

SPECIAL REPORT

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Ocean horizons

Strengthening maritime security in
Indo-Pacific island states

Anthony Bergin, David Brewster and Aakriti Bachhawat

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EXECUTIVE SUMMARY

This report examines how Pacific island countries (PICs) and Indian Ocean island states (IO island states) are managing and prioritising their maritime security challenges. These islands, which we call the 'Indo-Pacific island states', face an intricate offshore tapestry.

In particular, this report suggests that most of the maritime threats and risks facing the Indo-Pacific island states are increasing. That's in part because of the general lack of effective maritime security identified in this report.

The first part of the report describes the current geopolitical environment of the Indo-Pacific island states and how we should understand maritime security in the context of island states. The next two sections examine the core maritime security concerns of the PICs and IO island states, respectively. The report then considers points of commonality and divergence in island state perspectives on maritime security and major-power competition. The conclusion includes key recommendations for Indo-Pacific island states and for countries, such as Australia and its partners, that wish to more effectively engage with the island states on maritime security.

We argue that the geostrategic location of the island states in the Indo-Pacific and the growing impact of major-power competition, though not the major security concern in their own eyes, is nonetheless an important factor in determining their approach and response to their maritime security concerns.

Most of the island states considered in this report are small islands with small populations and few financial resources, but we also consider the maritime security needs of states such as Papua New Guinea and Sri Lanka, which are islands with larger land areas and populations and relatively greater access to financial resources.

The nature of the maritime environment in which island states are located means that maritime security lies at the heart of their national wellbeing and existence.

Maritime security can be a broad concept. It includes traditional military threats and the protection of national interests and sovereignty at sea as well as non-traditional security challenges such as piracy, maritime terrorism, maritime natural hazards (including tsunamis and severe weather conditions), 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.

The pervasive maritime nature of the strategic environment faced by island states, especially the small island states, makes most security threats *maritime* in one way or another.

Pacific island countries

The PICs are facing an increasingly diversified threat environment when it comes to maritime security.

Illegal, unregulated and unreported (IUU) fishing and the impacts of climate change are the highest priority risks and threats. There are also a range of other environmental security threats such as illegal dumping from sea-based sources, oil pollution, World War II shipwrecks with corroding metal hulls, the introduction of harmful species through ballast water, and marine litter.

The Pacific islands are extremely vulnerable to drug traffickers. In recent years, there has been a dramatic expansion in the number of boats carrying cocaine and methamphetamine from Latin America intended for Australia that is causing problems for PICs that straddle the drug highway.

The PICs' arrangements for maritime security are shaped by a wide-ranging body of law covering customs, fisheries, immigration and defence. But the PICs don't have a single maritime enforcement law that harmonises their existing enforcement regime to ensure that maritime enforcement powers are exercised appropriately in the maritime environment, including in fishing, customs and migration matters.

In nearly all PICs there's a lack of coordination between the many agencies concerned with maritime security. The PICs now require a more integrated approach to deliver long-term maritime security for their nations.

Most agencies concerned with maritime security are starved of equipment, maintenance and operational funds.

Many PICs lack the communications infrastructure that would enable a quick response to some national emergencies, including a major maritime search and rescue operation.

Generally, the level of surveillance and patrol of PICs' waters is inadequate. Air surveillance of areas of national maritime jurisdiction is conducted only occasionally. There are operational gaps in the current lack of maritime patrolling by PICs, especially in remote island areas.

Indian Ocean island states

The security priorities of IO island states have evolved in recent years in response to a changing regional environment. After more than a decade of focusing on Somali-based piracy, especially by the western Indian Ocean islands, that threat is now largely under control. Other types of threats are now of more immediate concern, including climate change and other environmental security threats, drug trafficking, IUU fishing, people smuggling and violent extremism.

Climate change and other environmental security threats are major geo-environmental challenges for IO island states, which are all heavily reliant on their natural maritime environment.

For many IO island states, drug trafficking, especially via the so-called 'Smack Track' in the western Indian Ocean, is a serious and immediate security threat.

IO island states also see IUU fishing as a major security threat, reflecting the importance of the fishing industry as a source of income and protein for island populations.

Four out of the seven worst container ship disasters in recent times occurred in the Indian Ocean. Ferry accidents are common in the region. The international system for controlling the technical condition and safety of ships (Port State Control) is weak in the Indian Ocean.

Violent extremism is also a significant security threat for some IO island states, including Sri Lanka and the Maldives.

Over the past decade, there's been significant growth in China's economic, political and military presence in the Indian Ocean. Perspectives of IO island states towards major-power competition vary, but some see it as manageable. However, Chinese Belt and Road Initiative (BRI) projects, and associated concerns about Chinese

political influence and corruption, have had a significant impact, which is likely to reverberate for years to come, on domestic politics in Sri Lanka and the Maldives.

Any efforts to enhance maritime security of the IO island states should inevitably include a focus on enhancing maritime domain awareness (MDA). Within assistance from the EU, the islands of the western Indian Ocean are cooperating to build a collective MDA system. In contrast, Sri Lanka is building a stand-alone national MDA system and needs assistance.

The limitations and constraints faced by many small island states, including their small populations, limited economic resources and massive areas of maritime jurisdiction, can make it extremely difficult for many of them to face challenges alone. This means that regional cooperation on maritime security is generally a much greater imperative for island states than for other countries.

Shared challenges and experiences

The Indo-Pacific island states are characterised by great diversity in geography, ethnic and social makeup and historical experiences, but despite that diversity they share many characteristics.

The ocean is critically important to the island states of the Indo-Pacific for cultural identity, food security and economic development. They have a natural dependence on the maritime domain and are consequently vulnerable to maritime security threats. They also tend to have relatively weak economies and governance institutions that make them relatively vulnerable to external interference.

Most Indo-Pacific island states face significant security challenges in the maritime realm, including climate change, sea-level rise, drug and people trafficking and IUU fishing. Many priority issues involve maritime environmental security in one way or another.

Major powers often target Indo-Pacific island states to gain strategic benefits or expand their political influence. China, for example, is continuing to push its BRI and its world view. There's a focus on investment but also a clear geostrategic element in its engagement with the Indo-Pacific islands.

It's part of a larger strategic goal by China to become more respected and accepted. The decision in September this year by Solomon Islands and Kiribati to shift their diplomatic recognition from Taiwan to Beijing shows that China's efforts to build up its presence among the PICs are paying off.

A combination of their small size, weak governance and limited financial resources make many island states uniquely vulnerable to the adverse effects of major-power competition, but it shouldn't be assumed that they're always mere pawns in a wider strategic contest. They have agency, often considerable agency, in pursuing their own national interests, whether through aligning themselves with larger powers or playing off larger powers against each other.

But that can be a risky game, and many small island states have little room for error in resisting larger powers. China's rise as a major power across the Indo-Pacific has brought major-power competition back to the doorsteps of many Indo-Pacific island states. The islands are increasingly seen as prizes or even battlegrounds to gain or retain influence or access.

As BRI investments are financed through loans from Chinese banks and tied to the use of Chinese companies for construction, there can be financial, strategic and sovereignty implications for countries taking on unsustainable debts.

There are some important differences between the major-power actors in the Indian and Pacific oceans, which lead to somewhat different dynamics between those theatres. In the Pacific, strategic competition is mostly between China on the one hand and the US and Australia on the other (although others such as France, Japan and Taiwan also play important roles).

In the Indian Ocean, strategic competition is felt most sharply between China and India, although the US, Australia and France also play important roles.

Island states are at a big disadvantage in dealing with large countries that may seek to gain undue economic or political influence. They may simply not have the resources and expertise to properly assess the benefits and costs of major infrastructure projects, potentially leaving them with economically unfeasible projects and large debts.

The difficulty of small island states to go it alone means that regional institutions play a vital role in building their resilience to address both maritime security challenges and strategic competition.

Lack of resources also means that island states must pursue a whole-of-government approach to maritime security, but this is often lacking at present. Each agency with some responsibility for maritime security has tended to do its own thing without coordinating actions or sharing information.

Government agencies receive little guidance as to how they should work together. Few Indo-Pacific island states, for example, have published a national maritime security strategy for their country, although some have developed or are now developing national security strategies, national oceans policies, border security strategies, or some combination of them.

For the most part, the level of surveillance and patrol of Indo-Pacific island states' waters is also inadequate. There's a particular lack of dedicated aerial surveillance capabilities among Indo-Pacific island countries.

Significant gaps also exist in many of the island states' national legal frameworks and maritime law enforcement training schemes to deal with the full range of illegal activity at sea.

Without the kind of measures outlined in this report being taken in the near term to strengthen maritime security by Indo-Pacific island states, there are likely to be a number of adverse outcomes: fisheries will be overfished, maritime territorial disputes will arise, transnational crime at sea will grow, key marine areas won't be protected, there will be more maritime accidents, and law and order at sea in the region will deteriorate.

Recommendations

The recommendations that follow aren't listed in any particular priority order, as they're essentially interlinked.

For Indo-Pacific island states

1. Strengthen national resilience through building national institutions

Major-power competition in both the Pacific and Indian oceans is likely to place ever greater stress on governance institutions. This means that island states need to place even greater focus on building institutions, laws and processes that will help them resist external pressures.

2. Develop and implement national maritime security strategies

All Indo-Pacific island states should develop and implement national maritime security strategies that reflect their own specific needs and circumstances.

The strategies should include a framework for measuring the effectiveness of actions taken to deliver maritime security objectives. They should set out the island's approach to maritime security, how the country will deliver those objectives through its various agencies, assess maritime security risks and set out future directions. The implementation and updating of the strategies will require monitoring and regular updates to the assessment of maritime risks and threats.

3. Build maritime surveillance capabilities

Indo-Pacific island states should further build their maritime surveillance capabilities. Air surveillance capabilities are particularly weak for many island states, and air surveillance of their waters is generally not conducted routinely. Where appropriate, they should be encouraged to pool their air surveillance capabilities.

4. Develop a formal tasking program for the patrolling of remote islands and coastal areas

Remote island and coastal areas should be patrolled regularly to protect sovereignty, prevent illegal activity and support nation-building. Those areas should be identified and a schedule should be drawn up to state how frequently each should be visited.

5. Build national maritime domain awareness systems

The Indo-Pacific island states should build national MDA systems, starting with effective coordination and information sharing among their own national agencies (such as coastguards, police and fisheries regulators) as well as private organisations (for example, tourism operators and fishers) and local communities.

Island states that don't already have a single national maritime surveillance coordination centre should establish one to improve information sharing with neighbouring countries.

6. Strengthen institutional resilience through regional norms

Building resilience is a collective effort. The Indo-Pacific island states should work together to strengthen regional norms that will help them resist economic coercion and enhance transparency in decision-making.

7. Review interagency operational and staff training for maritime security

Indo-Pacific island states should review their training systems for maritime security. They should aim to build a single institution for learning and development for maritime security across all agencies.

8. Collate relevant maritime laws and ensure that they are easily accessible and understood

This task should take be undertaken before considering any comprehensive overhaul of maritime legislation.

For Australia, Japan and other like-minded countries working with Indo-Pacific island states

Tackling Indo-Pacific maritime security issues requires a truly collaborative approach. Australia, Japan and other partners can play important roles in assisting Indo-Pacific island states to address their maritime security challenges and promote strategic stability.

1. Give coastguards a key role in maritime security and safety cooperation in the Indian Ocean

Coastguard agencies have a leading role in engaging on maritime security and safety issues in most IO island states. Australia, Japan, India and other partners should as far as practicable fund and use their coastguards for regional engagement. This should include promoting arrangements for dialogue, cooperation and training among Indian Ocean coastguards.

2. Establish a 'Quad' of coastguards to coordinate regional capacity building

Australia, Japan, India and the US should consider establishing a working group of their coastguard agencies to take stock of and coordinate their assistance to Indo-Pacific island and littoral states. This would be a relatively uncontroversial way of giving further substance to the Quadrilateral Security Dialogue. The working group would liaise with other partners as appropriate.

3. Step up Australia's maritime security capability-building efforts among selected IO island states

Australia needs to take a more active role in building capabilities among selected IO island states. This should not seek to replicate Australia's Pacific Maritime Security Program but can draw valuable lessons from that experience.

Australia's efforts should be focused on Sri Lanka and the Maldives in the central Indian Ocean. In Sri Lanka, Australia should focus on helping to develop the national MDA system. Australia could also work with Sri Lanka on developing expertise in air surveillance, including through regular visits of Australian aircraft.

Australia is also well placed to make a big difference in the Maldives, which requires significant assistance and is facing numerous security challenges. Australia should focus on helping to build institutions, policies and systems for the more effective use of existing maritime security capabilities.

4. Assist the development of national and regional MDA systems

Australia, Japan and like-minded states should help promote the development of MDA systems in the Pacific and Indian oceans. This should include helping states to develop or improve their national MDA systems, which would then contribute to regional MDA networks.

In developing the new Pacific Fusion Centre, which will inform both strategic and operational responses to challenges such as illegal fishing, people smuggling and drug trafficking, the emphasis should be on collecting, fusing and analysing all sources of data to produce and disseminate strategic assessments. The Pacific Fusion Centre will need to bring together a number of separate 'empires' and overcome some significant national sovereignty instincts.

5. Develop framework disaster management arrangements

Natural disasters are projected to increase in frequency and severity in coming years, with particular impacts on Indo-Pacific island states. This will require ever greater humanitarian assistance and disaster management responses from Australia and Japan and their partners.

There's much scope to enhance regional disaster management arrangements, which are particularly weak in the Indian Ocean and require strengthening.

6. Shape the narrative on environmental security

Security engagement with Indo-Pacific island states needs to address environmental security concerns first and foremost. This creates an imperative to help shape the regional narrative of environmental security through building shared understandings of environmental security threats. If Australia and its partners don't take an active approach, others will shape the narrative.

In the Indian Ocean, Australia should join with Japan and other partners to sponsor the establishment of the Indian Ocean Environmental Security Forum to bring together representatives from military and civilian agencies to create shared understandings of environmental security threats, to help establish habits of dialogue in the field of environmental security and to consider responses and mitigation measures.

7. Help strengthen regional institutions for Indo-Pacific island states

Australia, Japan and their partners should look for opportunities to help strengthen regional institutions as a way of promoting regional norms and giving greater voice to small island states.

In the Indian Ocean, the newly established Indian Ocean Rim Association (IORA) Working Group on Maritime Safety and Security should be given material support to help develop regional norms relating to maritime safety and security.

8. Provide support for infrastructure development

Australia, Japan and partners should continue to provide island states with support for the development of infrastructure (including ports, airports, roads and power). This should include the development of norms and processes that promote transparency and economic sustainability.

The Coalition for Disaster Resilient Infrastructure—an India-led initiative launched in September 2019 and co-funded by other nations, including Australia, UK and Japan—is a good step forward and could pave the way for closer cooperation among like-minded nations in the region.

9. Build capacity for the blue economy

Building the blue economy is about exploring opportunities for using and linking with the marine domain. It's likely to be specific to each island state.

Countries such as Japan and Australia have much to offer in helping to develop the blue economies of Indo-Pacific island states through capacity building (human, social, physical, natural and financial) in specific areas such as management, monitoring, aquaculture and renewable energy, as well as through the translation of outcomes.

Australia has recently established the Blue Economy Cooperative Research Centre. The centre could play a useful role in capacity building with Indo-Pacific island states in policy and management, aquaculture species development and renewable energy converters to provide energy and fresh water (desalination). The centre could determine whether there's the potential for a trial or demonstration site where multiple island countries could learn.

A useful role could also be played here by the IORA Blue Carbon Hub based in Perth. Australia announced the hub in September 2019. Blue carbon ecosystems are effective at carbon storage, supporting coastal fisheries and protecting coastal communities against storms.

Australia and Japan should convene a regular forum of Indo-Pacific island states to exchange ideas on identifying potential areas of cooperation on the blue economy.

ISLANDS AND MARITIME SECURITY

Growing strategic competition in the Indo-Pacific means that the island states of the Pacific and the Indian Ocean are likely to become the battlegrounds for influence among the major powers. Australia and its partners need to better engage with the island states and work with them to address their maritime security challenges.

This report examines the maritime security needs of Indo-Pacific island states within the context of growing great-power competition. For this purpose, the concept of maritime security needs to be understood broadly to include the unique environmental, geographical, developmental and geopolitical challenges faced by island states.

Geopolitical context

The Indo-Pacific region has emerged as the most important theatre of major-power rivalry in the post-Cold War period. The rise of China and its challenge to US leadership and the US alliance system in Asia may be the defining feature of the 21st century.¹ US-China rivalry has catalysed into a competition for influence and dominance as well as a clash of norms and values.

The Indo-Pacific is essentially imagined as a maritime space, based on the confluence of the two oceans, the Indian and the Pacific (Figure 1).² It reflects the growing interactions between two theatres that were once thought to function largely separately in strategic terms.

China's burgeoning interest and presence among the Pacific islands have raised the potential for a regional competition for influence between China, on the one hand, and Australia, with the support of the US and other partners, on the other.

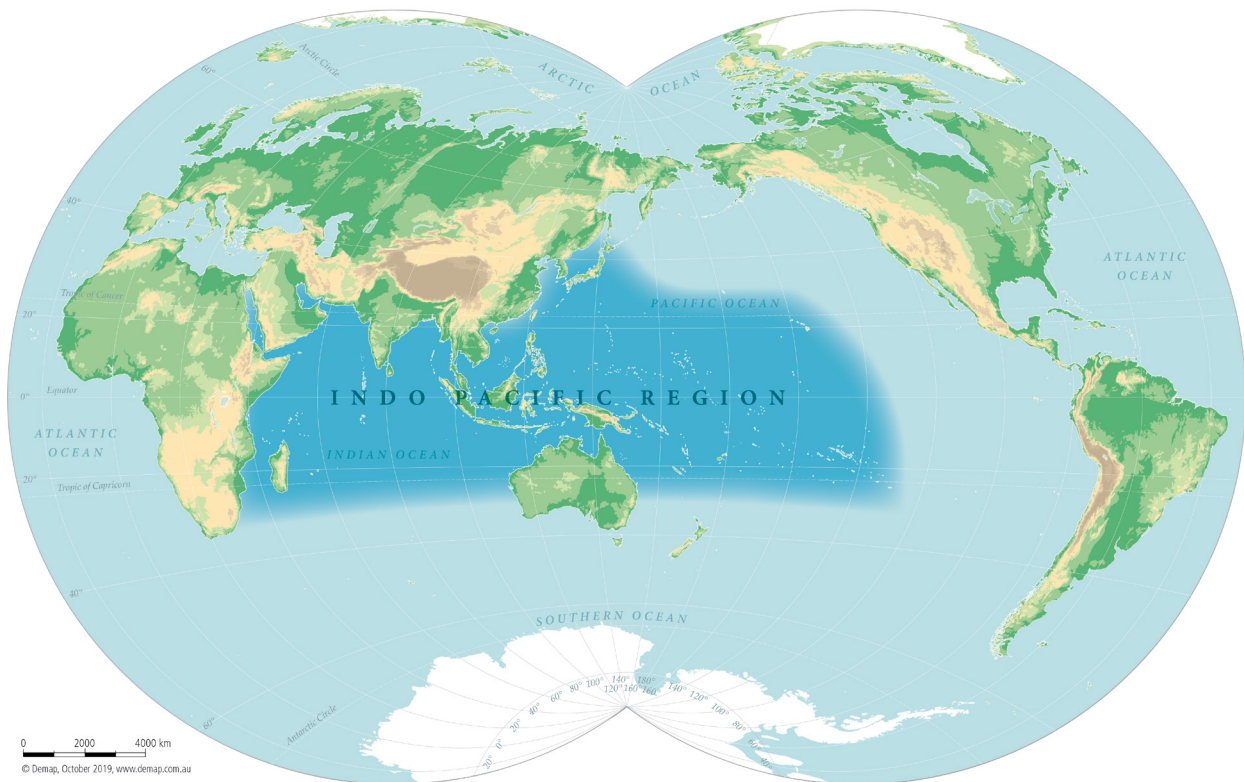
The script is similar in the Indian Ocean, although some of the actors are different, as competition in that region is being driven principally by China and India. In the Pacific and the Indian oceans, China's growing clout has resulted in considered strategic responses by regional powers such as Australia and India.

Since small states are often the objects of major powers' attention, it's not surprising that the Indo-Pacific island states have assumed such strategic prominence. Their identity as small *island* states adds another layer of complexity to their interaction with major powers, as they not only have added strategic value, but their unique circumstances also contribute to their susceptibility to pressure and influence from major powers.

Australia and its partners have taken serious notice of China's expanding influence among the Pacific island countries (PICs) only relatively recently. In the first decade of the 21st century, Australia viewed China's actions in the region principally through the prism of Beijing's diplomatic competition with Taipei.³

But recently there's been a sea-change in thinking by Canberra and its partners on China's role in the Pacific islands region. Australia's *2017 Foreign Policy White Paper* noted the need for Australia to 'step up' its engagement with its Pacific neighbours.⁴

Figure 1: The Indo-Pacific region



Australia's anxieties about the Pacific were heightened by several developments, including indications that China might be seeking a military base in Vanuatu and proposed Chinese-sponsored undersea cable networks in Papua New Guinea (PNG) and Solomon Islands.

Unlike China's actions in the Indian Ocean, its growing presence among the PICs can't be explained by any imperative to protect its sea lines of communication. Instead, Chinese interests in the Pacific are mostly geo-economic; the ocean wealth of the small islands in the Pacific, fisheries and mineral and energy resources are drawing Beijing to the region.⁵

The recent switching of diplomatic allegiance from Taiwan to China by Solomon Islands⁶ and Kiribati⁷ underscores the difficulties of the China challenge when Beijing is willing to offer large sums of money to small states. Further, China's long-term strategic ambitions in the region do have a military element. As Chinese Defence Minister Wei Fenghe recently told a gathering of Pacific and Caribbean leaders, the Belt and Road Initiative (BRI) would provide a 'framework' for military cooperation.⁸

Among the Indian Ocean island states (IO island states), Sino-Indian rivalry has been playing out for close to two decades. Since the early 2000s, many in India have worried about what New Delhi perceives to be a Chinese strategy of building a chain of naval bases or 'string of pearls' in the Indian Ocean.⁹ This would, it was feared, limit New Delhi's strategic reach and erode its role as a traditional security provider to the island states.¹⁰

China's plans to create a 'maritime silk road' in the Indian Ocean involving infrastructure investments in many island states adds to India's fears of Chinese strategic encirclement. For example, Sri Lanka's 99-year lease of Hambantota port to a company that's controlled by a Chinese state-owned company is seen by some as a case study in what some call Beijing's 'debt-trap diplomacy'.¹¹ Similarly, in the Maldives, unsustainable Chinese investments have destabilised the country, contributing to a protracted political contest in 2018 between what some outsiders saw as 'pro-China' and 'pro-India' political factions.

Ultimately, the Sino-India competition in the IO island states might be seen as a competition for status, legitimacy and influence, in which India is attempting to assert its primacy and China is refusing to acknowledge New Delhi's aspirations towards leadership in the region.¹²

From the perspective of some IO island states, engagement with China and other players is as much about hedging against Indian dominance as it's about extracting economic and political benefits, but many are also wary about being caught in a power struggle between major powers.¹³

In short, island states in both the Pacific and Indian oceans are increasingly finding themselves targets for influence by major powers while they seek to grapple with their own problems.

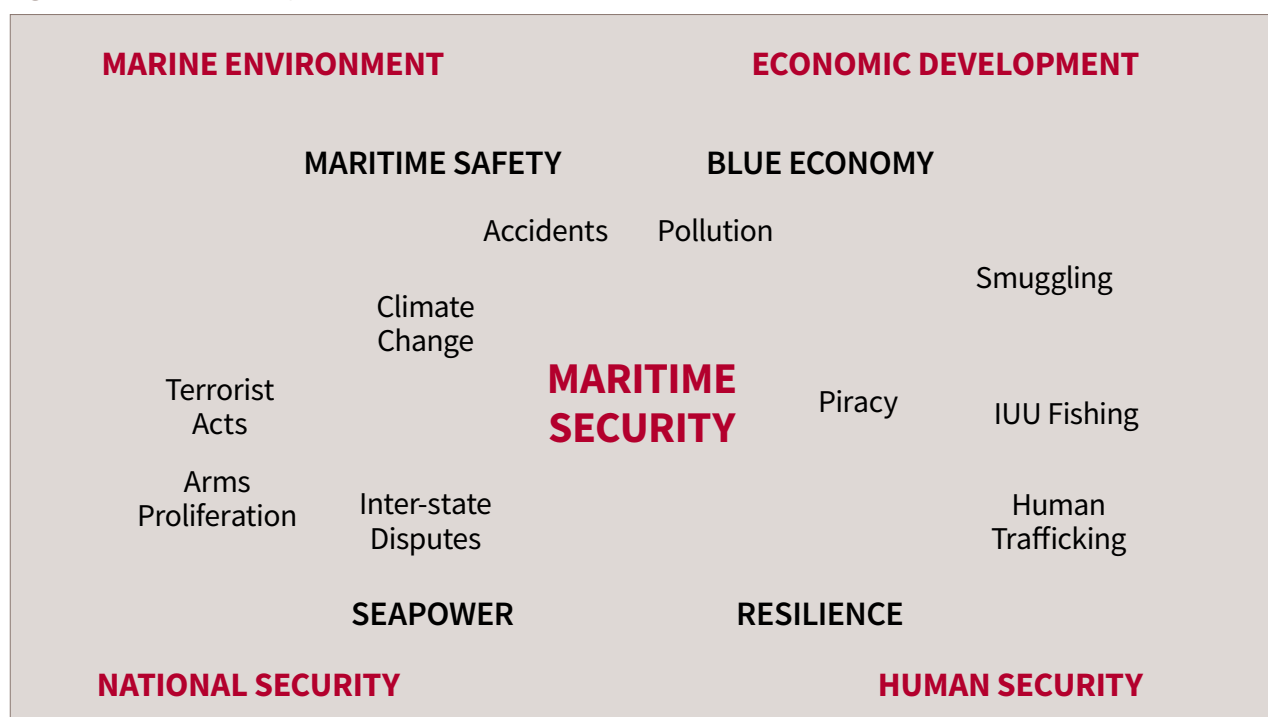
Maritime security and why it matters

This report is focused on the maritime security challenges faced by Indo-Pacific island states as the key to their national security. The very nature of the maritime environment in which island states are located means that maritime security lies at the heart of their national wellbeing and existence. In that context, it's often difficult to draw clear lines between 'maritime' and 'non-maritime' security challenges. The pervasive maritime nature of the strategic environment faced by island states, especially the small island states, makes most security threats *maritime* in one way or another.

Maritime security can be 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 so-called non-traditional, non-state security challenges such as piracy, maritime terrorism, maritime natural hazards (including tsunamis and severe weather conditions), 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.

Maritime security can be divided into four dimensions: national security, the marine environment, economic development and human security (Figure 2).¹⁴

Figure 2: Maritime security matrix



Source: *Mastering maritime security: reflexive capacity building and the Western Indian Ocean experience: a best practice toolkit*, SafeSeas, 2018.

National security involves the development and application of naval power, incorporating military power projection and homeland defence at sea, as well as the use of warships to protect maritime trade routes and commerce through functions including deterrence, surveillance and interdiction.

The marine environment includes issues such as marine pollution; vessel protection and regulation; maritime search and rescue efforts; ocean health status; pollution; and the impact of climate change.

Economic development includes the protection and promotion of the 'blue economy', trade routes, oil reserves, fisheries and so on that are under threat from piracy, criminal activity and other conflicts.

Perhaps the most important dimension for island states is human security, which encompasses those maritime insecurities experienced by individuals and local communities, whether as victims of human trafficking or piracy, or in consequence of the adverse effects of threats such as climate change, illegal fishing and marine pollution.¹⁵

The nature of the maritime security sector requires that a wide range of stakeholders must be involved in the provision of maritime security, including navies, coastguards, customs, quarantine, police, fisheries authorities and maritime safety agencies. This puts a premium on interagency coordination and the need for a whole-of-government approach. At the same time, a 'hole of government' in which some capabilities fall down the cracks between different agencies must be avoided.

Table 1 divides and organises elements of maritime security sector into *functions and subfunctions*.

Functions are key areas of activity required for a stable, safe and prosperous maritime sector. The functions group together related activities. The maritime sector is directly or indirectly linked to the defence, law enforcement, social and economic goals and objectives of the island states. The functions aggregate the range of actors that coexist in the maritime security sector. The table provides a list of activities that are implied in the provision of maritime security.

Table 1: Range of functions and actors in the maritime security sector

| FUNCTIONS | Maritime governance | Maritime civil and criminal authority | Maritime defence | Maritime safety | Maritime response and recovery | Maritime economy |
|---------------------|---|--|--|--|--|---|
| SUBFUNCTIONS | Maritime mission | Enforcement of civil and criminal laws | Maritime defence administration | Maritime safety administration | Emergency response administration | Economic activity regulation and management |
| | Maritime agency organisation | Integrated border management | Maritime defence forces | Flag state control | Incident management | Commercial ports |
| | Maritime law and policy | Judicial sector support | Maritime situational awareness / maritime domain awareness | Port state control | Search and rescue | Transport |
| | Diplomatic and foreign affairs support | Port security | | Fishing and small vessel safety and operations management | Fire | Market conditions |
| | Maritime programs | Vessel security | | Maritime facility safety management | Environmental | |
| | Maritime professionals | Supply chain security | | Mariner licensing administration | Maritime defence assistance to civil authorities | |
| | Maritime agency outreach and stakeholder coordination | Maritime environmental enforcement | | Aids to navigation infrastructure, equipment and maintenance | Investigation and after-action analysis | |
| | Accountability and oversight | | | Channel and harbour management | | |
| | | | | Maritime safety interagency coordination | | |

Source: US Department of State, Maritime security sector reform, 2010, [online](#).

This report looks broadly at resource assets assigned to maritime security in the Indo-Pacific island states and assesses them against the future need to meet the desired level of security.

We consider opportunities for processes within the island states to be strengthened and identify the key constraints to enhancing maritime security processes.

We conclude that maritime threats and risks facing the island states of the Indo-Pacific are increasing, in part because of the general lack of effective maritime security.

We also argue that the geostrategic location of the island states in the Indo-Pacific, although for many states not the major security concern in their own eyes, is nonetheless an important factor in determining their approach and response to their maritime security concerns.

The island states are seeking to leverage their enhanced importance by drawing in the major powers to assist with their maritime security concerns. In that way, maritime security is in part redefining the greater geopolitical game with respect to the island states.

This report pursues several themes in the security of Indo-Pacific island states:

- understanding the priorities of the island states in maritime security
- examining the level of awareness island states have over their extensive maritime domains
- assessing island states' approaches in building their blue economies.

Most of the island states considered in this report are small islands with small populations and few financial resources, but we also consider the maritime security needs of states such as PNG and Sri Lanka, which are islands with larger land areas and populations and relatively greater access to financial resources. While this report doesn't address the perspectives of all island states in the Indo-Pacific, many of the experiences and perspectives of those states noted in this report are, in one way or another, likely to be shared by other island states.

PACIFIC ISLAND COUNTRIES

The PICs face a range of non-traditional national security threats and security risks, ranging from climate change and natural disasters to transnational crime and border security. In contrast, they pay little attention to external ‘hard power’ military threats, and only three states (PNG, Fiji and Tonga) have formal militaries.

As part of their strategic thinking about their national security, the PICs tend to share a comprehensive view of maritime security. This involves consideration of economic, resource and environmental security, public health and social wellbeing.¹⁶

None of the PICs faces meaningful external threats of a military nature, although all are concerned with protecting their sovereignty and sovereign rights. Sovereignty is a particular problem for the small but geographically extensive island countries, which have very large areas of maritime jurisdiction (Table 2 and Figure 3).

Figure 3: South Pacific islands exclusive economic zones

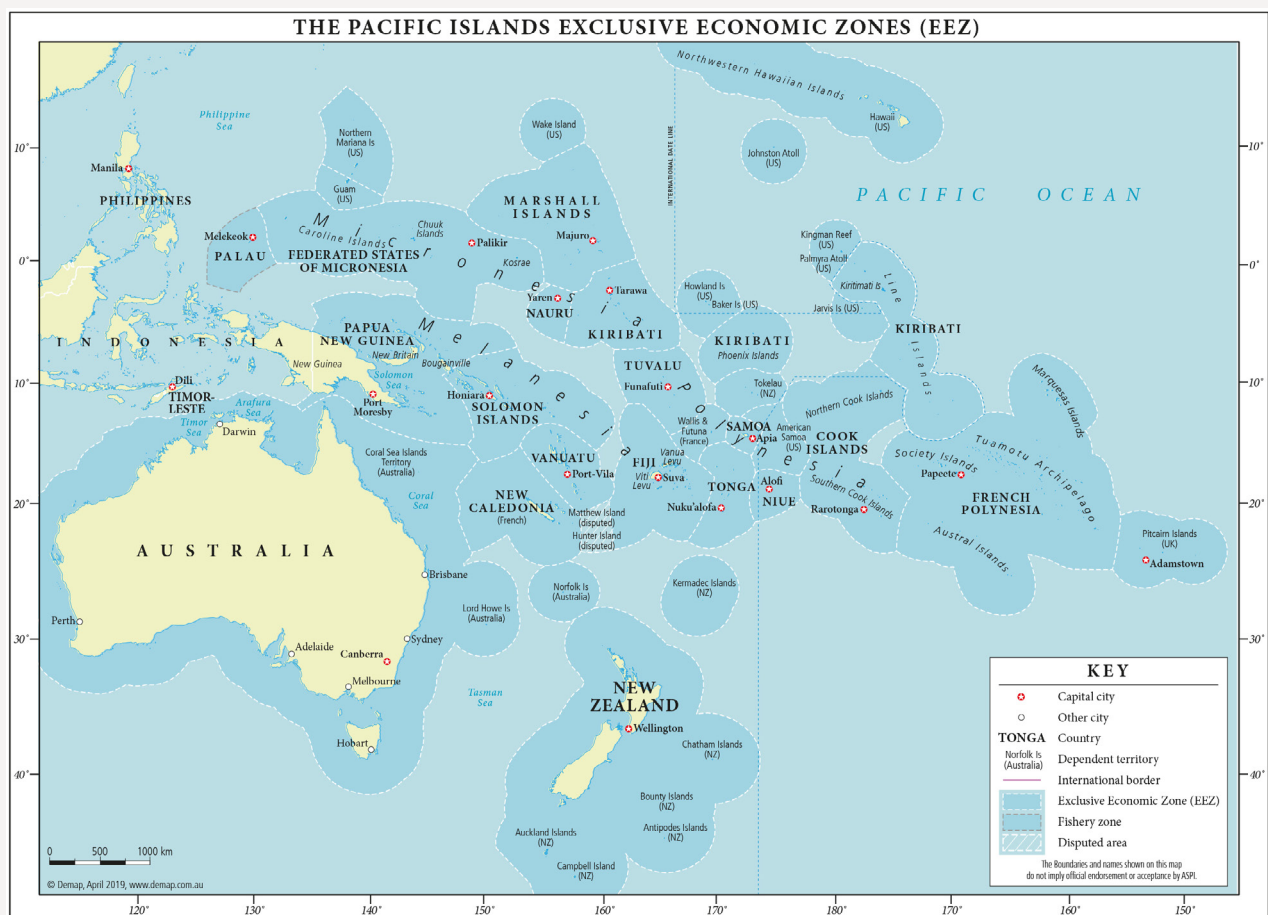


Table 2: Pacific island countries

| Country | Capital | Land (sq. km) | EEZ (sq. km) | Population [year] | GDP (US\$) [year] | Political status |
|----------------------------------|--|---------------|---------------------------|----------------------------|--------------------------------------|--|
| American Samoa | Pago Pago | 199 | 404,391 | 55,000 [2018] ^a | 636 million [2016 est.] ^b | Dependent territory |
| Cook Islands | Avarua | 240 | 1.8 million | 17,000 [2017] | 346 million [2017] | Freely associated state |
| Federated States of Micronesia | Palikir | 700 | 2.9 million | 102,000 | 0.4 billion [2019] | Freely associated state |
| Fiji | Suva | 18,270 | 1.3 million | 890,000 [2018] | 5.3 billion [2019] | Independent republic |
| French Polynesia | Papeete | 3,660 | 4.8 million | 286,000 [2018] | 5,418 million [2018] | An overseas country within the French Republic |
| Guam | Agana | 544 | 221,504 | 160,000 [2018] | 29,000 per capita [2018] | Dependent territory |
| Kiribati | Tarawa | 810 | 3.6 million | 115,000 [2018] | 0.2 billion [2019] | Independent republic |
| Nauru | Yaren | 21 | 320,000 | 13,000 [2018] | 0.1 billion [2019] | Independent republic |
| New Caledonia | Noumea | 18,280 | 1.4 million | 282,000 [2018] | 10.8 billion [2018] | 'Special collectivity' |
| Niue | Alofi | 260 | 390,000 | 1,536 [2009] | 24.9 billion [2016] | Freely associated state |
| Northern Mariana Islands | Salpan | 464 | 758,121 | 51,994 [2018] ^c | 1.5 billion [2017] ^d | Dependent territory |
| Palau | Koror | 488 | 629,000 ^e | 18,000 [2018] | 0.3 billion [2019] | Freely associated state |
| Papua New Guinea | Port Moresby | 462,243 | 3.12 million ^f | 8.4 million [2018] | 21.5 billion [2019] | Constitutional monarchy |
| Pitcairn Islands | Adamstown | 47 | 830,000 ^g | 49 [2017] ^h | Data not available | Dependent territory |
| Republic of the Marshall Islands | Majuro | 180 | 2.1 million | 56,000 [2018] | 0.2 billion [2019] | Freely associated state |
| Samoa | Apia | 2,830 | 120,000 | 199,000 [2018] | 0.9 billion [2019] | Independent republic |
| Solomon Islands | Honiara | 27,990 | 1.6 million | 627,000 [2018] | 1.5 billion [2019] | Constitutional monarchy |
| Tokelau | Administrative centres are located on each atoll | 12 | 370 km | 1,285 [2016] ⁱ | 8.7 million [2016] ^j | Dependent territory |
| Tonga | Nuku'alofa | 720 | 700,000 ^k | 101,000 [2018] | 0.5 billion [2019] | Independent kingdom |
| Tuvalu | Funafuti | 26 | 760,000 ^l | 11,000 [2018] | 0.0 billion [2019] | Constitutional monarchy |
| Vanuatu | Port Vila | 12,190 | 680,000 | 285,000 [2018] | 0.9 billion [2019] | Independent republic |
| Wallis and Futuna | Mata-Utu | 142 | 258,269 | 12,000 [2018] | Data not available | Dependent territory |

EEZ = exclusive economic zone.

EEZ = exclusive economic zone.

a Department of Foreign Affairs and Trade, *American Samoa country brief*, Australian Government, [online](#).

b Bureau of Economic Analysis, 'American Samoa GDP increases in 2018', media release, US Department of Commerce, 23 August 2019, [online](#).

c CIA, *World factbook*, 2019, [online](#).

d CIA, *World factbook*, 2019, [online](#).

e Food and Agriculture Organization of the United Nations (FAO), [online](#).

f FAO, [online](#).

g 'The Pitcairn Islands: the world's largest fully protected marine reserve', *Pew*, updated June 2017, [online](#).

h 'The people of Pitcairn Island', Pitcairn Government immigration website, [online](#).

i CIA, *World factbook*, 2019, [online](#).

j 'Tokelau's gross domestic product determined for first time this century', media release, Government of Tokelau, 28 April 2017, [online](#).

k Macbio Pacific Info, [online](#)

l Pacific Office in Fiji, UN Development Programme, [online](#).

Sources (where not specified): Department of Foreign Affairs and Trade country and region fact sheets, online; CIA, *The World Factbook*, 2019, online; Sea Around Us Project, online; Pacific Islands Forum Secretariat, [online](#).

For most PICs, large exclusive economic zones (EEZs) and the maritime sector are major sources of income. Some PICs gain considerable economic benefit from the wages of their national seafarers employed in the international shipping industry.

Ocean resources are the mainstay of most island economies. The western and central Pacific has the world's largest tuna fishery, worth an estimated \$7 billion a year. Illegal, unregulated and unreported (IUU) fishing is considered the major maritime security threat.

But other threats arise from climate change and sea-level rise; illegal people movement and drug smuggling; and marine pollution and the degradation of marine habitats.

Some of these broad maritime security challenges can be understood if we consider the Pacific's largest state, PNG (see box).

PNG and maritime security

One of the largest archipelagic states, PNG has a big EEZ of 3.1 million square kilometres. IUU fishing is one of PNG's most serious maritime security threats.

PNG's national waters are rich in fish, and the country could be losing considerable income through the lack of adequate surveillance and enforcement.

Some parts of the EEZ, including many islands, are very remote. Surveillance and patrol of this large area to maintain sovereignty, protect resources and prevent illegal activity is a challenging task that hasn't been performed well in recent years.

The status of the Autonomous Region of Bougainville complicates maritime security. PNG Defence Force (PNGDF) patrol boats don't currently patrol the large area of EEZ around Bougainville.

PNG has three main borders: with Australia, Indonesia and Solomon Islands. All three borders have security problems. The borders with Australia and Solomon Islands are across water. The long and isolated land border with Indonesia is vulnerable to illegal movement by sea at its northern and southern ends.

The borders with Indonesia and Solomon Islands aren't well patrolled on the PNG side and are largely open to the uncontrolled movement of people and goods. (In October 2019, Australia announced a joint project with Solomon Islands to construct a border and patrol boat outpost in Solomon Islands' western provinces. The Solomon Islands Government now regularly sends police to the border area and is engaging local communities as coast watchers.)¹⁷

The border with Australia across the Torres Strait is the best controlled of the country's borders, but some illegal movement of people and goods, including drugs and firearms, still occurs. Australia has a vested interest in PNG's border and maritime security. If its borders and waters aren't secure, then illegal immigrants, drugs and other prohibited goods can readily move through PNG into Australia.

The Maritime Element of the PNGDF has four Pacific-class patrol boats. They are being progressively replaced by Guardian-class vessels, the first of which, HMPNGS *Ted Doro*, has been commissioned. It also operates three Balikpapan-class landing craft.

Naval bases in Port Moresby and Lombrum on Manus Island are run down. The Port Moresby base is to be reclaimed for port development, but no satisfactory alternative has been identified so far.

The Air Transport Wing is small. Its role is to support army operations with transport, air resupply and medical evacuation capabilities. It's to acquire several P-750 XSTOL utility aircraft from New Zealand. Since 2012, Australia has leased two civilian helicopters to the PNGDF, which are flown and maintained by a

Continued on next page.

private company in Port Moresby. Air surveillance of PNG's large area of maritime jurisdiction is conducted only occasionally.

The 2013 PNG *Defence White Paper* stated that the capacity of PNG's security agencies has declined considerably since independence, causing significant security gaps along national land, air and maritime borders. It noted deficiencies in national air and maritime capabilities for effective border and maritime security. It observed that porous and uncontrolled borders had allowed transnational crime, such as the illegal smuggling of small arms, light weapons and contraband, to continue unabated. It pointed out that poor border control had permitted the widespread plundering of the country's fish stocks and timber.

Building a joint naval base on Manus will boost security in Australia's maritime approaches and enhance PNG's ability to conduct surveillance of its far-flung EEZ.

But it won't be cheap. The Lombrum base is in a poor state. Manus is remote and has high support costs. A new wharf will be needed to accommodate major naval units as well as a refuelling facility.

Historically, the Maritime Element and Air Transport Wing have been the underresourced poor cousins of the Army. Surprisingly, for a country with such a large area of maritime jurisdiction, PNG lacks maritime awareness, although the people of its coastal and island provinces have a long maritime tradition.

One noted maritime security expert has suggested that consideration be given to whether PNG's maritime and border security would be best provided by splitting the Maritime Element from the PNGDF to form a PNG coastguard with its own command arrangements, priorities and policies.¹⁸

Key maritime security threats and challenges for PICs

PICs face challenges in managing their natural resources, dealing with transnational crime, protecting their sovereignty and managing marine environmental threats and natural hazards.

IUU fishing

In the South Pacific in recent years, the problems of overfishing and overcapacity (too many fishing boats) have increased, threatening the long-term sustainability of some of the region's key fish stocks. Particularly challenging is the need to ensure compliance by distant-water fishing nations with fishing regulations and licensing conditions, especially in the highly important area of monitoring and reporting.

The history of compliance in this regard is not good, and there have been high levels of misreporting. The 'unreported' dimension of IUU fishing is now possibly the most serious aspect of IUU fishing in the Pacific. The estimated cost of IUU fishing within the Western and Central Pacific Ocean is over US\$616.11 million per year.¹⁹

Poor fishing licensing and enforcement have created opportunities for corruption in the region, and fisheries officers are open to bribes for the issue of licences or to secure the release of arrested vessels.

While all licensed fishing vessels operating in Pacific waters carry vessel monitoring systems, that isn't necessarily so for the support vessels. A particular problem has emerged in recent years with the appearance of Vietnamese so-called 'blue boats' fishing illegally (mainly for sea cucumber) in some island waters.²⁰ It's also suspected that those vessels are supported by mother ships.

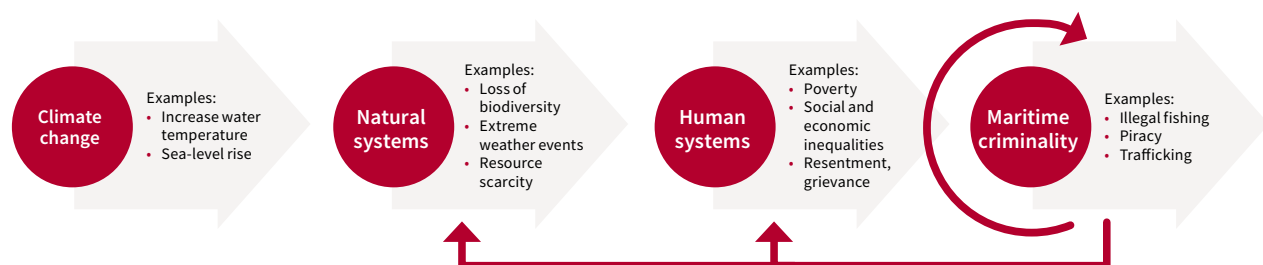
Climate change and sea-level rise

The 3rd South West Pacific Heads of Maritime Forces Meeting was held in Suva in August 2019. It was attended by maritime forces officers, chiefs of navy, permanent secretaries and senior government officials. The theme for this year's meeting was 'Climate change—the regional maritime security threat'.²¹

Collin Beck, the permanent secretary of the Ministry of Foreign Affairs and External Trade of Solomon Islands, recently described climate change as a ‘death sentence’ for the Pacific.²² Climate change puts pressures on the marine environment, including critical maritime infrastructure. Climate-change-enhanced storms, rising sea levels and coastal flooding are disproportionately affecting many island nations. It also adds to pressures on marine resources, including IUU fishing. Other climate-related security concerns for the PICs include access to fresh water and local food supplies. Potentially, these impacts can be further projected to second-order consequences that include economic loss and migration.

Climate change affects natural systems, which in turn has negative impacts on human systems, which can engender, or contribute to engendering, the occurrence of maritime crimes. Eventually, the occurrence of maritime crime can in turn negatively affect natural and human systems by reinforcing existing problems, such as resource scarcities, poverty and grievance (Figure 4).²³

Figure 4: Links between climate change impacts and maritime criminality



Source: B Germond, A Mazaris, ‘Climate change and maritime security’, *Marine Policy*, January 2019.

In short, climate change is one of the multipliers that can add risks and threats to maritime security. It’s interesting to note the statement on oceans and maritime boundaries in the 2019 Pacific Islands Forum (PIF) communiqué: it reaffirms the importance of preserving members’ existing EEZ rights in the face of sea-level rise.²⁴ (It’s not currently clear under international law what effect the disappearance of an island might have on a country’s EEZ rights.) This sends a clear message to those state and non-state actors that may be interested in exploiting maritime zones.

PICs are developing a regional solution to sea-level rise and maritime boundaries: eight Pacific states (Marshall Islands, Cook Islands, Fiji, Kiribati, Nauru, Niue, Palau and Tuvalu) have adopted legislation purporting to ‘fix’ their maritime limits. Other island states are developing legislation.

At the 2018 PIF meeting in Nauru, all members of the forum signed the Boe Declaration on Regional Security. The first assertion of the declaration says that all Pacific nations ‘reaffirm that climate change remains the single greatest threat to the livelihoods, security and wellbeing of the peoples of the Pacific, and our commitment to progress the implementation of the Paris agreement.’

Sea levels in several Pacific island states are predicted with a very high degree of confidence to continue to rise. Low-lying coastal areas and atolls are particularly affected. Perhaps the case that has attracted the most international attention is the Carteret Islands to the northeast of Buka Island, which are already reportedly threatened by rising sea levels. Their inhabitants could become the world’s first climate-change displaced persons.²⁵

Climate change is a key area in which China is trying to influence the regional narrative. After the 2019 PIF meeting in Tuvalu, Beijing suggested that Australia reflect on how it engages its Pacific neighbours after Pacific leaders were unhappy with Australia’s stance on climate change at the forum. China’s Foreign Ministry accused Australia of being condescending and stated that China would continue to work with Pacific countries under the framework of ‘south-south cooperation’.²⁶

Transnational crime

Transnational crime is a major issue for the PICs. It's facilitated by weak border and maritime security due to the wide maritime areas, the lack of resources, the volume of maritime traffic in the region, weak legislation, poor communications and poor cooperation.

Much of the transnational crime reported to occur in the Pacific islands region has a maritime dimension. It can also take a range of different forms. Apart from IUU fishing, other forms include illegal logging, illegal trade in wildlife and trafficking in drugs and small arms.²⁷

The Pacific islands are extremely vulnerable to drug traffickers. In recent years, there has been a dramatic expansion in the number of boats carrying cocaine and methamphetamine from Latin America intended for Australia that is causing problems for PICs that straddle the drug highway.

The main countries affected have been Fiji, Vanuatu, Papua New Guinea, Tonga and New Caledonia. Large quantities of cocaine have washed up on remote beaches in some island states. Since 2016, there have been six major seizures of drugs in French Polynesia. Some of the larger PICs are now plagued by drug abuse problems off the back of this trade.²⁸

With increased security at regional airports and relatively few unmanned or insecure airfields in remote locations, most smuggling of people and contraband goods in the Pacific region occurs by sea. Evasion of customs duties on goods landed in regional ports, possibly facilitated by corrupt officials, is a major problem.

Some PICs are losing revenue from the uncontrolled movement of goods into their countries without the payment of import fees. There are few border controls, for example, on the border between PNG and Solomon Islands, and goods, especially alcohol products, are being brought across the sea border without the payment of taxes.²⁹

There are reports of the illegal entry of people into the Pacific from Asia by fishing vessels or fisheries support vessels, as well as of drugs, cigarettes (usually counterfeit) and alcohol. Wildlife and cultural objects may be smuggled out of the PICs.

While foreign fishing vessels may be involved in smuggling or other illegal activity at sea, vessels supporting them, such as mother ships, bunkering vessels and fish carriers, may pose even greater risks. Those vessels enter and leave the region regularly and have larger crews than the fishing vessels. Undocumented crew exchanges are believed to occur. The accuracy of crew identity documentation is a particular problem. Tracking the movements of cruising yachts in the region is also a challenging problem.

Human trafficking

Illegal migration, including human trafficking, occurs in the Pacific.³⁰ Most traffickers are Chinese nationals using states such as Palau and Fiji as transit points for other destinations within the region.

The Pacific Immigration Development Community says that human trafficking that involves exploitation is common in the islands in industries such as logging, mining and fishing.³¹ The UN recently assisted Vanuatu with the deportation of around 100 Bangladeshis who'd been lured there by people traffickers with promises of jobs.³²

There's a huge gap in data on this problem in the Pacific, but it's thought that the problem is getting bigger. Law enforcement resources in the region to tackle the issue are quite low. Legislation making human trafficking a crime doesn't exist in all PICs.

Piracy and sea robbery

Incidents of piracy and armed robbery at sea have occurred in the waters of some PICs, such as Solomon Islands and PNG.³³ Most attacks occur in either the territorial sea or the archipelagic waters and should be regarded as acts of sea robbery rather than as piracy.³⁴

For example, there have been incidences of armed attacks on small craft at sea in various locations along the north coast of PNG between Lae and westward to the Indonesia border, and particularly between Lae and the Northern Province. There's an active trade in betel nut between those two locations. Boats carrying cash to buy betel nut destined for the highlands and then boats returning with their betel nut cargoes are reported to be regularly attacked and their crews sometimes killed.

Maritime terrorism

The threat of maritime terrorist attack in the region is generally perceived as very low. This is mainly due to the lack of targets and the difficulties facing terrorists in launching an attack. Cruise liners in the region may be vulnerable to bomb attacks onboard.

Major developments have occurred in the regulation of international shipping through the introduction of the International Ship and Port Facility Security Code (ISPS Code) and arrangements to improve cargo security in the region.³⁵

Sovereignty

Some PICs face a particular problem in maintaining sovereignty and security in remote islands. Foreign fishing vessels and cruising yachts often make illegal calls to outer islands and are involved in activities such as prostitution and smuggling drugs, alcohol and cigarettes.

There's also a risk of people arriving illegally on remote islands and then making their way to major centres, from which they can travel on to elsewhere. Disease could be spread in the region as a result of such unlawful arrivals.

Sovereignty issues also relate to the fact that there are still many maritime boundaries to be agreed between the PICs (Fiji, for example, has boundary disputes with Tonga and Vanuatu) and there are numerous claims to overlapping jurisdiction. At the 2018 PIF meeting, leaders acknowledged the urgency and importance of securing the region's maritime boundaries as a key issue for the development and security of the 'Blue Pacific Continent'.

The situation is complicated by conflicting and controversial claims about sovereignty over various offshore features. It's a very difficult task for a small country to conduct complicated boundary negotiations with its neighbours, sometimes including major powers.

It's important that boundaries be concluded to give island states legal certainty over which maritime space they have rights to exert control over. As noted above, there are also risks to maritime boundaries from sea-level rise and other climate-change-related impacts.

Marine environmental threats

Major industries in the PICs, particularly fishing and tourism, are dependent on a pristine environment. They need to be protected from the numerous threats arising both from land-based sources, including runoff and dumping of waste from mining activities³⁶ and illegal dumping, and from sea-based sources (ships, offshore oil and gas developments, and potentially also deep seabed mining). The risks are growing as shipping traffic in Pacific waters increases.

There are calls from some Pacific governments, such as Fiji, for a region-wide moratorium on seabed mining for a decade. Fiji, PNG, Solomon Islands, Tonga and Vanuatu have granted deep-sea exploration permits (the main minerals of interest are seafloor massive sulphides, polymetallic manganese nodules and cobalt-rich ferromanganese crusts).

PNG had previously been one of deep-sea mining's firmest backers, but Prime Minister James Marape has said he's wary of the technology, pointing out that PNG had been 'burned' by industry promises.³⁷

Oil pollution not only has a detrimental effect on ecosystems, fauna and flora, but it can also lead to loss of amenities such as sandy beaches and markets for fisheries and tourism, as well as causing damage to boats, fishing gear, boat ramps and jetties.

These environmental risks were demonstrated recently when a significant oil spill occurred off Rennell Island, which is part of Solomon Islands. Rennell Island is the world's largest raised atoll and is the first natural site that is customarily owned to be listed as a World Heritage site. In February this year, *MV Solomon Trader* ran into a coral reef near Rennell, spilling oil and threatening the site.³⁸

This incident prompted some experts to sound the alarm on another underwater environmental challenge that exists right across the Pacific. There are thousands of World War II shipwrecks that are ticking timebombs that need urgent attention.³⁹ Around 3,800 vessels were sunk during the war in waters across the Asia-Pacific, and their metal hulls are corroding. Exactly what chemicals, including oil, remain on board the shipwrecks, or how much, is not known.

The most vulnerable locations for protecting ecosystems from shipwrecks are those in the Federated States of Micronesia, Palau, PNG, the Republic of the Marshall Islands, and Solomon Islands. Some Pacific island communities are worried about large amounts of oil spilling out when the wrecks collapse completely.

Another issue of marine environmental concern to the island states is ballast water management (ballast water systems are used to stabilise ships at sea). Ballast water can pose a serious threat to a state's marine ecosystem due to the vast range of marine species carried in the water. The introduction of harmful species could seriously damage island economies by wiping out the marine life in their waters.

Finally, there is the problem of harmful marine debris. Much of the waste plastic that's generated by PICs ends up in their waterways and coastal waters, but the problem also involves marine plastics from land-based sources from states in other regions. Plastic pollution contributes to the degeneration of coral reefs and the loss of marine biodiversity and affects tourism.

To combat the problem of litter in their ocean environment, the PICs last year launched the Pacific Regional Action Plan on Marine Litter 2018–2025.⁴⁰ The first action listed is to support the development of a global treaty to address marine litter and microplastics. The issue will feature at the region's largest ocean gathering, the seventh Our Ocean Conference to be held in August 2020 in Palau.

Maritime natural hazards

Natural hazards include earthquakes, tsunamis, volcanic eruptions and severe weather conditions leading to coastal flooding or the loss of vessels. The region is vulnerable to maritime natural hazards, especially tsunamis and cyclones.⁴¹

When a severe event occurs somewhere in a PIC, there might not be an airfield available or an existing airfield may be rendered unserviceable. Initial outside assistance can then be provided only by sea.

Shipping safety and search and rescue

Marine safety is a major concern in the Pacific islands region. Nearly all PICs are archipelagic states and have a high level of dependence on inter-island and other domestic shipping traffic for the movement of goods and people.

There have been many ferry disasters in the region. (Last year, for example, 95 people were killed in such a disaster in Kiribati.) Poor maritime safety and security can lead to the unnecessary loss of human life. The increased presence of cruise liners in Pacific waters, including smaller ecotourism vessels, especially in remote locations, poses additional risks of shipping accidents.

The safety of ships navigating throughout PIC waters depends on good nautical charts. Hydrographic services are required by the Safety of Life at Sea Convention.

In the Pacific islands region, Australia, New Zealand, the UK, France and the US are the primary charting authorities. They assist the PICs to build their own hydrographic capabilities. The South West Pacific Hydrographic Commission covers the South Pacific, but its coverage also extends to the middle of the Indian Ocean as its western boundary.

A significant number of Pacific islanders are lost at sea each year, and most casualties are associated with small fishing vessels. Search and rescue capabilities should be considered along with maritime security.

Small vessels are used extensively in the PICs and are often overloaded. Problems arise from unpredictable weather, poor communications, and the fact that most small craft don't carry emergency position-indicating radio beacons or some other form of locator beacon. Long delays can occur before a search for a missing craft begins.

The capabilities required for search and rescue (ships, aircraft and command and control systems) are similar to those required for maritime surveillance and enforcement.

Undersea cables and pipelines

Several PICs have undersea cables and pipelines that are vulnerable to damage and breakage. Undersea pipelines connect offshore oil and gas platforms with shore installations, and submarine communications cables carry the bulk of international voice and data traffic.

Submarine cable networks are being developed to provide the backbone telecommunications needs for major coastal centres and islands in a number of PICs. The pipelines and cables are a vital component of national infrastructure, and any breakage or damage can have serious consequences.

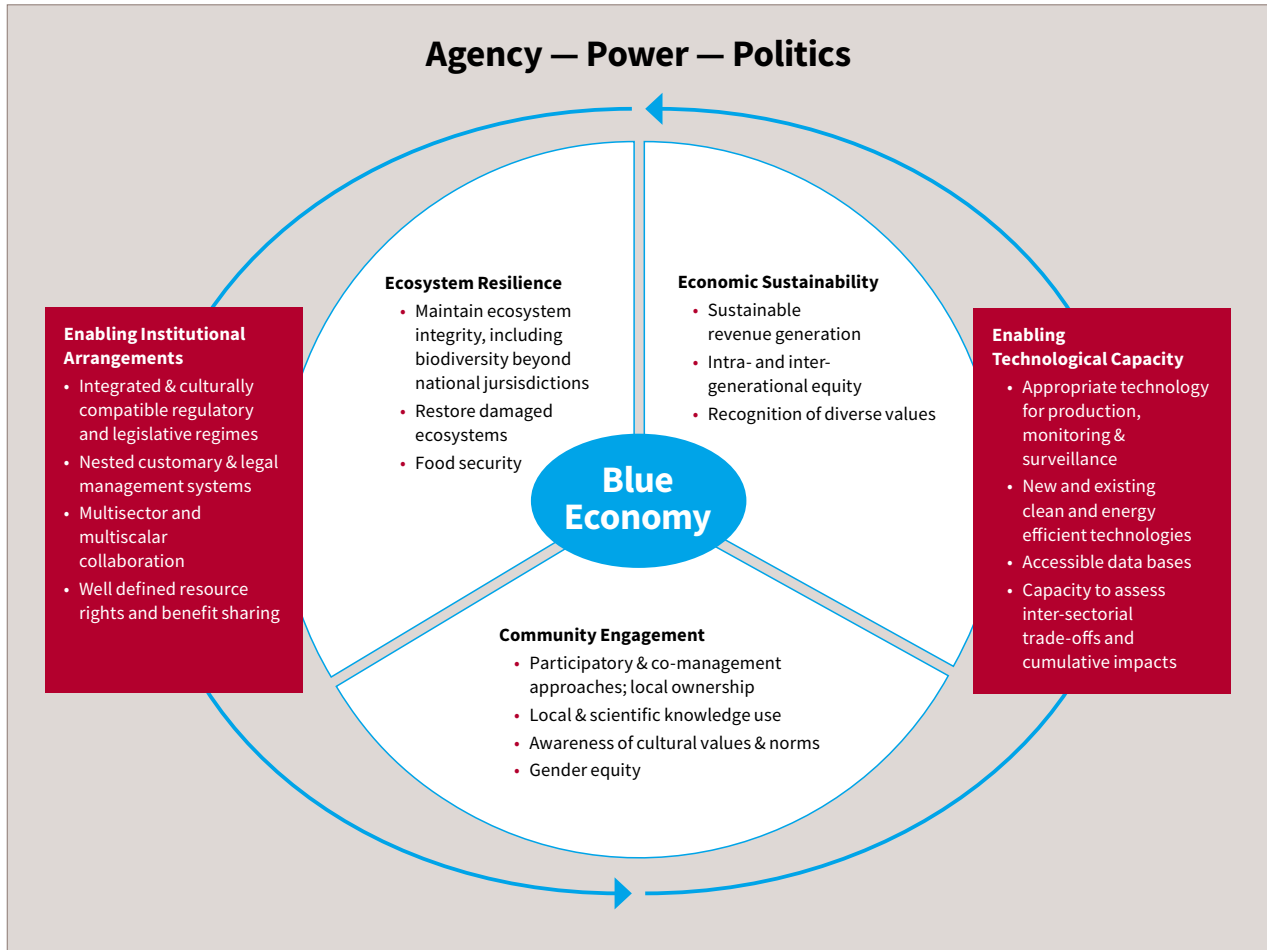
Protection for submarine cable infrastructure in the region is inadequate. The Council for Security Cooperation in the Asia Pacific recommends measures for countries to adopt. There's currently no international legal regime to address security issues that affect submarine cable networks.⁴²

The blue economy

The blue economy is a way of conceptualising economic activity in the maritime realm. The concept brings together existing maritime industries, such as tourism, ports, transport, shipbuilding, offshore oil and gas and fisheries, with newly emerging industries such as biotechnology, wind, wave and tidal energy and undersea mining.⁴³

Figure 5 shows five components of the blue economy: ecosystem resilience, economic sustainability, community engagement, institutional integration and technical capacity.

Figure 5: The blue economy



Source: M Keen, A Schwartz, L Wini-Simeon, 'Towards defining the blue economy: practical lessons from Pacific Ocean governance', *Marine Policy*, March 2017.

The blue economy is likely to become a significant focus of international cooperation, not just in the Pacific but also in the Indian Ocean, including in areas such as aquaculture—a field in which Australia holds significant competitive advantages.

Maritime security is essential to support the blue economy in a range of significant ways relevant to multiple sectors within the economy.

Maritime security agencies contribute to the blue economy through their defence of important maritime assets and infrastructure against threats. Maritime security operations are crucial for continued safe and effective commercial activities in the Indo-Pacific island states. The data gathered by maritime security agencies through protecting the maritime spaces of the islands provides critical information relevant to the blue economy, including on weather and oceanic conditions, bathymetric and oceanographic data, and vessel tracking. This data provides information to help marine industries plan and manage their business activities. It provides insights into potential new opportunities for ocean-based economic development.⁴⁴

Maritime security operations are often central to disaster response after oil spills or accidents at sea and contribute to marine environmental health. Maritime security operations and agencies play a role in supporting the blue economy by being themselves a source of economic development and growth (Table 3).⁴⁵

Table 3: Examples of maritime security interactions with the blue economy

| | Oceans as natural capital | Oceans as livelihoods | Oceans as good business | Oceans as a driver of innovation |
|---|--|---|--|--|
| Maritime security as an enabler of the blue economy | Guarding against IUU fishing, including within protected areas | Delimiting jurisdiction, enforcing regulations and guarding against piracy; search and rescue | Securing trade routes, diplomatic activities, and surveillance and monitoring; provision of oceanographic data to industry | Innovation associated with improvements in surveillance and monitoring; defence activities; patrol vessels and equipment |
| Maritime security as a component of the blue economy | Public and private sector employment / economic activity associated with: <ul style="list-style-type: none"> • surveillance and compliance activities • shipbuilding • defence activities • international diplomacy. | | | |

Source: Michelle Voyer, Genevieve Quirk, Alistair McIlgorm, Kamal Azmi, Stuart Kaye, Michael McArthur, *The blue economy in Australia*, RAN Seapower Centre and ANCORS, University of Wollongong, 2017.

Major-power competition in the Pacific

The Pacific islands were largely a backwater during the Cold War and were relatively insulated from the impact of US–Soviet strategic competition. This was assisted by the establishment of the PIF (then called the South Pacific Forum) in 1971, which gave the region a voice, and developments such as the 1986 South Pacific Nuclear Free Zone Treaty, which banned the use, testing or possession of nuclear weapons around the Pacific island states.

However, in the past several years, several PICs, including Solomon Islands, Vanuatu and PNG, and several Micronesian states have become targets for Chinese influence and expressions of both hard and soft power.⁴⁶ In less than two decades, China has emerged as a key aid, investment and trade partner for most states in the South Pacific. China ranks first in trade across the region.

China's interests in the Pacific islands region are to promote its diplomatic and strategic priorities, reduce Taiwan's international space and gain access to raw materials and natural resources such as fish, minerals and timber.⁴⁷

Last year, the Australian, US and like-minded governments were alarmed when Vanuatu signed a \$100 million port project deal with China at Luganville, even though both China and Vanuatu denied the deal involved the construction of a Chinese military base.⁴⁸

The Pacific islands are certainly receiving considerably more attention in US foreign policy as a response to rising Chinese influence in the region. Washington rolled out the red carpet earlier this year for visiting leaders of the three Micronesian countries. They met President Trump at the White House.

There are US fears that Beijing's inroads will come at the expense of Taiwan. As noted above, both Solomon Islands and Kiribati have recently switched diplomatic recognition to China, and there are reports that some \$US500 million (\$730 million) has been promised in financial aid by Beijing to Honiara, far surpassing the financial support offered by Taiwan.⁴⁹ Beijing praised Solomon Islands for severing diplomatic ties with Taiwan, saying the decision will bring 'unprecedented opportunities for development' for the Pacific nation.

The PICs are increasingly looking to China as a source of tourists, but seeing one country as a 'silver bullet' source of tourists can be risky. In late 2017, Beijing branded Palau an 'illegal destination' due to its ongoing diplomatic recognition of Taiwan and banned Chinese tour groups from visiting.⁵⁰

Much of the criticism of China in the Pacific islands is about the risk that island states will be ensnared in an unsustainable economic relationship that will tie them to China's political and strategic ambitions.

As BRI investments are financed through loans from Chinese banks and tied to the use of Chinese companies for construction, there can be financial, strategic and sovereignty implications for Pacific island states taking on unsustainable debts. Tonga, Samoa and Vanuatu appear to be among those most heavily indebted to China anywhere in the world.⁵¹

We've also seen reports on alleged Chinese criminals obtaining Vanuatu passports through its citizenship. More than 4,000 passports have been sold under the scheme, mostly to Chinese citizens, even though it's technically illegal to hold dual citizenship under Chinese law.⁵²

All these developments have provoked responses from several states, including Australia's 'Pacific step-up', New Zealand's 'Pacific reset' and the UK's 'Pacific uplift' (in 2018, the UK announced that it would open new posts in Vanuatu, Samoa and Tonga).

The US and Japan are also lifting their Pacific efforts. In October 2017, for example, the Japan Coast Guard launched a Mobile Cooperation Team to support capacity-building efforts.⁵³ Japan has led a training program for maritime law enforcement at the University of the South Pacific and has enhanced Micronesian states' maritime security surveillance.⁵⁴

Overall assessment

The task of securing the PICs' maritime domains has never been more difficult than it is today. The increasing volume and complexity of risks and threats to maritime security pose a challenge to the island states' finite security capabilities.

There are operational gaps in the current lack of maritime patrolling by PICs, especially in remote island areas. At present, air surveillance of remote areas, EEZs and adjacent areas of the high seas is conducted only on a limited basis. The PICs themselves don't have dedicated aerial surveillance capability.

The basic requirements of enhanced maritime security in the Pacific relate to institutional arrangements and information management. PICs need to take a more integrated approach to policy, management and the conduct of surveillance and enforcement operations, including the collection, analysis and dissemination of data related to maritime security.

INDIAN OCEAN ISLAND STATES

The Indian Ocean has fewer island states and territories than the Pacific. They are located more or less in two groups: the islands of the southwest Indian Ocean, including the Comoros, Madagascar, Mauritius, French Réunion/ Mayotte and Seychelles, and the island territories in the central Indian Ocean, including Sri Lanka, the Maldives and British Indian Ocean Territory (Table 4 and Figure 6). In addition, several countries, such as India and Australia, have dependent island territories in the Indian Ocean.

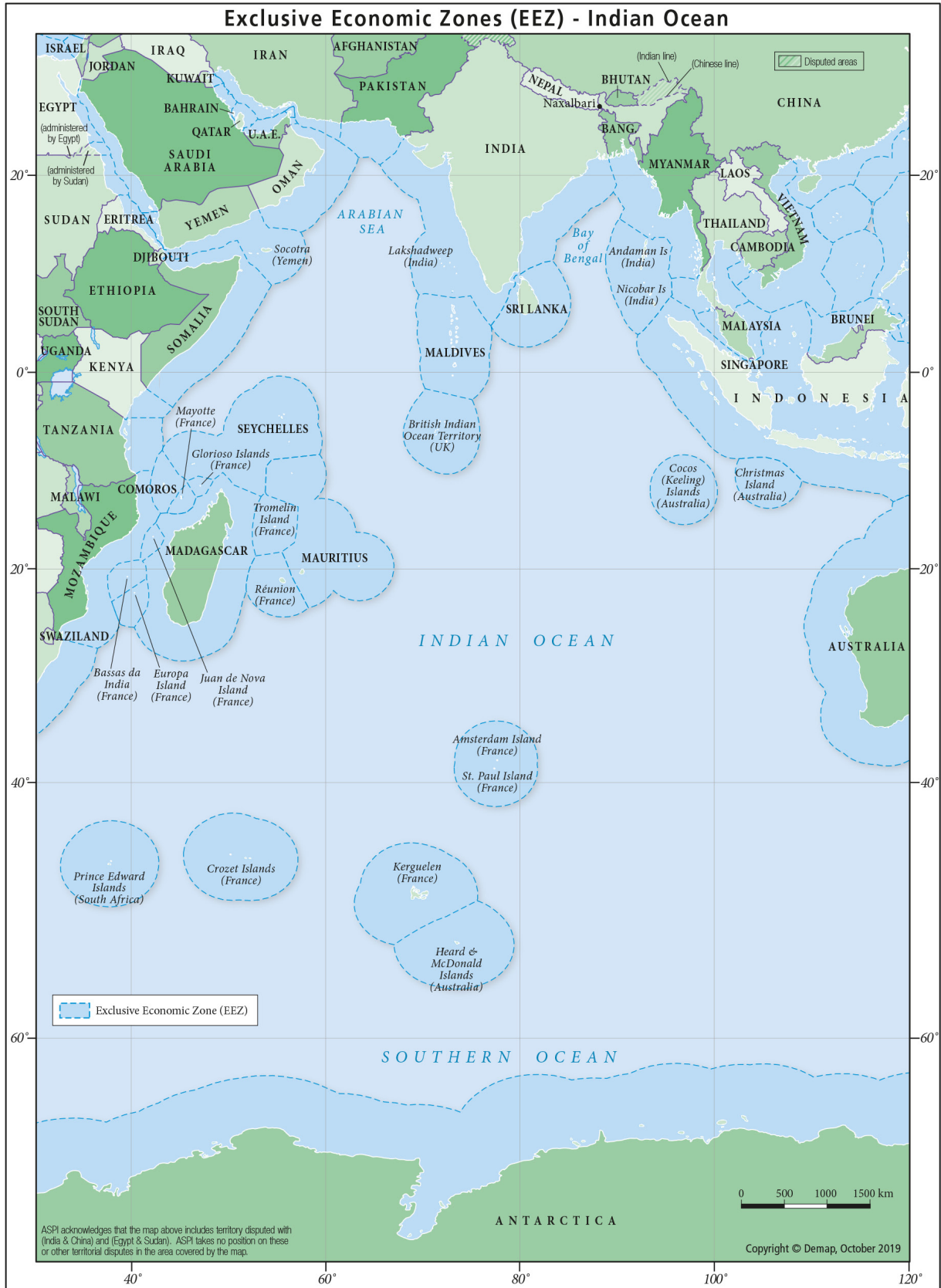
Table 4: Indian Ocean island countries

| Country/territory | Land (sq. km) | Population (year) | GDP at purchasing power parity in US\$ (year) | Political status |
|--------------------------------|---------------|--------------------------|---|--|
| Comoros | 2,235 | 821,000 (2018) | \$1.39 billion (2017) | Independent republic |
| Madagascar | 581,540 | 25,683,000 (2018) | \$39.85 billion (2017) | Independent republic |
| Maldives | 298 | 392,000 (2018) | \$6.901 billion (2017) | Independent republic |
| Mauritius | 2030 | 1,364,000 (2018) | \$28.27 billion (2017) | Independent republic |
| Mayotte | 374 | 270,000 (2019) | \$3.3 billion (2017) (market exchange rates) | Overseas department of France |
| Réunion | 2,511 | 866,000 (2019) | \$22.3 billion (2017) (market exchange rates) | Overseas department of France |
| Seychelles | 455 | 94,000 (2018) | \$2.75 billion (2017) | Independent republic |
| Sri Lanka | 64,630 | 22,576,000 (2018) | \$275.8 billion (2017) | Independent republic |
| British Indian Ocean Territory | 56 | No permanent inhabitants | Not applicable | Overseas territory of the United Kingdom |

Note: Excludes island territories of Indian Ocean littoral states.

Source: CIA, *World factbook*, for the Comoros, Madagascar, the Maldives, Mauritius, Seychelles and Sri Lanka.

Figure 6: Indian Ocean EEZ demarcations



Of the independent island states (that is, excluding the British Indian Ocean Territory and French Réunion and Mayotte), only Sri Lanka and Madagascar have formal navies, while the remainder have coastguards. This reflects a lack of concern regarding traditional state-based naval threats in most of the IO island states.

Key maritime security threats and challenges for IO island states

The security priorities of IO island states have evolved in recent years in response to a changing regional environment. After more than a decade of focusing on Somali-based piracy, especially by the western Indian Ocean islands, that threat is now largely under control. Somali-based piracy continues to be a challenge that requires close monitoring, but the threat has receded sufficiently so for many island states it's no longer among the highest priorities.

Over the past several years, other types of threats have replaced piracy as issues of more immediate concern. They include climate change, other environmental security threats, drug trafficking, IUU fishing, people smuggling and violent extremism.

Environmental security

Climate change and other environmental security threats are major geo-environmental challenges for IO island states, which are all heavily reliant on their natural maritime environment.⁵⁵

The Indian Ocean is already being affected by climate change, which is likely to worsen significantly in coming years. This is likely to act as an impact multiplier, increasing vulnerabilities caused by existing natural hazards such as cyclones and storms. It will exacerbate existing threats to human security, including geopolitical, socioeconomic, water, energy, food and health challenges that diminish resilience and increase the likelihood of conflict.

When climate impacts are combined with ethnic or other social grievances, they can contribute to increased migration, internal instability or intrastate insurgencies, and may foster terrorism or even cross-border conflict. Climate-induced resource competition can also increase tensions within and between states.⁵⁶

The rise in sea levels associated with climate change could have a significant impact on many island states. Sea-level rise is projected to aggravate storm surges, flooding, erosion and other coastal hazards, resulting in significant losses of coastal ecosystems.

An increase in sea level would also be expected to cause the intrusion of seawater into and salinisation of groundwater, challenging freshwater availability and reducing soil fertility.

For islands such as the Maldives, climate change represents an existential threat that will trump all others. As long ago as 1987, Maldives President Gayoom told the UN General Assembly that a rise of 2 metres above mean sea level would submerge virtually the entire country, and that a mere 1-metre rise could also be catastrophic and possibly fatal to the nation. With some 99% of tourist accommodation located within 100 metres of the ocean, any significant rise in sea levels may effectively destroy the Maldives' most profitable industry even before it potentially renders the country uninhabitable.⁵⁷

For other island states, such as Seychelles, sea-level rise could also result in significant internal population displacements as well as potential major impacts to their principal sources of revenue: marine-based tourism and fishing.

Other environmental threats, such as marine pollution, also have the potential to have a major impact on marine-based tourism and fishing. This is a significant issue for Sri Lanka, for example, which is passed by some 60,000 large ships carrying around half the world's cargo each year. A major oil spill could severely damage the Sri Lankan economy.

Drug trafficking

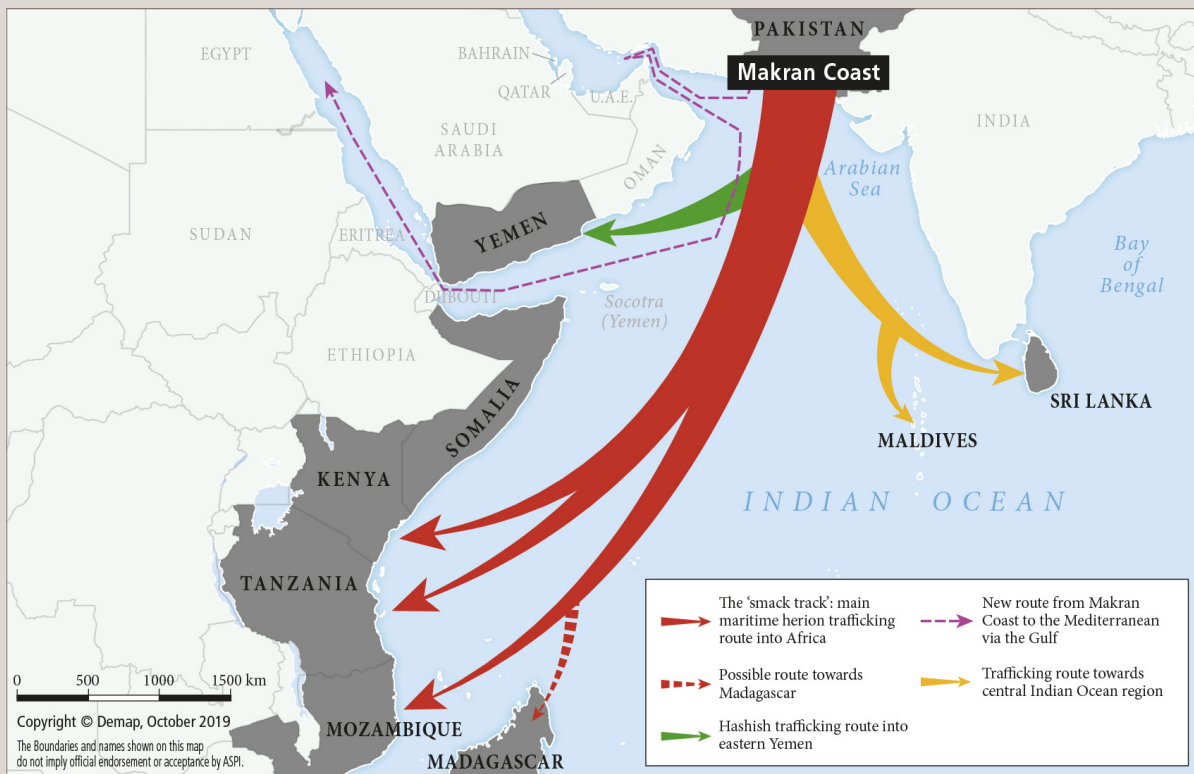
For many IO island states, drug trafficking, especially via the so-called ‘Smack Track’ in the western Indian Ocean, is a serious and immediate security threat. The Smack Track involves the trafficking of heroin and other drugs largely originating in Afghanistan, which are carried by boat and offloaded on the east coast of Africa (including in Tanzania and Mozambique) before being shipped to Europe and other markets (see box).

The Indian Ocean ‘Smack Track’

In recent years, the smuggling of drugs and weapons has become a significant maritime security focus in the western Indian Ocean, including because of its association with terrorism.

From around 2012, an increase in the cultivation of opium in Afghanistan led to a substantial increase in the trafficking of heroin from Afghanistan across the Indian Ocean along what was called the ‘Smack Track’. It involves transporting drugs by dhow to East and Southern Africa on a route to markets in developed countries (Figure 7).

Figure 7: Drug-trafficking routes through the western Indian Ocean



The Indian Ocean route offers smugglers the ability to move large shipments across sparsely patrolled areas and subject to a relatively limited interdiction regime outside of intelligence-led seizures in ports.⁵⁸

Key hubs in the western Indian Ocean are Mozambique and Tanzania. This trade is also increasingly expanding towards the central Indian Ocean, as evidenced by an increase in seizures of drugs headed towards Sri Lanka and the Maldives in 2016 and 2017.⁵⁹

These threats have spurred cooperation among several navies, including those of Australia, France and Pakistan, with US support, although powers such as India and China have generally declined to participate in those enforcement activities.

While IO island states aren't currently used as major transshipment hubs for the maritime drug trade, the physical proximity of the Smack Track still has important implications for the islands.

For one thing, drug smuggling is often closely associated with other types of smuggling or other types of on-water illegal activities that affect the island states. In addition, the introduction of even small quantities of drugs can have a devastating effect on countries with small populations.

As a consequence of its proximity to the Smack Track, Seychelles, with a population of just 95,000, suffers one of the highest rates of heroin addiction of any country. It's been estimated that around 6% of the total population are heroin users, and that some 10% of the working-age population are unable to work due to drug addiction or related health consequences.⁶⁰

Security practitioners in Mauritius, the Maldives and Sri Lanka rate maritime drug trafficking as a major and growing threat. The drugs include heroin, cocaine and marijuana as well as synthetic drugs and other pills manufactured in countries such as India and China and smuggled through the region by boat.

IUU fishing

IO island states also see IUU fishing as a major security threat, reflecting the importance of the fishing industry as a source of income and protein for island populations.

For example, it's estimated that locally caught fish makes up some 57% of protein consumed in Sri Lanka.⁶¹ Fish is the basic source of protein for most of the population of the Maldives, giving it the highest per capita consumption of fish of any country (142 kilograms per person in 2016).⁶² In Seychelles, fish processing for export is one of the main national industries.

Several IO island states have experienced significant declines in fish stocks in recent years, and IUU fishing is likely to be one of the chief causes. The problem of falling fish stocks is likely to grow, driven by a combination of population growth, environmental factors and weak enforcement arrangements.

IUU fishing by Indian fishers in Sri Lankan waters is now a significant cause of tensions between the two countries. This can also have knock-on effects. The depletion of Sri Lankan fish stocks by IUU fishers has in part led Sri Lankan fishers to go further afield to fish illegally in the Maldives and Seychelles EEZs. This has led to innovative arrangements between Sri Lanka and the Maldives to discourage and prevent illegal fishing in ways that don't destroy the livelihoods of artisanal fishermen.⁶³

But much of the problem of IUU fishing comes from extra-regional fishers who use large commercial trawlers and fishing practices that can virtually denude areas of marine life. The practice of trawlers making mid-ocean transfers of catches to floating fish factories can also make the enforcement of fishing quotas extremely difficult.

Several extra-regional states have long been active fishers in the Indian Ocean, and they're now being joined and surpassed by China. The decline of fish stocks in Chinese waters and growing demand for fish protein has led the Chinese Government to build a subsidised fishing industry to operate far from Chinese waters. The World Bank estimates that China will account for some 37% of the global catch by 2030—many times more than any other country.⁶⁴

There are risks that extra-regional fishers will engage in unsustainable practices, acquire fishing rights through non-transparent means, or both. It was reported in 2019 that China had signed a secret 10-year right to fish Madagascar's EEZ and had plans to deploy some 330 fishing vessels.⁶⁵ This could have a devastating impact on fish stocks in Madagascar and neighbouring islands. Although this deal was reversed after a change of government in Madagascar, similar non-transparent and unsustainable arrangements could easily be entered into with other island states in future.

Competition for fish resources may increasingly become a security issue in relationships within the Indian Ocean region and with extra-regional powers.⁶⁶ IUU fishing is also often associated with other maritime security threats, including the smuggling of people and arms.

Maritime Safety

Four out of the seven worst container ship disasters in recent times occurred in the Indian Ocean. Ferry accidents are common in the region.

The international system for controlling the technical condition and safety of ships (Port State Control) is weak in the Indian Ocean region. Inspection rates are low. Over half the total inspections reported by the Indian Ocean MOU on Port State Control in 2018 were carried out by Australia.⁶⁷

People smuggling

People smuggling is perceived as a significant threat by some IO island states. For source states such as Sri Lanka, people smuggling is a political threat (it's used to promote claims of discrimination by Tamil groups), as a vector for other illegal activities, and as an impediment to good relations with recipient countries (for example, with Australia).

People-smuggling routes evolve according to changing circumstances. Over the past decade, there's been a reduction in people trafficking in the eastern Indian Ocean (such as from Sri Lanka to Australia, although there has been somewhat of a resurgence in recent months). However, new routes (such as from Sri Lanka to Réunion) are being opened in the western Indian Ocean.

Violent extremism

Violent extremism is a significant security threat for some IO island states. After a decade of peace following the end of its civil conflict in 2009, the threat of violent extremism returned to Sri Lanka with the 2019 Easter Sunday bombings, when coordinated blasts by Islamic extremists killed some 290 people and injured 500.

In the long term, the Maldives probably faces the biggest threat among the IO island states from violent extremism.

Over the past 20 years, many Maldivians have become radicalised under the influence of Saudi-sponsored Wahabist ideologies. The 2004 tsunami also played an important role in radicalisation following significant internal displacement of many local communities. The tsunami provided an opportunity for Pakistan-based jihadist groups such as Lashkar-e-Taiba to exploit social fault lines through its charitable front organisation in order to establish a foothold, especially in southern Maldives, in the garb of relief operations.⁶⁸

Over the past decade or more, many Maldivians have been involved in fighting as part of extremist groups in northwest Pakistan, and around 200 Maldivians travelled to the Middle East after 2013 to join the Islamic State of Iraq and Syria.⁶⁹ However, the government doesn't have any strategy for dealing with their return and deradicalisation.

In Mauritius, where the Muslim community constitutes about 20% of the population, the threat of violent extremism is also starting to be taken more seriously, although there are currently few indications of extremist elements.

Violent extremism potentially represents a significant threat to tourists, who may become high-profile 'soft' targets. The Easter Sunday attacks in Sri Lanka targeted several international hotels, killing some 45 foreigners, and the island tourist resorts of the Maldives might also be tempting targets for extremists.

Cruise ships could also be vulnerable to terrorist attacks. The Indian Ocean cruise market is expected to grow rapidly in coming years, in part driven by the growing middle class in India. In 2019 alone, the Indian Ocean is expected to see a 63% growth in cruise-ship guest capacity compared with 2018.⁷⁰ This is leading to growing concerns about the security of cruise ships against pirates and politically motivated extremists.

The impact of major-power competition in the Indian Ocean

Over the past decade, strategic competition among major powers has grown significantly in the Indian Ocean, as it has in the Pacific. The Indian Ocean has been the site of significant growth in China's economic, political and military presence, including many Chinese-sponsored infrastructure projects under the tag of the BRI.⁷¹ The projects have been accompanied by the growth of Chinese economic interests and growing numbers of Chinese nationals across the region.

The Chinese Navy has also had a growing presence in the region, including by establishing China's first overseas military base in Djibouti in 2017. According to some 2011 reports, there were also discussions about the Chinese Navy establishing a logistics facility in Seychelles, although that didn't go ahead.⁷²

China will also require facilities in the central and eastern Indian Ocean. It has provided some assistance to Sri Lanka in maritime security capacity-building (including a frigate, gifted in 2018), and a Chinese state-owned company controls the port of Hambantota. The Chinese Navy recently confirmed that in future it will seek to use Hambantota for logistical support.⁷³

India has responded particularly sharply to China's growing regional presence, pursuing strategies to maintain its influence among the island states and minimise China's. This has included limited Indian-sponsored infrastructure investment under India's policy of 'Security and Growth for All in the Region'.

For many years, India has provided assistance in maritime security capacity-building to several IO island states, including Sri Lanka, the Maldives, Mauritius and Seychelles. India has also moved, with varying degrees of success, to establish small military presences in several IO island states, including the Maldives, Mauritius and Seychelles.⁷⁴

Japan has moved to secure its presence among the IO island states. It's been a leading provider of aid through the Japan International Cooperation Agency.⁷⁵ It has expanded its diplomatic footprint in the region, opening embassies in the Maldives (2016), Mauritius (2017) and Seychelles (2019).

For some years, Japan has provided maritime security assistance to Sri Lanka, including two fast patrol boats and two offshore patrol vessels.⁷⁶ It's also currently stepping up efforts to provide maritime security assistance in the western Indian Ocean, including aid to Seychelles (training and technical capacity-building in anti-narcotics policing),⁷⁷ Mauritius (including in disaster prevention and maritime safety)⁷⁸ and Madagascar (measures against illegal fishing).⁷⁹

Despite these developments, Japan's political relationships among IO island states are generally much less developed compared with its relationships among PICs,⁸⁰ which have been a focus of Japanese diplomacy for at least 20 years. As noted above, this has, for example, included providing assistance to the Micronesian states in maritime surveillance.⁸¹

France and the EU have played important roles in building maritime security capabilities among many IO Island states, particularly in the western Indian Ocean. Those programs have been delivered bilaterally, as well as through institutions such as the Indian Ocean Commission. The EU Program to Promote Regional Maritime Security in the Eastern and Southern African and Indian Ocean (MASE) has included institution-building to fight piracy, maritime capacity-building and a regional mechanism for the exchange of information (discussed below). In addition, with EU assistance, Mauritius, Seychelles, Madagascar, the Comoros, Djibouti and Kenya have adopted or are now adopting national maritime security strategies.

The US, which is the predominant military power in the Indian Ocean region, has largely avoided playing a high-profile role in maritime security among most IO island states, although it has provided some military assistance to Sri Lanka. The US Coast Guard is also running some limited training programs in the region.

Perspectives of IO island states on major-power competition vary. Most would in principle welcome Chinese-sourced investment to help contribute to their economic development, although there may be some wariness among some about the terms of Chinese-sponsored BRI projects.

BRI projects, and associated concerns about Chinese political influence and corruption, which are likely to reverberate for years to come, have had a significant impact on domestic politics in Sri Lanka and the Maldives.

In Sri Lanka, the close relationship of former President Mahindra Rajapaksa with China and Chinese BRI projects was a factor in his election loss in 2015. However, there's a significant chance that the Rajapaksa family (through Mahindra Rajapaksa's brother, Gotabaya Rajapaksa) will return to political power in late 2019. Such a development would be likely to increase controversy about Sri Lanka's political links with China.

The Maldives also saw a period of significant political instability in 2018 that ended with the surprise ouster of President Abdullah Yameen, whom voters saw as politically close to China and highly corrupt. He's since been replaced by a new administration more aligned with Indian and Western perspectives.⁸²

But China's growing regional presence has so far been of generally less concern for other IO island states. Some, such as Mauritius and Seychelles (both of which are generally Western-oriented in their political perspectives), have demonstrated some institutional resilience to major-power competition and don't see it as a major concern to them.

Seychelles has for decades shown itself to be adept at balancing several major powers in order to extract economic benefit and extend its influence. It was able to work with both the US and the Soviet Union during the Cold War. Similarly, it's now confident in engaging with the US, China and India. This reflects relatively strong institutions and a tradition of 'smart' diplomacy.⁸³

Other islands, such as Madagascar, which has relatively weak governance institutions, may become the venue of significant competition for influence in coming years.

Maritime domain awareness

Any efforts to enhance maritime security of the IO island states must inevitably include a focus on enhancing maritime domain awareness (MDA), which has come to be recognised as an essential foundation for the effective provision of maritime security (see box). Until very recently, the IO island states had very poor MDA in respect of their territorial waters and massive EEZs, but that's changing.

What's maritime domain awareness?

MDA involves the effective understanding of anything associated with the maritime domain that could affect security, safety, the economy or the environment.

Since the turn of this century, there's been a growing realisation of the importance of MDA as an essential enabler for a variety of government agencies providing maritime security. Some see MDA as the 'engine room' of a national maritime governance system.⁸⁴

With recent advances in sensor and computing technology, it's now possible to create a networked real-time picture that allows for a shared understanding of threats and developments in the maritime domain.

Achieving MDA involves the development of systems for the collection of information and data, its aggregation, its interpretation, and the distribution of results to decision-makers and users.

Achieving MDA isn't necessarily about collecting *more* information. Rather, the biggest gains in MDA are achieved from *putting together* information that may already be available to government agencies (both military and civil) and commercial sources in a way that can be used by all agencies with responsibility for maritime security.

The centrepiece of an MDA system is the creation of a common operating picture. This is the sum of data and intelligence drawn from many sources and organisations, which is then cross-referenced and fused into a coherent single picture that's accessible to many users. The common operating picture helps decision-makers to make decisions and take action on the basis of shared, reliable and trustworthy information.

One of the biggest challenges in achieving MDA is in integrating data sourced from a variety of military, law enforcement and civil government agencies. Commercial entities are also a key source of information on shipping. Each type of entity will have its own agenda, motivations and concerns about confidentiality or secrecy and might not always be easily disposed to share information.

The common operating picture also needs to be usable for a variety of military, law enforcement and civil purposes. The most effective MDA systems should simultaneously serve multiple users that have different priorities and time imperatives. Those factors substantially complicate the common operating picture, meaning that it must simultaneously operate on several different levels, including different levels of confidentiality or secrecy.

In the southwest Indian Ocean, the island territories of Mauritius, French Réunion, Madagascar, the Comoros and Seychelles are cooperating to build a collective MDA system alongside a capability to provide a collective response to maritime security threats.

As noted above, the EU has funded a number of programs to enhance maritime security in the western Indian Ocean. This has included the establishment of the Regional Maritime Information Fusion Centre (RMIFC), located in Madagascar, and the Regional Combined Operations Centre (RCOC), based in Seychelles.

The RMIFC was officially established in 2018 to provide for the sharing of information in the western Indian Ocean among the island states of Mauritius, Madagascar, Seychelles, the Comoros and French Réunion and the littoral states of Djibouti and Kenya. It's now becoming operational.

The RMIFC is intended to work closely with the RCOC, which is intended to coordinate combined operations to address maritime security challenges that involve the maritime territories of Seychelles, Madagascar, Mauritius, the Comoros, French Réunion, Somalia and Tanzania. Member states will receive compensation for the costs of any operations coordinated by the RCOC.

The Maldives and Sri Lanka have taken somewhat different approaches to enhancing MDA. The Maldives has responsibility for huge oceanic territories (including an EEZ of almost 1 million square kilometres) but extremely limited financial resources. Although the Maldives has been the recipient of gifts of patrol craft from several countries, it to some extent outsources much of its MDA needs to India. India is building a surveillance system of 10 coastal radars in the Maldives archipelago, supplemented by Indian helicopters and fixed-wing aircraft. The data from the sensors feeds into an information fusion centre operated by the Indian Navy.

Sri Lanka, which has the most financial resources of any of the IO island states, is building its maritime surveillance capabilities and MDA systems. It has received patrol vessels from a variety of donors, including India, Australia, Japan and China. It has also received around 20 coastal radar systems from India, although many of them are reportedly unserviceable due to lack of maintenance.

The Sri Lanka Air Force is also now enhancing its maritime air surveillance capabilities and considering the acquisition of unmanned aerial vehicles. Sri Lanka is sorely in need of additional air surveillance platforms and expertise as well as assistance in building a national information fusion centre.

Australia could potentially play an important role in providing know-how and training in both those areas. Australia's experience in developing the Australian Border Operations Centre, fusing information from a great variety of sources, could be highly valuable for Sri Lanka. Australia could also provide valuable training in air surveillance, including through undertaking regular visits by Australia's P-8 Poseidon maritime surveillance aircraft.

Regional cooperation

The limitations and constraints faced by many small island states, including their small populations, limited economic resources and huge areas of maritime jurisdiction, can make it extremely difficult for many of them to face challenges alone.

This means that regional cooperation in maritime security, including through the structures provided by existing regional groupings, is generally a much greater imperative for island states than for larger continental countries.

This is particularly true for IO island states such as Mauritius, Seychelles, the Comoros and the Maldives, and even the larger island states of Madagascar (population 26 million) and Sri Lanka (population 21 million).

But regional groupings in the Indian Ocean region are generally weaker or less developed compared with groups in the Pacific. All IO island states (with the exception of French Réunion / Mayotte) are members of the Indian Ocean Rim Association (IORA).

For much of its history, IORA shied away from dealing with maritime security issues. However, that's now changing, and IORA has recently established a Working Group on Maritime Safety and Security, coordinated by Sri Lanka, as the first step in developing a regional vision and policy for maritime safety and security.⁸⁵ Sri Lanka sees this as a valuable platform to advance an island-state perspective on regional security.

IORA has also taken a leading role in advancing the blue economy agenda across the Indian Ocean region. For example, the September 2019 meeting of IORA foreign ministers called for greater cooperation in the areas of marine fisheries, shipping, seabed exploration and renewable energy.⁸⁶

Australia, Indonesia and South Africa have made significant efforts in recent years to revitalise IORA, cognisant of its central role in regional architecture.

However, while IORA can be a valuable conduit for island states to connect with the broader region, the group has limitations. It has had few concrete achievements in its history, and its large membership of 22 nations, which includes many large continental states, tends to limit its effectiveness and relevance for the island states.

The Indian Ocean Commission (IOC), the members of which include Mauritius, Seychelles, the Comoros, Madagascar and French Réunion, is a valuable and effective regional institution for the island states of the western Indian Ocean. The effectiveness of the IOC is a result of several factors, including its relatively small size, its focus on the challenges faced by island states and the considerable financial support and expertise supplied by the EU.

The IOC provides a valuable regional voice and a means for coordinating regional activities, including maritime security activities. In recent times, there's been discussion of transforming the IOC into an 'Indian Ocean Community' with a broader mandate that would include peace and security, the blue economy, climate change, food security and maritime security.⁸⁷

The effectiveness and influence of the IOC in the western Indian Ocean has led several extra-regional states and organisations to obtain observer status, including the EU and China. Japan and Russia have also indicated that they'll seek observer status.

But the IOC doesn't provide a comprehensive grouping of Indian Ocean island states, as it doesn't include Sri Lanka and the Maldives. Sri Lanka and the Maldives are members of the South Asia Association for Regional Cooperation (SAARC), and Sri Lanka is also a member of the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC), but both those groups are focused on South Asia and are inevitably dominated by India and other continental states, which may limit their value to island states.

In recent years, Sri Lanka and the Maldives have both indicated interest in joining the IOC, but there have been reservations from some members of the group, in part due to the francophone character of the IOC. This effectively leaves Sri Lanka and the Maldives outside the collective 'island voice' of the Indian Ocean.

The blue economy

Like the PICs, many IO island states have identified the blue economy as the key to their economic future.⁸⁸ Island states such as the Maldives, Seychelles and Mauritius (including its claims to the Chagos archipelago) have vast maritime territories of many times their land area. The area of the Maldives' maritime jurisdiction, for example, is more than 3,000 times the size of its land area.

Seychelles provides a good example of how the blue economy increasingly underpins the economic existence of many island states and of the interconnections between the blue economy and maritime security.

Seychelles is an archipelago of some 115 islands. Its population of around 95,000 and total land area of just 460 square kilometres make it one of the world's smallest countries. However, it has an outsized maritime jurisdiction (territorial waters and EEZ) of more than 1.35 million square kilometres.

The maritime realm accounts for the two key pillars of the Seychelles economy: tourism (which accounts for some 55% of GDP) and fish processing and exports.

Seychelles has been one of the foremost and entrepreneurial proponents of the concept of the blue economy and the vital role of maritime security in underpinning it.

In 2018, Seychelles adopted a blue economy strategic framework and road map (2018–2030) as an integrated approach to ocean-based sustainable development that brings together the economy, the environment and society.⁸⁹

The vision involves developing a blue economy as a means of realising the nation's development potential through innovation and a knowledge-led approach while being mindful of the need to conserve the integrity of the Seychelles marine environment and heritage for present and future generations

It's implemented on four key pillars:

- economic diversification and resilience: to reduce economic vulnerability and increase the proportion of GDP derived from marine sectors
- shared prosperity: the creation of high-value jobs and local investment opportunities
- food security and wellbeing
- integrity of habitats and ecosystem services, sustainable use and climate resilience.

Seychelles is recognised as an innovator in ocean governance through initiatives such as a debt-for-nature swap and marine spatial planning.

In parallel with its advocacy of the blue economy, Seychelles has also played a leading role in facilitating regional maritime security. For example, it's been the chair of the Contact Group on Piracy off the Coast of Somalia, which coordinates the maritime security work of some 60 countries and organisations in the western Indian Ocean.

Seychelles also took a leading role in implementing a system for the trial and imprisonment of international pirates, for which no other country was willing to assume responsibility.

The outsized role that tiny Seychelles has played in bringing the blue economy onto the international agenda and in facilitating regional cooperation in maritime security has led some to argue that it's an 'astonishing case' of successful small-state diplomacy.⁹⁰

SHARED CHALLENGES AND EXPERIENCES

This section discusses challenges and experiences shared among PICs and IO island states in relation to maritime security and the impact of strategic competition.

The Indo-Pacific island states are characterised by great diversity in geography, ethnic and social makeup and historical experiences.

The PICs have an array of physical landforms. Low-lying atolls with vast central lagoons are typical in Polynesia and Micronesia. Nauru and Niue are raised atolls with no lagoons. There are high volcanic islands in Polynesia and Melanesia, and continental islands in Melanesia include PNG with its snow-capped mountains.

The PICs are located in the world's largest ocean but include some of the world's smallest countries. Indeed, the number of microstates with resident populations of fewer than half a million is one of the region's key identifying geopolitical characteristics. There's no greater concentration of microstates on the planet.

The Pacific islands region has been divided into three parts—Melanesia, Micronesia and Polynesia. While the ethnographic validity of this schema has been challenged at the margins, it's been broadly accepted by Pacific islanders.⁹¹

The IO island states range from the large and mountainous islands of Madagascar and Sri Lanka to the tiny Comoros and the low-lying atolls of the Maldives. Population ranges from Madagascar (25 million) to Seychelles (95,000).

There are also considerable ethnic divergences among IO island states, including between South Asian cultures (Sri Lanka, the Maldives), predominantly African cultures (Madagascar, the Comoros) and multicultural states (Mauritius, Seychelles).

Although all of the Indo-Pacific island states experienced colonialism (British, French, US, Japanese, Australian and German) in one form or another, this has resulted in different historical experiences, institutions and language ties, even among neighbouring islands.

But despite their diversity the Indo-Pacific island states share many characteristics. The ocean is critically important to them for cultural identity, food security and economic development. They have a natural dependence on the maritime domain and are consequentially vulnerable to maritime security threats.

They also tend to have relatively weak economies and governance institutions (half the independent PICs are fragile due to poor governance), which makes them relatively vulnerable to external interference.⁹²

Addressing security priorities

Any security engagement with the island states should first and foremost give priority to their concerns. It's only when those priorities are being adequately addressed that others, such as concerns about the impact of major-power competition, can be tackled.

Most PICs and IO island states face significant security challenges in the maritime realm, including climate change, drug and people smuggling, human trafficking and IUU fishing. Many priority issues involve environmental security in one way or another.

For some, such as the Maldives, Seychelles, Kiribati, the Marshall Islands and Tuvalu, climate change and sea-level rise are an existential threat that would be expected to trump all else.

Environmental security

The maritime environment of Indo-Pacific island states inevitably means that they give particular emphasis to climate change and other environmental security issues in various forms.

This includes addressing the human security implications of sea-level rise, increased severity of cyclones and storm surges, salinisation and the deterioration of fish stocks (including through IUU fishing), preferably on a holistic basis.

Island-state groups such as the PIF and the IOC give significant emphasis to environmental security, but there's sometimes a lack of shared understandings on environmental security between the island states and their large-power partners.

In the Pacific, US Indo-Pacific Command has sponsored the Pacific Environmental Security Forum, which provides a dedicated avenue for building shared perspectives on environmental security threats among the island states and many larger powers. However, there's no analogous forum dedicated to environmental security in the Indian Ocean.

Major-power competition

Major powers often target Indo-Pacific island states to gain strategic benefits or political influence. A combination of their small size, weak governance and limited financial resources makes many island states uniquely vulnerable to the adverse effects of major-power competition.

But it shouldn't be assumed that the Indo-Pacific island states are always mere pawns in a wider strategic contest. They have agency, often considerable agency, in pursuing their own national interests, whether through aligning themselves with larger powers or playing off larger powers against each other.⁹³ When dealing with China and other external powers, the PICs wish to be 'friends to all'.⁹⁴ Nevertheless, that can be a risky game, and many small island states have little room for error in resisting larger powers.

After a gap of some 30 years after the end of the Cold War, China's rise as a major power across the Indo-Pacific has brought major-power competition back to the doorsteps of many Indo-Pacific island states. The islands are increasingly seen as prizes or even battlegrounds to gain or retain influence or access.

China is doing more economically, politically and strategically in the Indo-Pacific, as evidenced by the BRI. There's a focus on investment but also a clear geostrategic element.

As noted above, in the past few years several PICs, including Solomon Islands, Vanuatu and PNG and several Micronesian states, have become targets for Chinese influence and expressions of both hard and soft power.⁹⁵

After the recent diplomatic switch by Solomon Islands and Kiribati, China will be putting pressure on the four remaining PICs that recognise Taiwan (Nauru, Palau, the Marshall Islands and Tuvalu) to switch recognition. Beijing University's recent decision to teach regional languages will give China a pretext to recruit and incorporate island lecturers and cultural advisers into an academic environment, as well as to address language as a soft-power deficit for it in the region.⁹⁶

However, over the past five years the impact of strategic competition has been felt sharply among certain IO island states, reflecting China's military and strategic imperatives in the northern Indian Ocean. India–China competition has become a major factor in domestic politics, especially for Sri Lanka and the Maldives, aggravating weakness in their economies and governance institutions.

Although strategic competition has so far had less impact on some other IO island states, that may change. Both Mauritius and Seychelles have been under pressure from India to grant access to naval facilities (Assumption Island in Seychelles and Agalega Island in Mauritius).

Madagascar, with weak governance institutions and significant natural resources, also has the potential become the target of predatory initiatives from China. This has already occurred in the form of non-transparent attempts by Chinese companies to acquire fishing rights to Madagascar's entire EEZ.

But there are also some important differences between the major-power actors in the Indian and Pacific oceans, which lead to somewhat different dynamics.

In the Pacific, strategic competition is mostly between China on the one hand and the US and Australia on the other (although others, such as France, Japan and Taiwan, also play important roles). In the Indian Ocean, strategic competition is felt most sharply between China and India, although the US, Australia and France also play important roles. Island states have different relationships with these players, which can drive their responses.

There are also differences (and in some cases, similarities) in China's strategic imperatives in each region. In the Indian Ocean, China has an overriding strategic imperative to protect its sea lines of communication, over which much of its imported energy needs flows. This gives China strong reasons to build military facilities to support the long-distance deployment of its navy and air force in the event of contingencies. We've already seen the opening of China's first overseas military base at Djibouti and we should expect the opening of other bases (or at least logistical support facilities) in the future in the western, central and eastern Indian Ocean.

In contrast, China has less compelling military imperatives among the PICs. For example, the region doesn't straddle sea lines of communication that are critical to China. It does, however, host several important US military facilities and covers the key sea lanes linking Australia with the US. This is one reason why a Chinese military facility in the region would be of significant concern to Australia.

But China also has growing economic and demographic interests in each region that could drive future military responses. Growing investments, including as part of the BRI, create new interests to be protected.

There are also growing communities of Chinese nationals (in addition to historical Chinese diaspora communities) in the Pacific that may look to protection from Beijing in times of crisis. In the past decade or so, China has conducted several non-combatant evacuation operations from PICs.⁹⁷ Future evacuation operations should be expected as the number of Chinese nationals resident in the island states grows.

Building effective regional institutions and norms

The small size and economic weakness of many Indo-Pacific island states tend to make them relatively powerless on the international stage when they act alone. Although they have a nominally 'equal' vote in the UN and other international forums, their voices are rarely heard.

Their size and institutional weaknesses also place island states at a big disadvantage in dealing with large countries that may seek to gain undue economic or political influence.

They may simply not have the resources and expertise to properly assess the benefits and costs of major infrastructure projects, potentially leaving them with economically unfeasible projects and large debts. This has been one criticism of the impact of some of China's BRI projects on small island states.

The difficulty for small island states to ‘go it alone’ means that regional institutions play a vital role in building their resilience to address maritime security challenges and strategic competition.

Regional institutions can help island states in many ways. They can provide an institutional framework for collective responses to maritime security challenges, such as information sharing or coordination centres. They can be channels for training and expertise that will often be difficult for small islands to develop themselves. They can help define regional norms and build governance institutions that can support island states’ responses to initiatives from major powers. They can also help provide a collective voice for island states in dealing with the international system.

The PIF generally provides the benefit of a relatively well-established and comprehensive regional voice to PICs, even if there’s much to be done to strengthen that organisation. PICs have boosted their fisheries revenue through the Nauru Agreement, which limits the number of vessels and number of days when fishing by distant-water vessels is permitted within Pacific EEZs, and Forum Fisheries Agency collaboration, as well as working together on climate change at the UN.

In the Indian Ocean, the IOC provides an effective regional voice for Mauritius, Seychelles, Madagascar, the Comoros and French Réunion, but Sri Lanka and the Maldives are less well connected to a network of island states. Their lack of regional island connections may make Sri Lanka and the Maldives less resilient to maritime security challenges and more vulnerable to major-power competition. This may have been a factor in the difficulties faced by both those states in recent years. It could benefit the region if key members of the IOC were to find a way to better connect Sri Lanka and the Maldives with the other IO island states.

Challenges in maritime security capabilities

Threats to regional maritime security are likely to increase for Indo-Pacific island states. There are various and very similar challenges for these small states in building capabilities for effective maritime security.

A whole-of-government approach to maritime security in the island states is currently lacking. Each agency with some responsibility for maritime security has tended to do its own thing. For example, few Indo-Pacific island states have published a national maritime security strategy, although some have developed or are now developing national security strategies, national oceans policies, border security strategies or some combination of them.

For the most part, the level of surveillance and patrol of Indo-Pacific island states’ waters is inadequate. There are often no patrols to remote coastal areas and islands both to protect sovereignty and to prevent illegal activity. Air surveillance of the islands’ large area of maritime jurisdiction is conducted only occasionally.

In many cases, coordination between agencies that contribute to maritime security is notoriously bad. There’s sometimes minimal or no communication between regional agencies and between the various arms of national administrations with responsibilities for maritime security.

There’s often a general lack of awareness of the wider impact of decisions in one area upon another and little integration of maritime security-related data within the Indo-Pacific island states. Data collected for one purpose should as far as possible serve a wider maritime security purpose.

Significant gaps exist in many of the island states’ national legal frameworks to deal with the full range of illegal activity at sea. Island agencies in the Indo-Pacific rely on a wide body of legislation ranging from customs, fisheries and quarantine to immigration and defence when it comes to drawing upon enforcement powers at sea. This can sometimes lead to inefficiencies.

The island states don’t have a single maritime enforcement law that harmonises their existing enforcement regimes, provides a comprehensive framework for enforcing their laws at sea and ensures that maritime enforcement powers are exercised appropriately in the maritime environment.

The island states lack dedicated aerial surveillance capabilities, and their maritime patrol vessels have limited range, endurance and sea-keeping ability. The latter issue, at least for the Pacific islands, is being addressed through Australia's donations of new Guardian-class patrol boats (see box). The boats are part of Australia's Pacific Maritime Security Program. Canberra has committed \$2 billion to the program over the next 30 years. As part of that program, Australia will provide up to 1,400 hours of aerial surveillance each year across the central and western Pacific through two dedicated long-range aircraft based in the region.

Guardian-class patrol boats in the Pacific

Under the Pacific Maritime Security Program, Australia will replace island states' Pacific patrol boats with new Guardian-class patrol boats.

Between 2018 and 2023, Australia will gift 21 new vessels to 12 PICs (PNG, Tuvalu, Tonga, Samoa, Solomon Islands, Fiji, Palau, Kiribati, Cook Islands, the Federated States of Micronesia, the Republic of the Marshall Islands and Vanuatu) and Timor-Leste.

New boats were delivered to PNG on 30 November 2018, to Tuvalu on 5 April 2019, to Tonga on 21 June 2019, to Samoa on 16 August 2019 and to Solomon Islands in November 2019. In 2020, Fiji, Palau, Kiribati and Tonga are currently scheduled to receive their new boats. After that, the rollout schedule will deliver a new boat approximately every three months until 2023.

PICs will need to give greater priority to ensuring that sufficient numbers of trained personnel, especially technical personnel, are available for the Guardian patrol boats. The PICs differ in the size of their maritime workforces; age and succession planning; maritime recruitment; their national pride (or lack of it) in the vessels; and their ability and desire to maintain and run the new boats efficiently. The relationship that the key operating agency (a military or police force) has with key stakeholders in each country affects how the maritime wing carries out its prime job, which will have been determined by each nation.

Australia has no comparable ongoing program with IO island states, although in 2014 it did donate two used Bay-class offshore patrol vessels to Sri Lanka, which had a significant positive effect on that relationship. Even though Australia plays a relatively lesser role among IO island states compared with its role in the Pacific, there's still scope for it to strengthen maritime security capabilities (probably at relatively little cost) in countries such as Sri Lanka and the Maldives.

Another capability issue for Indo-Pacific island states is the need for an integrated approach to maritime law enforcement training schemes. Authorised fisheries officers from different Indo-Pacific island countries, for example, are currently trained for enforcing regulations against IUU fishing only and are not as familiar with other forms of illegal activity at sea.

SEA CHANGE

The ultimate objective for Indo-Pacific island states should be a regional maritime security and safety regime that provides for law and order at sea, the free and safe movement of shipping and seaborne trade, and the ability of countries to pursue their maritime interests and use their marine resources in accordance with agreed principles of international law.

The Indo-Pacific island states face many security challenges in the maritime realm, including a range of transnational and environmental security threats. Successful economic development for the island states depends on their ability to provide maritime security. This dimension of national security is important for both nation-building and national pride.

Indo-Pacific island states' international and regional image will suffer if their maritime areas are seen to be porous and their countries become havens for many forms of transnational crime, as well as a transit route for illegal trafficking in drugs, arms and people.

At the policy level, maritime security should be seen in whole-of-government terms. It isn't an abstract notion, but a clear national regional requirement for Indo-Pacific island states that has much wider dimensions now than it had in the past.

Small island states are highly vulnerable to the impact of strategic competition among the major powers. Competition for influence with island states can in some cases have a significant adverse affect on the political stability and economic development of those states.

There are many similarities in the challenges faced by island states in the Pacific and Indian oceans. Some can be used to help them face security challenges and mitigate the impact of strategic competition.

Countries engaging with Indo-Pacific island states on maritime security must first and foremost focus on island-state priorities. This principally includes transnational and environmental security threats such as climate-related challenges, drug and people trafficking and IUU fishing.

Climate change is an existential threat to several island states and a major economic threat to many others. Any engagement by major powers with island states needs to include the challenge of climate change and other environmental security threats as a centrepiece. This should include building forums to develop shared understandings of environmental security threats and potential response and mitigation strategies.

It's important for Australia and its partners to proactively shape the narrative on environmental security. Failure to do so will allow others, including strategic competitors, to shape the narrative in ways that benefit themselves.

Strategic stability is best promoted through focusing on building the resilience of the small island states to resist undue or harmful influence. This should include strengthening national institutions and norms to promote transparency and good economic outcomes.

Regional groupings and institutions play a vital role in helping island states address security challenges and promote stability. External players should give considerable attention to making those groups effective and efficient. Island states that fall outside those groups may be relatively more vulnerable to external challenges.

Managing maritime risks puts a premium on cooperation with neighbouring countries, but international cooperation is also important for setting the necessary standards and best practices for dealing with those risks.

Australia and Japan should as far as possible work together, as well as with other like-minded states such as the US, New Zealand, India and France, to pursue regional initiatives in the Pacific and Indian oceans. A cooperative approach will allow participants to leverage their strengths in resources, expertise and historical relationships.

Recommendations

The recommendations that follow aren't listed in any particular priority order, as they're essentially interlinked.

For Indo-Pacific island states

1. Strengthen national resilience through building national institutions

Major-power competition in both the Pacific and Indian oceans is likely to place ever greater stress on governance institutions. This means that island states need to place even greater focus on building institutions, laws and processes that will help them resist external pressures.

2. Develop and implement national maritime security strategies

All Indo-Pacific island states should develop and implement national maritime security strategies that reflect their own specific needs and circumstances.

The strategies should include a framework for measuring the effectiveness of actions taken to deliver maritime security objectives. They should set out the island's approach to maritime security, how the country will deliver those objectives through its various agencies, assess maritime security risks and set out future directions. The implementation and updating of the strategies will require monitoring and regular updates to the assessment of maritime risks and threats.

3. Build maritime surveillance capabilities

Indo-Pacific island states should further build their maritime surveillance capabilities. Air surveillance capabilities are particularly weak for many island states, and air surveillance of their waters is generally not conducted routinely. Where appropriate, they should be encouraged to pool their air surveillance capabilities.

4. Develop a formal tasking program for the patrolling of remote islands and coastal areas

Remote island and coastal areas should be patrolled regularly to protect sovereignty, prevent illegal activity and support nation-building. Those areas should be identified and a schedule should be drawn up to state how frequently each should be visited.

5. Build national maritime domain awareness systems

The Indo-Pacific island states should build national MDA systems, starting with effective coordination and information sharing among their own national agencies (such as coastguards, police and fisheries regulators) as well as private organisations (for example, tourism operators and fishers) and local communities.

Island states that don't already have a single national maritime surveillance coordination centre should establish one to improve information sharing with neighbouring countries.

6. Strengthen institutional resilience through regional norms

Building resilience is a collective effort. The Indo-Pacific island states should work together to strengthen regional norms that will help them resist economic coercion and enhance transparency in decision-making.

7. Review interagency operational and staff training for maritime security

Indo-Pacific island states should review their training systems for maritime security. They should aim to build a single institution for learning and development for maritime security across all agencies.

8. Collate relevant maritime laws and ensure that they are easily accessible and understood

This task should be undertaken before considering any comprehensive overhaul of maritime legislation.

For Australia, Japan and other like-minded countries working with Indo-Pacific island states

Tackling Indo-Pacific maritime security issues requires a truly collaborative approach. Australia, Japan and other partners can play important roles in assisting Indo-Pacific island states to address their maritime security challenges and promote strategic stability.

1. Give coastguards a key role in maritime security and safety cooperation in the Indian Ocean

Coastguard agencies have a leading role in engaging on maritime security and safety issues in most IO island states. Australia, Japan, India and other partners should as far as practicable fund and use their coastguards for regional engagement. This should include promoting arrangements for dialogue, cooperation and training among Indian Ocean coastguards.

2. Establish a 'Quad' of coastguards to coordinate regional capacity building

Australia, Japan, India and the US should consider establishing a working group of their coastguard agencies to take stock of and coordinate their assistance to Indo-Pacific island and littoral states. This would be a relatively uncontroversial way of giving further substance to the Quadrilateral Security Dialogue. The working group would liaise with other partners as appropriate.

3. Step up Australia's maritime security capability-building efforts among selected IO island states

Australia needs to take a more active role in building capabilities among selected IO island states. This should not seek to replicate Australia's Pacific Maritime Security Program but can draw valuable lessons from that experience.

Australia's efforts should be focused on Sri Lanka and the Maldives in the central Indian Ocean. In Sri Lanka, Australia should focus on helping to develop the national MDA system. Australia could also work with Sri Lanka on developing expertise in air surveillance, including through regular visits of Australian aircraft.

Australia is also well placed to make a big difference in the Maldives, which requires significant assistance and is facing numerous security challenges. Australia should focus on helping to build institutions, policies and systems for the more effective use of existing maritime security capabilities.

4. Assist the development of national and regional MDA systems

Australia, Japan and like-minded states should help promote the development of MDA systems in the Pacific and Indian oceans. This should include helping states to develop or improve their national MDA systems, which would then contribute to regional MDA networks.

In developing the new Pacific Fusion Centre, which will inform both strategic and operational responses to challenges such as illegal fishing, people smuggling and drug trafficking,⁹⁸ the emphasis should be on collecting, fusing and analysing all sources of data to produce and disseminate strategic assessments.⁹⁹ The Pacific Fusion Centre will need to bring together a number of separate 'empires' and overcome some significant national sovereignty instincts.

5. Develop framework disaster management arrangements

Natural disasters are projected to increase in frequency and severity in coming years, with particular impacts on Indo-Pacific island states.¹⁰⁰ This will require ever greater humanitarian assistance and disaster management responses from Australia¹⁰¹ and Japan and their partners.¹⁰²

There's much scope to enhance regional disaster management arrangements, which are particularly weak in the Indian Ocean and require strengthening.

6. Shape the narrative on environmental security

Security engagement with Indo-Pacific island states needs to address environmental security concerns first and foremost. This creates an imperative to help shape the regional narrative of environmental security through building shared understandings of environmental security threats. If Australia and its partners don't take an active approach, others will shape the narrative.

In the Indian Ocean, Australia should join with Japan and other partners to sponsor the establishment of the Indian Ocean Environmental Security Forum to bring together representatives from military and civilian agencies to create shared understandings of environmental security threats, to help establish habits of dialogue in the field of environmental security and to consider responses and mitigation measures.

7. Help strengthen regional institutions for Indo-Pacific island states

Australia, Japan and their partners should look for opportunities to help strengthen regional institutions as a way of promoting regional norms and giving greater voice to small island states.

In the Indian Ocean, the newly established Indian Ocean Rim Association (IORA) Working Group on Maritime Safety and Security should be given material support to help develop regional norms relating to maritime safety and security.

8. Provide support for infrastructure development

Australia, Japan and partners should continue to provide island states with support for the development of infrastructure (including ports, airports, roads and power). This should include the development of norms and processes that promote transparency and economic sustainability.

The Coalition for Disaster Resilient Infrastructure—an India-led initiative launched in September 2019¹⁰³ and co-funded by other nations, including Australia, UK and Japan—is a good step forward and could pave the way for closer cooperation among like-minded nations in the region.

9. Build capacity for the blue economy

Building the blue economy is about exploring opportunities for using and linking with the marine domain. It's likely to be specific to each island state.

Countries such as Japan and Australia have much to offer in helping to develop the blue economies of Indo-Pacific island states through capacity building (human, social, physical, natural and financial) in specific areas such as management, monitoring, aquaculture and renewable energy, as well as through the translation of outcomes.¹⁰⁴

Australia has recently established the Blue Economy Cooperative Research Centre.¹⁰⁵ The centre could play a useful role in capacity building with Indo-Pacific island states in policy and management, aquaculture species development and renewable energy converters to provide energy and fresh water (desalination). The centre could determine whether there's the potential for a trial or demonstration site where multiple island countries could learn.

A useful role could also be played here by the IORA Blue Carbon Hub based in Perth. Australia announced the hub in September 2019.¹⁰⁶ Blue carbon ecosystems are effective at carbon storage, supporting coastal fisheries and protecting coastal communities against storms.

Australia and Japan should convene a regular forum of Indo-Pacific island states to exchange ideas on identifying potential areas of cooperation on the blue economy.

NOTES

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ACRONYMS AND ABBREVIATIONS

| | |
|-------------|---|
| ANU | Australian National University |
| BRI | Belt and Road Initiative |
| EEZ | exclusive economic zone |
| EU | European Union |
| GDP | gross domestic product |
| IOC | Indian Ocean Commission |
| IONS | Indian Ocean Naval Symposium |
| IORA | Indian Ocean Rim Association |
| IOTC | Indian Ocean Tuna Commission |
| IUU fishing | illegal, unreported and unregulated fishing |
| MDA | maritime domain awareness |
| PIC | Pacific island country |
| PIF | Pacific Islands Forum |
| PNG | Papua New Guinea |
| PNGDF | Papua New Guinea Defence Force |
| RCOC | Regional Combined Operations Centre |
| RMIFC | Regional Maritime Information Fusion Centre |
| UN | United Nations |

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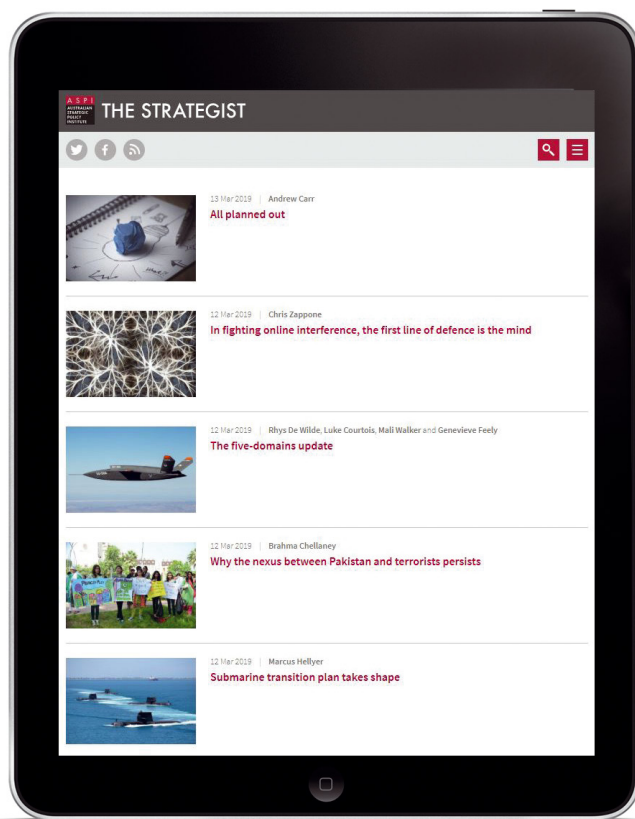


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