Pacific Community
Communauté du Pacifique

Regional Strategy on Safety of Navigation 2023–2027

Regional strategy to improve and harmonise safety of navigation in the Pacific

GEM
Geoscience, Energy and Maritime Division

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Abbreviations

ATO	approved training organisation
AtoN	aids to navigation
ECIDS	Electronic Chart Display Information System
EEZ	exclusive economic zones
ENC	electronic nautical charts
FATS	Framework for Action on Transport Services
GMDSS	Global Maritime Distress and Safety System
JCOMM	Joint Technical Commission for Oceanography and Marine Meteorology
IALA	International Association of Marine Aids to Navigation and Lighthouse Authorities
IHO	International Hydrographic Organization
IMO	International Meteorological Organization
IMSAS	IMO Member State Audit Scheme
IMSO	International Mobile Satellite Organization
IOC	Intergovernmental Oceanographic Commission
ISPS	International Ship and Port Facility Security
KFA	Key Focus Areas
LDC	Least Developed Countries
MEL	Monitoring, evaluation and learning
MHEWS	Multi-Hazard Early Warning Systems
MIMIP	Marshall Islands Maritime Investment Project
MRO	mass rescue operation
MSI	Maritime Safety Information
NAVAREA	Geographical sea area established for the purpose of coordinating the broadcast of navigational warnings
NHCC	National Hydrographic Coordination Committees
NMHS	national meteorological and hydrological services
PCA	primary charting authorities
PEARL	Planning, Evaluation, Accountability, Reflection and Learning
PIC	Pacific Island countries
PICT	Pacific Islands countries and territories
PMP	Performance Monitoring Plan
RCC	Rescue Coordinating Centres
SAR	search and rescue
SDG	Sustainable Development Goals
SIDS	Small Island Developing States
SIMA	Solomon Islands Maritime Authority
SIRA	Simplified IALA Risk Assessment Method
SOLAS	International Convention for the Safety of Life at Sea
SoN	safety of navigation
SPC	Pacific Community
SRF	Strategic Results Framework
SRR	Search and Rescue Regions
VTS	vessels traffic services
WMO	World Meteorological Organization
UNCLOS	United Nations Convention on the Law of the Sea

1.0 PURPOSE

The purpose of the Regional Strategy on Safety of Navigation ("the strategy") is to support Pacific Islands countries and territories (PICTs) and to guide development partners through an integrated and coordinated approach to improve and harmonise safety of navigation in the Pacific. The strategy aims to provide a platform to coordinate, monitor, communicate and report on all safety of navigation-related initiatives in the region to PICTs and development partners. The strategy establishes and sustains regional coordinating mechanisms and strategic partnerships to achieve economies of scale and promote complementary actions among development partners active in the sector. The strategy will be implemented by monitoring, evaluating and reporting on the stated objectives, milestones and indicators.

2.0 BACKGROUND, PROBLEM ANALYSIS AND NEEDS

The lives of Pacific Island peoples are inextricably linked to the Pacific Ocean, the biggest feature covering more than 30% of the Earth's surface. It spreads over an area of more than 30 million square kilometres of the Pacific Ocean, stretching from the Commonwealth of the Northern Mariana Islands (United States) in the north-west Pacific, to Pitcairn Islands (United Kingdom) in the southeast, with at least 7,500 islands of which around 500 are inhabited. The exclusive economic zones (EEZs) of the PICTs total an estimated 28 million square kilometres, with over 1,500 scattered islands comprising a mere 2% in land area within this vast expanse of the Blue Pacific Continent.

Apart from being a source of food, sight of awe, and means of transportation, the ocean plays a bigger, crucial role for the livelihood of living things on planet Earth and includes generating 50% of the oxygen needed, absorbing 25% of all carbon dioxide emitted, and capturing 90% of the heat generated by these emissions.[1] These facts guarantee that Pacific peoples have in their stewardship a significant asset that compels everyone to be prudent and act responsibly for the betterment and survival of the planet.

The Pacific Island region represents an enormous diversity in physical geography and cultures, languages and socio-political organisation, size and resource endowment. While Papua New Guinea, the largest island in the Pacific, represents a land area of more than 460,000 square kilometres with a population of over 9 million people, the rest of the PICTs represent only 10 million people, 100,000 square kilometres of land, and having jurisdiction over a sea area of over 30 million square kilometres. PICTs, therefore, have rights and responsibilities over a globally significant ocean space that far exceeds their terrestrial footprint, so are known as small island countries in a large ocean space. There are 22 PICTs[2] that are members of various regional organisations and agencies and form a consistent group of small island nations in the Pacific region. The 14 Pacific Island countries (PICs) are all Small Island Developing States (SIDS)[3] and three are in the Least Developed Countries (LDCs)[4] category of the United Nations.

1 According to United Nations Climate Action at https://www.un.org/en/climatechange/science/climate-issues/ocean#:~:text=The%20ocean%20generates%2050%20percent,the%20impacts%20of%20climate%20change

2 Pacific Island countries and territories (PICTs) are: Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu, American Samoa (United States), French Polynesia (France), Guam (United States), New Caledonia (France), Commonwealth of the Northern Mariana Islands (United States), Pitcairn Islands (United Kingdom), Tokelau (New Zealand) and Wallis and Futuna (France). Timor-Leste is in the process of becoming a member of SPC and considered by various development partners as part of PICTs.

3 Pacific Island countries (PICs) are: Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu. Federated States of Micronesia and Niue are not IMO members.

4 Kiribati, Solomon Islands and Tuvalu are categorised as Least Developed Countries (LDCs)

Working within small island states surrounded by the vast Pacific Ocean presents unique challenges, including implementation capacity, particularly due to limited resources. These represents enormous challenges to the Pacific Islands region as coastal and island nations relying primarily on the maritime sector to access markets and services. The maritime transport sector is crucial for national development and social cohesion in any modern society, but more so for maritime nations of the Pacific region, which mainly depend on the sea for commerce, trade, and mobility. According to the World Bank,[5] the total import of goods and services in Pacific Island small states accounted for 53.9% of GDP compared to the world average of 37.9% as at 2021. The sector is vital to the lives of Pacific Islanders, serving as the backbone of domestic inter-island transport and often providing the only means of access to and from smaller outer islands for basic socio-economic needs such as education, healthcare and emergency services in response to natural disasters such as cyclones and droughts.

The region is also heavily dependent on the maritime transport sector to provide and support domestic, intra-regional and international transportation of cargo and passengers, and to facilitate trade, fisheries, and cruise tourism. Therein lies a challenge for governments and administrations in PICTs to ensure the increasing traffic and volume of ships either entering or transiting are managed in an efficient, effective and safe manner to reduce negative impacts on the marine resources and the environment of PICTs. Further, the increase in frequency of shipment into countries creates opportunities for economic development for small island countries and remote communities that rely heavily on maritime transport services.

Becoming aware and ensuring the safety of maritime routes should therefore become a major component of PICTs' strategies to support their economic development by fostering safe and accessible maritime transport services and the development of new opportunities for trade and tourism. It is essential to improve safety of navigation on current and future maritime routes and to develop the capacities of maritime administrations in PICTs to ensure the safety of navigation on those maritime routes.

In the Pacific region, domestic shipping mainly involves the use of small craft[6] and "non-Convention"[7] vessels that service main governmental or commercial centres and other islands within a country. In some countries, Convention-sized vessels service such domestic routes and even neighbouring countries or territories.[8] Ports in PICTs host a wide variety of ships flagged in other countries[9] including its own flagged ships. Similarly, small ports are usually frequented by 100 to 150-metre container ships, small tankers and for some of them 30 to 50-metre foreign fishing vessels and their associated "mother" ships. Moreover, larger ports can host large bulk carriers and tankers with some of the PICTs' main ports and outer islands being visited by passenger cruise ships which have the capacity to carry up to 2,000 passengers.

5 http://data.worldbank.org

6 Motorised or sail-driven fibreglass, plastic or wooden made craft usually of 10 metres and less. Otherwise known as dinghy, canoes and tender boats.

7 "Convention" refers to the International Convention for the Safety of Life at Sea (SOLAS). Among other things, SOLAS specifies the international requirements for the operation of vessels of a gross tonnage of 500 or more engaged in international voyages.

8 SPC database contains **2345 domestic vessels registered in 12 countries** (Cook Islands, Federated State of Micronesia, French Polynesia, Kiribati, Marshall Islands, New Caledonia, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga and Vanuatu) – 1176 vessels have a length of 15 m or above or a gross tonnage of 50 or above; 950 less than 15 m or 50 in gross tonnage; 219 vessels are recorded with no information on length and gross tonnage **620 vessels are declared as carrying passengers** including 18 500-gross tonnage or more vessels carrying more than 12 passengers (5 vessels carry more than 400 passengers) - 247 vessels are declared as carrying passengers but no information on number of passengers.

9 The **number of calls of vessels engaged on international voyages in the port of 13 PICTs is approximatively 7000 per year** (Source: SPC 2014); around 50% calling in Papua New Guinea ports, 35% calling in Fiji, French Polynesia and New Caledonia, 15% in the rest of PICTs (Nauru, Marshall Islands, Samoa, Tuvalu, Kiribati, Tonga, Vanuatu, Solomon Islands, Wallis and Futuna) – the **smallest ports are visited by less than 10 distinct vessels each year.**

2.1 Background: Aligning to the Sustainable Development Goals

The 17 United Nations Sustainable Development Goals (SDG) were agreed to by 193 members of the UN in September 2015 as part of a global undertaking to act on crosscutting issues and to revive the most basic elements of peace, equality, healthy and prosperous living on earth. Furthermore, the goals are aimed at minimising the footprint of human impact on the environment and are much more important for small island states of the Pacific where effects of climate change and sea level rising are a clear and present danger.

The IMO works across all 17 SDGs and developed linkages between their technical assistance work, paying particular attention to goals 13 and 14 which deal with climate actions and life below water, respectively. IMO in partnership with other intergovernmental organisations like the International Hydrographic Organization (IHO) and International Association of Marine Aids to Navigation and Lighthouses (IALA) made commitments to deliver as one- the Pacific Safety of Navigation program. The commitments made by these organisations are reflected in their respective strategic plans and work activities; however, working collaboratively and working as one towards a regional strategic goal may be more effective.

Regional strategies such as the *2050 Strategy for the Blue Pacific Continent* and *The Framework for Resilient Development in the Pacific* are committed to protecting the ocean and environment to ensure a well-connected region. The *Framework for Resilient Development in the Pacific* identifies three goals, namely, strengthened integrated adaptation and risk reduction to enhance resilience to climate change and disasters, low-carbon development and strengthened disaster preparedness, response, and recovery.

Figure 1. United Nations SDGs

The Pacific Community's (SPC) *Strategic Plan 2022–2031* has also aligned the organisation's goals and key focus areas (KFAs) to contribute to multiple SDG indicators and regional strategies. The KFAs and indicators are achieved through its strategic results framework made up of divisional three-to-five-year business plans and annual individual work plans.

Figure 2. IMO and the SDGs

Figure 3. SPC's key Strategic Results Framework (SRF) aligned to IMO and UN SDG

Resilience and climate action	Natural resources & biodiversity	Food systems	Equity, education & social development	Sustainable economies & livelihoods	Planetary health	Transforming institutional effectiveness
11 13 14	6 14 15	2 3 14	4 5 16	1 7 8 9 10 12 14	3 6	13 16 17
SDG 11.5.2	SDG 6.1.1	SDG 2.1.1, 2.1.2, 2.5.1	SDG 4.1.1, 4.2.2, 4.7.1, 4. C.1	SDG 1.2.1, 1.2.2	SDG 3.8.1, 3.c.1, 3.d.1, 3.3.5	SDG 13. a. 1
SDG 13.1.2, 13.2.1, 13. b.1	SDG 14.4.1, 14.5.1	SDG 3.4.1	SDG 5.1.1, 5.2.1, 5.2.2	SDG 7.2.1, 7.a.1, 7.b.1 SDG 8.6.1, SDG 9. a.1	SDG 6.2.1	SDG 16.9.1
SDG 14.2.1	SDG 15.1.1, 15.5.1	SDG 14. b.1	SDG 16.1.3, 16.7.2	SDG 10.2.1, 12. b.1 SDG 14.6.1, 14.7.1		SDG 17.18.2, 17.18.3, 17.19.1. 17.19.2

2.2 Aligning to the overarching framework and strategies

At the regional level, the Pacific Forum leaders' call for improved coordination and delivery of safe, secure, and competitive regional transport services has been clearly mandated in the *Framework for Action on Transport Services* (FATS) 2011 to 2020 which was endorsed in 2010. Theme 3 of FATS and its associated implementation plan has a particular focus on maritime safety including the safety of navigation.

2.3 Problem analysis

The *United Nations Convention on the Law of the Sea 1982* (UNCLOS) is considered the 'constitution of the ocean' and has been ratified by 168 parties which include 167 states and the European Union. This convention gives certain jurisdictions for the peaceful use of the sea to the party state and ultimately the benefits from the vast resources that are available within the maritime boundaries that are declared and recognised. Furthermore, the UNCLOS permits coastal states to claim various maritime zones within which they can claim certain rights and jurisdictions, such as within internal waters, territorial seas, contiguous zone, exclusive economic zone, continental shelf and archipelagic waters and the right to extend their continental shelf limits.

The *Safety of Life at Sea Convention 1974* (SOLAS Convention) is considered as the most important of all international treaties concerning the safety of life at sea and currently has 168 contracting States, which flag about 98.91% of merchant ships around the world in terms of gross tonnage.[10] Although several chapters of the SOLAS Convention apply only to vessels engaged in international voyages, Chapter V applies to all ships on all voyages (with some exceptions) and requires contracting governments to ensure safety of navigation by ensuring that services are in place to provide navigational and meteorological services and warnings, search and rescue services, hydrographic services, ship reporting and routeing systems, vessel traffic services and aids to navigation (AtoN). The obligations placed on contracting governments under SOLAS Convention Chapter V, as flag state, port state and coastal state, are included in the IMO Instruments Implementation Code (III Code) which became mandatory in January 2016. This code constitutes the framework by which all parties undergoing a mandated audit (known as the IMO Member State Audit Scheme (IMSAS)) are required to ensure that sufficient resources and capabilities are made available for the implementation of the mandatory IMO instruments.

The level of implementation of safety of navigation requirements under the SOLAS Convention varies between parties. Thirteen Pacific Island countries[11] have ratified the SOLAS Convention which compels them to give full and complete effect to its requirements through legislative provisions and services. However, most often, PICTs lack the resources and expertise to effectively implement the requirements. This is particularly the case for the provision of hydrographic and aids-to-navigation services, for which many PICTs are unable to satisfactorily implement the recommendations and guidelines published by the IHO and IALA respectively. The main challenges that PICTs face in implementing those provisions are most often due to lack of government priority and awareness, hence lack the commitment, financial resources and infrastructure to conduct appropriate risk assessments and to put in place adequate safety systems and services. Similarly, most PICTs do not have the capacity and the infrastructure to collect, analyse and disseminate the maritime safety and meteorological information of concern to users at sea. Search and rescue (SAR) services are sometimes unable to respond to distress at sea due to a lack of capacity to conduct SAR operations in waters under the PICTs responsibility or lack of effective national coordination.

Various international and regional organisations as well as development partners play an important role to assist PICTs improve their safety of navigation services through technical and material assistance. Although efforts are being made to share information on current initiatives, there is still a need to improve communication and coordination, avoid duplication, use complementary areas of expertise, replicate sustainable best practices, improve cost-effectiveness, increase economies of scale, and reduce impacts through the pursuit of common goals and objectives. While safety of navigation is being increasingly recognised as a key development challenge in PICTs, the integration of safety of navigation improvement in sectoral policies and measures is still widely lacking in the Pacific.

10 https://wwwcdn.imo.org/localresources/en/About/Conventions/StatusOfConventions/Status%202023.pdf

11 Cook Islands, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu.

3.0 VISION

Safety of navigation through waters, channels and passages within the PICTs are improved, thereby supporting sustainable socio-economic development, protection of the ocean, marine environment and living organisms.

Safety of navigation is ensured through the effective implementation of policies and legislation in accordance with the relevant international instruments, the existence of a functional and compliant safety of navigation infrastructure, improved capacity to provide appropriate safety of navigation systems, and updated maritime safety information services that provide timely information to enable effective decision-making.

Safety of navigation is addressed through a global and coordinated approach to consistently bring technical and infrastructure improvement solutions to the main elements that support improved safety of navigation in the Pacific region. This approach is supported by governments and administrations in PICTs, relevant intergovernmental, international and regional organisations and development partners in order to ensure positive impacts and cost-effective solutions at the regional level.

4.0 IMPLEMENTATION

This strategy covers the following areas of safety of navigation services: 1) governance; 2) navigation warnings and meteorological services; 3) hydrographic services; 4) aids to navigation and vessels traffic services (VTS); 5) search and rescue services.

The strategy promotes a consistent and innovative approach to safety of navigation in the Pacific by interlinking the targets, overall objective, results, and indicators as stated in Chapter V of the SOLAS Convention. Although the delivery of initiatives places the responsibility on the implementing agencies, the coordination and reporting function for the strategy, which includes aggregating information and capturing progress through monitoring, is designated to the Pacific Community (SPC). The strategy's implementation and progress will be reported to PICTs and development partners by the SPC through an agreed performance monitoring plan.

- Area of Service 1: Safety of navigation governance, legislation and policy development;
- Area of Service 2: Navigation warnings and meteorological services;
- Area of Service 3: Hydrographic services;
- Area of Service 4: Aids to navigation and vessels traffic services (VTS);
- Area of Service 5: Search and rescue services (SAR).

4.1 Safety of navigation governance, legislation, and policy development

The lack of political will, frequent staff turnover, limited resources and expertise and inadequate legal frameworks in most of the PICTs are common issues that prevent the effective delivery of safety of navigation services. The delivery of such services requires a consistent set of governance framework in PICTs comprised of an adequate policy and legal framework, and effective coordination of all public and private stakeholders. Good oversight of safety of navigation in waters under the responsibility of a PICT requires improved accountability and transparency of institutions, processes, rules and actions, a clarification of roles and relationships between all stakeholders (including the private sector and communities) and enhanced capacity and the allocation of appropriate resources. Good governance will eventually allow PICTs to properly fulfil their obligations as contracting governments under international instruments.

Improving governance in PICTs to deliver effective safety of navigation services in accordance with international instruments will require: i) a specific high-level objective in the national maritime transport policy or strategy; ii) the development and enactment of a legislative and regulatory framework taking into account the international instruments; iii) the drafting of quality management systems and procedures by maritime administrations; iv) the development and implementation of training plans with the support of intergovernmental, international and regional development partners; and v) safety of navigation development and implementation framework which includes economics and level of service statement of safety of navigation services.

4.2 Navigation and meteorological services and warnings

Regulations 4 and 5 of chapter V of the SOLAS Convention require contracting governments to ensure that appropriate warnings about dangers to navigation are issued and that weather forecasts, warnings and other meteorological information are promulgated to mariners. This information, although specified in separate regulations (chapter V, regs 4 and 5 respectively), is known collectively as Maritime Safety Information (MSI) and is assimilated and promulgated via the Global Maritime Distress and Safety System (GMDSS). However, most PICTs do not have the capability to fulfil even the most basic provisions under these regulations, primarily due to inadequate commitment to the resourcing and reporting of MSI. Furthermore, the lack of appropriate radio broadcasting facilities at the national level and dysfunctional contact with relevant NAVAREA/METAREA coordinators are preventing the promulgation of timely and relevant safety information, essential for the safe operation of vessels.

To achieve improvements to MSI services in PICTs is: i) to conduct technical assessments to identify associated gaps in capability and services, from which appropriate plans can be developed in in conjunction with other safety of navigation components; ii) the provision of technical support to PICTs to establish a MSI regional coordinator; iii) develop and implement capacity-building initiatives in collaboration and partnership with IHO/SWPHC and IMO to deliver as one.

In this area the *Pacific Islands Meteorological Strategy 2017–2026* has a key priority area and Pacific Key Outcome (PKO) 2 activity on marine weather which includes the implementation of Regulation 5 of chapter V of SOLAS Convention and the provision of marine weather forecast by the national meteorological services. This is coordinated by the Pacific Meteorological Council through the SPREP/Pacific Meteorological Desk Partnership.

4.3 Hydrographic services

Regulation 9 of chapter V of the SOLAS Convention requires contracting governments to ensure the collection and compilation of hydrographic data and the publication, dissemination and keeping up to date of all nautical information necessary for safe navigation. Technical assessments of the hydrographic capability of PICTs completed in recent years confirm this obligation is not being fulfilled, primarily due to the state of existing nautical charts which, in many cases, are based on outdated and extremely sparse data and the relatively high cost of the specialised hydrographic surveys required to update them.

Recognising that the development of a hydrographic survey capability is beyond the reach of most PICTs, and that the production of charts and nautical publications can be, as in some cases, already achieved through appropriate bilateral arrangements with established chart-producing States, the IHO capacity-building activities in the Pacific are focused towards PICTs achieving Phase 1 of the IHO Capacity Building (CB) Maturity Model[12] – improving their processes and the timely collection and circulation of nautical information necessary to maintain existing charts and publications. Other regional CB programmes have adopted and are actively collaborating to assist PICTs achieve this goal together with increasing awareness of the importance and value of hydrography, identifying and developing appropriate governance models and strengthening links with charting authorities; however, such work is being carried out largely in isolation from other components of safety of navigation improvement.

In addition to the establishment of effective arrangements to provide the required hydrographic services, PICTs require assistance in developing mitigation measures based on appropriate risk assessment methodology. Development partner support will be required in the implementation of such measures, which will involve significant hydrographic survey and subsequent chart modernisation programmes. The latter is becoming more relevant as electronic nautical charts (ENC) and Electronic Chart Display Information System (ECIDS) were made mandatory by IMO in January 2011.[13]

PICTs in partnership with IHO/SWPHC and IMO need to address and carry out certain nautical and hydrographic obligations including: i) hydrographic surveys around choke points, marine sensitive areas, congested ports and waterways; ii) prepare and issue nautical publications and charts; iii) promulgate notice to mariners and maritime safety information efficiently and in a timely manner; iv) provide data management arrangements; and v) capacity-building initiatives.

The establishment of National Hydrographic Coordination Committees (NHCC) is another key activity, essential to identifying risks and priorities and strengthening relationships between stakeholders and with regional METAREA and NAVAREA coordinators thereby achieving greater collaboration between national bodies with maritime safety responsibilities.

4.4 Aids to navigation and vessel traffic services

Regulations 12 and 13 of chapter V of the SOLAS Convention oblige contracting governments to provide vessel traffic services (VTS) and aids to navigation (AtoN), as the volume of traffic justifies and the degree of risk requires, in accordance with the international standards, recommendations and guidelines published by IALA. While PICTs have made efforts to procure and maintain AtoNs, these are impeded by frequent natural events such as cyclones, earthquakes and volcanoes which damage AtoNs and result in their deterioration. AtoNs deployed in PICTs vary from country to country depending on their needs and priorities. However, in most cases due to fiscal constraints and competing priorities, insufficient attention is paid to the maintenance and upkeep of less imposing infrastructures like AtoNs. These issues need to be addressed systemically and continuous awareness needs to be carried out to improve the sustainability of investments in AtoN. Additionally, the recruitment, selection and training of suitable personnel are pre-requisites to the provision of an effective and efficient AtoN and VTS services. However, several demographic factors make that requirement difficult to achieve in practice in countries that have insufficient resources or expertise to provide such training.

12 https://iho.int/uploads/user/Inter-Regional%20Coordination/IRCC/IRCC14/C6_2022_04.2_EN_AnnexA_Capacity_Building_Strategy_2021.pdf

13 https://www.imo.org/en/OurWork/Safety/Pages/ElectronicCharts.aspx

To respond to these issues, there is a need to identify in PICTs the current and future needs for AtoN and eventually VTS in the region using risk assessment tools based on the volume of traffic, and probability and consequence of marine casualties. It is also advantageous to assess the economic impact of planned investments to promote the benefits of investing in AtoN and VTS for the facilitation of trade and tourism. Noting that VTS is a considerable investment, guidance for establishing a VTS is provided in IALA Recommendation V-119 on the implementation of vessel traffic services.

PICTs, working together or individually, need to address and carry out certain obligations in order to harmonise AtoN and VTS services such as through the i) conduct of navigation safety risk assessments to determine level of risks and mitigating factors using SIRA, IWRAP, PAWSA tools; ii) preparation and promulgation of the light list and level of service commitments; iii) promulgation of notice to mariners and maritime safety information efficiently and in a timely manner; iv) providion of data management arrangements; and v) capacity-building initiatives in partnership with IHO/SWPHC, IALA and IMO in line with their delivering-as-one capacity development strategy.

Given the level of technical knowledge indicated in IALA manuals, recommendations and guidelines to manage AtoN and VTS services and operate and maintain AtoN, PICTs do not have the capacity to provide training for AtoN managers and technicians. For this reason, most PICTs are on the IALA World-Wide Academy list of target States, which means that they have yet to demonstrate their ability to meet their SOLAS V obligation that AtoN and VTS services are provided in a manner consistent with international standards. This evidences a need to identify and offer places to potential AtoN managers and technicians from PICTs to training organised by IALA and/or by an approved training organisation (ATO) under the terms of IALA Guideline 1100.

4.5 Search and rescue services

There are moral and legal obligations under Regulation 7 of chapter V of the SOLAS Convention for maritime nations to provide search and rescue (SAR) services to respond to distress calls when initiated in their waters of responsibility. The challenge in the Pacific region is obviously related to the vast size of the ocean, coupled with significant ship and pleasure craft activities, the advent of ever-larger cruise vessels and commercial aircraft transiting the associated air space. While the increase in tourism activity and travel is a welcome boost to the economies of PICTs, they must be aware of the risks should an incident occur, that will necessitate a mass rescue operation (MRO) which, by definition, is an event that exceeds a SAR service provider's resource.

In accordance with the *International Convention on Maritime Search and Rescue* (SAR Convention), eight PICTs are responsible for Search and Rescue Regions (SRR) in the Pacific and are normally associated with having Rescue Coordinating Centres (RCCs). These are Australia, Fiji, French Polynesia, Nauru, New Caledonia, New Zealand, Papua New Guinea, Solomon Islands, and the United States of America (Hawaii). Even though Fiji, Nauru and Solomon Islands are assigned with SRRs, they have not acceded to the SAR Convention. Additionally, Nauru does not have adequate SAR resources and capacity to commit itself to fully operate an RCC.

While the other PICTs are located in SRRs under the responsibilities of the above, they still have the responsibility to provide SAR services in their waters and coordinate and communicate with neighbouring countries. This has been acknowledged by the *Maritime Search and Rescue Technical Arrangement for Cooperation among Pacific Island Countries and Territories that support international lifesaving in the Pacific Region* (SAR TAfC) which so far has been signed by Australia, New Caledonia, New Zealand, Vanuatu and United States. Moreover, the Pacific SAR Steering Committee (PACSAR SC) has been formed with membership from Australia, Fiji, New Caledonia, New Zealand and the United States, with the support of SPC to improve regional SAR coordination and provide capacity-building activities in the Pacific region.

SAR initiatives as agreed by the PACSAR SC and SPC are framed around the motto of 'saving lives together in the Pacific', which focuses on four key capability areas: i) responsible SAR governance; ii) effective SAR coordination; iii) efficient operational response; and iv) SAR prevention. The PACSAR SC Strategic Plan outlines the related activities and respective measurements. The activities are based on working arrangements to provide technical assistance at the national level while collaborating to improve the collective regional SAR capability. The improvement of regional SAR coordination requires the cooperative efforts of the PACSAR SC, the delivery of capacity-building activities and regional focused meetings to improve harmonisation of SAR services and facilitate SAR operations.

4.6 Timeframe

The strategy addresses the period from 2023 to 2028. A progress report on the status of implementation of the strategy will be submitted annually and biennially to PICTs Transport Officials Meeting from 2024 onwards. An evaluation will be conducted at the end of 2027 to review and renew the strategy for the next five years.

4.7 Partners

4.7.1 Development partners

As the specialised agencies responsible for setting the standards for safety of navigation, the IMO, IHO and IALA are the main partners supporting the implementation of the strategy in the Pacific region. These three organisations have agreed to deliver as one and to work collaboratively and to communicate on technical cooperation and capacity-building activities to improve the abilities of the contracting governments to meet their safety of navigation obligations as set out in chapter V of the SOLAS Convention.

Several other agencies – such as the World Meteorological Organization (WMO) and the Joint WMO/UNESCO's Intergovernmental Oceanographic Commission (IOC), Technical Commission for Oceanography and Marine Meteorology (JCOMM); the International Mobile Satellite Organization (IMSO) also play an important role in providing standards, recommendations, and guidelines as well as the technical expertise for the delivery of harmonised, compliant, and efficient safety of navigation services.

Strategic partners include organisations and countries currently supporting and implementing initiatives to improve safety of navigation services in the Pacific at the national and regional levels and those that are primary charting authorities (PCA) or NAVAREA/METAREA coordinators. Some of those organisations are listed as donors and/or partners in Annex II to this strategy.

4.7.2 Partnership Desk

A coordinating agency and partnership desk is established within the Pacific Community (SPC) to:

1. coordinate all safety of navigation initiatives in the Pacific region;
2. collect information relating to safety of navigation initiatives and activities in the Pacific region;
3. improve awareness of PICTs on level of implementation through information-sharing;
4. monitor and report on implementation of the strategy; and
5. seek endorsement of PICTs and partners on progress and achievements.

5.0 OBJECTIVES, RESULTS AND INDICATORS

Goal: To ensure safety of navigation in the waters under the jurisdiction of PICTs is safe for any person or vessel at sea, the marine environment is protected and the international and domestic traffic is facilitated to support the sustainable development goals of the Pacific Island countries and territories (PICTs).	
Specific objective: To support PICTs to improve the provision of safety of navigation (SoN) services in accordance with their international obligations. **Indicator:** Number of PICTs providing adequate SoN services in accordance with international requirements, guidelines, and recommendations.	
Timeframe: 5 years: 2023–2027	
Results	**Performance measure**
Result 1: PICT provide effective services that fulfil their safety of navigation obligations	• Evidence of PICTs with functional and well-maintained SoN infrastructure • Evidence of PICTs with effective SoN services being provided. • Evidence of information relating to safety of navigation activities • Evidence of safety of navigation governance, legislation and policy development and implementation activities • Evidence of effective capacity-building through SoN related initiatives
Result 2: PICT safety of navigation projects and initiatives are designed in line with the strategy addressing its five components	• Number of regional and/or country projects and initiatives addressing the five components of the strategy • New technologies and innovations are incorporated into the developments of projects and initiatives
Result 3: Coordination among PICTs and development partners for the implementation of safety of navigation projects and initiatives is improved	• Evidence of information sharing and coordinated projects being planned to address country needs in line with the strategy • Number of regional coordination meetings held • Countries Baseline Survey indicates a balanced level of safety of navigation activities being implemented and achieved
Result 4: Greater visibility and awareness of PICTs' status in achieving their safety of navigation obligations	• Number of updated reports on PICT performance and progress against the five components as noted in the strategy • Number of PICTs attendances with presentations at international and regional workshops, forums, conferences and meetings

6.0 MONITORING AND EVALUATION

The monitoring, evaluation and learning (MEL) of the strategy will be aligned to the SPC's Planning, Evaluation, Accountability, Reflection and Learning (PEARL) policy which focuses on providing good quality performance information to answer key questions to support planning, improvement and decision-making.

The MEL process will be informed by a strategy baseline with information SPC has to date and the Performance Monitoring Plan (PMP) in Annex I which provides means of verification and monitoring tools against the overall objective, results and indicators.

A monitoring report will be produced annually to communicate the progress being made based on the agreed indicators. At the end of the strategy timeframe a review and evaluation report will be produced to assess progress against the strategy indicators and agree on the new baseline indicators for the PMP. The full evaluation will also measure the achievements and impacts in PICTs towards the overall goal and specific objective.

ANNEX I – PERFORMANCE MONITORING PLAN

Overall objective and results	Performance measure	Means of verification (MOV)	Schedule for collection	Responsibility
Goal To ensure safety of navigation in the waters under the jurisdiction of PICTs is safe for any person or vessel at sea, the environment is protected and the international and domestic traffic is facilitated to support the sustainable development goals of PICTs.				
Specific objective To support PICTs to improve the provision of their safety of navigation services in accordance with their international obligations	• Number of PICTs providing adequate safety of navigation services in accordance with international requirements, guidelines, and recommendations			
Result 1: PICT provide effective services that fulfil their safety of navigation obligations	• Evidence of PICTs with functional and well-maintained SoN infrastructure • Evidence of PICTs with effective SoN services being provided. • Evidence of information relating to safety of navigation activities • Evidence of safety of navigation governance, legislation and policy development and implementation activities • Evidence of effective capacity-building through SoN related initiatives	• PICT SoN audit/ review reports • Project and training reports	Annually	IMO/IHO/IALA/SPC/ SPREP Project implementers
Result 2: PICT safety of navigation projects and initiatives are designed in line with the strategy addressing its 5 components	• Number of regional and/or country projects and initiatives addressing the five components of the strategy • New technologies and innovations are incorporated into the developments of projects and initiatives	• SoN project design documents • SoN project evaluation documents	Annually	Development partners, regional agencies, and PICTs
Result 3: Coordination among PICTs and development partners for the implementation of safety of navigation projects and initiatives is improved	• Evidence of information sharing and coordinated projects being planned to address country needs in line with the strategy • Number of regional coordination meetings held • Countries Baseline Survey indicates a balanced level of safety of navigation activities being implemented and achieved	• Strategy biennial review/evaluation report	2 years	SPC
Result 4: Greater visibility and awareness of PICTs status in achieving their safety of navigation obligations	• Number of updated reports on PICT performance and progress against the five components as noted in the strategy • Number of PICTs attendances with presentations at International and Regional Workshops, Forums, Conferences, and meetings	• Annual state of SoN in the Pacific reports produced by the Partnership Desk	Annually	SPC

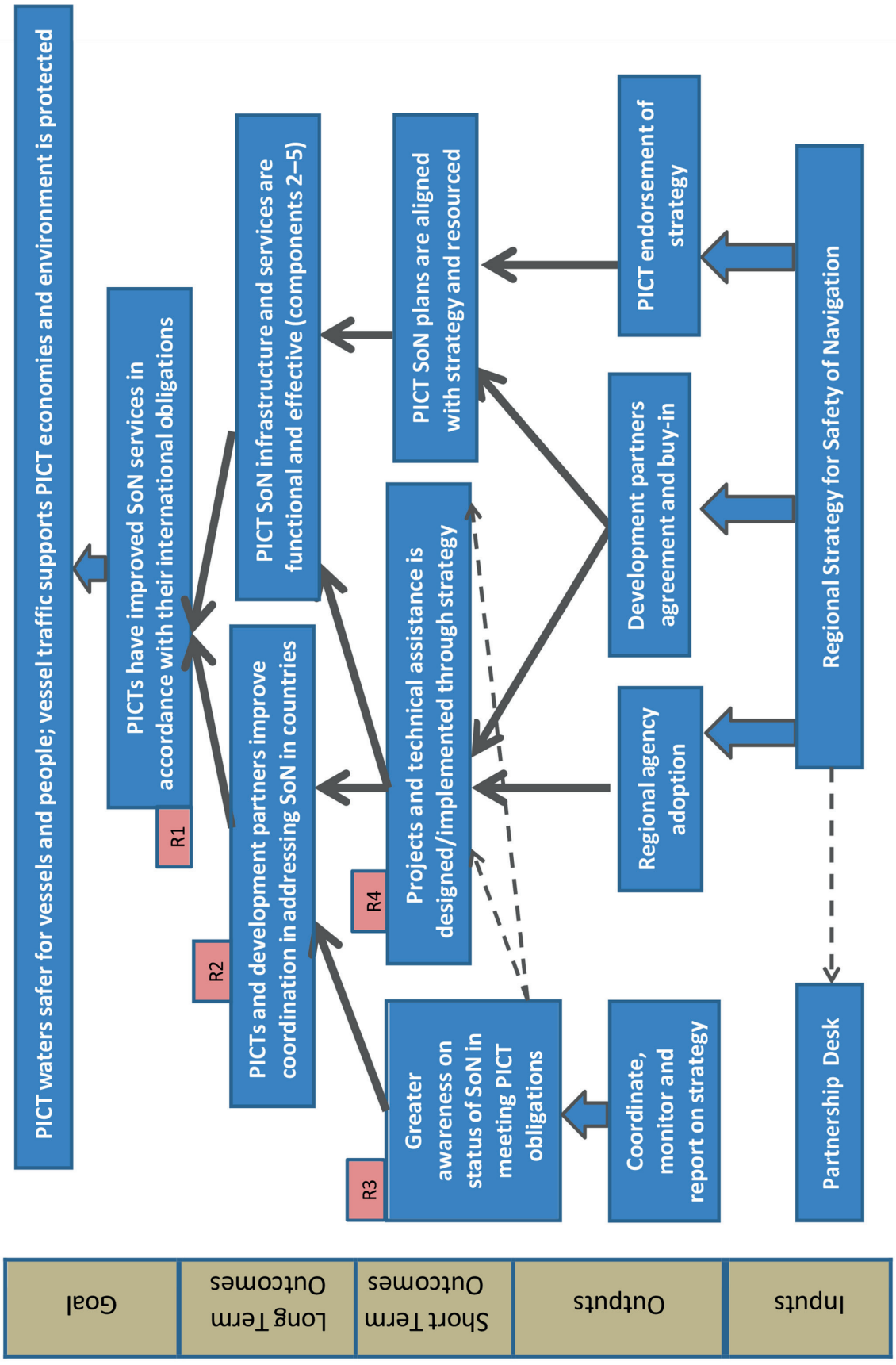
ANNEX II – REGIONAL FRAMEWORK – PROGRAMMES/PROJECTS CURRENTLY IMPLEMENTED

Title	Overall objective	Specific objectives/results	Donor	Implementer	Partner	Timeframe	Targeted countries
Framework for Action on Transport Services (FATS)	Enhanced economic development for Pacific communities through effective responses to transport challenges	• Theme 1: Leadership, governance, coordination and partnerships • Theme 2: Capacity development, policy, planning and regulatory frameworks • Theme 3: Transport safety and security • Theme 4: Improved access • Theme 5: Environmental impact, technology and energy • Theme 6: Transport data, information and knowledge • Theme 7: Sustainability, monitoring and evaluation				2011–202X	All PICTs
Pacific Islands Meteorological Strategy 2017–2026	National meteorological and hydrological services (NMHSs) of the Pacific Island countries and territories (PICTs) provide relevant weather, climate, water and ocean services to their people to make informed decisions for their safety, socio-economic well-being, prosperity and sustainable livelihoods.	• Pacific Key Outcome (PKO) 2: Improved marine weather services and establishment of ocean services. (10 National Priority Actions and nine Regional Priority Actions) • Pacific Key Outcome (PKO) 4: Strengthened national meteorological and hydrological services (NMHS) is coordinated capacity to implement Multi-Hazard Early Warning Systems (MHEWS) for tropical cyclones, coastal inundation and tsunamis. • Pacific Key Outcome (PKO) 10: Support to national meteorological and hydrological services is coordinated.		Pacific Meteorological Council, with the Pacific Meteorological Desk Partnership as the secretariat	SPREP WMO	2017–2026	All PICTs
Pacific Search and Rescue Steering Committee Strategic Plan 2017–2021	By 2021 the SAR capability of each PICT in the Pacific region, and of the region as a collective, has measurably improved in line with international standards, and our success measures, in order to respond to distress.	• Key capability area 1: Responsible SAR governance • Key capability area 2: Effective SAR coordination • Key capability area 3: Efficient operational response • Key capability area 4: SAR prevention		PACSAR SC	IMO, NZ, Australia	2017–2021	All PICTs

Title	Overall objective	Specific objectives/results	Donor	Implementer	Partner	Timeframe	Targeted countries
Marshall Islands Maritime Investment Project	The MIMIP will improve the safety, efficiency and climate resilience of maritime infrastructure and operations in the RMI in compliance with the International Ship and Port Facility Security (ISPS) Code to ensure safety and security arounds its port.	• Component 1 related to marine infrastructure. This component will enhance the resilience of maritime structures to natural disasters and climate change impacts through better design and quality of infrastructure, as well as safer and more efficient operation of port facilities; • Component 2 which will improve maritime safety and security, which will strengthen connectivity between the islands of RMI states, and facilitate access to food, water, fuel and emergency response services. This component will also address an urgent need of waste management in ports. The component will include the provision of search and rescue equipment and safety devices; as well as review and assess options and measures to counter trafficking of persons and will propose steps RMI could take to comply with the minimum standards under the US TVPA; and • Component 3 will support technical assistance to strengthen oversight and management of port facilities, improve the coordination of emergency response systems, elevate awareness of SAR awareness and ISPS requirements, and implement project activities	World Bank	RMI Ports Authority		2019–2024	RMI
Provision of port navigation management equipment and safety of navigation equipment for Vanuatu	Safe and stable maritime transport in ports and their coastal areas by reducing the risk of collisions	• Lighting, buoys and radios on the routes of the remote islands outside the international shipping lanes • Pilot boats and navigation markings for two international ports of Port Vila and Luganville	Japan–Pacific Kizuna (Bond) Policy	Minister for Infrastructure and Public Utilities	Japan	2023	Vanuatu
Solomon Islands Maritime Authority (SIMA) deployment of hydrography capability strengthened	Improvement of hydrographic capabilities and capacities for the Solomon Islands	• Training for SIMA staff in CAT2 hydrographic survey • Hydrographic boat repair and fitted with capabilities • Institutional strengthening	JICA	Solomon Islands Maritime Authority	JICA	2022–2023	Solomon Islands

Title	Overall objective	Specific objectives/results	Donor	Implementer	Partner	Timeframe	Targeted countries
Pacific Regional Navigation Initiative	Contribute to safe, reliable and affordable transport services in the Pacific that connect people to markets and services	*Long-term:* • Pacific maritime/nautical charts that support economic development through the transport of people and goods • A safer Pacific maritime environment due to strengthened navigation that supports the well-being of all mariners *Medium-term:* • PICs provide accurate and timely information to enable nautical chart updating • PICs have hydrographic institutional capacity that contributes to maritime health and safety issues *Short-term:* • All relevant data is available to improve nautical charts • Areas of maritime navigational risk identified and mitigation measure priorities actioned • All PICs are aware of maritime transport safety and hydrographic compliance obligations	NZ MFAT	Land Information New Zealand (LINZ)/SPC	IALA	2015–2018	LINZ – Cook Islands; Niue; Samoa; Tokelau; Tonga
Regional Safety of Navigation Project	Strengthening safety of navigation in the Pacific through enhanced capacity, governance, and infrastructure	• Key work area 1 – Governance: support PICTs to strengthen safety of navigation governance frameworks to ensure compliance with international maritime instruments and best practice; • Key work area 2 – Capacity Building: strengthen PICTs capacity to deliver effective AtoN services through regional coordination and qualifications; • Key work area 3 – Infrastructure: procure and guide the installation, maintenance and upgrading of critical AtoN infrastructure identified in the Phase II Simplified IALA Risk Assessments (SIRA) in PICTs territorial waters	IFAN	SPC	IALA	August 2021 until July 2024	Cook Islands, Kiribati, Federated States of Micronesia, Fiji, Marshall Islands, Nauru, Niue, Palau, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu

ANNEX III – THEORY OF CHANGE



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