it via that lens.

Maritime safety is critical across the board and arguably the most neglected aspect of maritime security.<sup>5</sup> This has significant consequences for the Pacific region. Ageing, poorly maintained ferries combined with overcrowding and ineffective safety and communications equipment have contributed to several serious maritime

accidents in the Pacific in recent years, resulting in the region experiencing the highest per capita fatality rate in the world from maritime incidents (fatal ferry accidents and small craft incidents).<sup>6</sup> Many of these tragedies could have been prevented with adequate investment in the domestic Pacific fleet and crew.<sup>7</sup>

Small-scale coastal artisanal fishers who use small vessels for fishing and local transport are routinely swamped in rough weather. Ensuring these vessels are equipped with adequate safety equipment and that fishers have access to information about weather conditions would have a significant impact on communities and improve safety for all.

Access to safe and reliable transport is fundamental to supporting economic growth, creating jobs and connecting people to essential services such as healthcare or education. Predictable trade flows facilitated by reliable and timely shipping services contribute to improved food security, especially in remote or outer island communities.<sup>8</sup> However, predictable trade to outer islands is reliant on valuing maritime connectivity as an essential societal need rather than an economic enabler.

The Pacific maritime area is a crowded space, with a range of partners involved and not necessarily coordinating their activities. Given the current geopolitical environment, it is likely to become more crowded in the future, with a risk the focus from partners becomes skewed towards maritime security.

Pacific Island countries and development partners have long raised issues of safety at sea as a critical consideration. Maritime safety remains a priority for the Pacific. There is a need to do more; the opportunity is now for Australia to engage.

- 3 Pacific Island Forum, 2050 Strategy for the Blue Pacific Continent, 2022: <https://www.forumsec.org/wp-content/uploads/2022/08/PIFS-2050-Strategy-Blue-Pacific-Continent-WEB-5Aug2022.pdf>
- 4 <https://www.mcst-rmiusp.org/index.php/hlpu/pacific-blue-shipping-partnership>, <https://www.igd.unsw.edu.au/pacific-blue-shipping-partnership>
- 5 Sam Bateman, Ferry Safety: A Neglected Aspect of Maritime Security?, 2006: <https://www.rsis.edu.sg/rsis-publication/idss/786-ferry-safety-a-neglected-aspe/#.ZEXazvkzY2x>
- 6 In 2009, the sinking of Tongan ferry the MV Princess Ashika resulted in 74 deaths (2 bodies recovered, 72 people lost at sea). A month earlier, 33 people lost their lives in a ferry accident in Kiribati.
- 7 For example, in 2018 the sinking of MV Butiraoi in Kiribati resulted in the death of 95 people including 23 school children. An investigation into the accident found that the ferry was overloaded and should not have been carrying any passengers. The vessel was structurally compromised and had previously been grounded, an all too-common issue with the Pacific domestic fleet. See Liam Fox and Christina Zhou, Kiribati ferry disaster report describes horrific moments before deaths of 95 people, ABC News, 2019: <https://www.abc.net.au/news/2019-10-07/butiraoi-kiribati-ferry-disaster-full-report-released-government/11579208>
- 8 The World Bank, Transport, 2023: <https://www.worldbank.org/en/topic/transport/overview>

# Maritime Safety and Development Outcomes

Efficient, safe, affordable, and accessible transportation systems not only promote economic productivity and create jobs but can increase access to employment, recreational, and other essential life-shaping opportunities that enable people to improve their living conditions and escape poverty. Sustainable, reliable and safe maritime transport is a cross cutting issue and an important enabler for implementation of the 2030 Agenda<sup>9</sup> and many of the Sustainable Development Goals (SDGs).<sup>10</sup>

The SDGs are the internationally agreed blueprint to achieve a better and more sustainable future for all. They address global challenges, including poverty, inequality, climate change, peace and justice. Pacific Island leaders have made a commitment to the full implementation of the 2030 Agenda and the SDGs, recognising them as an important driving force in regional development efforts.

<b>SDG 1: End poverty in all its forms everywhere</b>	Access to clean, affordable, accessible, achievable and reliable maritime transport and shipping services improves access to basic goods, services and products that can help lift people out of poverty.  Shipping facilitates commerce and opens up economic opportunities to remote populations.
<b>SDG 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture</b>	Fish is a major source of nutrition for many Pacific Island people. Small-scale and subsistence fishers need access to safe fishing vessels, up-to-date weather information and adequate safety equipment. Farmers benefit from reliable access to markets to sell produce.  Shipping plays an essential role in the import and export of food and many Pacific Islands are reliant on shipping services for increased food security.
<b>SDG 3: Ensure healthy lives and promote well-being for all at all ages</b>	In parts of the Pacific the number one form of local transport is by boat. Access to clean, affordable, accessible and reliable domestic ferry services and safe inter-island/lagoon transport improves access to health services and provision of medications and vaccines to local communities.  Shipping is a societal need that contributes to many aspects of well-being.
<b>SDG 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all</b>	In parts of the Pacific the number one form of local transport is by boat. Access to safe and reliable domestic ferry services and safe inter-island/lagoon transport improves access to schools, other educational institutions as well as many other aspects of societal wellbeing.  Meeting the crucial needs of island communities, the safety and security of life at sea, the protection of the marine environment and the efficient movement of trade depend on the professionalism and competence of seafarers, leading to capacity building and on-going learning opportunities for those in the maritime sector.

9 <https://sdgs.un.org/2030agenda>

10 Adapted from International Maritime Organization, IMO and the Sustainable Development Goals 2019: <https://www.imo.org/en/MediaCentre/Hot-Topics/Pages/SustainableDevelopmentGoals.aspx#number2>

<b>SDG 5: Achieve gender equality and empower all women and girls</b>	Ensuring that transportation is safe for women and girls represents a step toward gender equality and a gain for women, because it enables them to freely engage in activities they wish to pursue, enhancing their ability to participate in educational and professional activities and in public life with fewer upgradedtraints. <sup>11</sup>
<b>SDG 7: Ensure access to affordable, reliable, sustainable and modern energy for all</b>	Many Pacific Island states are completely dependent on the safe and efficient functioning of the maritime sector for trade to flow freely and food and energy to be delivered. Communities where there is no or insufficient trade to sustain shipping services are at greatest risk. This is true for many outer island communities in the Pacific.
<b>SDG 8: Promote inclusive and sustainable economic growth, full and productive employment and decent work for all</b>	Shipping is an essential component of sustainable economic growth. Safe and reliable shipping provides access to markets and increased economic opportunities as well as the education opportunities needed to secure decent and productive employment.  Over one million seafarers operate the global fleet, providing a range of employment opportunities. For example in the 1990s one in ten Tuvaluan males were employed as international seafarers and their remittances made up 15% of Tuvalu's economy.
<b>SDG 9: Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation</b>	Technological advances are key to building resilient infrastructure and central to the effective functioning of the whole transportation sector. Clean, affordable, accessible, and reliable shipping is a major driver towards sustainable development, especially in countries where maritime transport is the primary means of transportation.
<b>SDG 10: Reduce inequality within and among countries</b>	There are links between access to safe and reliable transport and inequality. Individuals and communities that have limited access to transport systems are often disadvantaged and experience higher levels of social exclusion and lower levels of wellbeing compared to people who have good access to safe transport options.
<b>SDG 11: Make cities and human settlements inclusive, safe, resilient and sustainable</b>	Sustainable communities rely on a secure supply chain. In the Pacific, communities rely on maritime connections within and between islands to contribute to safe, resilient and sustainable communities, including facilitating disaster and humanitarian responses.
<b>SDG 13: Take urgent action to combat climate change and its impacts</b>	The maritime sector is subject to mandatory, binding energy efficiency regulations and standards designed to address greenhouse gas emissions.  Decarbonisation of shipping across the Pacific is a positive and ambitious step towards combatting climate change and revenue flowing from climate financing could be used to upgrade port facilities, ongoing vessel maintenance, training, technology and other safety provisions.
<b>SDG 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development</b>	To be sustainable, human activities need to be balanced with the oceans' capacity to remain healthy and diverse in the long term.  Implementing and enforcing the main conventions and regulations adopted by International Maritime Organization Member States actively addresses marine pollution and supports targets for managing and protecting marine and coastal ecosystems, as well as protecting marine biodiversity and mitigating the threat of harmful invasive species being carried by ships.

11 Asian Development Bank, Policy Brief: A safe transportation environment for women and girls 2015: <https://www.adb.org/sites/default/files/publication/179182/safe-public-transport-women-girls.pdf>

# Regional Perspectives

In May 2023, the Pacific Transport Ministers agreed on the following key priorities for the maritime transport sector:

- To commit to mobilising appropriate resources, finances, infrastructure, technology and capacity building for a safe, resilient, green, clean, digital, gender-just maritime transport for the Blue Pacific.
- To recognise the central role of the sector in transitioning to a fossil fuel free Pacific mindful that all Members are at different stages of development and encourage strategic dialogue and partnerships for a just and equitable transition of the maritime transport sector.
- To affirm a collective commitment for effective cooperation, coordination and determined actions for maritime transport regionally and internationally, including the crucial aspect of maritime safety.
- To commit to develop a one-maritime framework with appropriate plans and solutions aligned to the 2050 Strategy for the Blue Pacific Continent that are adaptable to varying circumstances across the region, and incorporating monitoring, evaluation and learning.
- To call for a conducive environment to access climate finances and implement transformative programmes in the maritime sector, as well as access to reliable investment in the sector.

Source: Pacific Community, Fifth Pacific Regional Energy and Transport Ministers' Meeting, Efate Outcome Statement, 2023: <https://gem.spc.int/meetings/5th-pacific-regional-energy-and-transport-ministers-meeting-2023>

Domestic shipping in the Pacific faces complex, wide-ranging issues, such as political and commercial pressures, ineffective compliance and enforcement, and a lack of supply and servicing capability for machinery and lifesaving equipment.<sup>12</sup>

Pacific Island countries' domestic shipping fleets provide essential connectivity across archipelago nations but are often in very poor repair and would not pass seafaring standards in Australia or New Zealand. Systemic issues, including financing and lack of economies of scale on long shipping routes, mean countries are often trapped in a vicious cycle of old, badly maintained vessels being replaced by more of the same. The vast majority of domestic vessels in the Pacific rely on diesel and the dependency of imported fossil fuels is a huge burden to national budgets.

It is the smallest, most remote and vulnerable communities on the outer islands that are most disadvantaged. For these communities, shipping services are infrequent and often erratic, and the most expensive per capita to service.<sup>13</sup> There is an urgent need to upgrade domestic vessels in the region to ensure all Pacific peoples have access to safe maritime transport.

This must be balanced with the Pacific's desire for a fossil fuel free Pacific.<sup>14</sup> Fiji, Niue, Solomon Islands, Tonga, Tuvalu and Vanuatu have pledged to phase out fossil fuels "as soon as possible" and called on international partners to help finance the transition.<sup>15</sup>

Decarbonisation of shipping fleets is a global imperative that has been driven by some Pacific nations. In 2018, the

12 Pacific Community, International Maritime Organization, 2023: <https://www.spc.int/partners/transport-energy/international-maritime-organization>

13 Andrew Irvin, Global Maritime Forum, How the Pacific is starting the voyage towards decarbonisation, 2020: <https://www.global-maritimeforum.org/news/how-the-pacific-is-starting-the-voyage-towards-decarbonisation>

14 Makereta Komai, Pasifika Environews, Pacific Islands Forum supports Port Vila call for a Fossil Fuel Free Pacific, 2023: <https://pasifika.news/2023/03/pacific-islands-forum-supports-port-vila-call-for-a-fossil-fuel-free-pacific/>

15 Caleb Fotheringham, RNZ Pacific, Port Vila call to phase out fossil fuels, 2023: <https://www.rnz.co.nz/international/pacific-news/486463/port-vila-call-to-phase-out-fossil-fuels>

International Maritime Organization set the ambition of reducing the global shipping industry's greenhouse-gas emissions by at least 50% by 2050. An alliance of high ambition Pacific states is credited with driving progress toward a 1.5 degree-aligned Revised Strategy at the Marine Environment Protection Committee in July 2023.<sup>16</sup> The scale of the challenge means that any solution needs to be comprehensive and involve every aspect of shipping.

The Pacific will need ongoing support from international partners to realise this ambition and some within the region fear that bigger nations will transition to zero/low carbon vessels while leaving the Pacific stranded with aged, inefficient and increasingly expensive-to-operate fleets.<sup>17</sup> It is essential to recognise that the Pacific's decarbonisation pathway will not just be a case of scaling down international initiatives and projects to Pacific size. The region has a globally unique shipping scenario and a bespoke transition theory of change must be deployed.<sup>18</sup>

Access to safe, sustainable and well-maintained vessels needs to be complemented with a raft of other safety measures including:

- improved search and rescue response capabilities and better access to safety equipment;
- community education;
- awareness and promotion of the use of safety equipment;
- improved regulatory capacity in legislation and enforcement;
- education and training for seafarers and port officials; as well as
- access to adequate maritime weather detection and communication.

16 Nuttall, P. (2020) "Small islands with a strong voice: Why Pacific Islands are playing a critical role in the current shipping decarbonization debate", Article No. 46 UNCTAD Transport and Trade Facilitation Newsletter N°85 - First Quarter 2020. <https://unctad.org/news/small-islands-strong-voice-why-pacific-islands-are-playing-critical-role-current-shipping>, Corbett, J, et al 2021 <https://www.tandfonline.com/doi/abs/10.1080/09644016.2019.1705057>, Earsom et al 2021 <https://www.cogitatiopress.com/politicsandgovernance/article/view/4296>

17 Andrew Irvin, Global Maritime Forum, How the Pacific is starting the voyage towards decarbonisation, 2020: <https://www.globalmaritimeforum.org/news/how-the-pacific-is-starting-the-voyage-towards-decarbonisation>

18 P. Nuttall, A Newell, I Rojon, B Milligan and A Irvin Pacific Island domestic shipping emissions abatement measures and technology transition pathways for selected ship types, Marine Policy Volume 132, October 2021, <https://doi.org/10.1016/j.marpol.2021.104704>

19 <https://www.maritimenz.govt.nz/about-us/what-we-do/international-engagement/pacific-maritime-safety-programme/#:~:text=Photo%20gallery-,About%20the%20PMSP,and%20delivered%20by%20Maritime%20NZ.>

20 From AP4D consultations with the Fiji Maritime Authority.

21 [https://prdrse4all.spc.int/sites/default/files/t8\\_-\\_annex\\_a\\_regional\\_strategy\\_for\\_pwm\\_2020-2024\\_0.pdf](https://prdrse4all.spc.int/sites/default/files/t8_-_annex_a_regional_strategy_for_pwm_2020-2024_0.pdf)

# Australian Perspectives

## GENDER AND ACCESS TO SAFE MARITIME TRANSPORT

Across the globe, women are exposed to physical aggression, sexual harassment and other forms of unwelcome behaviour on public transport including maritime transport. Promoting transportation safety and the employment of women in a traditionally male sector is a mutually reinforcing strategy: when more women participate in the design and building of transportation systems they are likely to be safer.<sup>22</sup> According to one study carried out by the Asian Development Bank,<sup>23</sup> the type of incidents that women experience on transport can leave them feeling unsafe or victimised even if they don't constitute a 'crime' (such as leering, unwelcome comments or disrespect for personal space). When men's behaviour leaves women feeling unsafe and vulnerable it can curtail women's movement. This has the potential to negatively affect their ability to access employment, education or participate fully in society. Ensuring that transport systems are safe for women contributes to achieving gender equity goals necessary for development and allows women the same rights as men in the development agenda.

For a long time, transport planning and design have paid little attention to gender.<sup>24</sup> The awareness of the importance of incorporating gender perspective into transport policy making remains very low. Women's mobility needs are often not taken into consideration at the early stage of designing, planning and developing transport systems, services and infrastructure. Nor are they addressed in training of transport professionals.<sup>25</sup>

The 14th Triennial Conference of Pacific Women (2021) reaffirmed women's economic empowerment as fundamental for development and called on Pacific governments and the private sector to do more to facilitate access to safe and efficient transport to and from places of work for women.<sup>26</sup> The 5th Pacific Regional Energy and Transport Minister meeting committed to "mobilising appropriate resources, finances, infrastructure, technology and capacity building for a safe, resilient, green, clean, digital, gender-just maritime transport for the Blue Pacific".<sup>27</sup> Transport officials also urged ministers to work with partners to embed gender equality in all regional projects recognising the critical role of the maritime sector in the sustainable development of the Blue Pacific.<sup>28</sup>

Addressing gender issues in transport will benefit not only women, but all transport users.

22 Agence Française De Développement The link between gender equality and safe public transportation! 2022: <https://www.afd.fr/en/actualites/gender-equality-also-relies-safe-and-qualitative-public-transport>

23 Asian Development Bank, Policy Brief: A safe public transportation environment for women and girls, 2015: <https://www.adb.org/sites/default/files/publication/179182/safe-public-transport-women-girls.pdf>

24 Arianna Legovini, Nancy Vandycke, Josephine Njoki Irungu, Girija Borker, Mary Ngaratoko Fabian. All too often in transport, women are an afterthought, World Bank Blogs, 2022: <https://blogs.worldbank.org/transport/all-too-often-transport-women-are-afterthought>

25 International Transport Forum, Transport Connectivity: a Gender Perspective, 2019: <https://www.itf-oecd.org/sites/default/files/docs/transport-connectivity-gender-perspective.pdf>

26 Pacific Community, Outcomes and Recommendations: 14th Triennial Conference of Pacific Women and 7th Meeting of Pacific Minister for Women, 2021: <https://www.spc.int/sites/default/files/documents/14th%20Triennial%20Conference%20of%20Pacific%20Women%20Eng.pdf>

27 Pacific Community, Fifth Pacific Regional Energy and Transport Ministers' Meeting, Efate Outcome Statement, 2023: <https://gem.spc.int/meetings/5th-pacific-regional-energy-and-transport-ministers-meeting-2023>

28 Pacific Community, Resolution of Transport Officials Fifth Pacific Regional Energy and Transport Ministers' meeting, 2023: <https://gem.spc.int/meetings/5th-pacific-regional-energy-and-transport-ministers-meeting-2023>

Australia is a committed maritime partner with the Pacific. Improving domestic passenger safety is a priority need for the Pacific that Australia supports.

Australia has an interest in ensuring that the ships in the region are seaworthy, have competent crews and are able to safely navigate through sensitive marine areas. From an economic perspective, it is important that the shipping straits that facilitate large volumes of Australia's exports such as iron ore are protected and safe.

However the Pacific maritime area is a crowded space. Addressing maritime safety in the region requires all partners that work with Pacific Island countries to prioritise long term engagement to ensure sustainability of the shipping sector.

There is scope for Australia to strengthen maritime safety in the region by leveraging the expertise and capacity of regional organisations and other partners such as the Pacific Community, New Zealand, the United States and France. For example, there is potential for Australia to

partner with New Zealand to replicate the Pacific Maritime Safety Program in countries which are not currently covered under the program, at the invitation of those countries and aligning with their priorities. This would bring greater consistency to maritime safety programs across the region while ensuring support was tailored to meet the variety of needs across Pacific Islands.

Australia can encourage all donors to have high maritime safety standards and ensure all vessels provided through donor funding, for example grant funding, have safety equipment such as AIS (automatic identification system) trackers and flotation devices installed in the hull of the vessels, as well as the provision of marine safety training. This would significantly improve safety without burdening recipients with additional expenses.

## WHAT IS ALREADY BEING DONE?

<b>International Maritime Organization (IMO)</b>	<ul style="list-style-type: none"> <li>• Marine Technical Cooperation Centre (MTCC)-Pacific which is implemented by SPC and Secretariat of the Pacific Regional Environment Programme (SPREP)</li> <li>• Women in Maritime Program</li> <li>• Regional Presence Office, Fiji</li> </ul>
<b>Pacific Community (SPC)</b>	<ul style="list-style-type: none"> <li>• Pacific Safety of Navigation Project</li> <li>• Pacific Island Domestic Ship Safety (PIDSS)</li> <li>• Pacific Memorandum of Understanding on Flag State Implementation (FSI)</li> <li>• SPC Maritime Integrated Program</li> <li>• SPC has observer status at the International Maritime Organization and is the implementing body for IMO technical cooperation division activities.</li> </ul>
<b>UNCTAD</b>	<ul style="list-style-type: none"> <li>• Works with countries to improve transport systems</li> <li>• Has developed a Training Toolkit for Sustainable Freight Transport and Finance tailored to the Pacific context</li> </ul>

<b>United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)</b>	<p>The Regional Program for Sustainable Transport Development 2022 – 2026 aims to advance:</p> <ul style="list-style-type: none"> <li>• Efficient and resilient transport and logistics networks and mobility for economic growth</li> <li>• Environmentally sustainable transport systems and services</li> <li>• Safe and inclusive transport and mobility</li> </ul>
<b>Australia</b>	<p><b>Australian Maritime Safety Authority (AMSA)</b></p> <ul style="list-style-type: none"> <li>• Secretariat to Asia Pacific Heads of Maritime Safety Agencies (APHoMSA) and member country</li> <li>• Current Chair of Pacific Search and Rescue Steering Committee (PACSAR) and committed to working with Pacific Island countries to build regional search and rescue (SAR) response capability</li> <li>• Provides ongoing support to International Maritime Organization (IMO) Integrated Technical Cooperation Program (ITCP) and is committed to increasing IMO presence in the Pacific region</li> <li>• The primary responder to six Pacific Island countries under Pacific Island Regional Marine Spill Contingency Plan (PACPLAN)</li> <li>• Support to World Maritime University and provision of scholarships to Pacific Island students</li> </ul> <p><b>Department of Defence</b></p> <ul style="list-style-type: none"> <li>• Pacific Maritime Security Program including provision of patrol boats</li> </ul>
<b>France</b>	<ul style="list-style-type: none"> <li>• Coast guard and armed forces patrol and protect France's Pacific EEZ including maritime safety (search and rescue, vessel traffic monitoring); environment protection (oil spill response and readiness); maritime security (law enforcement, counterterrorism); and suppression of illegal activities (illegal, unreported and unregulated (IUU) fishing, and human, narcotics or weapons trafficking)</li> </ul>

<b>Marshall Islands (RMI)</b>	<ul style="list-style-type: none"> <li>• Micronesia Center for Sustainable Transport<sup>29</sup> (MCST), established in 2015 as the world's first Small Island Developing States (SIDs) Center of Excellence for transport decarbonisation<sup>30</sup></li> <li>• Rebbelib 2050 is the National Transport Decarbonisation Framework. It was the first (and only) National Action Plan lodged with IMO</li> <li>• MCST facilitates a network of leading multi-disciplinary international researchers and provides full technical, legal, economics, policy and logistics support to the "6PAC" - the alliance for Pacific high ambition states negotiating Green House Gas reductions at IMO - and to Pacific states planning their domestic transitions</li> <li>• Provides leading technical, economic and policy research to the Pacific Blue Shipping Partnership<sup>31</sup></li> <li>• Inaugural (and only SIDS) member of the International Wind Ship Association,<sup>32</sup> the Carbon Pricing Leadership Coalition<sup>33</sup> and the Global Maritime Forum<sup>34</sup></li> </ul>
<b>New Zealand</b>	<p>The Pacific Maritime Safety Programme (PMSP) was established in 2011 with the overall goal of "Pacific maritime transport that is safe, environmentally friendly and meets international requirements". The program covers seven Pacific Island countries (Cook Islands, Kiribati, Niue, Samoa, Tonga, Tokelau and Tuvalu). PMSP takes a flexible approach and works with local authorities to tailor support to individual country's needs and priorities across five key areas:</p> <ul style="list-style-type: none"> <li>• Community education and awareness</li> <li>• Regulatory capacity</li> <li>• Support for education and training of seafarers</li> <li>• Domestic vessel safety</li> <li>• Search and rescue and oil pollution response</li> </ul>
<b>United States</b>	<ul style="list-style-type: none"> <li>• Shiprider program agreement with 11 Pacific nations (including Cook Islands, Fiji, Kiribati, Marshall Islands, Micronesia, Palau, Nauru, Samoa, Tonga, Tuvalu and Vanuatu) whereby defence and law enforcement personnel from the partner nations embark aboard the US cutters to enforce their nation's laws in the island nations' exclusive economic zones.</li> </ul>

29 <https://www.mcst-rmiusp.org/>

30 MCST has provided technical support to a number of other Pacific Island countries in preparing their policies and strategies including the Fiji Green Growth Framework (2014), the transport chapters of the Fiji LEADS (2018), the Tongan draft National Maritime Strategy (2022) and transport decarbonisation priority pipelines for RMI, Fiji, Kiribati, Tonga, Tuvalu and Palau

31 <https://www.mcst-rmiusp.org/index.php/hlpu/pacific-blue-shipping-partnership>

32 <https://www.wind-ship.org/en/grid-homepage/>

33 <https://www.carbonpricingleadership.org/>

34 <https://www.globalmaritimeforum.org/getting-to-zero-coalition/call-to-action>



## CASE STUDY: INTERNATIONAL MARITIME ORGANIZATION INTEGRATED TECHNICAL COOPERATION PROGRAMME

The International Maritime Organization (IMO), as a specialised agency of the United Nations, is the global standard-setting authority for the safety, security and environmental performance of international shipping. The IMO's Integrated Technical Cooperation Programme (ITCP) is designed to assist countries meet their international shipping regulations through building the technical knowledge and resources needed to operate a shipping industry safely and efficiently.

The ITCP focuses on three priority areas:

- global maritime rules and standards (ratification of international treaties and implementing national legislation)
- institutional capacity-building (public sector effectively exercise flag, port and coastal jurisdictions) and
- human resource development (for the management of national maritime programmes including maritime safety).

The ITCP works in close collaboration with other development partners to mobilise regional expertise and resources. In 2023 the ITCP, Pacific Community and the Australian Maritime Safety Authority delivered a Pacific Regional Maritime Search and Rescue workshop, and a Pacific Women in Maritime conference in Cairns. The participants shared knowledge and skills to strengthen search and rescue operations in the region, while fostering gender inclusivity in the maritime sector.

This is a good example of what can be achieved when Australia works closely with partners to bring together skills and expertise in maritime safety. The establishment of an IMO Regional Presence Office for the Pacific Islands region in Fiji will further extend ITCP activities in the region, and provide an opportunity for Australia for stronger coordination and collaboration.

<https://www.imo.org/en/OurWork/TechnicalCooperation/Pages/ITCP.aspx>

## CASE STUDY: PACIFIC ISLAND DOMESTIC SHIP SAFETY

The Pacific Island Domestic Ship Safety (PIDSS) program was introduced in 2010 following tragic maritime accidents in Kiribati and Tonga, and now includes 10 Pacific Island countries. The program is implemented by the Pacific Community, with initial funding by Australia from 2010-12 followed by support from New Zealand from 2018-2021.

PIDSS aims to reduce domestic shipping accidents through building the capacity of governments and ship operators to implement international maritime safety regulations, effective safety and maintenance plans, and pollution prevention systems. PIDSS activities strengthen implementation of safety management systems by domestic shipping companies through delivering training on safe operational plans. Training is accompanied by templates that are specifically tailored to smaller domestic vessels operating in the Pacific.

PIDSS assists countries to conduct maritime safety audits. Under the program, there has been an 80% increase in the number of maritime safety audits, with a 21% increase in audit findings being addressed, leading to an improvement in safety culture onboard vessels. Despite progress toward improved safety at sea, challenges persist.

PIDSS is the only program in the region focused on improving domestic ship safety, and with funding coming to an end in 2021 there is a strong need for continued investment and support. There is an opportunity for Australia, in coordination with key partners such as New Zealand, to commit funding and resources to ensure this program continues.

<https://gem.spc.int/projects/pacific-island-domestic-ship-safety-pidss>

# Risks and Barriers

The challenges in providing reliable and affordable shipping in the Pacific are well-documented.<sup>35</sup> Achieving economies of scale in the provision of maritime services in the Pacific is complicated by their small size, geographical dispersion, low trade volumes, ageing and inefficient domestic vessels and varying quality of port facilities. Servicing remote islands, while a political, social and economic imperative, is oftentimes not commercially viable. Without considerable resources (financial, human and technical) addressing these challenges remains out of reach for Pacific Island countries.

Varying capacity, capability and resources across the region create challenges as there is no one-size-fits-all approach. For example, the relative size of Papua New Guinea has enabled it to invest more capacity and resources, and as a result PNG is relatively advanced in maritime safety regulations when compared to the rest of the region.

A key barrier to maritime safety in the region is the lack of appropriate legislation and enforcement capabilities. Even when a country has ratified international conventions on maritime safety there may not be domestic legislation in place, leaving governments with no power to enforce maritime safety. This enables overcrowded vessels and vessels that do not meet safety requirements to continue to operate.

Once legislation is in place, this can be improved with relatively simple measures, such as placing a maritime safety officer, supported by local police and enforcement agencies when required, to check vessels before they depart. However, unless there is political support for such enforcement measures, they are unlikely to be successful. For example, grounding a vessel due

to safety non-compliance can cause a raft of other problems: while the vessel is grounded the owner/operator is not receiving income, making it financially difficult to invest in required safety repairs and, secondly, the grounded vessel could result in goods and people being stranded and outer islands not being serviced. All of this puts negative political pressure on the minister or department responsible for maritime safety leading to a reluctance to enforce safety measures consistently.

Difficulties in enforcing safety standards also arise with small craft of less than 15m. In many cases it is difficult for small craft operators to afford compliance requirements. This poses challenges for government enforcement efforts. Small craft are used by fishermen to feed their families and communities and are a transport lifeline for many villages. Costs associated with buying simple safety equipment including lifejackets and flares (where available), as well as costs of certifying small crafts including registration and licensing, is not within reach for many.

Due to limited resources, the private sector and community sector in the Pacific have little choice but to purchase degraded second-hand vessels. Some of the vessels have previously been involved in major accidents, posing significant safety concerns. Most government owned ships are donated. Vessels donated to Pacific Island countries are not always the most appropriate vessels for the region and governments are unable to provide for operational costs or ongoing training to support safety. All of this is exacerbated by aging port infrastructure, a lack of repair yards and servicing facilities and low maintenance of equipment and training facilities.

35 E.g. Pacific Community & UNESCAP Inter- island shipping in the Pacific region: challenges and constraints, 2012: [https://www.unescap.org/sites/default/files/5.1.SPC\\_.pdf](https://www.unescap.org/sites/default/files/5.1.SPC_.pdf) and Alison Newell, Peter Nuttall and Elisabeth Holland, Pacific Centre for the Environment and Sustainable Development, The University of the South Pacific, Sustainable Sea Transport for the Pacific Islands: The Obvious Way Forward, 2015: <https://sustainabledevelopment.un.org/content/documents/591456-AlisonNewell-Sustainable%20sea%20transport%20for%20the%20Pacific.pdf> and Asian Development Bank, OCEANIC VOYAGES Shipping in the Pacific, 2007: <https://www.adb.org/sites/default/files/publication/29760/shipping-pacific.pdf>

The leading causes of ferry accidents in developing countries include:<sup>36</sup>

- Lack of enforceable regulations or failure to enforce existing regulations
- Poor vessel design and/or construction, leading to small vessels which are unseaworthy
- Inadequate or absent vessel maintenance
- Inadequate weather information or failure to heed weather warnings
- Absence of crew training

<sup>36</sup> Daryl Attwood, Lloyd's Register Foundation Insight report on safety in the passenger ferry industry: a global safety challenge, 2018: <https://www.lrfoundation.org.uk/en/publications>

Inadequate training is another barrier to realising maritime safety in the Pacific. Support is needed to mobilise resources to assist Maritime Training Institutes in the region to upgrade their training modules and integrate new skills and requirements to facilitate seafarers labour mobility and employment placements, as well as ensure domestic vessels are operated safely. Ongoing training is required to ensure skills and knowledge stays up to date and relevant. It is not a 'once and done' exercise.

There are opportunities to partner with maritime training institutes in Australia or New Zealand to provide training placements or facilitate training in the region and to improve the supply of technical vocational skills.

Insufficient servicing facilities further contributes to poor maintenance and upkeep of vessels and impacts on Pacific Island countries' ability to fully implement safety recommendations. There is also a lack of local suppliers of safety equipment or lifesaving appliances which means even basic safety items are hard to access locally.

Limited resources also impact on the sustainability of programs. The lack of long-term sustainable funding impacts on significant regional maritime safety projects, such as the Pacific Island Domestic Ship Safety Program (PIDSS) implemented by the Pacific Community (SPC). This program was initially funded by the Australian Government (2012-2018) and received subsequent funding from New Zealand until 2021. The program's future is now uncertain with no pipeline funding available. While the focus of development programming in the sector has largely been on emergency response, there is more to be done on the prevention side.

Inadequate maritime weather detection and communication also poses considerable risks to maritime safety in the Pacific. Weather events are getting fiercer, more frequent, moving with more rapidity and breaking previous patterns. These sudden, unexpected weather changes can catch vessels operators off guard and increase the risk of capsizes and fatalities.<sup>38</sup> Tools that

<sup>38</sup> Roberta Weisbrod, Saving lives at sea in a changing world: the case for AWS, 2020

can be used to detect and communicate weather systems are weak or non-existent and there is a lack of coverage by satellites and automatic identification systems (AIS). The IMO expects that ports and harbours will also be subject to more frequent and intense storms and rising sea levels. Inundation in ports and harbours present challenges from both a safety and economic perspective.<sup>39</sup>

Insufficient satellite and AIS coverage also presents significant challenges in maintaining Maritime Domain Awareness for safety purposes, hindering search and rescue (SAR), of which the Pacific region experiences huge numbers. SAR incidents reported in Guam, Papua New Guinea, the Solomon Islands, Kiribati, Cook Islands and Tuvalu, represent an exponential amount for a region of this size.<sup>40</sup>

Difficulty obtaining even the most basic data on the maritime sector is another persistent challenge. Most Pacific Island countries lack access to current and reliable transport data and information needed for effective planning and decision making.<sup>41</sup> For example, the lack of maritime weather data hinders ship's ability to navigate safely and to make informed decisions, such as altering course to avoid bad weather or choosing the best route to take advantage of favourable winds, waves and ocean currents.<sup>42</sup> Data from ships can also improve management of vessel performance and route optimisation. While some non-government organisations, such as World Ferry Safety Association and Baird Maritime, collect data from media reports on ferry fatalities, there is no international body that tracks national government statistics about ferry accidents. There is often a lack of transparency regarding the causes of incidents and reports often list the number of people missing rather than as deaths (even when experience suggests it is unlikely missing passengers will ever be found).<sup>43</sup>

<sup>39</sup> World Meteorological Organization and International Maritime Organization, WMO-IMO Symposium addresses extreme maritime weather 2019: <https://public.wmo.int/en/media/news/wmo-imo-symposium-addresses-extreme-maritime-weather>

<sup>40</sup> Roberta Weisbrod, Disproportionate Numbers: tracking ferry safety in the Southern Hemisphere 2019

<sup>41</sup> <https://unctadstportal.org/sftftoolkit/transitioningtolowcarbonshippingmodule/chapter2a/>

<sup>42</sup> Spire, A guide to maritime weather data for shipping, 2023: <https://spire.com/blog/weather/guide-to-maritime-weather-data/>

<sup>43</sup> Roberta Weisbrod, Disproportionate Numbers: tracking ferry safety in the Southern Hemisphere 2019

Subsistence and small-scale fishing is one of the world's most dangerous occupations. In developing countries, the causes of fishing fatalities include:<sup>37</sup>

- Lack of enforceable regulation for small craft
- Use of small, unseaworthy vessels
- Lack of visibility of small fishing boats leading to collisions with larger vessels
- Lack of weather information leading to being at sea in dangerous conditions
- Lack of access to safety and life-saving equipment
- Fishers who feel they have no choice but to fish each day to feed their families, regardless of weather conditions or the state of their equipment.

<sup>37</sup> Daryl Attwood, Lloyd's Register Foundation, Insight report on safety in the fishing industry: a global safety challenge 2018: <https://www.lrfoundation.org.uk/en/publications>

## CASE STUDY: ASIA PACIFIC MEMORANDUM OF UNDERSTANDING ON PORT STATE CONTROL (TOKYO MOU)

Port State Control (PSC) is a national authority undertaking the inspection of ships in domestic waters to verify that the condition of the ship is in compliance with international maritime conventions. PSC ensures that ships meet safety, security, environmental and crew welfare standards and therefore reduces the number of substandard vessels operating around the world.

The Asia Pacific Memorandum of Understanding on Port State Control, known as the Tokyo MOU, was signed in 1993 to establish an effective PSC in the region. The Tokyo MOU is one of the most active regional PSC organisations in the world, and provides transparent and timely information on PSC inspections and detentions. Common reasons for ships being detained are non-compliance with key international regulations on firefighting equipment, maritime labour conventions, lifeboats and functioning communication equipment, international safety management code and the international convention for the prevention of pollution on ships.

Australia, as a member of the Tokyo MOU, provides crucial information on deficiencies and detention of ships in Australian waters, enabling members to be alerted to sub-standard ships before entering their ports. This helps countries with limited PSC capacity to target sub-standard ships. Australia does provide funding and expertise to the Tokyo MOU PSC, however there is opportunity for increased assistance through expanding bilateral technical assistance programs to Pacific Island countries, which will significantly support global efforts to improve maritime safety.

<https://www.tokyo-mou.org>

## CASE STUDY: INTERNATIONAL ASSOCIATION OF MARINE AIDS TO NAVIGATION AND LIGHTHOUSE AUTHORITIES

The International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) is an international association working to improve and harmonise marine aids to navigation worldwide in support of the safe and efficient movement of vessels. The work of IALA ensures mariners have Marine Aids to Navigation, contributing to a reduction of marine accidents, increased safety of life and property at sea, and protection of the marine environment.

A 'Marine Aid to Navigation' is a device, system, or service, external to a vessel, designed and operated to enhance safe navigation. IALA supports the adoption of best practice through the provision of more than 250 standards, recommendations and guidelines, and has developed vital navigation systems including the IALA Maritime Buoyage System, Automatic Identification System, VHF Data Exchange System and the Vessel Traffic Services.

IALA also delivers education and training through the IALA World-Wide Academy. Courses are designed to assist members meet their obligations under the Safety of Life at Sea convention, the United Nations Convention on Law of the Sea and other regional agreements. The IALA Academy also supports members to develop national frameworks for the establishment and operation of authorities for Marine Aids to Navigation.

IALA is a valuable organisation contributing to maritime safety around the world. In the Pacific, only Australia, New Zealand, Papua New Guinea and Fiji are members. Australia could support the membership of other Pacific Island countries to join and participate in IALA activities, which would significantly improve standards across the region for navigational aids.

# The Vision in Practice

## What does it look like for Australia to be a partner on maritime safety with the Pacific?

Australia and the Pacific value maritime connectivity as a crucial societal need, not simply an economic enabler. The business case for greater investment in the sector is framed within the parameters of societal need, with shipping seen as an essential public good.

Australia supports Pacific Island countries to realise their vision, as articulated in the 2050 Strategy for the Blue Pacific, for a well-connected region with inclusive, affordable and accessible sea transport for all Pacific peoples.<sup>44</sup> This includes support for the Pacific region's ambition to decarbonise shipping under the Climate Action Pacific Partnership and Pacific Blue Partnership Program.

Climate financing opportunities are utilised as a valuable source of revenue capable of effecting a revolution in Pacific shipping. Pacific maritime safety is prioritised through proactive investment in long-term and sustainable programming.

The Pacific has access to clean, affordable, accessible, maintainable and reliable vessels<sup>45</sup> that are appropriate for the country context. Australia works with the Pacific region to support the adoption of up-to-date technology that increases the safety and security of sea transport. Alternatives to diesel-powered vessels are explored, aligning with the region's ambitions to decarbonise shipping. The potential role of uncrewed surface vessels in the transportation of people and goods, data collection and search and rescue efforts is fully understood.

Where donors provide vessels to Pacific Island countries, all care is taken to ensure that vessels are appropriate for the operating context, include all safety equipment and are supported by a comprehensive package of assistance that prioritises building regional capacity and allows for ongoing maintenance and training requirements.

Complementing access to affordable, reliable and safe domestic vessels, the Pacific has access to ongoing capacity-building and training for seafarers and port workers that is tailored to each country's context.

The Australian government remains a strong partner for Pacific Island countries on climate change, supporting adaptation measures that combat rising sea levels and more extreme weather events, improve port infrastructure and provide real time weather monitoring. Australia continues to proactively support the IMO's goal to reduce total annual greenhouse gas emissions from shipping by at least 50 per cent by 2050, consistent with the Paris Agreement temperature goals. Australia sends a clear message on its commitment to decarbonisation action by supporting Pacific Island efforts to push the IMO to establish a greenhouse gas (GHG) levy on emissions from the international shipping industry. Australia advocates for Pacific Islands countries in international forums to support climate finance to be used for maritime safety in the Pacific.

Revenue flowing from climate financing and decarbonisation efforts is used to upgrade port facilities and other infrastructure as well as ongoing maintenance, training, technology and other safety provisions.

<sup>44</sup> Pacific Island Forum, 2050 Strategy for the Blue Pacific Continent, 2022: <https://www.forumsec.org/wp-content/uploads/2022/08/PIFS-2050-Strategy-Blue-Pacific-Continent-WEB-5Aug2022.pdf>

<sup>45</sup> P Nuttal, M Vahs, J Morshead and A Newell "The case for field trialing and technology/knowledge transfer of emerging low carbon maritime technologies to Pacific Island Countries" in Burton, V. (Ed) Renewable Energy: Sources, Applications and Emerging Technologies (Hardcover Edition); Chapter 8 p.159-185 Nova Science Publishers, 2016 posit the following criteria for vessels: 1. Clean (low emissions) - Pacific leaders have consistently stated their intention to advocate for the strengths and unique advantages of the region on broader global platforms and to lead by example for other developing states; 2. Affordable - it must be possible for both clients (local communities to national governments) and service providers from local to international shipping operators to sustain the operational costs of new technological solutions; 3. Accessible - in terms of access to finance, technology, maintenance, human and logistical capacity; 4. Maintainable - low-skilled maintenance, simple technology, parts can be easily obtained (locally or at least close by) and at reasonable cost; 5. Reliable - highly robust under extreme tropical weather conditions and Pacific operational constraints; and 6. Achievable - in terms of implementing the technology on a scale large enough to make a significant impact.

All Pacific Island countries have adequate legislation and operate within a regulatory framework that enables and promotes enforcement of safety standards. Pacific administrations are properly resourced and equipped to achieve this. Maritime safety officers, crew members and others involved in the sector have the skills and understanding to implement, and comply with, safety requirements. Non-compliance with safety standards is identified and rectified promptly. In support of this the Australian Government builds on its strong links with the region to support implementation of the IMO's Model Regulations on Domestic Ferry Safety, which provides a comprehensive guideline and concept of safety, including crew safety, for domestic shipping in the Pacific.

Australia builds on its strong record of delivering maritime safety programs for small craft in countries such as Papua New Guinea, sharing lessons learnt and replicating successes to other Pacific partners. Australia's program of supplying safety equipment in small craft in addition to supporting regulations is tailored to other countries.

The Pacific region has adequate access to satellite and automatic identification system (AIS) coverage for both Maritime Domain Awareness (MDA) and weather detection and communication. Communities understand weather warnings and take them into consideration prior to fishing or undertaking sea transport.

Australia works within existing regional architecture, including the Pacific Island Forum and SPC, to ensure priorities are Pacific led and contribute to strengthening of regional programs under the 2050 Strategy for the Blue Pacific and the Boe Declaration, which recognise the importance of human security and enhancing maritime domain awareness to ensure safety outcomes. Where regional approaches are unable to achieve impact, Australia looks to invest in country driven programming.

Australia remains a committed partner to the region, building strong partnerships with regional and international organisations. Australia is actively engaged in the work of regional centres, such as the Pacific Fusion Centre, SPC and IMO to ensure strengthened cooperation and coordination on maritime safety issues. Australia partners with the Pacific in proactively supporting increased female participation in the maritime industry in line with the Regional Strategy for Pacific Women in Maritime.<sup>46</sup>

Australia works with regional and international partners to promote safe, secure shipping and a clean marine environment within the Pacific region. Internationally Australia is active in influencing international ship safety, search and rescue protocols and marine environment standards, and the effective implementation of these.

## CASE STUDY: TORRES STRAIT MARINE SAFETY PROGRAM

The Torres Strait Marine Safety Program (TSMSP) was created in 2006 as a joint initiative between the Australian Maritime Safety Authority program, Maritime Safety Queensland, the Torres Strait Regional Authority, Queensland Police Service and the National Maritime Safety Authority of PNG. The initiative was in response to the Torres Strait region's reliance on seaborne transport in small open boats over long distances of open ocean resulting in high search and rescue incidents.

The program focuses on improving and promoting boating safety; reducing the number of search and rescue operations; increasing the survivability of persons lost at sea; and supporting development of the near coastal maritime industry in the region. The program works closely with communities in the region, engaging with traditional owners and community representatives to deliver maritime safety education workshops to school campuses and villages. Workshops cover motor maintenance, breakdown prevention, safety equipment and its use and emergency procedures at sea.

A vital part of the program is the safety grab bag scheme, which has made thirty-eight bags available for short-term borrowing from police throughout the region, providing essential life-saving equipment available for no charge. The TSMSP has also developed resources including a Boatsafe Workbook, safety maps and fuel requirements stickers for boats, safety equipment stickers and a safety pocket handbook.

The program's success in Australia provides an opportunity to share good practice and lessons learned with Pacific partners faced with similar maritime safety challenges in remote communities.

<https://www.amsa.gov.au/about/who-we-work/torres-strait-marine-safety-program>

## CASE STUDY: INTERNATIONAL MARITIME ORGANIZATION MODEL REGULATIONS ON DOMESTIC FERRY SAFETY

In 2022 the International Maritime Organization (IMO) adopted a set of Model Regulation on Domestic Ferry Safety in response to the high incidents of lives lost through domestic ferry incidents. In the past 50 years, 93% of lives lost at sea have been attributed to domestic ferry incidents. The main international convention governing safety at sea, the International Convention for the Safety of Life at Sea, does not apply to passenger ships on domestic voyages.

To fill the legislative gap, the IMO has developed a regulatory framework to be used as a model to develop national legislation to govern domestic ferry safety, and to be used to develop bilateral, multilateral and regional agreements to govern the safe operation of domestic ferries in their waters. The regulations focus on critical areas to ensure seaworthy vessels including fully functioning communications and navigation equipment, life-saving appliances and fire-fighting gear, crew training, good management and shoreside support. Incorporation of the regulations into national law is voluntary for member states, and the regulations do not include provisions on security or pollution.

To encourage adoption of the regulations, the IMO offers technical assistance to countries to incorporate the model regulations in national law. This is an important program creating safe and reliable ferry systems, which is crucial for sustainable development. Australia can support Pacific Island countries' adoption of the regulations through continued active engagement with the IMO Integrated Technical Cooperation Programme.

[https://wwwcdn.imo.org/localresources/en/KnowledgeCentre/IndexofIMOResolutions/MSCResolutions/MSC.518\(105\).pdf](https://wwwcdn.imo.org/localresources/en/KnowledgeCentre/IndexofIMOResolutions/MSCResolutions/MSC.518(105).pdf)

46 [https://prdrse4all.spc.int/sites/default/files/t8\\_-\\_annex\\_a\\_regional\\_strategy\\_for\\_pwm\\_2020-2024\\_0.pdf](https://prdrse4all.spc.int/sites/default/files/t8_-_annex_a_regional_strategy_for_pwm_2020-2024_0.pdf)

## CASE STUDY: PACIFIC WOMEN IN MARITIME

In the Pacific, it is estimated that there are some 16,000 people working in the maritime sector and less than 10% of these are women. Women employed in the maritime sector are predominately in support, administration and mid-level management roles and experience the same challenges Pacific women in other sectors face including restrictions to the labour market, gender-based violence and discriminatory or non-gender-sensitive legislation and work practices. The maritime industry is highly male dominated and women in leadership are rare. But the tide is changing. Since 2016, there has been a notable increase in training opportunities for women, as well as strengthening of measures to promote the role of women in the maritime sector. However, the need for awareness and advocacy within the sector to make working conditions safe and appealing for women and young females is ongoing.<sup>47</sup>

Following a call from Pacific Transport Ministers to prioritise Pacific women in maritime, the region developed the Regional Strategy for Pacific Women in Maritime 2020-2024. The regional strategy was a global first and is a positive milestone in advancing gender equality in the sector.

At the 2023 5th Energy and Transport Ministers meeting, transport officials called on transport ministers to continue to advocate for the advancement of gender equality in the maritime sector including through the development of a new Regional Strategy of Pacific Women in Maritime 2025-2030. It was recommended that the new strategy focus on increasing women's participation in the maritime sector, including in leadership positions, promoting gender equality and addressing the specific needs of women in the sector. There were also calls to promote the adoption of a cross-cutting sectoral approach in dealing with challenges faced by women in the maritime sector, mainstreaming gender in the maritime sector, and fostering gender-responsive budgeting within Maritime Administrations and National Governments.<sup>48</sup>

47 Pacific Community, Regional Strategy for Pacific Women in Maritime 2020 - 2024 2019: <https://pacwima.com/wp-content/uploads/2021/05/Regional-Strategy-for-Pacific-Women-In-Maritime-2020-2024.pdf>

48 Pacific Community, Resolution of Transport Officials Fifth Pacific Regional Energy and Transport Ministers' meeting, 2023: <https://gem.spc.int/meetings/5th-pacific-regional-energy-and-transport-ministers-meeting-2023>

## CASE STUDY: PAPUA NEW GUINEA SMALL CRAFT ACT

The *Small Craft Act* was implemented in 2011 to improve the safety of community water transport, reduce occurrences of marine incidents, and develop a safety-oriented approach by small craft owners and users in Papua New Guinea. By regulating vessels 10 metres and less in length, the Act provides for the safety of people using small craft, and standards for their construction, registration and operation. Importantly, the Act requires small craft operators to have a minimum of safety training and a range of safety equipment on board their craft.

To administer the new legislation, the PNG National Maritime Safety Authority (NSMA) established 15 Provincial Small Craft Registration Boards who are responsible for ensuring the owners of small crafts who ferry passengers are registered, licensed and monitored. The NSMA provided training and education to local government officials and community groups throughout the provinces. The South Pacific Community 'Dev2fish' project also supported the introduction of the Act through providing 30 small-craft sea-safety grab-bags kits for training and safety. The kits included rescue laser lights (replacing flares), sea anchors, portable GPS, lifejackets, a mirror, a whistle and a waterproof mobile phone pouch.

PNG's implementation of a regulatory framework to improve small craft safety is an example for other Pacific Island countries. When tailored to their specific circumstances, similar legislation could be developed to encourage maritime safety for small vessels in the region.

<https://www.nmsa.gov.pg/community/small-craft/>

# Pathways

## ACCESS TO SAFE AND RELIABLE PASSENGER VESSELS

There is widespread recognition that the Pacific is in dire need of updated, safe, reliable and sustainable passenger vessels. There are a number of ways in which Australia could support this need, each with different strengths and weaknesses.

### 1. AUSTRALIA DONATES A FLEET OF MODERN FERRIES TO THE PACIFIC

Drawing on international experience, for example the Australian-designed FastCat ferries that revolutionised ferry safety in the Philippines, Australia could offer a comprehensive program of support, modelled on the Pacific Maritime Security Program, that donates domestic ferries similar to the Guardian-class Pacific patrol boat program.<sup>49</sup> In addition to the provision of vessels, Australia would need to consider on-going support in the form of training, maintenance and upgrade of berthing and loading facilities.

#### PROS

Australia is a world leader in small ferry building, renowned for its ship repair and maintenance skills and maritime crew training expertise.<sup>50</sup> Such a program could be provided for an estimated \$266 million for 20 vessels plus simple berthing/loading upgrades<sup>51</sup> and would potentially save lives in the Pacific. It would also be a win for the Australian shipbuilding industry.

Australian designed and built vessels can be seen operating successfully and appropriately in French Polynesia, New Caledonia, the Seychelles, Tanzania, Maldives and the Philippines.

#### CONS

The provision of diesel-powered vessels contradicts the Pacific's ambition to decarbonise its fleet and may hinder Australia's ability to advocate for strong climate action at the IMO.

Continued reliance on diesel is crippling to national budgets and could represent a missed opportunity in terms of transitioning to low/zero-carbon transport.

Lack of adequate servicing facilities is problematic as vessels would have to be returned to Australia for routine servicing.

Sustainment costs will far exceed the cost of acquiring the vessels, particularly where maintenance regimes and support services are limited. The total cost for repair and maintenance, servicing, and training over the life of the vessel can be many times the original acquisition cost.

49 <https://www.defence.gov.au/programs-initiatives/pacific-engagement/maritime-capability>

50 Anthony Bergin & Neil Baird, Australian Strategic Policy Institute, An Australian-funded safe ferries program would save lives in the Pacific, 2020: <https://www.aspistrategist.org.au/an-australian-funded-safe-ferries-program-would-save-lives-in-the-pacific/>

51 Anthony Bergin & Neil Baird, Australian Strategic Policy Institute, An Australian-funded safe ferries program would save lives in the Pacific, 2020: <https://www.aspistrategist.org.au/an-australian-funded-safe-ferries-program-would-save-lives-in-the-pacific/>

## 2. AUSTRALIA SUPPORTS A SHIPBUILDING INDUSTRY IN THE REGION

Australia could provide support for creating a shipbuilding industry within the Pacific region. This approach would need to 'start small' in one country and scaled out to other locations as appropriate. Packages are available for prefabricated small vessels (including fishing, passenger and cargo vessels) that can be put together in-country overseen by an external project manager. These packages do not require sophisticated shipping yards for construction.

### PROS

Adequate, usable products exist that would allow Pacific Island countries to construct vessels locally. This approach can be tailored to local context depending on needs and existing capacity. Optimum ship models that address carbonisation and safety elements could be agreed.

In time vessels could be sold to other countries in the region resulting in income generation for the shipbuilding country and creating options for more affordable, new vessels for the receiving country.

Promotes sharing of knowledge, capabilities and capacity within the region.

Increased technical knowledge, improved docking and shipping building facilities would mean other vessels could be serviced within the region rather than having to travel back to Australia or New Zealand.

### CONS

Lack of existing infrastructure and lack of trained personnel and technical capacity to build modern, safe, reliable vessels.

Difficulty accessing materials in Pacific Island countries, leading to a reliance on expensive, imported goods.

Modern shipbuilding works best in 'clusters' or 'precincts' (e.g. Fremantle/Henderson in Perth) and require many years and massive investment to develop.

## 3. AUSTRALIA WORKS WITH THE PACIFIC TO LEVERAGE CLIMATE FINANCING TO REPLACE OR RETROFIT VESSELS

Building on the Pacific's desire to decarbonise its shipping fleets and adopt up-to-date technology to increase safety at sea,<sup>52</sup> support could be provided to secure a low/zero carbon fleet for domestic use within the Pacific region.

This could be done either through:

- a dedicated new low/zero carbon fleet replacement program. This could include investigating the potential of Uncrewed Surface Vessels (USVs) powered by wind and solar
- a program of retrofitting existing vessels to use alternative low carbon fuels

This would require significant investment. Climate financing could be harnessed to accelerate fleet replacement across the Pacific to meet emissions reductions targets at the speed and scale set by Pacific leaders.

### PROS

International consensus is that sufficient technology exists in some form to produce low- or zero-carbon vessels at most scales.

There is an opportunity here for Australia to work with the Pacific (and other partners) to invest in new technology and take on a leadership role in decarbonisation of shipping in the region.

USV have considerable potential for cargo vessels and their potential as passenger ferries should not be discounted. The technology for this exists and is being used in other sectors such as Illegal, Unreported and Unregulated Fishing.

Renewable energy use of propulsion (wind) and auxiliary powered supplementation (wind, solar) are already being used in the Pacific and could be replicated, advanced and scaled up.<sup>53</sup>

### CONS

Lack of financial drivers to encourage mature commercial applications of low carbon technologies to enable market-scale deployment.

Retrofitting vessels will not achieve the same degree of efficiency as new builds.

Alternative fuels such as methanol, solar and wind-powered vessels are viewed by some as impractical and unreliable.

There is currently no practical infrastructure to facilitate the use of alternative fuels such as methanol in the Pacific. Many Pacific Island countries already struggle with adequate domestic bunkering facilities for fossil fuels. A new alternative domestic fuel source that requires new and additional bunkering infrastructure will require investment which may not be available.<sup>54</sup>

There is still much work to be done regarding USVs for Pacific domestic scenarios. Consensus as to the value of these vessels for use in first world contexts is still being debated.

52 Pacific Island Forum, 2050 Strategy for the Blue Pacific Continent, 2022: <https://www.forumsec.org/wp-content/uploads/2022/08/PIFS-2050-Strategy-Blue-Pacific-Continent-WEB-5Aug2022.pdf>

53 P. Nuttall, A. Newell, I. Rojon, B. Milligan, A. Irvin, Pacific Island domestic shipping emissions abatement measures and technology transition pathways for selected ship types, Marine Policy, Volume 132, 2021: <https://doi.org/10.1016/j.marpol.2021.104704>.

54 P. Nuttall, A. Newell, I. Rojon, B. Milligan, A. Irvin, Pacific Island domestic shipping emissions abatement measures and technology transition pathways for selected ship types, Marine Policy, Volume 132, 2021: <https://doi.org/10.1016/j.marpol.2021.104704>.

## SUPPORT FOR DECARBONISATION OF SHIPPING IN THE PACIFIC

**“It is no secret that we must accelerate our efforts towards decarbonisation of energy and transport whilst also driving genuine and equitable access across our Pacific region”**

*Dr Stuart Minchin, Director General of the Pacific Community, 5th Regional Energy and Transport Ministers' meeting, May 2023*

Maritime transport accounts for around 1 billion tonnes of greenhouse gas emissions every year.<sup>55</sup> Australia can work with the Pacific Island Forum and SPC to support priorities identified at the 5th Pacific Regional Energy and Transport Ministers' meeting. Australia can also support the Pacific Blue Shipping Partnership (PBSP),<sup>56</sup> a coalition of Pacific governments calling for significant investment in next generation low carbon vessels. The Partnership, which includes the governments of Fiji, the Marshall Islands, Samoa, Vanuatu, the Solomon Islands and Tuvalu, is calling for a significant financing program of \$500 million to make all shipping in the Pacific Ocean zero carbon by 2050. The partnership intends to raise money through grants from multinational institutions, concessional loans and direct private sector investment. The money would be used to retrofit existing passenger and cargo ferries with low-carbon technologies and invest in new zero-emissions ferries.

Australia could further assist with decarbonisation efforts by supporting options for zero-emissions cargo transport. Uncrewed Surface Vessels (USVs), powered by solar, could provide a smart option for cargo transport within the Pacific that aligns with the Pacific's desire to decarbonise and adopt up-to-date technology to increase safety at sea. Further, USVs have potential to combat two of the challenges to shipping in the region: 1) the prohibitive cost of transport between islands and 2) the lack of data. USV can be designed to accommodate a shipping container making them an efficient way to transport small trade volumes between islands without risk to human life. The uncrewed nature of the vessels means vessels can be smaller (and therefore cheaper) with no requirements for toilet, sleeping or galley facilities onboard. Many small islands do not have good access for large cargo ships. Artificial intelligence (AI) on USV would learn the safest route through coral atolls allowing USV to berth safely removing the need for people to travel out to larger ships on unstable, dangerous barges. AI can also continuously collect data to maximise voyage pathways and provide valuable information to other seafarers and maritime safety organisations.

An added value of USVs is that they could be deployed quickly and efficiently as 'first responders' in search and rescue efforts. If a maritime incident occurred, any USV in the area could be re-routed to the search and rescue zone. Data collected by the USVs would provide information on currents and winds refining the search target, making search efforts faster and more efficient without risking additional human lives. The incredible seafaring knowledge and experience held by many Pacific Island people could be used to inform AI.

55 Aideé Saucedo Dávila, Camille Bourgeon, Onno Hoffmeister UNCTAD, Improving availability of maritime transport costs data in the Pacific region 2023: <https://unctad.org/news/improving-availability-maritime-transport-costs-data-pacific-region>

56 <https://www.mcst-rmiusp.org/index.php/hlpu/pacific-blue-shipping-partnership>

## REGULATION

Australia can contribute to common standards across all Pacific Island countries to access Maritime Domain Awareness (MDA) for safety purposes through expanding the use of MDA platforms. Currently Pacific Island countries, through the FFA, have a common operating picture for fisheries, useful for tracking all fishing boats in the region and linking them to enforcement operations. But there is a gap in their ability to track vessels for safety purposes, and there is a need to ensure relevant shipping and maritime authorities all have access to the right tools, particularly an MDA platform, to track vessels. The provision of AIS, together with a satellite network and enough shore-based receivers would be a significant step towards increasing Pacific capacity to track vessels for safety purposes.

Australia should provide support, bilaterally or through regional organisations, to implement the IMO Model Regulations on Domestic Ferry Safety which provides a comprehensive guideline and concept of safety, including crew safety, for Pacific Island countries involved in the domestic shipping sector. The Australian Government should support efforts by Pacific Island countries to implement the regulations, bilaterally and through regional bodies such as SPC. Ongoing support could be provided to SPC to ensure the longevity of the successful initiatives such as the Pacific Island Domestic Ship Safety project (PIDSS).

Australia's involvement in the development of PNG's Small Craft Act provides an opportunity for Australia to share the lessons learned and replicate similar regulatory reform across the Pacific.

## DONOR-COORDINATION AND STRENGTHENED PARTNERSHIPS

Australia can advocate for strong action on climate change and Australia can join the coalition of Pacific Island countries at the IMO calling for 1.5-degree alignment, meaning greater steps must be taken to avoid rising global temperatures. In addition, Australia can support efforts to use climate financing to provide the funding and investment in secure and safe shipping. Climate finance could come from the IMO implementing a shipping carbon tax, creating a carbon fund to raise finance for developing nations.

Australia should support strong partnerships to maximise available resources and improve donor coordination. IMO is currently expanding their regional presence and establishing a new Pacific IMO office based in Suva, Fiji. There is an opportunity here for Australia to provide support, either through the Fijian Government or directly to the IMO.

Australia can encourage cooperation and coordination between key agencies including IMO, SPC, and UN ESCAP (Program for Sustainable Transport Development) to work

together to combine funding and expertise to support more regular training and workshops for maritime safety in the Pacific. Opportunities to partner with Australian maritime safety institutions can be explored to investigate training placements in Australia and/or provision of in-country training tailored to local contexts.

There is scope for Australia to partner with New Zealand to replicate the Pacific Maritime Safety Program in countries which are not currently covered under the program, if this is something that countries wanted. This would bring greater consistency to maritime safety programs across the region while ensuring support was tailored to meet the variety of needs across Pacific Islands

Australia should consider providing long-term and consistent funding for the SPC Pacific Domestic Ships Safety program, ensuring adequate support and resourcing for key programs.

## PRIVATE SECTOR ENGAGEMENT

Australia can partner with the private sector to encourage investment in transport and servicing centres. Economies of scale in the Pacific are a constant challenge, with little incentive for an international company as there is no return or revenue. Even larger Pacific Island economies such as PNG have been unable to get a reputable international company for servicing vessels. Australia can support

service organisations to establish a presence in the region and encourage local governments to provide a location and provide the training to build local capacity. SPC is currently piloting a servicing program in Fiji, bringing together the government and a life raft company to build a servicing facility. If successful, this could be replicated across the Pacific.

## CAPACITY BUILDING

Australia can support capacity development and training to deliver the skills needed to address each country's own unique safety challenges through partnering with regional and international organisations. Currently the Australia Maritime Safety Authority (AMSA) doesn't have the resources to meet the demand for skills and expertise required by the region. Australia could fund regional organisations such as the IMO, which has a large pool of resources and expertise, to deliver on maritime safety objectives. Australia should engage with IMO's current program of work, which includes a capacity needs assessment to identify big scale projects in the region with the intention of bringing in relevant partners to improve donor coordination.

Australia should expand existing programs to the rest of the Pacific.

The Australian-funded PNG port state control capacity building program is an example of where Australia could share lessons and look to replicate activities elsewhere in the Pacific. The PNG program was successful in upskilling port state control inspectors to do robust inspections to ensure vessels were fully compliant against IMO international safety standards. Replicating this across the Pacific, tailored to individual country's needs, would be an effective step towards identifying and eliminating sub-standard shipping in the region.

Similarly, Australia can share lessons from its experience in implementing a successful fisheries project in Timor-Leste where small automatic identification system (AIS) trackers were provided to fishing vessels. A similar program could be replicated throughout the Pacific with AIS provided to all small craft, supporting safety and response measures in the region.

# Contributors

Thank you to those who have contributed their thoughts during the development of this paper. Views expressed cannot be attributed to any individuals or organisations involved in the process.

**Anthony Bergin**  
National Security College

**Bekir Sitki Ustaoglu**  
International Maritime Organization

**Daryl Attwood**  
Lloyd's Register Foundation

**Dii Mek Thomas**  
Pacific Community

**Neil Baird**  
Baird Maritime

**Nurur Rahman**  
Hannur Maritime Consultants Pty Ltd

**Olivia Swift**  
Lloyd's Register Foundation

**Omirote Tabureka**  
Pacific Community

**Ore Toua**  
Pacific Community

**Peter Nuttall**  
Micronesia Centre for Sustainable Transport

**Phillip Solaris**  
X-Craft

**Remko Hottentot**  
Lloyd's Register

**Roberta Weisbrod**  
Worldwide Ferry Safety Association

**Sesoni Komaisoso**  
Maritime Safety Authority Fiji

**Sooyeob Kim**  
UNESCAP

**Sophie Hazelhurst**  
Pacific Maritime Safety Programme, New Zealand

## EDITORS

**Heather Wrathall**  
AP4D Program Lead

**Kate Archer**  
AP4D Editorial Panel

**Melissa Conley Tyler**  
AP4D Executive Director





## FOUNDING PARTNERS AND SUPPORTERS



AUSTRALIAN  
COUNCIL  
FOR  
INTERNATIONAL  
DEVELOPMENT



Australian  
National  
University



THE UNIVERSITY OF  
MELBOURNE