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Pacific Small Island Developing States Aviation Needs Analysis (PSIDS Study)



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AMENDMENTS

Amendments are announced in the supplements to the *Products and Services Catalogue*; the Catalogue and its supplements are available on the ICAO website at www.icao.int. The space below is provided to keep a record of such amendments.

RECORD OF AMENDMENTS AND CORRIGENDA

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FOREWORD

The present report documents the outcome of the Pacific Small Islands Developing States Aviation Needs Analysis (PSIDS Study) conducted from March to September 2019.

The report reflects the views of the PSIDS Study Senior Advisor, resulting from his work and that of his team. This work was performed within the time and budget constraints of the study, based on document review, including results from activities undertaken under the ICAO Universal Safety Oversight Audit Programme (USOAP) and Universal Security Audit Programme (USAP), interviews with relevant personnel from the concerned States and Organizations, on-site visits to States and Organizations in the PSIDS region and analyses of the information collected. The views expressed in the report may not represent the official positions of the ICAO Secretariat on some of the matters addressed within the study. In addition, they do not represent in their entirety results from USOAP and USAP activities or preclude any future findings under these audit and monitoring programmes.

It should also be noted that, due to the limitations in the number, expertise and availability of team members, the study did not cover the whole spectrum of civil aviation activities. In particular, the area of air navigation services (ANS) was not covered. It is however expected that a number of observations, conclusions and recommendations contained in the report, being of a systemic nature, would also apply to the ANS area, for example with respect to safety oversight and investments in infrastructure.

The Senior Advisor expresses his gratitude to all States, Organizations and individuals who participated in the study and to the five PSIDS Study team members who provided valuable contributions in their areas of specialty. May any benefit created by the conduct of this study, and the eventual implementation of its recommendations, contribute to the well-being of all Pacific Islanders.



Nicolas Rallo
Senior Advisor



ACRONYMS

AD	Airworthiness Directive
ADB	Asian Development Bank
AED	Aircraft Engineering Division
AID	Aircraft Inspection Division
AIP	Aeronautical Information Publication
AME	Aircraft Maintenance Engineer
AMO	Approved Maintenance Organization
ANB	Air Navigation Bureau of ICAO
ANS	Air Navigation Services
AOC	Air Operator Certificate
AOSP	Aircraft Operator Security Programme
APAC	Asia and Pacific
ASIAP	Aviation Safety Implementation Assistance Partnership
ASP	Airport Security Programme
ASPA	Association of South Pacific Airlines
ASTC	Aviation Security Training Centre
ATB	Air Transport Bureau of ICAO
ATS	Air Traffic Service
AUD	Australian Dollar
AVSEC	Aviation Security
BAGASOO	Banjul Accord Group Aviation Safety Oversight Organization
CAA	Civil Aviation Authority
CAD	Civil Aviation Division
CAGR	Compound Annual Growth Rate
CAP	Corrective Action Plan
CARs	Civil Aviation Rules
CASSOA	Civil Aviation Safety and Security Oversight Agency
CASSOS	Caribbean Aviation Safety and Security Oversight System
CASP	Cooperative Aviation Security Programme
CASP-AP	Cooperative Aviation Security Programme in Asia and Pacific
CE	Critical element (of a State safety/security oversight system)
CMA	Continuous Monitoring Approach
CoA	Certificate of Airworthiness
COSCAP	Cooperative Development of Operational Safety and Continuing Airworthiness Programme
CROP	Council of Regional Organisations in the Pacific
EASA	European Union Aviation Safety Agency
ECCAA	Eastern Caribbean Civil Aviation Authority
EFOD	Electronic Filing of Differences
EI	Effective implementation (of the CEs of a State safety/security oversight system)
FAA	United States Federal Aviation Administration
FAOC	Foreign Air Operator Certificate
FSM	Micronesia (Federal States of)
FSTD	Flight Simulation Training Device
GANP	Global Air Navigation Plan
GASOS	Global Aviation Safety Oversight System
GASP	Global Aviation Safety Plan

GASeP	Global Aviation Security Plan
GDP	Gross Domestic Product
ICAO	International Civil Aviation Organization
ICM	Interdisciplinary Centre for Mathematical and Computational Modelling
IT	Information Technology
MCARs	Model Civil Aviation Regulations
MDB	Multilateral Development Bank
MFAT	New Zealand Ministry of Foreign Affairs and Trade
NATFP	National Air Transport Facilitation Programme
NCASP	National Civil Aviation Security Programme
NCASTP	National Civil Aviation Security Training Programme
NQCP	National Quality Control Programme
NZ	New Zealand
NZD	New Zealand Dollar
OJT	On-the-Job training
OLF	Online Framework of the USOAP CMA
PASO	Pacific Aviation Safety Office
PICASST	Pacific Islands Civil Aviation Safety and Security Treaty
PIF	Pacific Islands Forum
PIFS	Pacific Islands Forum Secretariat
PNG	Papua New Guinea
PRSD	Pacific Roadmap for Sustainable Development
PSIDS	Pacific Small Island Developing States
QC	Quality Control
RAIO	Regional Accident and Incident Investigation Organization
RO	Regional Office
RSSOO	Regional Safety and Security Oversight Organization
RSOO	Regional Safety Oversight Organization
SAMOA	SIDS Accelerated Modalities of Action
SARPs	Standards and Recommended Practices
SDGs	Sustainable Development Goals
SIDS	Small Island Developing States
SOO	Safety Oversight Organization
SMS	Safety Management System
SPC	Secretariat of the Pacific Community
SPREP	Secretariat of the Pacific Regional Environment Programme
SSC	Significant Safety Concern
SSeC	Significant Security Concern
SSO	State Safety Oversight
SSP	State Safety Programme
TC	Type Certificate
TCB	Technical Cooperation Bureau of ICAO
TSA	United States Transportation Security Administration
UN	United Nations
UNDP	United Nations Development Programme
USAP	Universal Security Audit Programme
USD	United States Dollar
USOAP	Universal Safety Oversight Audit Programme
WB	World Bank

EXECUTIVE SUMMARY

1. The PSIDS have relatively low levels of aviation operations. Although the scheduled seat capacity in the PSIDS region has increased by 3.75% compound annual growth rate from 2009 to 2018, going from 10.6 million to 15.1 million per year, this accounts up for only 0.27% of the global scheduled seat capacity. With a few exceptions, most of the PSIDS' service providers are small, or very small, organizations and face challenges to attract, recruit and retain appropriately qualified and experienced staff. This is particularly the case in the smaller PSIDS, which have vulnerable air operators facing operational, safety and security challenges in addition to a lack of financial sustainability.
2. Civil aviation is vital for PSIDS, especially for their connectivity, socio-economic development and disaster relief efforts. Many of the PSIDS depend on tourism for their socio-economic development and the vast majority of tourists arrive to these States by air. In 2017, in the PSIDS, the average contribution of tourism was 23% of GDP and 15% of total employment. In some States, the contribution of tourism reached about 70% of the GDP and 34% of total employment.
3. In addition to the numerous vulnerabilities shared with other Small Island Developing States (SIDS), including with respect to the impacts of climate change, PSIDS face specific challenges due to remoteness in terms of distances, poor connectivity and high cost of travel to other States as well as between the many islands within each State. Issues of poor connectivity are particularly significant between the North Pacific States (FSM, Marshall Islands and Palau) and South Pacific States, resulting in an isolation of the North Pacific States from most of the Pacific Region.
4. While differences exist between PSIDS' safety and security oversight capabilities, most of them need significant support from external organizations for performing the related oversight functions. This is particularly true for the smallest States (some of them having a population of 10 000 or even 1 500 inhabitants). The main organization providing safety and security oversight support is the Pacific Aviation Safety Office (PASO), a regional safety and security oversight organization (RSSOO) established in 2004 under the Pacific Islands Civil Aviation Safety and Security Treaty (PICASST) comprised of 10 Member States, namely Cook Islands, Kiribati, Nauru, Niue, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu. Associate Member States, which are not parties to the PICASST, are Australia, Fiji and New Zealand.
5. Although each of the PSIDS has a unique situation and set of challenges, the following categories may be suggested to facilitate awareness and understanding by stakeholders outside the region:
 - a) a group comprised of the three North Pacific States (FSM, Marshall Islands and Palau), which have received support from the United States under the Compacts of Free Association and which are not PASO Member States;
 - b) a group of nine Central and South Pacific States (Cook Islands, Kiribati, Nauru, Niue, Solomon Islands, Samoa, Tuvalu, Tonga and Vanuatu), which have adopted or adapted the New Zealand Civil Aviation Rules (NZ CARs) or are working towards it, are all PASO Member States and heavily rely on PASO's services for most safety and security oversight functions;
 - c) Papua New Guinea (PNG), which is a PASO Member State, while having its own set of regulations (with some adaptations from NZ CARs), has benefited from capacity-building support by Australia and uses external support (including from PASO and New Zealand) for specific purposes; and

- d) Fiji, which is not a PASO Member State, has its own set of regulations (not following the NZ CARs) and occasionally uses external support.

6. The main inter-governmental organization active in the Pacific Region is the Pacific Islands Forum (PIF), which has 18 members, including all 14 PSIDS. The Secretariat of the Pacific Community (SPC) is another inter-governmental organization, which exists as a technical agency. However, SPC no longer maintains an aviation programme or addresses aviation issues within its scope of activities. The Pacific Islands Forum Secretariat (PIFS), in addition to its role in harmonizing and advocating regional positions on various political and policy issues, also has technical programmes in economic development, climate resilience and trade, *inter alia*. PIFS does not currently have an aviation expert and often relies on PASO for technical assistance and advice on aviation-related issues. There are plans for PIFS to recruit a Regional Connectivity Expert. PASO is one of nine regional agencies that comprise the Council of Regional Organisations of the Pacific (CROP), which was established by Pacific Island Forum Leaders in 1988 with the mandate to improve inter-regional cooperation, coordination, and collaboration in achieving the common goal of sustainable development in the Pacific Region.

7. The establishment of PASO has enabled the provision of some aviation safety and security regulatory support to its Member States. In addition, the PASO Council has recognized in the last few years improvements in the governance and functioning of the organization. However, PASO currently has very limited human and financial resources. PASO does not have any technical personnel (inspector) in a full-time or even part-time staff member capacity. Instead, the organization retains a roster of experienced aviation safety and security contractors (inspectors), in addition to possible support from the New Zealand CAA, for contracting as consultants to conduct inspections and audits and/or provide technical advice as required by its Member States and at the State's cost. This outsourced activity comes at what is seen by many PSIDS as a high cost for developing States, which normally pass this on to the service providers. Furthermore, some PASO Member States do not always utilize PASO services for their various oversight needs but resort to engaging independent experts from time to time.

8. The PIF has adopted many strategies and plans to assist its States in coping with the challenges they face, and in particular to meet the UN Sustainable Development Goals (SDGs). However, with respect to aviation, and despite the vital importance thereof for PSIDS and their socio-economic development, there is currently no prominence of the aviation sector in the strategic policies and plans at regional level and, in most cases, at national level as well. While the PIF issued the first Quadrennial Pacific Sustainable Development Report to track the region's progress in realizing the 2030 Sustainable Development Agenda, the SAMOA Pathway and other global commitments, the aviation sector is largely not addressed in this report and the contribution of the aviation sector has not been linked with SDGs in the PIF region. With respect to the Sendai Framework, the current strategic policies of the PIF do not explicitly recognize the key importance of aviation in disaster relief efforts following natural disasters. There is a lack of prioritization given to ensuring compliance to the applicable international and national aviation safety and security requirements. In particular, in the few cases when aviation is mentioned in regional or national strategic plans, most of the time the focus is on infrastructure development without components regarding compliance with the applicable international and national requirements, therefore missing the key importance of compliance as a prerequisite and enabler of civil aviation development. The recent decision of the PIF Forum Leaders to convene a Regional Aviation Ministers Meeting in 2020 will increase the prominence of aviation matters in the Region.

9. The production of comprehensive safety data and information for the PSIDS region is hindered by the low level of safety reporting and the lack of effective safety data collection and processing systems (SDCPS) within the Region. Limited information is available regarding the safety performance of aviation service providers, including air operators and aerodrome operators, in the PSIDS region. Due to the low level of operations in the PSIDS, the number of accidents is limited. Five accidents, including two fatal accidents (causing a total of 29 fatalities) occurred in the PSIDS during the 2008-2018 period. The lack of occurrence of any major accident in the PSIDS may have contributed to a lack of prominence of aviation safety and compliance within the Region. Similarly, the absence of a repeated history of acts of unlawful interference with civil aviation in the PSIDS and the perception of a relatively low level of terrorist threat to aviation within the region may also have contributed to a lack of prominence of aviation security (AVSEC) within the Region.

10. Most PSIDS do not have the capability to fully discharge their obligations under the Chicago Convention and the Annexes thereto. USOAP information show that the PSIDS' average Effective Implementation (EI) score of the eight Critical Elements (for those PSIDS having received a USOAP audit) is significantly lower than the global and APAC averages. With respect to security oversight, the PSIDS average EI score (for those PSIDS having received a USAP audit) also falls below the global and APAC averages. There is a high number of unresolved Significant Security Concerns (SSeCs) in the PSIDS region, compared to the rest of the world, and a high risk of situations that could lead to Significant Safety Concerns (SSCs). While differences exist amongst PSIDS in terms of aviation safety and security oversight capability, most of these States require significant support from external organizations for fulfilling their national and international obligations related to safety and security oversight. This is particularly true for the smallest States (some of them having a population of circa 10 000 or even, in one case, 1 500 inhabitants). The three North Pacific States face even greater challenges. In addition to the "disconnect" with the South Pacific States, they lack regulatory oversight support in some areas (as they are not members of PASO), especially in the flight safety areas (personnel licensing, aircraft operations and airworthiness).

11. The Pacific Islands Civil Aviation Safety and Security Treaty (PICASST), signed 15 years ago, has enabled the establishment of PASO and the provision of some aviation safety and security regulatory support to the PASO Member States. There are however a number of shortcomings regarding the Treaty and its ratification by the States which are party thereto. Although all PASO Member States have signed or acceded to the PICASST, not all of them have fully ratified the Treaty and approved or accepted the amendments, or proposed amendments, thereto. In addition, the PASO Council decision of May 2018 to expand the scope of PASO's remit to cover 16 of the 19 Annexes to the Convention has not been adopted as an amendment to the Treaty. The scope of PASO's remit therefore remains somewhat more limited than intended. There are also several anomalies in the text of the Treaty, resulting in a lack of clarity about the status and functions of PASO; in particular regarding the level of delegated authority to undertake safety and security oversight functions. The Treaty lacks provisions for granting, or securing in the Member States, the necessary protection from liability to PASO, its personnel and contractors in the performance of functions on behalf of Member States. The Treaty contains no commitment on the part of the Member States on developing harmonized regulatory requirements for adoption into the national legal systems and on securing the implementation of PICASST provisions in national legislation, including the recognition of the role of PASO as an RSSOO. Although Service Level Agreements have been signed between some PASO Member States and PASO, these documents do not define — and in themselves cannot expand — the scope of functions under the PICASST delegated to PASO in the various domains in a clear, comprehensive and detailed manner.

12. In many cases, the PSIDS' legal frameworks are not wholly sufficient to form a relevant, comprehensive and fit-for-purpose basis for these States' safety and security oversight systems. Primary aviation legislation has been promulgated in all PSIDS, but in most cases is in need of amendment, including update and expansion. Although most PSIDS heavily rely on external support for safety and security oversight tasks, in most of them the primary legislation does not effectively permit the delegation of some safety and security oversight functions from the State/CAA to an external, regional or other international safety and/or security oversight body. In most PSIDS, the primary legislation lacks specificity or precision in the provisions relating to delegation of oversight functions and associated powers to an external body, and lacks provisions regarding protection from liability for organizations and individuals performing delegated functions. In some PSIDS, the lack of publication, dissemination and/or update of the regulations results in an ineffective or quasi non-existent regulatory framework. The risks related to regulatory frameworks are more severe in the North Pacific States, given their isolation and lack of regulatory oversight support. In those PSIDS having adopted or adapted the New Zealand Civil Aviation Rules (NZ CARs), and despite all benefits of such a solution, challenges include the difficulty for the respective CAA staff to fully understand the NZ CARs (and amendments thereto) and the inadequacy of some of these rules to accurately reflect or address the PSIDS' operating environments as opposed to the operating environment in New Zealand, where the CARs originate. The tendency is for this gap to widen as NZ CARs are progressively evolving towards more performance-based requirements, which may be suitable for New Zealand but not at this stage for PSIDS, as these States are still challenged to ensure compliance with prescriptive requirements.

13. PSIDS, to different degrees, do not offer employment conditions enabling their CAAs to attract, recruit and retain qualified and experienced technical staff (inspectors). Most CAAs have a severe shortage of qualified and experienced inspectors and heavily depend on external assistance for safety and security oversight. In some PSIDS, due to the lack of expertise, the State may not even be aware of its responsibilities under the Chicago Convention, e.g. as a State of Registry. The risk of such situations occurring is higher in some of the North Pacific States, given their isolation and lack of regulatory oversight support. In most PSIDS, there is a lack of clear, comprehensive and detailed description of functions at the organizational level (CAA and CAA departments/offices, as applicable) and individual level (job positions). In addition, most PASO Member States have not established a clear delineation of functions between the State's CAA and PASO.

14. PSIDS' CAAs lack financial resources for the provision of training to their staff. As training institutions are located outside the PSIDS, the cost of training is often not affordable to these States, unless the training is sponsored, e.g. through scholarships or fellowships (in particular from Singapore) or, in the case of PASO Member States, by PASO. In addition, while the ICAO APAC RO has provided some training opportunities to PSIDS with regard to aviation safety and security, these opportunities have been limited, due to financial resources constraints for the regional office. In the vast majority of cases, training has been received on an ad hoc manner, based on available opportunities. PSIDS CAA personnel lack training and in particular on-the-job training (OJT) in most areas. In some cases, the training received by the PSIDS' CAA staff members has not always been the most relevant one for their functions, resulting in a lack of "return for investment" for the State. The situation is further aggravated, as the CAAs are even more under-resourced during the staff members' leave for training, which may lead the CAAs deciding to postpone the required training. A specific challenge is the provision of on-the-job training (OJT), in the absence of sufficient funding, availability of experienced trainers and of adequate training policies, programmes and practices. In practice, OJT is often limited to exposure; for example, during an activity performed by a PASO contractor. Training institutions, despite efforts to be client (trainee) oriented, are often unaware of the specificities of the PSIDS and their CAA and of their priority training needs, e.g. at strategic level vs. operational or technical level. There is also a lack of strategic and systemic approach for the identification of training needs and the actual provision of training within the PSIDS CAA and PASO. The main training needs in the PSIDS are twofold: training at senior and middle management level, which should at least clarify States' responsibilities under ICAO and key components of State safety and security oversight systems; and training at CAA officer level, which should be adapted to the actual functions that these officers will perform and should include OJT.

15. With respect to aviation safety, in most PSIDS, there has not been an effective initial verification of compliance (with all applicable international and national requirements) for the issuance or re-issuance of certificates, licences, approvals or other authorizations. In most cases, during such processes, non-compliances are either not identified, due to lack of resources and/or expertise, or identified but not addressed through an appropriate process, including the review of risk assessments or aeronautical studies, in order to either grant exemptions (with related mitigations and/or restrictions along with the necessary publication) or deny the issuance of the certificate, licence, approval or other authorization concerned. Although PASO Member States benefit from the services of PASO contractors to help them identify non-compliances as part of this initial compliance verification process, these States do not always take the actions needed to address identified non-compliances, which are often documented in repetitive findings by PASO contractors. North Pacific States face even greater challenges in the initial compliance verification in the flight safety areas (personnel licensing, aircraft operations and airworthiness) due to the lack of resources, expertise and regulatory oversight support.

16. With respect to AVSEC, while most PSIDS have certification and approval activities in place to help ensure a certain level of compliance with Annex 17 to the Chicago Convention, this is often achieved only with support from other States and/or Organizations. Improvements are still needed in these areas, in particular with respect to AVSEC screener and instructors certification, the approval obligations of the regulatory authority and quality control activities to ensure compliance with the relevant National Civil Aviation Security Programme(s) setting the national requirements to be met and reflected within the airport-level programmes, such as airport security programmes (ASPs) and aircraft operator security programmes (AOSPs). As the provision of training is limited in most of the PSIDS, a comprehensive system of AVSEC instructor training and certification has not been established on a national or regional basis in most

States, although in recent years the number of ICAO certified AVSEC instructors in PSDIS has increased. These instructors still have limited opportunities to practice and further develop their instruction techniques and expertise. There is currently no centralized role, process or mandate for screener certification and in particular screeners' ability to identify and detect threats to civil aviation through the AVSEC screening process in majority of the PSIDS.

17. Regarding continuing surveillance related to aviation safety, in many PSIDS there are minimal activities — or no surveillance activities at all — in between each process of re-issuance of a certificate, licence, approval or other authorization. This is also the case in most PASO Member States, as PASO is currently not involved in continuing surveillance activities with respect to aviation safety. With respect to AVSEC, in most PSIDS, very limited surveillance and quality control activities are conducted at the national level. In PASO Member States, although PASO's services are provided in support of the CAA activities, the combined quality control activities conducted by PASO and the CAAs are insufficient to fully ensure the effective implementation of the critical elements of the States' AVSEC oversight systems and compliance with the provisions of Annex 17 to the Chicago Convention, particularly as PASO's AVSEC quality control services are limited to assessing compliance with the CARs rather than the CARs and Annex 17 SARPs. The frequency and prioritization of the surveillance activities are not based on a systematic risk assessment process but are decided upon and requested by the Member States based on other considerations, such as the availability of financial resources. Secondary international airports and domestic airports in each State have been subjected to very little formal quality control activities, if any. In most PSIDS, both for aviation safety and security, there is no effective mechanism in place to ensure the effective and timely resolution of identified issues, nor for the analysis of surveillance and quality control results to identify trends and patterns in non-compliance, and ascertain and address root causes.

18. Out of the 14 PSIDS, only Papua New Guinea has established a separate/independent authority for the investigation of aircraft accidents and serious incidents. In most cases, serious incidents are either not reported or are not the object of investigations as required under Annex 13 to the Chicago Convention, leaving only accidents to be investigated. There is no Regional Accident and Incident Investigation Organization (RAIO) in the Pacific Region. In addition, no State with robust investigation capabilities in the Pacific Region is currently in a situation to accept systematic delegation of all accident and serious incident investigations that PSIDS are responsible to conduct. In the absence of independent authorities for the investigation of aircraft accidents and serious incidents, and in the absence of effective safety data, collection and processing systems (SDCPS), safety occurrences are not acted upon at State level and underlying safety issues are not identified and resolved.

19. As far as relationships between the PSIDS and the ICAO Secretariat are concerned, they are characterized by a significant disconnect. Most PSIDS face challenges in communicating, liaising and coordinating with ICAO at headquarters and regional office levels. They are particularly challenged in coping with the numerous electronic communications from ICAO, both due to the lack of expertise to properly understand the content of these communications, lack of manpower and poor internet connectivity in these States. Time difference between the Pacific Region and Bangkok further aggravates communication challenges. Due to the cost and time of travel to Bangkok, paired with the risk of slow administrative processes to grant authorizations to State/CAA officers for official travel, most PSIDS do not attend the key regional ICAO meetings and, as consequence, do not benefit from all information, including updates and discussions on important aviation matters for the Pacific Region. Compared to these States' needs, and despite ICAO's efforts (such as a recent increase in assistance missions), there is an insufficient number of visits, workshops and other interventions by ICAO in the PSIDS, largely due to budget limitations, given the relatively high travel costs between Bangkok and the Pacific Region. Because of the situation described above, the personnel of the ICAO APAC RO may not have full and current knowledge about the situation and challenges faced by some of the PSIDS, as well as the unique situation of such PSIDS. Non-participation of States in various regional and sub-regional meetings, as well as low levels of response to ICAO communications further widens this knowledge gap. With decades of limited interactions between the PSIDS and the ICAO APAC RO, and with ongoing challenges faced by PSIDS in coping with all correspondence and requests from ICAO, the relationships between the PSIDS and ICAO would require further strengthening, of which an ICAO presence in the Pacific would be an essential component.

20. PSIDS have received significant assistance in aviation safety and security from various States and organizations. This assistance has been instrumental to support the most under-resourced of these States. However, the overall effectiveness and efficiency of the support framework has been limited by a lack of systemic coordination between the various assistance donors. Furthermore, the assistance provided has sometimes been on an ad hoc basis, as a one-off effort, rather than as part of a long-term strategy and plan. In addition, with a few exceptions (such as the capacity building assistance provided by Australia to the Civil Aviation Safety Authority of Papua New Guinea), the assistance provided has not followed a risk-based systemic approach (with clear objectives, actions plans, timelines and measurable outcome) and has not resulted in effective, sustainable and resilient capacity building. In many cases, the PSIDS' CAA staff members still face challenges in progressively "taking ownership" during and following the completion of assistance projects.

21. Investments to enhance aviation infrastructure will be needed as the number of international passengers in PSIDS is forecasted to increase by 3.5 times by 2045. Multilateral Development Banks (MDBs) have been providing significant financing support to PSIDS in the aviation sector, particularly for airport-related projects. The two active MDBs in the PSIDS region are the World Bank (WB) and the Asian Development Bank (ADB). All MDBs, including the WB and ADB, have institutional strengthening components as part of their strategies. However, these institutions do not have aviation regulatory experts as part of their personnel to support the design, implementation, and monitoring/evaluation phases of aviation-related projects. As a result, MDBs do not have the necessary knowledge to ensure that their aviation-related projects are embedded in a framework ensuring compliance (with all applicable aviation safety and security related requirements) and long-term, sustainable and resilient regulatory capacity building. At project level, project documents lack the necessary content and clarity to help ensure an effective verification of compliance with the applicable international and national requirements. In addition, they do not systematically contain plans for long-term sustainability (e.g. for infrastructure maintenance or adaptation to the impacts of climate change) and for capacity building at regulator level. At strategic level, although both MDBs are actively supporting SDGs and mention in their strategic documents the importance of the civil aviation for improving connectivity between States, they have not explicitly acknowledged the importance of the aviation sector to the State's SDGs and have not clearly linked their aviation-related activities to the SDGs. The regional and local offices of these MDBs in the PSIDS do not have mechanisms in place for coordination with the ICAO APAC Regional Office.

22. As most PSIDS are small or very small, and do not have all necessary resources and expertise for fulfilling their aviation safety and security oversight obligations, their priority need is direct safety and security oversight support. This includes the ability to delegate the conduct of some or all of the technical evaluations necessary for certification, licensing, approval, surveillance, quality control and follow-up activities, which require expertise and experience in the concerned technical domains. In addition to the ability to delegate technical functions, PSIDS are also in significant need of advice, training and opportunities for sharing of information and experience.

23. The defining characteristics that are common to all Regional Safety Oversight Organizations (RSOOs) lie in their objective to assist their Member States in performing safety oversight, through expert advisory and consultative services, the provision of technical assistance and/or the execution of some safety oversight functions. Compared to a COSCAP, an institutionalized RSOO more expressly commits its Member States, better enables the effective delegation of tasks and functions to the RSOO and better provides for sustainability and resilience. PASO already is an institutionalized Regional Safety and Security Oversight Organizations (RSSOO), being an inter-governmental organization established on the basis of a treaty. Moving from an institutionalized RSOO to a regional cooperative arrangement (such as a Cooperative Development of Operational Safety and Continuing Airworthiness Programme (COSCAP)), which is a less institutionalized form, would not provide the necessary level of effectiveness, sustainability and resilience, all the more since most PASO Member States are small, or very small States, heavily in need of delegation of technical oversight tasks to external entities. A strengthened, or enhanced RSSOO is the most suitable and pragmatic solution in the PSIDS region. An institutionalized RSOO can eventually evolve into a regional CAA (RCAA), in due time and after years of effective and efficient contributions, provided there is sufficient political will in the Region and the legal and organization prerequisites can be achieved.

24. Considering the specific situation and needs of most PSIDS, the most appropriate regional mechanism for providing safety and security oversight would be through an Enhanced Regional Safety and Security Oversight Organization (ERSSOO). The framework proposed would encompass:

- a) a revised Treaty establishing the ERSSOO and containing all necessary provisions to enable it to provide regulatory support to its Member States in an effective, sustainable and resilient manner;
- b) amended primary legislation in each Member State (MS), which provides for effective delegation of authority and functions to the ERSSOO, its officers and contractors; and which provides for their protection;
- c) the development and maintenance of harmonized regional safety and security regulatory requirements (Pacific Aviation Requirements), fit-for-purpose for the PSIDS region, and adopted in each MS' regulatory framework;
- d) the establishment and implementation of sustainable funding mechanisms for the ERSSOO;
- e) the recruitment of qualified and experienced permanent technical and legal staff for the ERSSOO (at least two permanent full-time staff members in each main domain of activity), complemented by a roster of qualified and experienced part-time staff and contractors;
- f) the establishment and implementation of a comprehensive training system, including OJT, for all ERSSOO technical staff, including part-time staff and contractors;
- g) the development and implementation of appropriate, clear, comprehensive and detailed policies and procedures for use by the ERSSOO when performing their tasks; and
- h) the development and implementation of binding, appropriate, clear, comprehensive and detailed Service Level Agreements (SLA) between each MS and the ERSSOO, reflecting each MS' specific capabilities and needs, and allowing flexibility as each State would determine the scope of delegation to the ERSSOO.

25. As consideration should be given to the already existing regional framework, the ERSSOO should be established as an evolution of PASO (strengthened PASO) in order to ensure continuity with PASO's operations and avoid affecting the ability to support Member States' aviation safety and security oversight activities. Such a framework would help mitigate numerous safety and security oversight risks in the PSIDS region and would be beneficial for all PSIDS, including Fiji and, most particularly, the three North Pacific States, which are in greater need of regulatory oversight support. Residual risks would still exist, including the possible lack of financial resources and/or clear and consistent political will at State/Government level.

26. The creation and operation of an ERSSOO would however not resolve the various challenges faced by PSIDS in interacting with ICAO. There is therefore a need for a solution which would enable PSIDS to interact with ICAO in a more effective, efficient and timely manner. Considering the situation of most PSIDS as well as the need to rationalize the cost of an ICAO office in the Pacific Region (which could be fully or partially funded through resource mobilization), it would appear that the most effective and cost-efficient option would be for ICAO to establish a position of PSIDS liaison officer to facilitate support to the PSIDS. This officer should have sufficient current or past experience working in ICAO to be able to provide the necessary guidance to PSIDS and other stakeholders, including PASO and the PIFS, as soon as possible after the liaison officer's deployment on site. This is all the more important since the Region would be implementing significant changes with respect to civil aviation at strategic, legal, organizational and operational levels. The liaison officer could also be supported by technical and/or administrative staff seconded by States or Organizations on a voluntary basis. To facilitate the activities of the liaison officer, their location should be in the Pacific Region offering good flight and IT connectivity.

27. The liaison officer, reporting to the ICAO Regional Director, APAC, and working in close coordination with the relevant experts at the ICAO APAC RO and ICAO Headquarters, would also be able to facilitate coordination and cooperation, as applicable, with all relevant stakeholders, including assistance donors, training institutions, MDBs and other UN organizations with offices in the PSIDS region. The liaison officer would need to maintain independence vis-à-vis PASO (or, once established, the ERSSOO), but would still be able to provide support and guidance to this Organization as needed. In addition, the liaison officer would be able to facilitate continuous monitoring over the regional safety and security oversight support system. In order to assess the effectiveness and efficiency of the ICAO PSIDS liaison officer mechanism, it would be appropriate for ICAO to perform periodic evaluations of the PSIDS liaison officer framework to assess its effectiveness, efficiency and need at least every three years following the establishment of the framework, with due consideration of the views of the PSIDS. Establishing an ICAO liaison officer in the Pacific would address the need and long-standing demand of the Pacific States. It would help overcome the challenges faced by PSIDS in interacting with ICAO, thereby bringing ICAO closer to these States, leaving none of them behind.

28. One of the aspirations of Pacific Islanders is to benefit from reliable and affordable air transport. To date, this is a wish but not a reality for most of them. PSIDS, individually and collectively, have made efforts to enhance their aviation systems with the support of assistance of donors and MDBs. However, compliance with aviation safety and security requirements, which is a prerequisite for the development of air transport, is still a major challenge for these States. Many initiatives have been taken over the years to help overcome these challenges, but more efforts would be needed, and this would require a level of change. Not only with respect to *what* should be done, or *how much more* should be done, but *how* things should be done.

29. In that connection, and in addition to the establishment of an ERSSOO and an ICAO PSIDS liaison officer position in the Pacific, many enhancement opportunities have been identified as a result of the study. Based on the information gathered and the analyses performed, and within the time and resource constraints of the study, a total of 30 recommendations have been formulated, for the consideration of the PSIDS, the Pacific Islands Forum and ICAO, as applicable. Some of the recommendations for ICAO's consideration aim at encouraging assistance donors, training institutions and MDBs to take further actions to support PSIDS.

30. The recommendations issued enable a holistic approach in the development and implementation of a Pacific aviation roadmap to achieve effective, sustainable and resilient aviation regulatory systems in the Region. Their implementation would require PSIDS and ICAO, in coordination with all concerned stakeholders, to develop long-term roadmaps, identifying steps, timelines and accountable entities. As part of these roadmaps, short-term deliverables should also be identified so as to achieve progress rapidly whenever needed, for example in relation to actual or potential situations of immediate risk for aviation safety and/or security.

31. From all stakeholders involved in supporting the PSIDS, some adjustments would be needed in order to better meet these States' specific needs and enhance the effectiveness, sustainability and resilience of their aviation regulatory oversight systems. The PSIDS would also need to show a clear and consistent commitment to work with the ERSSOO, empower their national CAAs and enhance regional cooperation.

Chapter 1

BACKGROUND

1.1 REQUEST MADE BY THE PACIFIC STATES FOR ICAO TO UNDERTAKE THE STUDY

1.1.1 During the 39th Session of the ICAO Assembly, Cook Islands, Fiji, Kiribati, New Zealand, Papua New Guinea, Samoa, Singapore, Tonga and Vanuatu presented a working paper which recommended that ICAO, in close cooperation with the Pacific States, examine the feasibility and consider undertaking further analysis of the merits of establishing a Sub-regional Office (SRO) for the Pacific Region. The Assembly supported that the Council consider the conduct of a feasibility study for the establishment of an ICAO Sub-Regional Office in the Pacific Region. During its 210th Session, the ICAO Council reviewed the 30th Assembly resolutions and decisions and tasked the Secretariat to undertake the study, with resources mobilized from voluntary contributions from States and International Organizations.

1.1.2 The ICAO Secretariat initially drafted Terms of Reference (TOR) for the study, with the aim to determine the PSIDS' needs with respect to aviation safety, air navigation capacity and efficiency and aviation security. In order to ensure the involvement of the concerned States, the draft TORs underwent several consultations with the PSIDS. This included side-meetings held during the 54th Asia and Pacific Directors General of Civil Aviation Conference (7 to 11 August 2017, Ulaanbaatar, Mongolia), the First Asia Pacific Civil Aviation Ministerial Conference (31 January 2018 to 1 February 2018, Beijing, China) and the 55th Conference of Asia and Pacific Directors General of Civil Aviation (22 October 2018, Nadi, Fiji).

1.1.3 At the occasion of the Pacific Aviation Safety Office (PASO) Council Meeting (Auckland, New Zealand, 3 to 5 December 2018), the ICAO APAC Regional Office provided updates to all concerned States on the envisaged team composition, work plan and funding mechanism for the PSIDS Study. During this meeting, further aspects of the study were discussed and agreed upon, including Fiji's offer to host the study in Nadi and provide complimentary air tickets to the study team for some of their on-site visits to States. It was also agreed that Samoa and Vanuatu would be participating in some on-site visits as observers representing all PSIDS. In addition, the PSIDS committed to facilitate meetings of the study team with the appropriate high officials (ministerial level) during their on-site visits to States.

1.2 SCOPE, PURPOSE, METHODOLOGY AND PRINCIPLES OF THE STUDY

1.2.1 While Assembly Resolution A39-23 supported the conduct of a feasibility study for the establishment of an ICAO RSO, the inputs received by ICAO throughout the consultation phase indicated that the sustainable development of the PSIDS was hampered by a unique set of challenges. It was therefore considered necessary to undertake an inventory of needs with due consideration to PSIDS vulnerabilities and to assess how civil aviation could alleviate some of the PSIDS challenges and support their sustainable development. This also led to a broadening of the scope of the study to include the conduct of a comparative analysis of various forms of State regulatory oversight and assistance mechanisms, as well as the option of establishing an ICAO RSO. The study took into consideration the applicable United Nations (UN) framework: the UN 2030 Agenda for Sustainable Development, the Small Island Developing States Accelerated Modalities of Action (SAMOA) Pathway and the Sendai Framework for Disaster Risk Reduction 2015–2030.

1.2.2 The PSIDS Study included 14 States, namely the Cook Islands, Fiji, Kiribati, Marshall Islands, Micronesia (Federal States of), Nauru, Niue¹, Palau, Papua New Guinea (PNG), Solomon Islands, Samoa, Tuvalu, Tonga and Vanuatu.

1.2.3 The key purpose of the study was to identify the current challenges and needs of the PSIDS with respect to civil aviation, and to identify potential options to help address these challenges. Within that framework and, considering the unique set of challenges faced by the PSIDS, the key objective was to enhance the capabilities of PSIDS in a strong and resilient manner, for the benefit of their sustainable development, as well as their resilience to climate-related hazards.

1.2.4 The study was built on the principle of a robust dialogue with all stakeholders, including the PSIDS, PASO and the Pacific Island Forum Secretariat (PIFS), the main inter-governmental organization in the Pacific Region. To that effect, the number of on-site visits to States was optimized within the time and budget constraints of the study, resulting in visits to 10 States, PASO the PIFS, as well as Australia, New Zealand, offices of UN Organizations (located Suva, Fiji), the Association of South Pacific Airlines (ASPA), the World Bank (WB) and the Asian Development Bank (ADB). In addition, the few States without dedicated on-site visits were invited to meet with the study team leader (Senior Civil Aviation Advisor) in order to provide their views and inputs to the team. Representatives from the Civil Aviation Authorities (CAAs) of Samoa and Vanuatu participated as observers in some of the on-site visits.

1.2.5 The study was structured around two phases: Phase 1, which consisted in a situational and capacity analysis; and Phase 2, which consisted in an option analysis. Two consultation meetings were scheduled within the work plan towards the end of Phase 1 and Phase 2, respectively, to present draft results to all concerned States and Organizations and receive their views and comments for consideration.

1.2.6 Phase 1 of the study comprised two tasks. The first task was a situation analysis of the current aviation environment in the PSIDS. It included an analysis of the special situations and challenges faced by PSIDS with respect to aviation, as well as an analysis of the contributions of the civil aviation sector to sustainable development and to relief efforts following natural disasters. This task also included a review of the status of aviation safety and security in the PSIDS, based on results from ICAO safety oversight and security audit programmes' activities (USOAP and USAP results), as well as information related to accident/accident rates and information derived from the on-site visits.

1.2.7 The second task of Phase 1 was a capacity analysis. It included an analysis of the existing air traffic volumes and levels of connectivity to and between PSIDS, and a review of the need for additional infrastructure within PSIDS to meet the projected demand, based upon air traffic forecasts. Specific challenges and needs related to training were also identified and addressed.

1.2.8 Phase 2 involved a comparative analysis of different options to address the identified challenges and support States in their regulatory functions. The purpose of the comparative analysis was to identify the most effective solution or set of solutions to help address the challenges faced by PSIDS, considering various options and making recommendations based on the information gathered during Phase 1 of the study. The options below were examples of solutions for consideration by the Senior Advisor and his team:

- a) establishing a Regional Cooperative Project to enhance safety, air navigation and security oversight capabilities within the Region;
- b) strengthening PASO by improving its capacity and governance to perform a greater Regional Safety Oversight Organization (RSOOs) role;

1. Niue is not a contracting State.

- c) forming a Regional Safety and Security Oversight Authority for the PSIDS or a sub-set of the PSIDS; and/or
- d) establishing an ICAO Sub-regional Office (SRO) for the PSIDS.

1.2.9 Although the SRO is listed together with the other options, it should however be noted that the functions of a Regional Office or SRO are fundamentally different from those of a CAA or RSOO.

1.3 PSIDS STUDY TEAM COMPOSITION

1.3.1 To ensure impartiality, leadership and timeliness in the conduct of the PSIDS Study, the Secretary General of ICAO released a senior ICAO Officer for a six-month period to conduct of the study as Senior Advisor. In addition, in order to allow effective and efficient access to relevant information, an APAC Regional Officer, Aviation Security (AVSEC), was released to support the Senior Advisor in the AVSEC area for a four-week period.

1.3.2 The ICAO Secretariat reached out to Member States to support the cost of the study and/or provide in-kind contributions. These efforts resulted in the secondment of three experts: a flight safety expert (seconded by Singapore for four-week period), an aerodrome expert (seconded by the United States for a five-week period), and an aviation legislation expert (seconded by the United Kingdom for a two-week period). In addition, an air transport and economics expert was made available through the ICAO Programme for Aviation Volunteers (IPAV) mechanism for a two-week period. Financial and in-kind contributions to support the study were provided by Australia, Chile, China, Fiji, Singapore, the United Kingdom and the United States.

1.3.3 The PSIDS Study team was composed of:

Mr. Nicolas Rallo — Senior Advisor, aviation safety, safety oversight, safety management and accident/incident investigation expert;

Mr. Mike Butler — Team Member, aviation legislation expert;

Mr. Eduardo Café — Team Member, air transport and economics expert;

Mr. Paul Devoti — Team Member, aerodrome expert;

Mr. Tang Kok Liang — Team Member, flight safety expert; and

Mr. Ross Lockie — Team Member, aviation security (AVSEC) and AVSEC security oversight expert.

1.4 STATES' RIGHTS AND OBLIGATIONS UNDER THE CONVENTION ON INTERNATIONAL CIVIL AVIATION AND THE ANNEXES THERETO

1.4.1 The principal purpose of the *Convention on International Civil Aviation* signed on 7 December 1944 (hereinafter referred to as 'the Convention' or 'the Chicago Convention') is expressed very clearly in its Preamble. The emphasis is on establishing a means by which international civil aviation could develop in a manner that helps to create and preserve friendship and understanding among nations, whilst recognising that its abuse could become a threat to the general security of the world. The Convention recognizes the fundamental principle that every State has complete and exclusive sovereignty over the airspace above and within its territory. It also establishes the privileges and obligations of all contracting States on civil aviation activities. It is the articles of the Convention and its 19 Annexes,

covering the entire spectrum of civil aviation operations that underpin the safety and security oversight responsibilities of contracting States. States are entitled to exercise their rights, provided they comply with their obligations under the Convention, including the Annexes thereto.

1.4.2 The Convention sets out several basic provisions designed to facilitate the international movement and navigation of aircraft. Its Chapter II (Articles 5 to 16) — Flight over Territory of States — contains a series of rights of, and obligations upon, States and prohibitions dealing with the flight of aircraft over, into and out of the territory of a State by aircraft of the other States. Articles 5 and 6 contain the rights of aircraft from one State to fly over, through, into and out of the territorial airspace of other States — rights of non-scheduled and scheduled flights.

1.4.3 The responsibility of contracting States to regulate and supervise all their aviation activities to ensure the safe, efficient and regular operation of air services is underscored in several articles of the Convention.

1.4.4 Article 37 of the Convention specifies that “each contracting State undertakes to collaborate in securing the highest practical degree of uniformity in regulations, standards, procedures, and organization in relation to aircraft, personnel, airways and auxiliary services in all matters in which such uniformity will facilitate and improve air navigation”. This uniformity is achieved by integrating the ICAO Standards and Recommended Practices (SARPs) into the national legal framework and practices of the contracting States and by implementing them in a timely manner for the safety, regularity and efficiency of air navigation worldwide.

1.4.5 It is ICAO’s responsibility to adopt and amend SARPs, which are contained in the Annexes to the Convention. The corresponding obligation upon the States is to collaborate in securing the highest practicable degree of uniformity in regulations, standards, procedures and organization; ensuring compliance with the standards, recommended practices and procedures contained in the Annexes; and other ICAO documents, including Procedures for Air Navigation (PANS). SARPs are defined as follows:

Standard: “Any specification for physical characteristics, configuration, material, performance, personnel or procedure, the uniform application of which is recognised as necessary for the safety or regularity of international air navigation and to which Contracting States will conform in accordance with the Convention; in the event of impossibility of conformance, notification to the Council [of ICAO] is compulsory under Article 38 [of the Convention].”

Recommended Practice: “Any specification for physical characteristics, configuration, material, performance, personnel or procedure, the uniform application of which is recognised as desirable in the interest of safety, regularity or efficiency of international air navigation and to which Contracting States will conform in accordance with the Convention.”

1.4.6 Article 33 of the Convention highlights the key importance of compliance with international requirements for the recognition by other States of certificates and licences issued by a State, stating that:

Certificates of airworthiness and certificates of competency and licenses issued or rendered valid by the contracting State in which the aircraft is registered, shall be recognized as valid by the other contracting States, provided that the requirements under which such certificates or licences were issued or rendered valid are equal to or above the minimum standards which may be established from time to time pursuant to this Convention.

1.4.7 Article 12 of the Convention requires contracting States to implement and enforce the SARPs contained in the Annexes to the Convention. It explicitly states that:

Each contracting State undertakes to adopt measures to insure that every aircraft flying over or manoeuvring within its territory and that every aircraft carrying its nationality mark, wherever such aircraft may be, shall comply with the rules and regulations relating to the flight and manoeuvre of aircraft there in force. Each contracting State undertakes to keep its own regulations in these respects uniform, to the greatest possible extent, with those established from time to time under this Convention ... Each contracting State undertakes to insure the prosecution of all persons violating the regulations applicable.

Prosecution in this context does not just mean criminal proceedings but other “enforcement” actions.

1.4.8 Article 4 of the Convention provides that each contracting State agrees not to use civil aviation for any purpose inconsistent with the aims of the Convention. The underlying intent of Article 4 is to prevent the use of civil aviation by States for purposes that may create a threat to the security of other nations.

1.4.9 Other key articles determining some of the principal obligations of the States are contained in Chapter IV of the Convention (Measures to Facilitate Air Navigation). Principal among the articles in that chapter are:

- Art. 25: Measures of assistance to aircraft in distress (Annex 12);
- Art. 26: Investigation of accidents (Annex 13);
- Art. 28: Provision of air navigation facilities and standard systems, including airports (aerodromes) (covered by Annexes 3, 4, 10, 11, 14 and 15).

1.4.10 Under Article 38 of the Convention, a contracting State “shall give immediate notification to the International Civil Aviation Organization of the differences between its own practice and that established by the international standard” in case:

- a) it finds it impracticable to comply with any international standard or procedure; or
- b) it finds it impracticable to bring its own regulations or practices into full accord with any international standard or procedure after amendment of the latter; or
- c) it deems it necessary to adopt regulations or practices differing from those established by international standard.

1.5 STATE SAFETY OVERSIGHT SYSTEM

1.5.1 In Annex 19, ICAO defines safety oversight as a function performed by a State to ensure that individuals and organizations performing an aviation activity comply with safety-related national laws and regulations. Safety oversight also ensures that the national aviation industry provides a safety level equal to or better than that defined by the SARPs. As such, individual States’ responsibility for safety oversight is the foundation upon which safe global aircraft operations are built. Lack of appropriate safety oversight in one or more contracting State therefore threatens the health of international civil aircraft operations generally.

1.5.2 Annex 19 (Chapter 3 and Appendix 1) and ICAO Doc 9734 — *Safety Oversight Manual*, Part A — *The Establishment and Management of a State Safety Oversight System* together underline the duties and responsibilities of contracting States, as signatories to the Convention, in relation to safety oversight, in particular in relation to the obligations contained in Articles 12 and 37 of the Convention.

1.5.3 ICAO identifies eight Critical Elements (CEs) that are essential components of a State safety oversight system. The effective implementation of the CEs enables the State to ensure the implementation of ICAO SARPs and associated procedures and guidance material. The eight CEs are as follows:

Primary aviation legislation — CE-1

- 1.1 States shall promulgate a comprehensive and effective aviation law, commensurate with the size and complexity of their aviation activity and consistent with the requirements contained in the Convention on International Civil Aviation, to enable the oversight and management of civil aviation safety and the enforcement of regulations through the relevant authorities or agencies established for that purpose.

Note.— This includes ensuring that the aviation law remains relevant and appropriate to the State.

- 1.2 The aviation law shall provide personnel performing safety oversight functions access to the aircraft, operations, facilities, personnel and associated records, as applicable, of individuals and organizations performing an aviation activity.

Specific operating regulations — CE-2

States shall promulgate regulations to address, at a minimum, national requirements emanating from the primary aviation legislation, for standardized operational procedures, products, services, equipment and infrastructures in conformity with the Annexes to the Convention on International Civil Aviation.

State civil aviation system and safety oversight functions — CE-3

- 3.1 States shall establish relevant authorities or agencies, as appropriate, supported by sufficient and qualified personnel and provided with adequate financial resources for the management of safety.
- 3.2 States authorities or agencies must have stated safety functions and objectives to fulfil their safety management responsibility.

Note.— This includes the participation of the State aviation organizations in specific activities related to the management of safety in the State, and the establishment of the roles, responsibilities and relationships of such organizations.

- 3.3 Recommendation. States should take necessary measures, such as remuneration and conditions of service, to ensure that qualified personnel performing safety oversight functions are recruited and retained.
- 3.4 States shall ensure that personnel performing safety oversight functions are provided with guidance that addresses ethics, personal conduct and the avoidance of actual or perceived conflicts of interest in the performance of official duties.

- 3.5 Recommendation. States should use a methodology to determine their staffing requirements for personnel performing safety oversight functions, taking into account the size and complexity of the aviation activities in their State.

Note.— In addition, Appendix 5 to Annex 6, Part I, and Appendix I to Annex 6, Part III, require the State of the Operator to use such methodology to determine its inspector staffing requirements. Inspectors are a subset of personnel performing safety oversight functions.

Technical personnel qualifications and training — CE-4

- 4.1 States shall establish of minimum qualification requirements for the technical personnel performing safety-related functions and provide for appropriate initial and recurrent training to maintain and enhance their competence at the desired level.
- 4.2 States shall implement a system for the maintenance of training records for technical personnel.

Technical guidance, tools and provision of safety-critical information — CE-5

- 5.1 States shall provide appropriate facilities, comprehensive and up-to-date technical guidance material and procedures, safety-critical information, tools and equipment, and transportation means, as applicable, to the technical personnel to enable them to perform their safety oversight functions effectively and in accordance with established procedures in a standardised manner.
- 5.2 States shall provide technical guidance to the aviation industry on the implementation of relevant regulations.

Licensing, certification, authorisation and approval obligations — CE-6

States shall implement documented processes and procedures to ensure that individuals and organizations performing an aviation activity meet the established requirements before they are allowed to exercise the privileges of a licence, certificate, authorisation or approval to conduct the relevant activity.

Surveillance obligations — CE-7

States shall implement documented surveillance processes, by defining and planning, inspections, audits and monitoring activities on a continuous basis, to proactively assure that aviation licence, certificate, authorization and approval holders continue to meet the established requirements. This includes the surveillance of personnel designated by the Authority to perform safety oversight functions on its behalf.

Resolution of safety issues — CE-8

- 8.1 States shall use a documented process to take appropriate actions up to and including enforcement measures to resolve identified safety issues.
- 8.2 States shall ensure that identified safety issues are resolved in a timely manner through a system which monitors and records progress, including actions taken by individuals and organizations performing an aviation activity in resolving such issues.

1.5.4 Annex 19 — *Safety Management* sets out, in Chapter 3, the way States are required and expected to discharge their obligations as noted above. Paragraph 3.1 requires that States shall establish and maintain a State Safety Programme (SSP) that is commensurate with the size and complexity of that State's civil aviation system. Chapter 3 of Annex 19 also highlights that the CEs of a State safety oversight system constitute the foundation of an SSP.

1.5.5 It should be noted that Annex 19 provides that States may delegate safety management-related functions and activities to another contracting State, a Regional Safety Oversight Organization (RSOO) or a Regional Accident and Investigation Organization (RAIO). However, a State delegating functions retains responsibility and, therefore, accountability for the effective discharge of those functions and activities.

1.6 STATE AVIATION SECURITY OVERSIGHT SYSTEM

1.6.1 In addition to the State safety oversight system, the State aviation regulatory oversight system also includes the State aviation security oversight system.

1.6.2 In the ICAO Document 10047 — *Aviation Security Oversight Manual*, aviation security oversight is defined as: "A function by means of which States ensure the effective implementation of the security-related SARPs and associated procedures contained in the Annexes to the Chicago Convention (primarily Annex 17, but including the security-related provisions of Annex 9) and related ICAO documents. Aviation security oversight also ensures that the national civil aviation industry provides a security level equal to or better than that defined by the SARPs. With respect to aviation security, it is particularly important to maintain worldwide uniform standards, since the level of protection deriving from the implementation of security standards is only as strong as the weakest link in the global aviation network. Lack of aviation security oversight in one State therefore threatens the security of international civil aviation operations."

1.6.3 ICAO Member States, in their effort to establish and implement an effective civil aviation security oversight system, need to consider the CEs for aviation security oversight, which are required for the effective implementation of security-related policies and associated procedures. States are expected to implement the CEs in a way that assumes shared responsibility among government entities, with a management role provided by the appropriate authority for aviation security. The effective implementation of the CEs is an indication of a State's capability for security oversight.

1.6.4 The CEs of a State aviation security oversight system slightly differ from those of a State safety oversight system. They are defined in ICAO Doc 10047 as follows:

CE-1. Primary aviation security legislation. The provision of a comprehensive and effective legislative framework, consistent with the environment and complexity of the State's civil aviation operations, to effect the establishment and implementation of the State's aviation security policies and requirements in conformance with Annex 17 SARPs and security-related provisions contained in other Annexes to the Chicago Convention.

CE-2. Aviation security programmes and regulations. The provision of necessary national-level programmes and adequate regulations to address, at a minimum, national requirements emanating from the primary aviation security legislation and providing for standardized implementation procedures, equipment and infrastructures (including security management and training systems) in conformance with Annex 17 SARPs and security-related provisions contained in other Annexes to the Chicago Convention.

CE-3. State appropriate authority for aviation security and its responsibilities. The designation of an appropriate national authority for aviation security supported by appropriate technical and non-technical staff and provided with adequate financial resources. The State appropriate authority must have aviation

security regulatory functions, objectives and policies. This element also includes the definition and allocation of tasks and coordination of activities between government agencies and airport-level entities concerned with or responsible for the implementation of various aspects of the NCASP, as well as arranging for the supporting resources and facilities required for aviation security to be available at airports serving civil aviation.

CE-4. Personnel qualifications and training. The establishment of minimum knowledge and experience requirements for the technical personnel performing aviation security oversight functions and the provision of appropriate training to these personnel to maintain and enhance their competence at the desired level. The training should include initial, on-the-job and recurrent training. This element also includes the provision of training to entities involved in the implementation of applicable aviation security requirements, measures and procedures.

Note.— The technical personnel may be from an organization engaged by the appropriate authority to provide State oversight functions on its behalf.

CE-5. Provision of technical guidance, tools and security-critical information. The provision of technical guidance (including processes and procedures), tools (including facilities and equipment) and security-critical information, as applicable, to the technical personnel to enable them to perform their aviation security oversight functions in accordance with established requirements and in a standardized manner. This element also includes the provision of technical guidance by the appropriate authority to entities responsible for the implementation of applicable aviation security requirements, measures and procedures.

CE-6. Certification and approval obligations. The implementation of processes and procedures to ensure that personnel and entities performing an aviation security activity meet the established requirements (such as certification systems for security screeners and aviation security instructors, and a system to ensure that entities responsible for the implementation of security measures and procedures have established security programmes consistent with all relevant national requirements) before they are allowed to conduct the relevant activity.

CE-7. Quality control obligations. The implementation of processes, such as audits, inspections, surveys and tests, to proactively ensure that entities authorized and/or approved to perform an aviation security activity continue to meet the established requirements and operate at the level of competency and security required by the State. This includes the monitoring of designated personnel who perform security oversight functions on behalf of the appropriate authority.

CE-8. Resolution of security concerns. The implementation of processes and procedures to resolve identified deficiencies impacting aviation security, which may have been residing in the aviation security system and have been detected by the appropriate authority or other appropriate bodies. This includes the ability to analyse security deficiencies, provide recommendations, support the resolution of identified deficiencies by implementing follow-up procedures to validate the effective implementation of corrective actions, as well as take enforcement action when appropriate.

1.7 USOAP, USAP AND GASOS

1.7.1 The Universal Safety Oversight Audit Programme (USOAP)

1.7.1.1 In response to widespread concerns about the adequacy of aviation safety oversight around the world, ICAO initially launched the Universal Safety Oversight Audit Programme (USOAP) as a mandatory programme in January 1999, following two years of operations of USOAP as a voluntary programme. Initially, USOAP activities consisted in regular and mandatory audits and audit follow-ups of ICAO Member States' safety oversight systems with respect to three Annexes to the Chicago Convention, i.e. Annex 1 — *Personnel Licensing*, Annex 6 — *Operation of Aircraft* and Annex 8 — *Airworthiness of Aircraft*.

1.7.1.2 In 2005, the USOAP programme transitioned to the Comprehensive Systems Approach (CSA) to include safety-related provisions contained in all safety-related Annexes to the Chicago Convention. As of 2005, USOAP audits focused on States' safety oversight capabilities by assessing the State's effective implementation of the Critical Elements (CEs) of a safety oversight system. The USOAP CSA cycle, which ended in December 2010, entailed about 40 safety oversight audits annually, and each ICAO Member State was required to host an audit at least once during the cycle.

1.7.1.3 In September 2007, the 36th Session of the Assembly adopted Resolution A36-4 directing the Council to examine different options for the continuation of the USOAP beyond 2010. This included the feasibility of applying a new approach based on the concept of continuous monitoring and incorporating the analysis of safety risk factors, aiming at making a more effective and efficient use of ICAO resources and reducing the burden on States caused by repetitive audits.

1.7.1.4 In 2010, the 37th Session of the Assembly adopted Resolution A37-5, affirming that the evolution of USOAP to the Continuous Monitoring Approach (CMA) should continue to be a top priority for ICAO to ensure that information on the safety performance of Member States is provided to other Member States and to the travelling public on an ongoing basis. This vital improvement to international aviation safety required the participation and support of all Member States, particularly during the two-year transition period (2011–2012) while the tools and guidance required for USOAP CMA were developed.

1.7.1.5 The USOAP CMA was fully launched in January 2013, with processes and tools being regularly reviewed to enable a more information-driven, risk-based and result-oriented approach. The objectives of the CMA include: monitoring States' safety oversight systems using a web-based platform, the Online Framework (OLF); validating States' progress through various on-site and off-site validation activities; and continuing to assess the effectiveness and sustainability of States' safety oversight systems through audits. The USOAP CMA is in continuous evolution and has started to include State Safety Programme implementation assessments (SSPIAs).

1.7.1.6 USOAP CMA activities are conducted using a set of standardized questions called Protocol Questions (PQs) to ensure transparency, quality, consistency, reliability and universality. The effective implementation (EI) score is a measure of the State's safety oversight capability. A higher EI indicates that a State's safety oversight system is more effective. The EI is calculated for any group of applicable PQs based on the following formula:

$$\text{EI (\%)} = \frac{\text{number of satisfactory PQs}}{\text{total number of applicable PQs}} \times 100$$

1.7.1.7 The EI can thus be calculated for each CE, each audit area (legislation, organization, personnel licensing, aircraft operations, airworthiness, accident and incident investigation, air navigation services & aerodromes) or as an overall value (the State's EI).

1.7.1.8 In addition to EI scores, USOAP CMA activities result in the production of detailed reports in the form of audit results or — for validation activities — documented progress.

1.7.1.9 USOAP CMA activities may also lead to the identification of significant safety concerns (SSCs). An SSC refers to any condition, practice, or violation that occurs when a State allows the holder of a licence, certificate, approval or authorization to exercise the privileges attached to the licence, certificate, approval or authorization without the holder meeting the minimum requirements established by the State and by the Standards set forth in the Annexes to the Chicago Convention and resulting in an immediate safety risk to international civil aviation.

1.7.2 The Universal Security Oversight Audit Programme (USAP)

1.7.2.1 The first cycle of USAP audits was conducted by ICAO from 2002 to 2007. These first-cycle audits were designed to determine the degree of compliance of a State in implementing Annex 17 Standards and the extent to which a State's implementation of its AVSEC system was sustainable through the establishment of appropriate legislation and an AVSEC authority with inspection and enforcement capabilities. The USAP methodology provided for a significant portion of the ICAO audit to be dedicated to making actual observations of security measures and procedures at airports *in situ*, in order to have direct evidence of the degree of implementation of each Annex 17 Standard. This approach provided a comprehensive picture of the overall situation of States with respect to AVSEC and resulted in recommendations for improvement that could be directed at all facets of the aviation security systems of States. Audit follow-up visits initiated in 2005, to validate the implementation of States' corrective action plans (CAPs) and to provide support to States in remedying deficiencies identified during the USAP first-cycle audits. These visits were normally conducted in the second year following the initial audit. The programme of audit follow-up visits was completed in 2009.

1.7.2.2 Aviation security audits under the second cycle of the USAP commenced in January 2008 and were completed in June 2013. The objective of the USAP second-cycle audits was to determine the States' capability for aviation security oversight by assessing the EI of the CEs of an aviation security oversight system and the status of States' implementation of AVSEC-related SARPs, associated procedures, guidance material and security-related practices.

1.7.2.3 The latest evolution of the USAP, the USAP-Continuous Monitoring Approach (USAP-CMA) was fully launched on 1 January 2015 with the following objectives:

- a) adopting a more comprehensive and proactive approach allowing audit activities to be prioritized and better focused on identification of deficiencies in the aviation security systems of Member States while maintaining the principle of universality;
- b) ensuring ongoing compliance of Member States with ICAO security-related provisions while assessing the aviation security oversight capabilities of States; and
- c) making more effective and efficient use of the resources available to the Programme.

1.7.2.4 As in USOAP, USAP activities are conducted using a set of protocol questions, leading to detailed results including EI scores.

1.7.2.5 USAP-CMA activities may also lead to the identification of significant security concerns (SSeCs). An SSeC occurs when the appropriate authority responsible for aviation security in the State permits aviation activities to continue, despite a lack of effective implementation (LEI) of the minimum security requirements established by the State and by

the provisions set forth in Annex 17 related to critical aviation security controls, including, but not limited to, the screening and the protection from unauthorized interference of passengers, cabin and hold baggage; the security of cargo and catering; access control to restricted and security-restricted areas of airports; and the security of departing aircraft resulting in an immediate security risk to international civil aviation.

1.7.3 The Global Aviation Safety Oversight System (GASOS)

1.7.3.1 ICAO has recently developed the Global Aviation Safety Oversight System (GASOS) as a voluntary standardized assessment and recognition mechanism for Safety Oversight Organizations (SOOs) such as RSOOs, and accident investigation organizations (AIOs), such as RAIOS. Under the GASOS programme, States may delegate some safety functions or activities to recognized SOOs and AIOs but still keep their obligations and responsibilities under the Chicago Convention and the Annexes thereto. Under the GASOS concept, an SOO or AIO may apply to ICAO for an assessment (conducted by qualified experts including USOAP auditors) in order to be recognized at one of the three levels below:

- Level 1 (Advisory and Coordination): this may include assistance in developing regulations, manuals, checklists, and other guidance material;
- Level 2 (Operational Assistance): this may include performing certification and surveillance tasks such as inspections, reviews, or audits on behalf of a State; or
- Level 3 (Delegation): in addition to level 2, this includes the delegation to issue, amend or revoke a certificate, licence, or other approval.

1.7.3.2 Once the assessment is found to be satisfactory, ICAO issues a GASOS recognition certificate and includes the SOO or AIO in the GASOS Directory. This directory provides States access to ICAO recognized SOOs and AIOs that can assist them in fulfilling their safety oversight obligations. At the time of writing of this report, the ICAO Council had approved the implementation of GASOS for Levels 1 and 2.

1.8 THE NEED TO COMMIT TO AN EFFECTIVE, SUSTAINABLE AND RESILIENT AVIATION REGULATORY OVERSIGHT SYSTEM

1.8.1 Over the years, ICAO and its Member States have collaborated to develop and ensure the implementation of SARPs and procedures, as well as guidance material, for the safe and orderly development of international civil aviation as well as for sound and economical international air transport services. Through the years, however, the challenges faced by the aviation community in general and State CAAs in particular have grown in number and complexity. This, in turn, requires stronger State commitment to aviation safety and security. This is all the more necessary since, in some States, the progress made towards a more effective aviation regulatory oversight system (i.e. aviation safety and security oversight system) has not been sustained over a period of time. In the context of this study, a 'sustainable' system or mechanism will be defined as one that remains effective over time. In addition, a 'resilient' system or mechanism will be defined as one that remains effective despite major external and/or internal changes, such as changes at political or administrative levels.

1.8.2 The information available to ICAO through USOAP and USAP activities shows that a number of Member States continue to experience difficulties in carrying out their safety oversight and security responsibilities for many diverse reasons. One of the root causes is the lack of ability of the State CAAs to attract, recruit and retain appropriately qualified and experienced staff, and in sufficient number. The successful resolution of such difficulties requires a solid and transparent commitment from governments. The entities responsible for safety and security oversight, whether at national or regional level, should be provided with the necessary resources, both human and financial, to enable them to

effectively perform their regulatory oversight functions. These elements should be taken into account and prioritized by States when elaborating their national development plans and air transport sector strategic plans. It should be noted that the most important of these is the legal mechanisms that become the basis for supporting such strengthening and resilience of a CAA. While the legal framework could be considered the strongest basis for a State regulatory oversight system (or without it, weakness), it is often the hardest to get changed and often requires years to amend. This is one of the reasons why legal aspects, especially with respect to primary legislation, are addressed in depth in this study and report.

1.8.3 Political will and budgetary resource allocation are essential for building an effective, sustainable and resilient State aviation regulatory oversight system and continuously ensuring compliance with the ICAO SARPs. Many States face the challenge of the initial investment costs for building such a system. However, the socio-economic benefits and contributions of aviation to the State's sustainable development can offset such costs. Thus, States need to find a balance between the cost of establishing and sustaining their regulatory system, and in particular their CAAs, and the ability of the industry and other concerned stakeholders to contribute to the funding of such a system. In this, ICAO has a crucial role to play in providing more pragmatic and sustainable support to States, all the more since some States may not fully "know what they do not know".

1.9 ICAO, CIVIL AVIATION AND THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS (SDGS)

1.9.1 Safe, reliable, cost-effective and environmentally responsible air transport is a critical enabler to achieve the United Nations 2030 Agenda for Sustainable Agenda and its 17 Sustainable Development Goals (SDGs). To illustrate just how essential a catalyst aviation is in the pursuit of the SDGs, ICAO mapped its work against the SDGs. The outcomes of this analysis demonstrate that the Organization and its Strategic Objectives support 15 of the 17 SDGs and highlight ICAO's commitment to work in close cooperation with States and other UN Bodies to achieve the sustainable development targets.

1.9.2 Information on the specific contributions of civil aviation to the SDGs, as shown in the table below, can be found at: <https://www.icao.int/about-icao/aviation-development/Pages/SDG.aspx>

1.9.3 The international community is increasingly acknowledging the importance of air transport as an essential enabler to achieve the SDGs. Testimony to this is the increased reflection of aviation in the National Voluntary Reviews (VNR) in which States present on progress on the SDGs at the national and sub-national levels. This happens on a yearly basis during the UN High Level Political Forum (HLPF). Between 2016 and 2018, 98 UN Member States submitted 107 VNRs. Over the course of these three years, the number of VNRs referencing aviation has more than tripled (from 25% to 77% of VNRs).

1.9.4 The ICAO 13th Air Navigation Conference recommended States to create cohesive linkages between the different global aviation plans and have the SDGs clearly referenced within each of them. In support of this objective, ICAO has developed guidance for its Member States to establish a National Aviation Planning Framework². This ensures sustainable development of air transport by prioritizing and coordinating the implementation of initiatives to improve the safety, security, facilitation, capacity and efficiency of their air transport systems. This approach will enable sustainable growth of air transport at the State, regional and global levels, resulting in significant socio-economic benefits, including increasing the predictability of funding for sustainable aviation.

1.9.5 ICAO continuously contributes to monitoring efforts of the UN 2030 Agenda for Sustainable Development, and is an official observer on the Inter-agency and Expert Group on Sustainable Development Goal Indicators, as well

2. States may use different terminology to define national plans and frameworks.

as the custodian agency of SDG indicator 9.1.2, *Passenger and Freight Volumes, by Mode of Transport*. In this capacity, ICAO has the opportunity to contribute to the annual global SDG progress report, as well as provide and update the indicator documentation. This, in turn, is helpful when making the case for financing and investments into transportation infrastructure and formulating policies that are furthering multimodal transport connectivity. These are expected to promote the sustainable growth of the transportation sector and accommodate the forecasted increase of passenger and freight traffic in developing regions and fast growing economies.

1.10 THE SAMOA PATHWAY

1.10.1 The Small Island Developing States (SIDS) Accelerated Modalities of Action (SAMOA) Pathway is an international framework that was developed as the outcome of the Third International Conference on Small Island Developing States (SIDS Conference) held from 1 to 4 September 2014 in Apia, Samoa. The Conference, with the overarching theme “The sustainable development of Small Island developing States through genuine and durable partnerships”, played a significant role in identifying SIDS priorities that needed to be considered in the formulation of the 2030 Agenda. In addition to the SAMOA Pathway, the conference also resulted in the announcement of 300 multi-stakeholder partnerships in support of SIDS and the establishment of a unique inter-governmental SIDS Partnership Framework; designed to monitor progress of existing, and stimulate the launch of new, genuine and durable partnerships for the sustainable development of SIDS.

1.10.2 The priority areas in the SAMOA Pathway are:

- a) Sustained and sustainable, inclusive and equitable economic growth with decent work for all (including sustainable tourism);
- b) Climate Change;
- c) Sustainable Energy;
- d) Disaster risk reduction;
- e) Oceans and seas;
- f) Food security and nutrition;
- g) Water and sanitation;
- h) Sustainable transportation;
- i) Sustainable consumption and production;
- j) Management of chemicals and waste, including hazardous waste;
- k) Health and non-communicable diseases;
- l) Gender Equality and women’s empowerment;
- m) Social Development;
- n) Biodiversity;

- o) Invasive alien species; and
- p) Means of implementation, including partnerships.

1.10.2 The part of the SAMOA Pathway related to Sustainable Transportation addresses in particular air transport, including aviation safety. It reads as follows:

66. We recognize that transportation and mobility are central to the sustainable development of small island developing States. Sustainable transportation can enhance economic growth, promote trade opportunities and improve accessibility. Sustainable, reliable and safe transportation achieves better integration of the economy while respecting the environment. We also recognize the importance of the efficient movement of people and goods in fostering full engagement in local, regional and global markets and the potential for sustainable transportation to improve social equity, health, the resilience of cities, urban-rural linkages and the productivity of rural areas of small island developing States.

67. In this regard, we are committed to continuing and enhancing support for the efforts of small island developing States:

- (a) To gain access to environmentally sound, safe, affordable and well-maintained transportation;
- (b) To advance the safety of land, sea and air transportation;
- (c) To develop viable national, regional and international transportation arrangements, including improved air, land and sea transport policies that take a life-cycle approach to the development and management of transport infrastructure;
- (d) To increase energy efficiency in the transport sector.

1.10.3 On 27 September 2019, the General Assembly of the UN will hold a one-day high-level review of the progress made in addressing the priorities of Small Island Developing States (SIDS) through the implementation of the SAMOA Pathway.

1.11 THE SENDAI FRAMEWORK FOR DISASTER RISK REDUCTION AND THE ROLE OF CIVIL AVIATION AND ICAO

1.11.1 The Sendai Framework for Disaster Risk Reduction (2015–2030) is an international document which was adopted by UN Member States in March 2015 at the World Conference on Disaster Risk Reduction held in Sendai, Japan and endorsed by the UN General Assembly in June 2015. It is the successor agreement to the Hyogo Framework for Action (2005–2015).

1.11.2 The Sendai Framework is a 15-year, voluntary, non-binding agreement which recognizes that the State has the primary role to reduce disaster risk but that responsibility should be shared with other stakeholders including local government, the private sector and other stakeholders. It aims at the “substantial reduction of disaster risk and losses in lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries”.

1.11.3 The Sendai Framework sets four specific priorities for action:

- a) understanding disaster risk;
- b) strengthening disaster risk governance to manage disaster risk;
- c) investing in disaster risk reduction for resilience; and
- d) enhancing disaster preparedness for effective response, and to “Build Back Better” in recovery, rehabilitation and reconstruction.

1.11.4 Consistent with its mandate, ICAO supports its Member States in responding to crises and disasters that may affect international civil aviation, with the overall objective of improving the resilience of civil aviation infrastructure and of addressing aviation-specific crises that could affect the safety or continuity of international civil aviation. The Sendai Framework for Disaster Risk Reduction 2015–2030 sets a strategic shift from the traditional emphasis on disaster response to disaster risk reduction and seeks to promote a culture of prevention, already embedded in ICAO’s SARPs and recommended practices (e.g. Annex 14 to the Chicago Convention (*Aerodromes*, Volume I — *Aerodromes Design and Operation*, Chapter 9.1) and manuals and guidance materials (Doc 9137 — *Airport Services Manual*, Part 7 — *Airport Emergency Planning*; Doc 8896 — *Manual of Aeronautical Meteorological Practice*). By raising awareness, learning from experiences and preparing emergency response plans, ICAO assists its Members States to anticipate, prevent and face potential disruptions to international civil aviation operations that may be caused by natural phenomena. Since its creation, ICAO has responded to numerous crises including natural disasters that affect aviation. Creating a well-laid out strategic plan ahead of time has proven crucial in ensuring more effective and coordinated responses in the event of any such large-scale disasters. With respect to airports, given the sudden and often unforeseen nature of disasters (e.g. tsunamis, hurricanes or earthquakes), they must be ready to identify essential priority duties and promptly convert into disaster relief centers, shelters for the local population and generally key social infrastructures. The focus on emergency preparedness and response helps in mitigating the effects natural disasters have on the aviation industry, which in turn plays its role in delivering assistance and supporting necessary humanitarian relief.

Chapter 2

CURRENT SITUATION AND CHALLENGES OF PSIDS WITH RESPECT TO CIVIL AVIATION

2.1 THE PSIDS AND THEIR REGIONAL FRAMEWORK

2.1.1 Overview of the PSIDS

2.1.1.1 The 14 PSIDS have a combined population of less than 10 million people, spread across a unique and diverse region made up of hundreds of islands, and scattered across some 30 million square kilometers of ocean, spanning six time zones, over an area equivalent to 15% of the globe's surface. Despite differences in population, resources, history and culture (mainly Melanesian, Micronesian and Polynesian cultures), PSIDS face an exceptional set of development challenges arising from their dispersion, remoteness, small population and vulnerability. They share similar challenges as other small and remote island economies. They have limited natural resources, narrowly based economies, large distances away from major markets, and vulnerability to external shocks; all of which can affect growth and have often led to a high degree of economic volatility. Socio-economic progress is further hindered by high communication, infrastructure, energy and transportation costs. In addition, PSIDS are some of the most vulnerable States in the world to the effects of climate change and natural disasters, including cyclones, earthquakes, volcanic activities and tsunamis.

2.1.1.2 There is great diversity within the region; from Papua New Guinea (PNG), which is the largest country of the group with a population of over 7.5 million people, to Niue, with estimated populations around 1 600; making it the smallest State in the world by population. Kiribati is one of the most remote and geographically dispersed States in the world, consisting of 33 coral atolls spread over 3.5 million square kilometers of ocean; an area larger than India. Figure 2-1 below shows the population, area and population density of each PSIDS, as provided by the Pacific Sub-Regional Office (PSRO) of the United Nations Population Fund (UNFPA).

COUNTRY	POPULATION SIZE (thousands)	LAND AREA (km ²)	POPULATION DENSITY (/km ²)
 Papua New Guinea	7 587.2	462 840	16
 Fiji	847.6	18 273	46
 Solomon Islands	611.5	30 407	20
 Vanuatu	271.1	12 281	22
 Samoa	190.7	2 935	65
 Kiribati	111.2	811	137
 Tonga	104.2	650	160
 Micronesia (Federal States of)	102.8	701	147
 Marshall Islands	53.8	181	297
 Palau	17.7	444	40
 Cook Islands	15.0	237	63
 Tuvalu	11.0	26	424
 Nauru	10.6	21	504
 Niue	1.6	259	6

Figure 2-1. Estimated population size and population density, PIC: 2014

2.1.1.3 Out of the 14 PSIDS, 12 are situated in the Central and South Pacific Region. Three of the PSIDS (Marshall Islands, Micronesia (Federal States of) and Palau) are situated in the North Pacific Region, and suffer from even greater isolation and remoteness.

2.1.1.4 Five of the 14 PSIDS, although being independent States, are in free association with another State. This is the case for the three North Pacific States (in free association with the United States); and Niue and the Cook Islands (in free association with New Zealand).

2.1.1.5 With the exception of Niue, all PSIDS are ICAO Member States.

2.1.2 The Pacific Islands Forum (PIF)

2.1.2.1 Overview of the PIF

2.1.2.1.1 The Pacific Islands Forum (hereinafter referred to as “the Forum” or the “PIF”) is an inter-governmental organization that aims at enhancing cooperation between countries and territories of the Pacific Ocean. It was founded in 1971 as the South Pacific Forum. In 1999, the name was changed to Pacific Islands Forum to be more inclusive of the Forum’s Oceania-spanning membership of North, Central and South Pacific Island States, including Australia. It has an observer status at the United Nations.

2.1.2.1.2 The mission of the Forum is to work in support of Forum member governments, to enhance the economic and social well-being of the people of the region by fostering cooperation between governments and between international agencies, and by representing the interests of Forum members in ways agreed by the Forum. Its decisions are implemented by the Pacific Islands Forum Secretariat (PIFS), which was established initially as a trade bureau in 1972 and later became the South Pacific Bureau for Economic Co-operation (SPEC). The name South Pacific Forum Secretariat was approved by member governments in 1988 and changed to Pacific Islands Forum Secretariat (PIFS) in 2000. The PIFS headquarters are in Suva, Fiji, and comprise four main divisions, each of them with direct responsibility for a range of programmes designed to improve the capacity of the Forum members and to coordinate action on matters of common interest: (i) Policy; (ii) Governance and Engagement; (iii) Programmes and Initiatives; and (iv) Corporate Services.

2.1.2.1.3 As well as its role in harmonizing regional positions on various political and policy issues, PIFS has technical programmes, including in economic development, climate change financing and trade.

2.1.2.1.4 In September 2011, the US territories of American Samoa, Guam and the Northern Mariana Islands were granted observer status in the Pacific Islands Forum, while in September 2016 the French territories of French Polynesia and New Caledonia were granted full membership.

2.1.2.1.5 The PIF Member and Observer States can be seen in Figures 2-2 and 2-3 below¹:

Member States			
 Australia (AU)	 Cook Islands (CK)	 Fiji (FJ)	 French Polynesia (PF)
 Kiribati (KI)	 Marshall Islands (MH)	 Micronesia (Federal States of) (FSM)	 Nauru (NR)
 New Caledonia (NC)	 New Zealand (NZ)	 Niue (NU)	 Palau (PW)
 Papua New Guinea (PNG)	 Samoa (WS)	 Solomon Islands (SB)	 Tonga (TO)
 Tuvalu (TV)	 Vanuatu (VU)		
Associate members		Observers	
 Tokelau (TK)	 American Samoa (AS)	 Guam (GU)	 Northern Mariana Islands (MP)
	 Timor-Leste (TL)	 Wallis and Futuna (WF)	 United Nations
	Asian Development Bank	Commonwealth of Nations	WCPFC
	World Bank		

Figure 2-2. List of PIF Member and Observer States

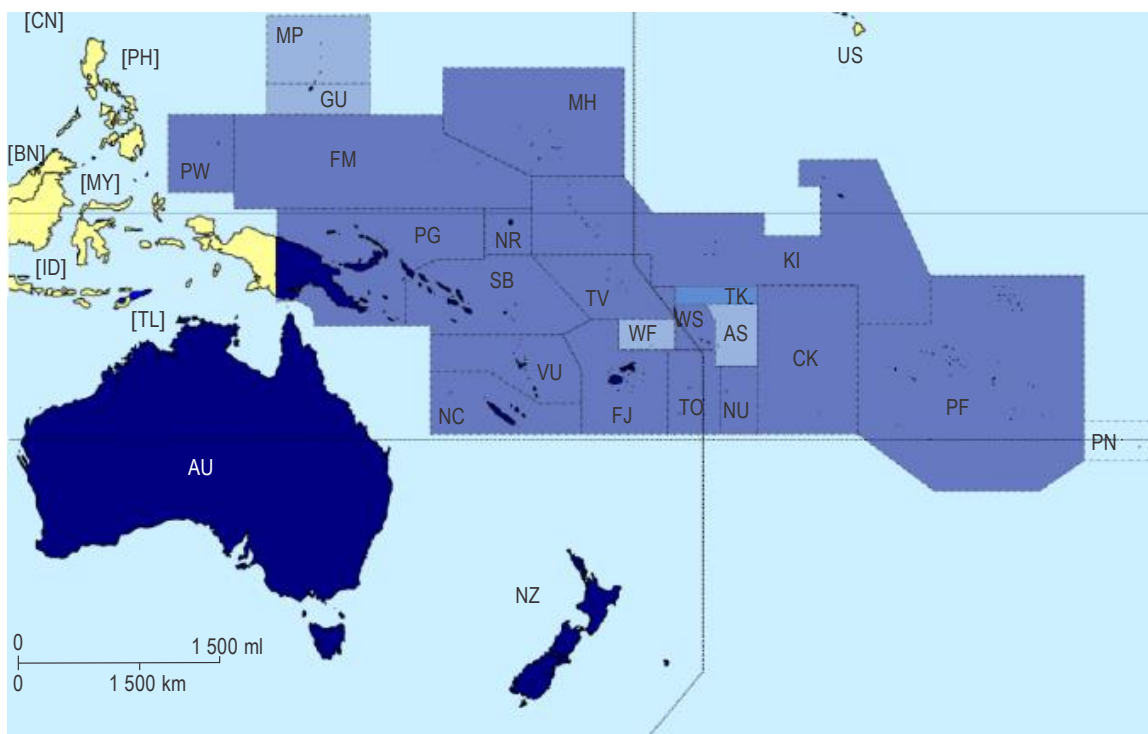


Figure 2-3. Map of PIF Member and Observer States

1. At their 2018 meeting in Nauru, Forum Leaders endorsed the application of Wallis and Futuna to become an Associate Member of the Forum.

2.1.2.2 The geopolitical context and the Framework for Pacific Regionalism

2.1.2.2.1 The geopolitical and development context for the Pacific is constantly changing and today the region faces a variety of external and internal forces that are influencing it. They include climate change, shifts in global power and globalisation, ocean management and conservation, an increasingly crowded and complex region, rising inequality, advances in technology, economic and environmental uncertainty, and regional global conflict. The current shifts in global and regional geopolitical context are currently providing to the Pacific Region an opportunity for revisiting the expression of a common sense of identity and purpose and for developing strategies in the benefit of the whole Pacific Region.

2.1.2.2.2 In this context, Pacific States and the PIF have developed a Framework for Pacific Regionalism, which was endorsed by Forum Leaders in July 2014. It sets out the strategic vision, values, objectives and approaches to achieve deeper regionalism in the Pacific. The Forum's Pacific Vision is for a region of peace, harmony, security, social inclusion and prosperity, so that all Pacific people can lead free, healthy, and productive lives. For almost five decades, Pacific Island countries have worked together to achieve this vision through Pacific regionalism. The motivation for this was "We know that we can achieve more together, than alone". The Framework for Pacific Regionalism (FPR) reinforces the commitment of Forum Leaders to work together to ensure security, harmony and prosperity of the Pacific region. It commits PIF Leaders to being more inclusive in setting regional policies and to work together for the benefit of all countries and people in the Region. Examples of areas for which the Forum has worked together include the Rarotonga Treaty (nuclear-free zone in the South Pacific), the Law of the Sea (international advocacy for establishing EEZ) and cervical cancer (bulk procurement of vaccines).

2.1.2.2.3 At their meeting in August 2019 in Tuvalu, Forum Leaders endorsed the development of a 2050 Strategy for the Blue Pacific to build upon the successes of the Framework for Pacific Regionalism as well as address gaps in connectivity as a core driver of sustainable development for the region. Aviation is intended to feature prominently.

2.1.2.3 Council of Regional Organisations in the Pacific (CROP)

2.1.2.3.1 The Forum Leaders established the Council of Regional Organisations in the Pacific, CROP (formerly the South Pacific Organisations Coordinating Committee, SPOCC) in 1988 with the mandate to improve cooperation, coordination, and collaboration among the various inter-governmental regional organizations to work towards achieving the common goal of sustainable development in the Pacific Region. CROP comprises the heads of the inter-governmental regional organizations in the Pacific and is governed by the CROP Charter. The Secretary General of the PIFS is the permanent chair of CROP and reports to Forum Leaders on CROP-related matters.

2.1.2.3.2 CROP functions as a coordination mechanism between the heads of the regional organizations in the Pacific, and as a high-level advisory body, to provide policy advice and may assist in facilitating policy formulation at national, regional and international level. CROP provides a forum to enable CROP heads to collectively review progress with their respective organizations' contributions on the Framework for Pacific Regionalism. CROP consists of the following eight regional inter-governmental organizations: FFA (Pacific Islands Forum Fisheries Agency), PASO (Pacific Aviation Safety Office), PIDP (Pacific Islands Development Program), PIFS (Pacific Islands Forum Secretariat), PPA (Pacific Power Association), SPC (Secretariat of the Pacific Community), SPREP (Secretariat of the Pacific Regional Environment Programme), SPTO (South Pacific Tourism Organisation) and USP (University of the South Pacific).

2.1.2.3.3 CROP heads of organizations meet once each year, but the main consultative work is done by seven sectoral working groups, namely: Sustainable Development, Marine Sector, Information, Communication & Technology (ICT), Human Resource Development, Health and Population, Gender, and CROP Harmonization. These working groups are responsible for collaboratively working on various regional projects and policy initiatives. For example, the CROP Marine Sector Working Group has shepherded the inter-governmental agreement and promotion of the Pacific Islands Regional Ocean Policy while the CROP ICT Working Group has shepherded the Pacific Islands ICT Policy and Strategic Plan

(PIIPP). In addition to the agreed seven CROP Working Groups, a number of other active CROP technical working groups also exist, including one named Working Arm on Climate and Disaster Resilient Development (WARD).

2.1.2.3.4 The CROP interagency working groups also provide technical advice to Pacific Islands Forum inter-governmental working groups taking part in United Nations and other international negotiations and processes, on request.

2.1.2.4 *Forum Economic Ministers Meeting (FEMM)*

2.1.2.4.1 FEMM, established in 1995, plays a key role in assessing regional economic developments and is considered as one of the five core Forum meetings².

2.1.2.4.2 At the 19–20 August 2008 Pacific Islands Forum meeting in Niue, the leaders discussed Pacific Plan priorities including “fisheries, energy, trade and economic integration, climate change and transport, in addition to information and communication technology, health, education, and good governance”. Leaders also discussed the impacts of climate change and adopted the Niue Declaration on Climate Change.

2.1.2.5 *The Pacific Islands Forum and Air Transport*

2.1.2.5.1 Regarding air transport, an “open skies” policy has been under work by a number of States in the region. The Pacific Islands Air Services Agreement (PIASA) would allow member nations to have more access for their airlines to other member countries. To date there have been 10 signatories: Cook Islands, Kiribati, Nauru, Niue, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu, while only six have ratified the agreement, namely: Cook Islands, Nauru, Niue, Samoa, Tonga and Vanuatu.

2.1.2.5.2 The Secretariat is also the depositary for the Pacific Islands Civil Aviation Safety and Security Treaty (PICASST). See Section 2.9 of this report for more details on the PICASST.

2.1.2.6 *Decision to convene the first PIF Regional Aviation Ministers Meeting*

2.1.2.6.1 During the 50th Pacific Islands Forum, held in Funafuti, Tuvalu from 13 to 16 August 2019, Forum Leaders agreed to convene a Regional Aviation Ministers Meeting in 2020. This meeting will “consider and discuss aviation-specific matters of importance to the region, in particular aviation safety and security, compliance with International Civil Aviation Organization standards and opportunities for increased connectivity, and for the subsequent consideration of Leaders at their meeting in 2020, as appropriate”. The Forum which met in August 2019 was attended by the Heads of State, Government, and Territories of Australia, Cook Islands, Fiji, Kiribati, the Marshall Islands, Micronesia (Federal States of), Nauru, New Caledonia, New Zealand, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu. Niue, Palau and French Polynesia were represented by Ministers. Tokelau and Wallis and Futuna attended the Formal session as Associate Members.

2.1.2.6.2 Gatherings of aviation ministers or officials from the Pacific Region originated in 1975 with the Forum Aviation Policy Ministerial Meeting held in Vanuatu in July 2003 and the Forum Aviation Officials Meeting held in Fiji in August 2005 being the last Forum-led meetings of its kind. As such, the 2020 Regional Aviation Ministers Meeting will revive the momentum for regional cooperation in aviation matters across the Pacific. The decision to convene such a meeting in 2020 constitutes an important step for civil aviation in the Pacific Region and illustrates the commitment of States and Governments in the Region as well as the leading role of the PIF.

2 The other four are: (i) Forum Officials Committee meeting; (ii) Forum Foreign Ministers Meeting; (iii) Smaller Island States Leaders Meeting; and (iv) Forum Leaders Meeting.

2.1.3 The Pacific Aviation Safety Office (PASO)

2.1.3.1 Historically, many of the Pacific Island States have struggled to implement a safety and security oversight system to ensure compliance with ICAO SARPs and related provisions. In line with other parts of the world, most PSIDS came to the realisation that regional cooperation would be the solution to overcome their challenges, which provided the impetus for the establishment of PASO as a Regional Safety Oversight Organization (RSOO). PASO was established as a concept on 7 August 2004 by the formation of the Pacific Islands Civil Aviation Safety and Security Treaty (PICASST). In practice, PASO has also carried out tasks related to AVSEC and therefore constitutes a Regional Safety and Security Oversight Organization (RSSOO). The PICASST had four original signatories, and is currently ratified and in force in 10 States. PASO, as an organization, was created in 2008. The Asian Development Bank (ADB), in collaboration with donor States, provided a series of loans to support the establishment of PASO. The main objectives of the loans were to harmonize the legislative and regulatory frameworks of Member States, ensure airline compliance with international standards and establish a regional surveillance system. Four States acted as guarantors to the ADB loans: Kiribati, PNG, Samoa and Vanuatu. These four States, together with New Zealand, form the PASO Steering Committee, established to ensure that PASO performs in such a way that the terms of the ADB Loan can be fulfilled. PASO's office was established in Port Vila, Vanuatu, with the support of the Government of Vanuatu through a Hosting Agreement. Under that agreement, the Vanuatu Government provides office facilities, an operating budget and national staff to coordinate the work of PASO and provide administrative support.

2.1.3.2 Ten States are parties to the PICASST and therefore members of PASO, namely: Cook Islands, Kiribati, Nauru, Niue, PNG, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu. Associate States that are members of PASO, but not parties to the PICASST are Australia, Fiji and New Zealand. These Associate States may, at the invitation of the PASO Council and upon payment of the fee determined by the Council, attend and speak at the meetings of the Council but do not have voting rights. Observer organizations of PASO are Airways New Zealand, the ADB, the Association of South Pacific Airlines (ASPA), ICAO, the PIFS, the US Federal Aviation Administration (FAA) and the World Bank (WB).

2.1.3.3 With respect to governance, the PASO Council comprises the 10 Member States and the three Associate Member States. It is the prime governing body of PASO, accountable to the Signatory States for the advancement of the objectives of PASO. The PASO Council sets the overall vision, purpose and strategies of PASO in keeping with the PICASST. It also sets and assesses the achievement of annual targets for PASO and the PASO Office. The Council is responsible for the management of the financial and business affairs of PASO, and to that end, have formed financial and technical sub-committees to oversee the implementation of PASO objectives and report to the broader PASO Council. The Council appoints a General Manager who manages the daily affairs of PASO.

2.1.3.4 The role of the PASO Office is to conduct the day-to-day administrative and operational business of PASO. It works closely with all PASO Member States to ensure to provide safety and security oversight support and facilitate the provision of guidance and training opportunities. The PASO Office is overseen by a General Manager, who is the most senior Executive Officer of PASO and is responsible to the Council, through the Chairman, for the overall direction and implementation of the strategic and business plans determined by the Council. The General Manager is also required to foster close cooperation among the Members of PASO, and positively engage with organizations with observer status at PASO.

2.1.3.5 PASO provides regulatory support to its Member States in the areas of personnel licensing, aircraft operations, airworthiness, Air Navigation Services (ANS), aerodromes and AVSEC. PASO contractors provide the technical expertise required to carry out audit activities on behalf of a State and provide to the State's CAA a report of findings and recommended corrective actions. These activities are undertaken using the State's legislation and ICAO SARPs as base materials. However, in the current framework, the regulatory support provided by PASO to its Member States is significantly limited by the lack of resources within PASO. PASO does not have any technical personnel (inspector) in a full-time or even part-time staff member capacity. Instead, the organization retains a roster of experienced aviation safety and security contractors (inspectors), in addition to possible support from the New Zealand CAA, for contracting as consultants to conduct inspections and audits and/or provide technical advice as required by its Member States and at the State's cost. This outsourced activity comes at what is seen by many PSIDS as a high cost

for developing States (as was communicated to the Senior Advisor during his meetings with PSIDS), which normally pass this on to the service providers. In addition, PASO's mandate is also very limited by the provisions of the PICASST (see more details in Section 2.9 of this report). Within the current system, there is not a clear and consistent delegation of tasks from Member States to PASO. In practice, some PASO Member States do not always utilize PASO services for their various oversight needs but resort to engaging independent experts from time to time, without any assurance on the quality of service provided by such experts. It should be noted that this study and report do not comprise a comprehensive assessment of PASO, including on aspects related to personnel qualification and training and aspects related to establishment and implementation of policies and procedures. In August 2019, PASO has undergone a voluntary assessment by ICAO under the GASOS mechanism, with is the object a specific report to be provided by ICAO to PASO.

2.1.3.6 PASO is undergoing a Reform Project, funded by the World Bank, which focuses on the organizational strengthening and capacity development of PASO. The Reform Project is overseen by the PASO Steering Committee and the following four main components:

- Component A: Transitional management and support — focusing on the capacity building areas of PASO;
- Component B: Establishment of a pool of regional aviation inspectors — focusing on having a strong pool of inspectors to carry out the audit and inspection program;
- Component C: Quality management — focusing on the PASO Quality Management requirements and IT system; and
- Component D: Very small aperture terminals (VSAT) — focusing on the design, supply and installation of VSAT in the Cook Islands and Niue.

2.1.4 Aircraft accidents, accident rates and fatalities in the PSIDS (2008–2018)

2.1.4.1 The data used in the section originates from ICAO sources and can be accessed through the integrated Safety Trend Analysis and Reporting System (iSTARS) application on the ICAO website. It is limited to accidents to scheduled commercial flights on airplanes of a maximum take-off weight (MTOW) above 5.7 tonnes. The information provided, albeit useful, does not constitute a clear picture of the safety levels in the Region. The production of comprehensive safety data and information for the PSIDS region is hindered by the low level of safety reporting and the lack of effective safety data collection and processing systems (SDCPS) within the Region. Limited information is available regarding the safety performance of aviation service providers, including air operators and aerodrome operators, in the PSIDS region.

2.1.4.2 Due to the low level of operations in the PSIDS, the number of accidents is limited. Five accidents, including two fatal accidents (causing a total of 29 fatalities) occurred in the PSIDS during the 2008–2018 period. In comparison, for the same period and for the same type of aircraft and operations, there was only one fatal accident (causing one fatality) in Australia and no fatal accident in New Zealand, despite a much higher level of traffic in these two States. The above-mentioned five accidents in the PSIDS occurred in PNG (three accidents), Solomon Islands (one accident) and FSM (one accident). They involved air operators from PNG (in four accidents) and Solomon Islands (in one accident). Regarding the accident rate, this indicator is quite volatile for regions with low volumes of traffic such as the PSIDS region. The yearly accident rate is provided for reference in one of the graphic depictions below. The lack of occurrence of any major accident in the PSIDS may have contributed to a lack of prominence of aviation safety and compliance within the Region. Similarly, the absence of any act of unlawful interference with civil aviation in the PSIDS in the 2008–2018 period, and the perception of a relatively low level of terrorist threat to aviation within the Region, may also have contributed to a lack of prominence of aviation security (AVSEC) within the Region.

2.1.4.3 Figure 2-4 below shows the average accident rate for the PSIDS compared to world average during the period from 2008 to 2018:

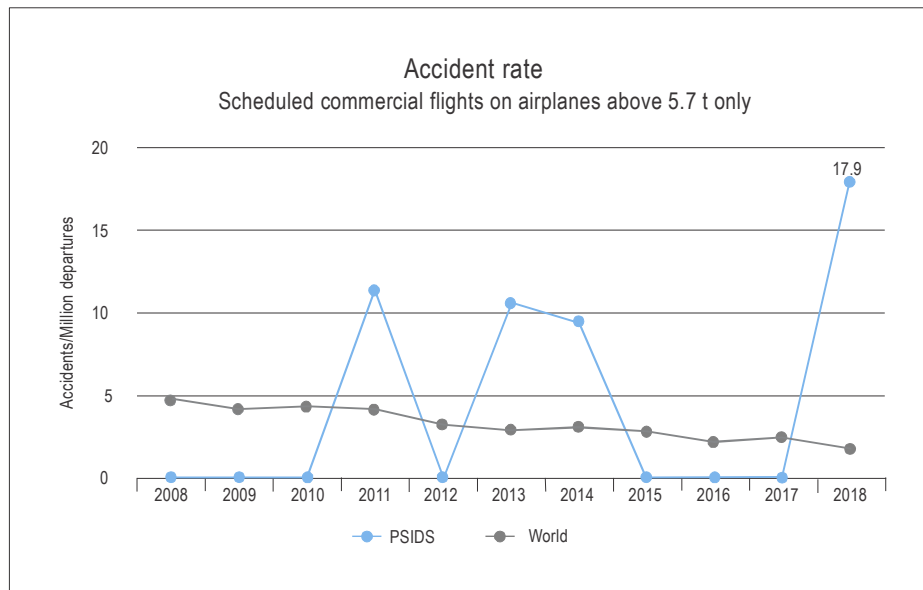


Figure 2-4. Accident rate: Scheduled commercial flights on airplanes above 5.7 t only

2.1.4.4 Figure 2-5 below shows the number of accidents in the PSIDS during the period from 2008 to 2018:

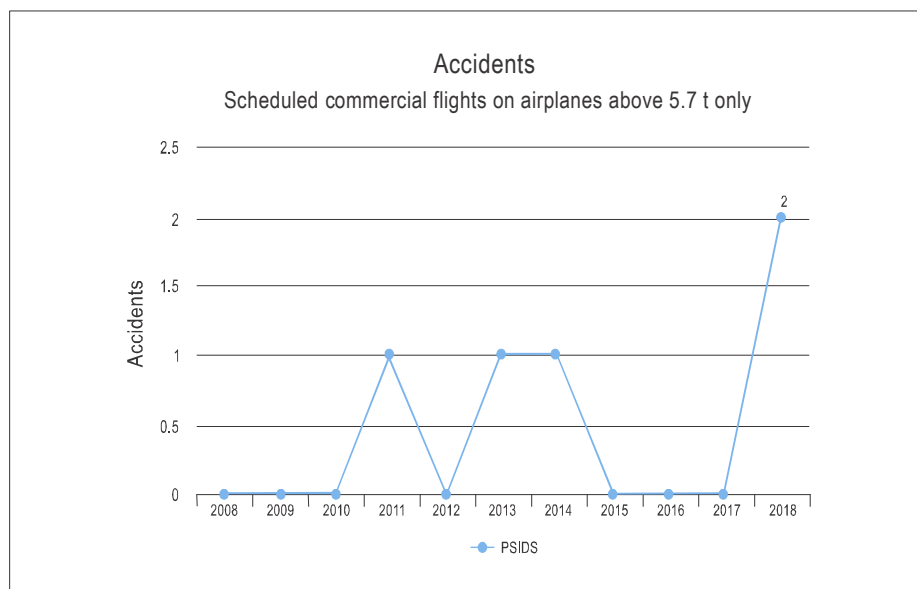


Figure 2-5. Accidents: Scheduled commercial flights on airplanes above 5.7 t only

2.1.4.5 Figure 2-6 below shows the number of fatalities in aircraft accidents in the PSIDS during the period from 2008 to 2018:

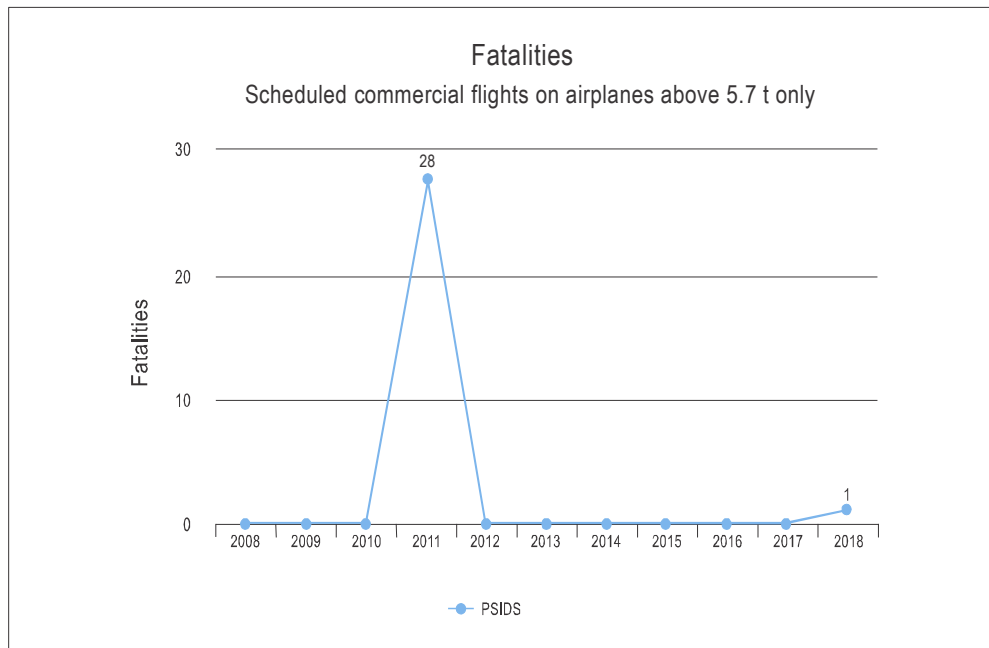


Figure 2-6. Fatalities: Scheduled commercial flights on airplanes above 5.7 t only

2.1.5 Categories of States within the PSIDS region

Although each of the PSIDS has a unique situation and set of challenges, the following categories may be suggested to facilitate awareness and understanding by stakeholders outside the region:

- a) a group comprised of the three North Pacific States (FSM, Marshall Islands and Palau), which have received support from the United States under the Compacts of Free Association and which are not PASO Member States;
- b) a group of nine Central and South Pacific States (Cook Islands, Kiribati, Nauru, Niue, Solomon Islands, Samoa, Tuvalu, Tonga and Vanuatu), which have adopted or adapted the New Zealand Civil Aviation Rules (NZ CARs) or are working towards it, are all PASO Member States and heavily rely on PASO's services for safety and security oversight functions;
- c) Papua New Guinea (PNG), which is a PASO Member State, while having its own set of regulations (with some adaptations from NZ CARs), has benefited from capacity-building support by Australia and uses external support (including from PASO and New Zealand) for specific purposes; and
- d) Fiji, which is not a PASO Member State, has its own set of regulations (not following the NZ CARs) and occasionally uses external support.

2.1.6 PSIDS average effective implementation (EI) of the critical elements (CEs) of a State safety and security oversight system

2.1.6.1 Introduction

2.1.6.1.1 The information used in this section originates from ICAO sources, i.e. results of USOAP and USAP activities as directly provided by the Sections in charge of the respective audit programmes at ICAO Headquarters. Although graphical depictions are provided for reference, they should be analysed with caution as the related results originate from activities that are more or less recent (e.g. some of these activities were performed in 2018 whereas others were performed many years ago, such as in 2009). In addition, the nature of the most recent activity may differ from one State to another. This is in particular the case for USOAP activities as the most recent one for a specific State may have been a full-scope audit whereas it may have been a validation activity (which only addresses non-satisfactory protocol questions, leaving the previously found satisfactory PQs as such) for another State.

2.1.6.1.2 Overall, both with respect to aviation safety oversight and security oversight, although the performance may vary significantly from one PSIDS to another, the PSIDS region has performed well below the APAC average and the world average, illustrating the challenges faced by PSIDS with respect to aviation regulatory oversight. Sections 2.1.5.2 and 2.1.5.2 provide the average EI scores of the PSIDS respectively for aviation safety oversight and aviation security oversight, as well as the latest EI scores of each PSIDS that has been subject to a USOAP/USAP activity.

2.1.6.2 PSIDS effective implementation (EI) of the critical elements (CEs) of a State safety oversight system

2.1.6.2.1 Figure 2-7 below shows the average USOAP EI of the eight CEs of a State safety oversight System as of 30 August 2019 for 11 of the 14 PSIDS. It should be noted that Kiribati has not yet been audited under the USOAP. Tuvalu has just recently become an ICAO Member State (in 2017) and has not yet been audited under the USOAP CMA. As for Niue, it is not an ICAO Member State and is therefore not subject to USOAP activities. The graphs demonstrate that the average EI score for these 11 States (at 36.79%) falls significantly below global average (66.59%), the APAC average (61.78%) and the GASP target (60%).

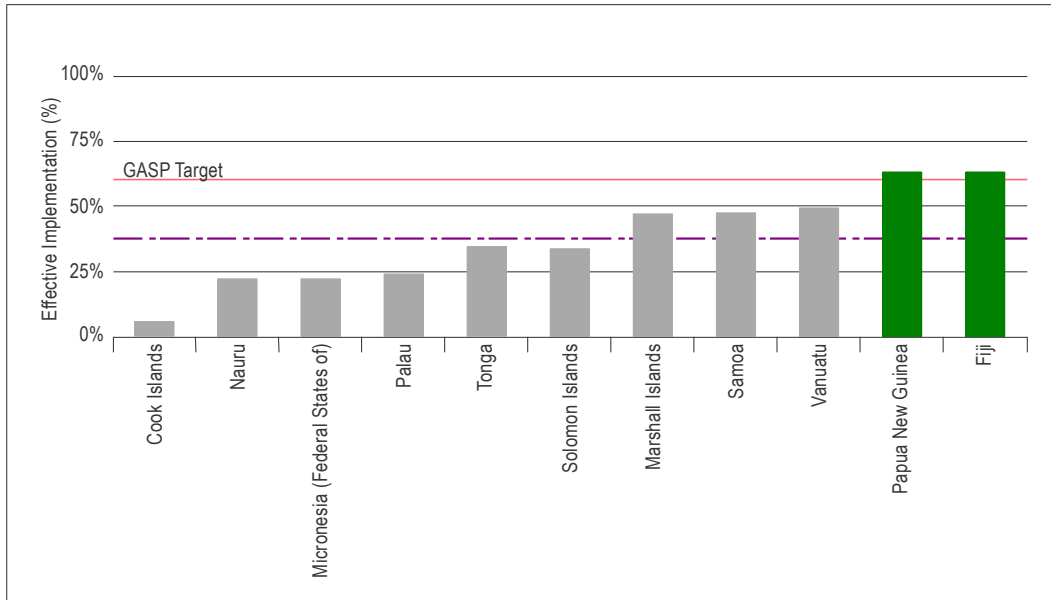


Figure 2-7. Average USOAP EIs of the 11 audited PSIDS (resulting from the most recent completed activity³)

2.1.6.2.2 Figure 2-8 below shows that the PSIDS average EI is below the world average EI in each one of the eight USOAP audit areas. The worst results are in the areas of accident/incident investigation (14.42%), aerodromes (26.95%) and organization (32.62%).

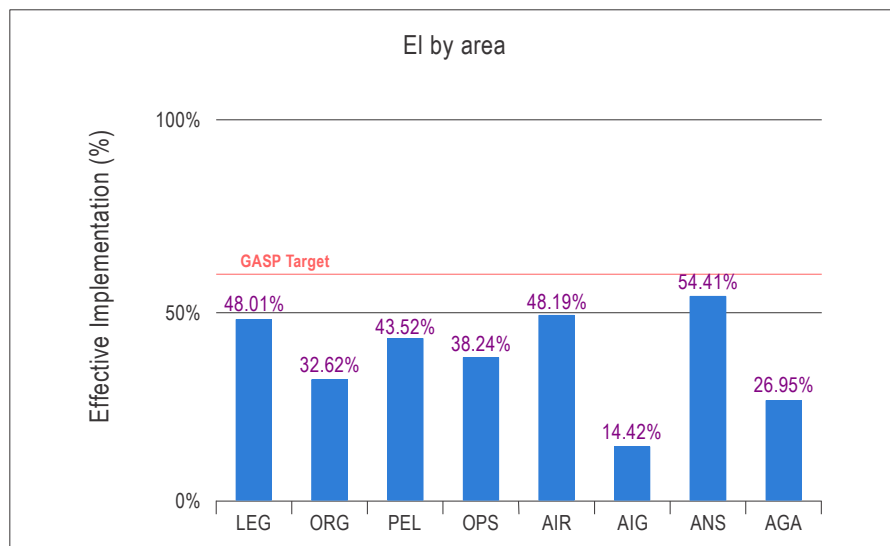


Figure 2-8. EI by area

3. An activity is completed when its final report is published, which, for a USOAP audit, is 5.5 months after the on-site part of the audit.

2.1.6.2.3 Figures 2-9, 2-10 and 2-11 below show that the PSIDS average EI is below the world average and APAC average EIs for each one of the eight CEs of a State safety oversight system. The worst results are for CE 8: Resolution of safety issues (24.38%), CE 5: Technical guidance, tools and provision of safety-critical information (29.08%) and CE 4: Technical personnel qualifications and training (30.38%).

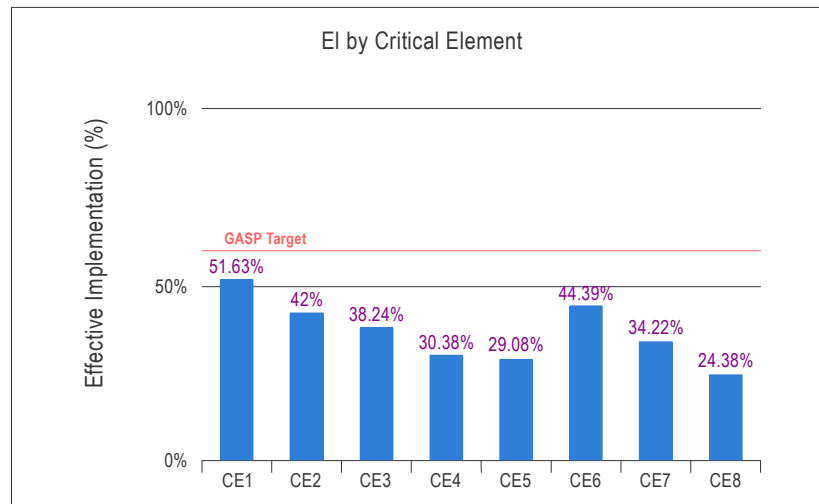


Figure 2-9. EI by critical element

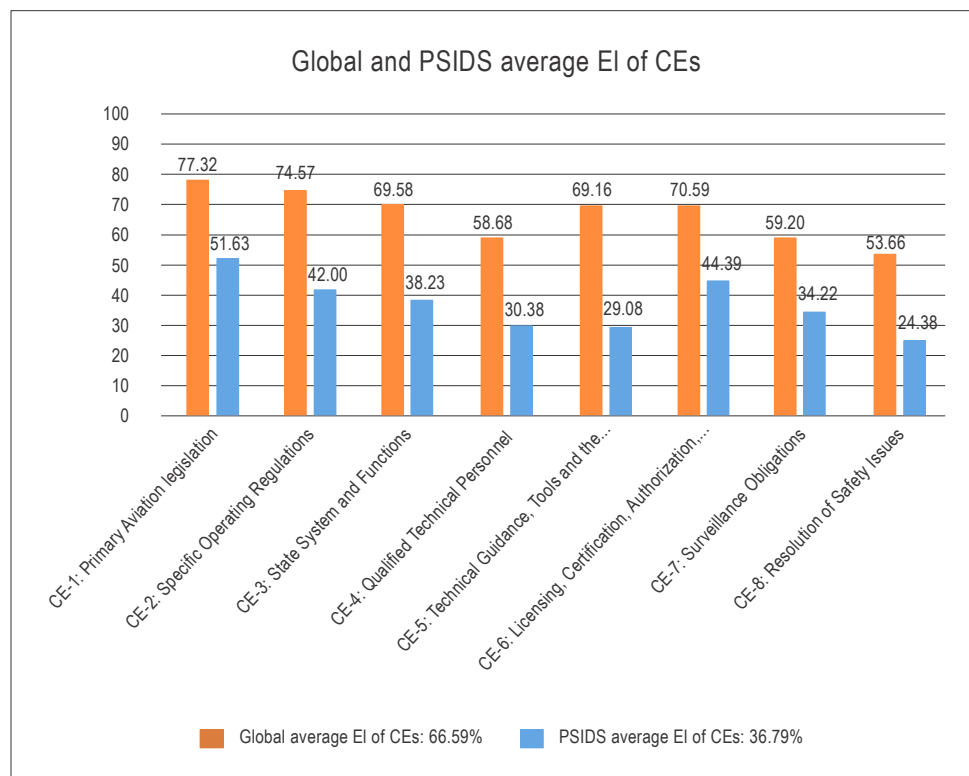


Figure 2-10. Global and PSIDS average EI by CEs

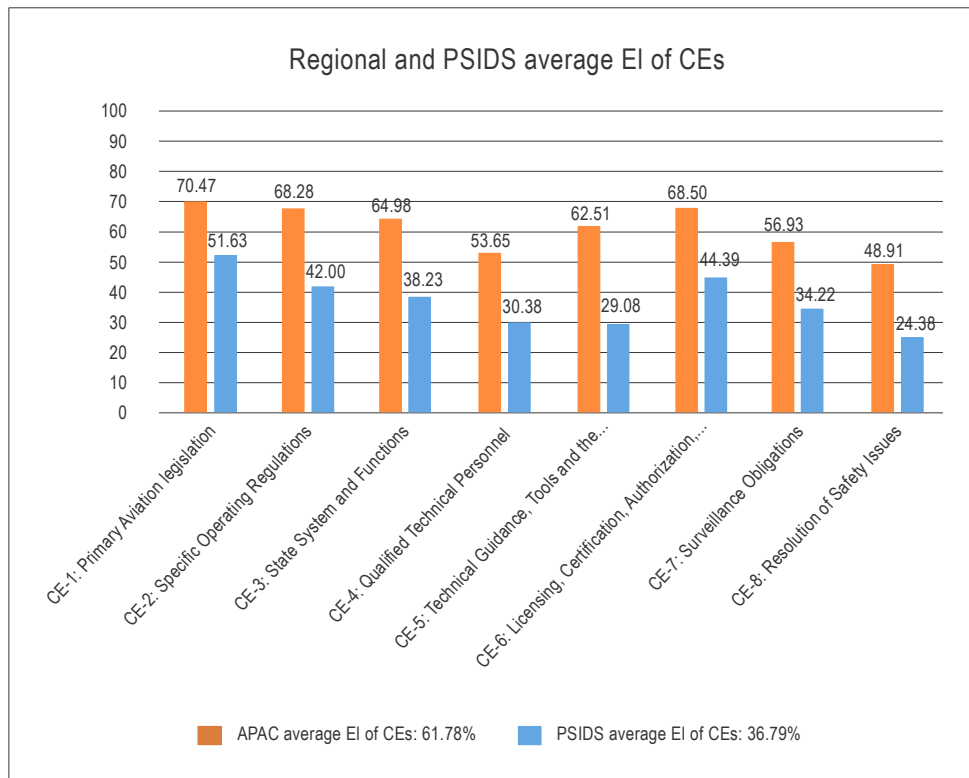


Figure 2-11. Regional and PSIDS average EI of CEs

2.1.6.3 PSIDS effective implementation (EI) of the critical elements (CEs) of a State Aviation Security Oversight System

2.1.6.3.1 Figure 2-12 below presents the average USAP EI of the eight CEs of a State's AVSEC oversight System as of 30 August 2019 for 12 of the 14 PSIDS. Tuvalu, which has just recently become an ICAO Member State, and has not yet been audited under the USAP-CMA. Niue, not being an ICAO Member State, is not subject to USAP activities.

2.1.6.3.2 Figure 2-12 also shows that the average USAP EI for these 12 States (52.77%) falls below global average (72.09%), APAC average (65.96%) and GAsEP target (65% by end 2020).

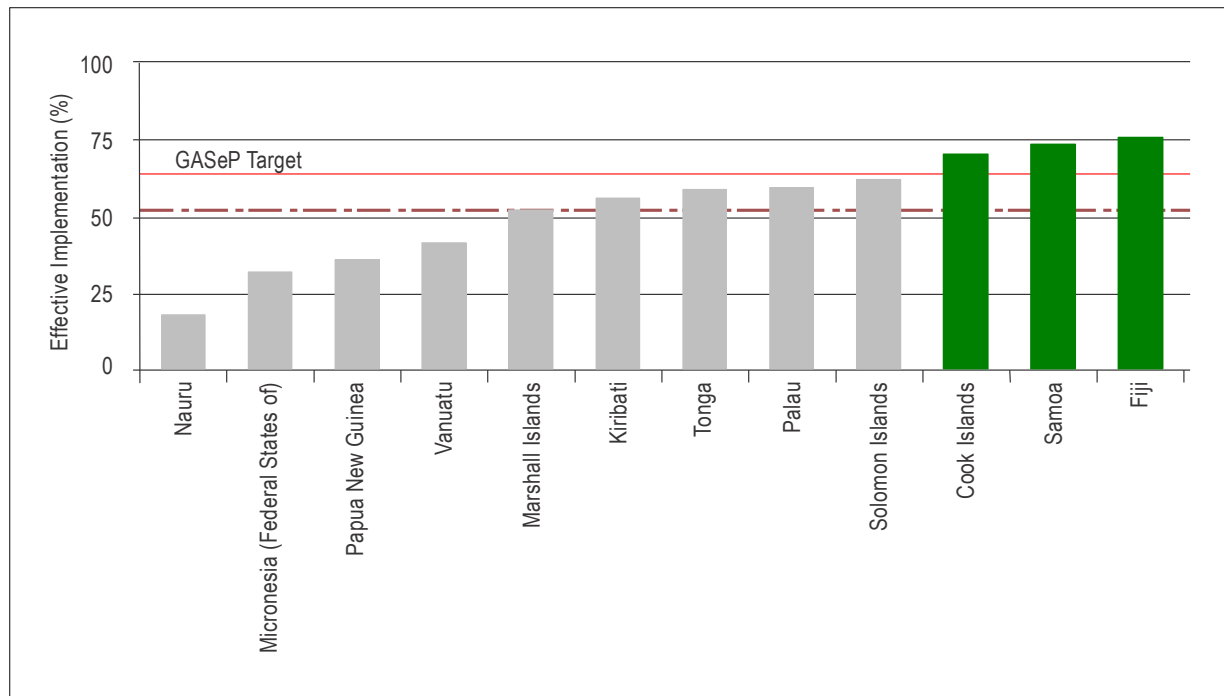


Figure 2-12. Average USAP EI for the eight CEs of a State Aviation Security Oversight System

2.1.6.3.3 Figure 2-13 below shows that the PSIDS average EI is below the overall global and APAC averages and the specific EI averages for each one of the eight CEs of a State's AVSEC oversight system. The worst results are for CE 7: Quality Control Obligations (31.73%), CE 8: Resolution of Security Concerns (37.84%) and CE 6: Certification and Approval Obligations (43.10%).

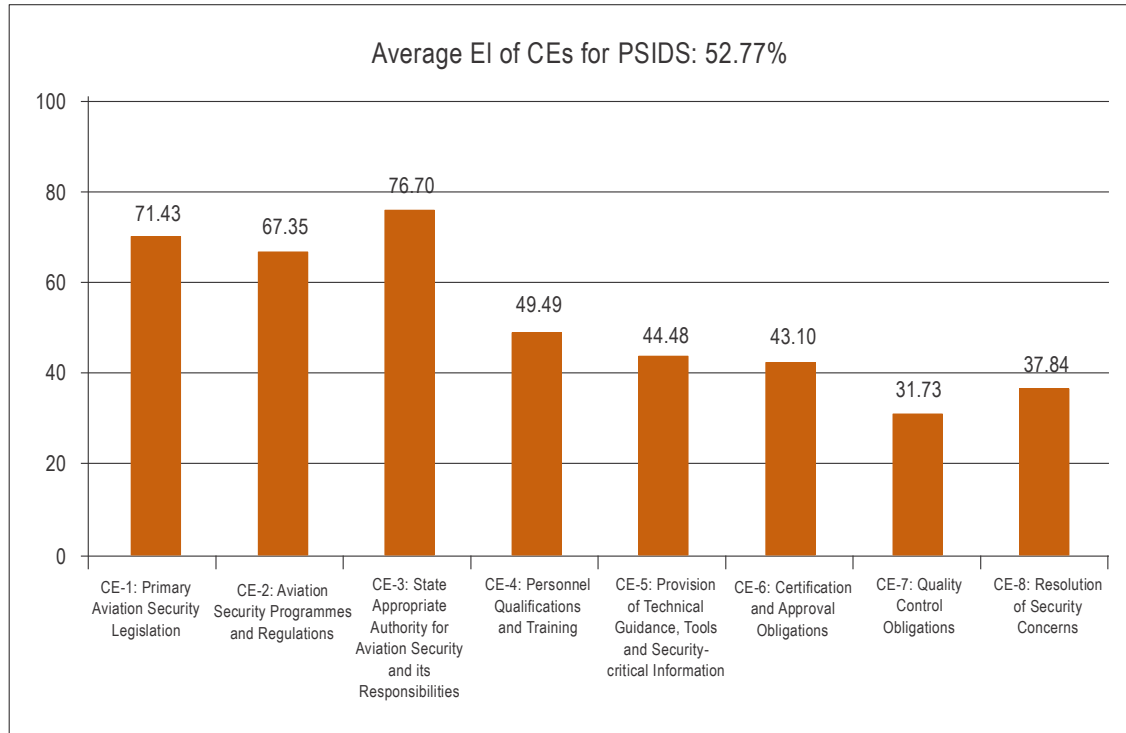


Figure 2-13. Average EI of CEs for PSIDS: 52.77%

2.1.6.3.4 The PSIDS average USAP EI by CE compared to global average can be observed in Figure 2-14:

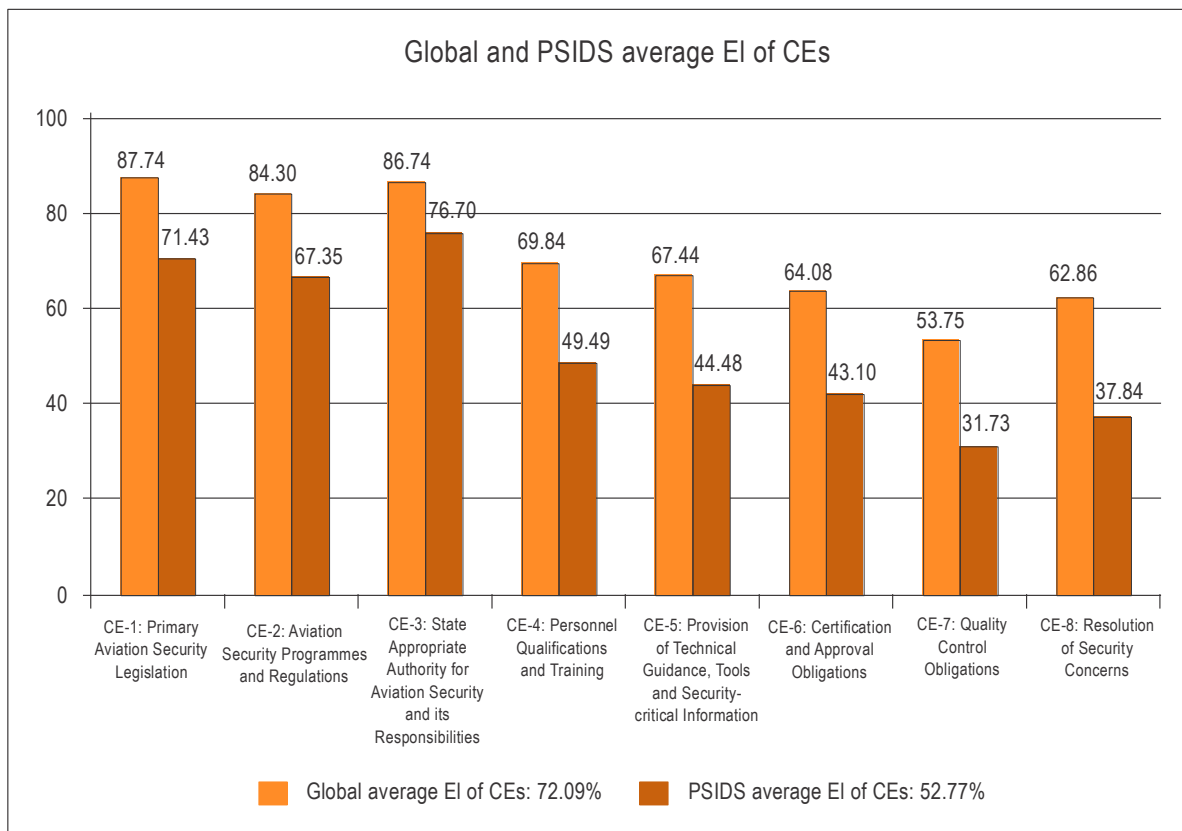


Figure 2-14. Global and PSIDS average EI of CEs

2.1.6.3.5 The PSIDS average USAP EI by CE compared to APAC average can be observed in Figure 2-15:

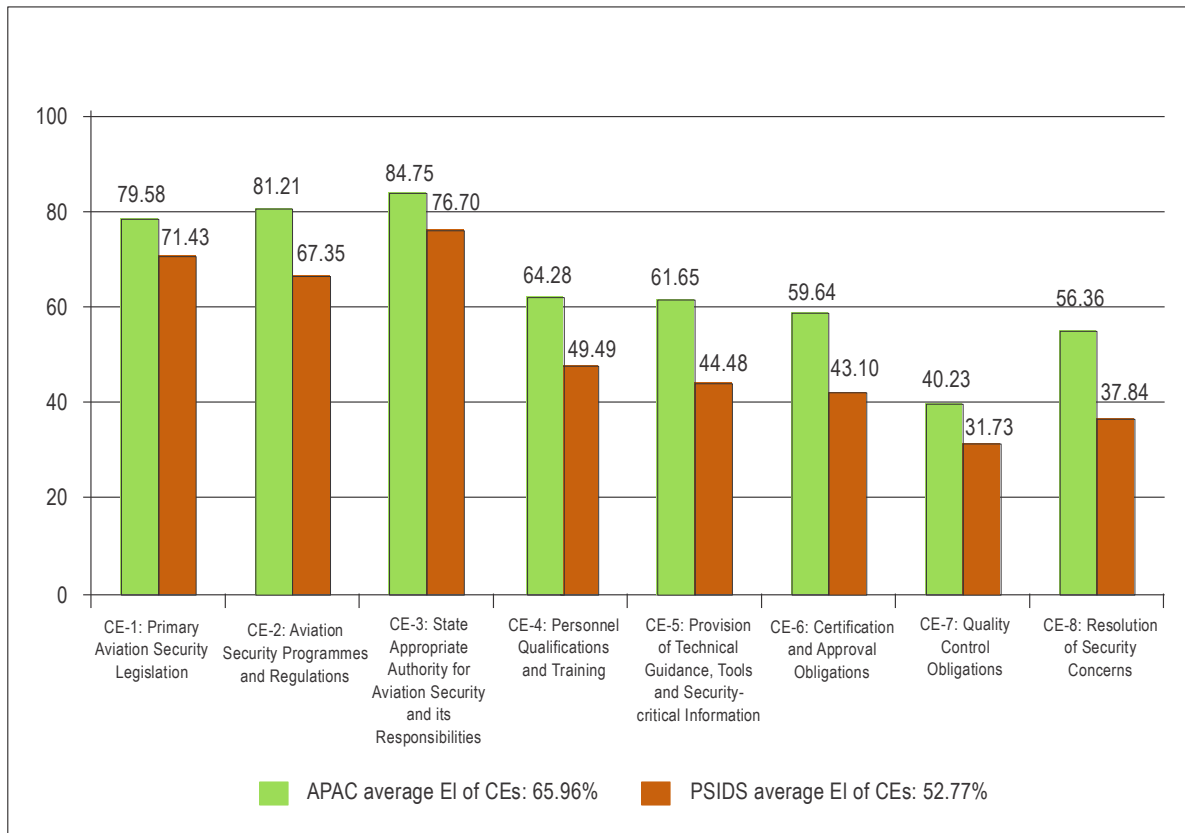


Figure 2-15. PSIDS average USAP EI by CE compared to APAC average

2.1.6.4 Actual or possible situations of significant safety concern or significant security concern

2.1.6.4.1 In addition to low EI scores, the PSIDS region is also characterized by a relatively high number of unresolved significant security concerns (SSeCs) and a relatively high risk of situations which could lead to significant safety concerns (SSCs).

2.1.6.4.2 With respect to AVSEC, as of 30 August 2019, there were eight unresolved SSeCs in three PSIDS⁴. This constitutes a very significant proportion of the SSeCs at global level (20 SSeCs remaining unresolved by seven States at global level). With respect to safety oversight, there is currently no unresolved SSC in the PSIDS. However, most PSIDS have not had recent USOAP. The risk of having an SSC situation in one or more of the PSIDS remains relatively high, particularly due to the poor resources and the resulting lack of effective certification, in particular with respect to the handling of non-compliances, as identified during USOAP activities.

4. The PSIDS with an unresolved SSeC are not named in this report. The existence of SSeCs is not broadly disseminated. It is communicated to States by ICAO via a restricted electronic bulletin (EB), with details posted on the ICAO USAP secure website.

2.2 AIR TRANSPORT IN THE PSIDS

2.2.1 Introduction

This section describes the air transport market in the PSIDS, and comprises five subsections: Scheduled seat capacity in the PSIDS, Main PSIDS air operators, Origin and destination traffic flows, Airfares for inter-PSIDS routes and ICAO forecast. This section also relies heavily on the aviation data and analysis provided by ATB, notably regarding the market shares, airline seat capacity, top routes and markets, as well as traffic forecasts. The data and analysis is taken from the ICAO Statistics Programme supplemented by Big Data Market Intelligence Data Transfer (MIDT) through the Global Air Transport Outlook (GATO) tool developed jointly between ICAO and the Interdisciplinary Centre for Mathematical and Computational Modelling (ICM) of the University of Warsaw. The evolution of scheduled seat capacity was used as an indicator of the air transport market evolution. The study did not include an analysis of information related to air cargo and total passenger flow evolution, due to the lack of primary and secondary sources. Using the same sources, Appendix A to this report contains air transport profiles for each one of the 14 PSIDS. These profiles provide information on the outbound one-way traffic statistics for each State, number of routes served and total frequency by market type, number of inter-PSIDS seats, market share by airline, origin airports, top 10 routes and top 10 destination airports.

2.2.2 Scheduled seat capacity in the PSIDS

2.2.2.1 As shown in Figure 2-16 below, the average annual growth rate of the scheduled seat capacity in the PSIDS in the last 10 years was 3.75% CAGR⁵. The capacity went from 10.6 to 15.1 million per year from 2009 to 2018. However, the PSIDS market only accounts for 0.27% of the global scheduled seat capacity. In comparison, the Caribbean Region⁶ accounts for 1% of the global scheduled seat capacity.

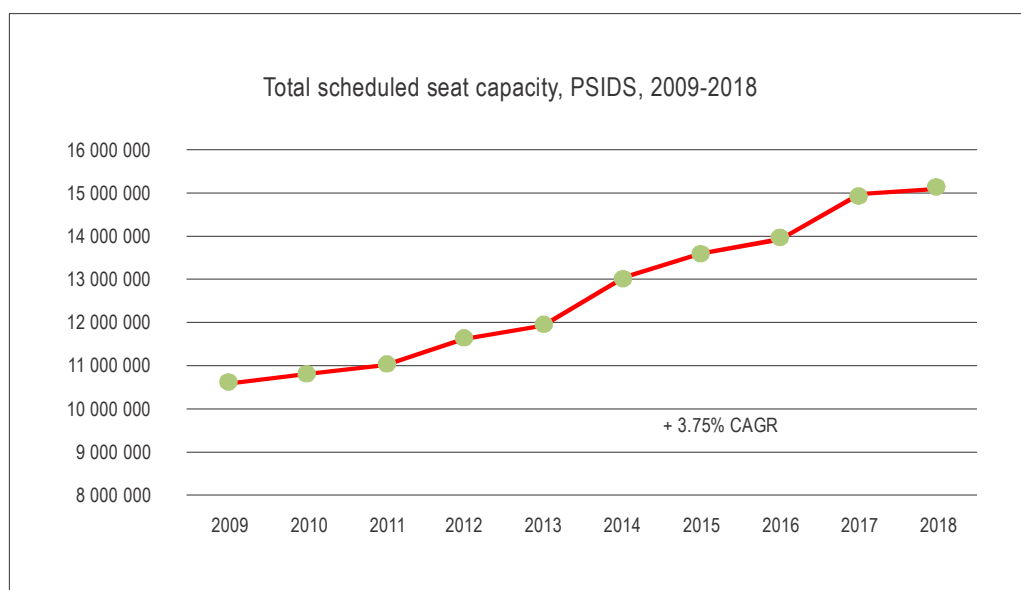


Figure 2-16. Total scheduled seat capacity, PSIDS, 2009-2018

5. CAGR means compound annual growth rate, which is a measure of growth over multiple time periods.

6. All islands State and Territories were included in the Caribbean Region with the exception of Puerto Rico. The Dominican Republic was included in the analysis. Without the Dominican Republic, the region accounts for 0.82% of the global scheduled seat capacity.

2.2.2.2 The scheduled seat capacity in each PSIDS has grown at different rates. As presented in Figure 2-17 below, the data show substantial growth in Kiribati, Nauru, Niue and Tuvalu; an above average growth in Marshall Islands, PNG, Samoa and Solomon Islands; a below average growth in Cook Islands, Fiji, Palau, Tonga and Vanuatu; and a slight decrease in FSM.

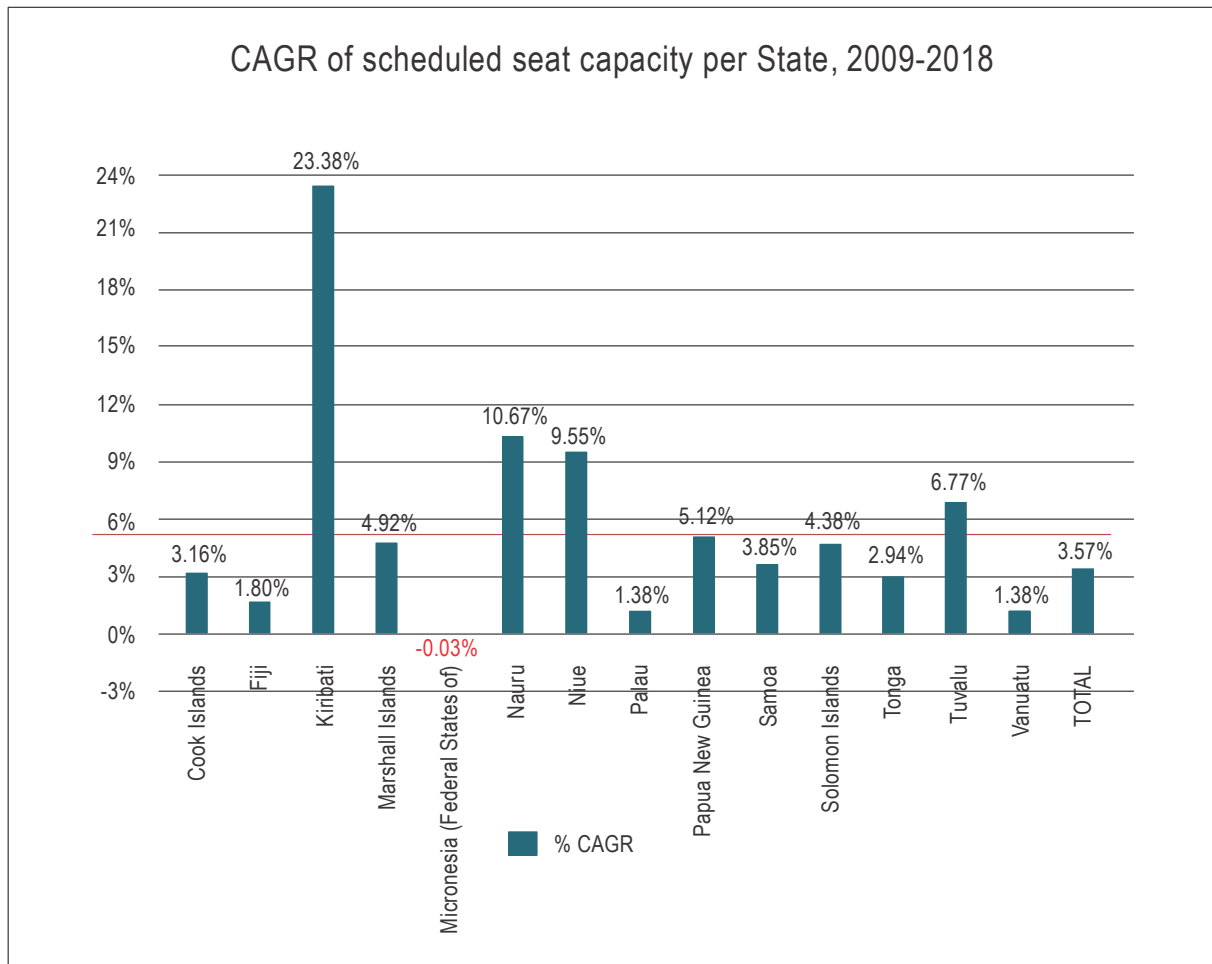


Figure 2-17. CAGR of scheduled seat capacity per State, 2009-2018

2.2.2.3 As shown in Figure 2-18 below, PNG (43%) and Fiji (25%) together make up around 68% of the total scheduled seat capacity in PSIDS, while half of them accounts for 90% of the market share: PNG, Fiji, Vanuatu (7%), Solomon Islands (around 5%), Cook Islands and Samoa (each 4%) and FSM (3%).

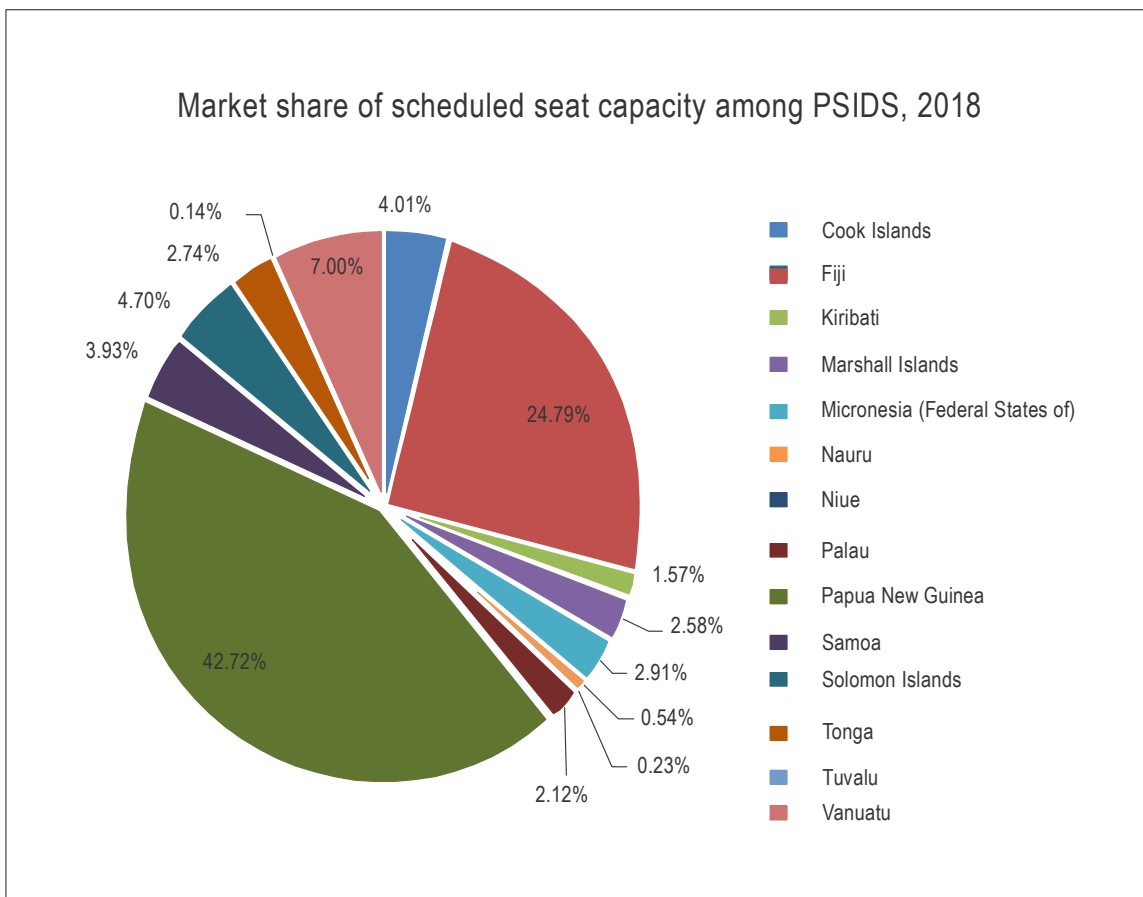


Figure 2-18. Market share of scheduled seat capacity among PSIDS, 2018

2.2.2.4 Figure 2-19 below presents the evolution of the total scheduled seat capacity for the various markets related to PSIDS:

- a) flights to/from non-PSIDS (i.e. between a PSIDS and a State which is not a PSIDS);
- b) domestic flights (i.e. from a location in a PSIDS to another location in the same PSIDS, or intra-PSIDS flights); and
- c) inter-PSIDS flights (i.e. between a PSIDS and another PSIDS).

2.2.2.5 The capacity has consistently grown in all three markets: flights from/to non-PSIDS (3.06% CAGR); PSIDS domestic flights (3.73% CAGR) and inter-PSIDS flights (5.39% CAGR). The inter-PSIDS capacity remains however very low compared to the two other markets, illustrating the poor level of connectivity between PSIDS.

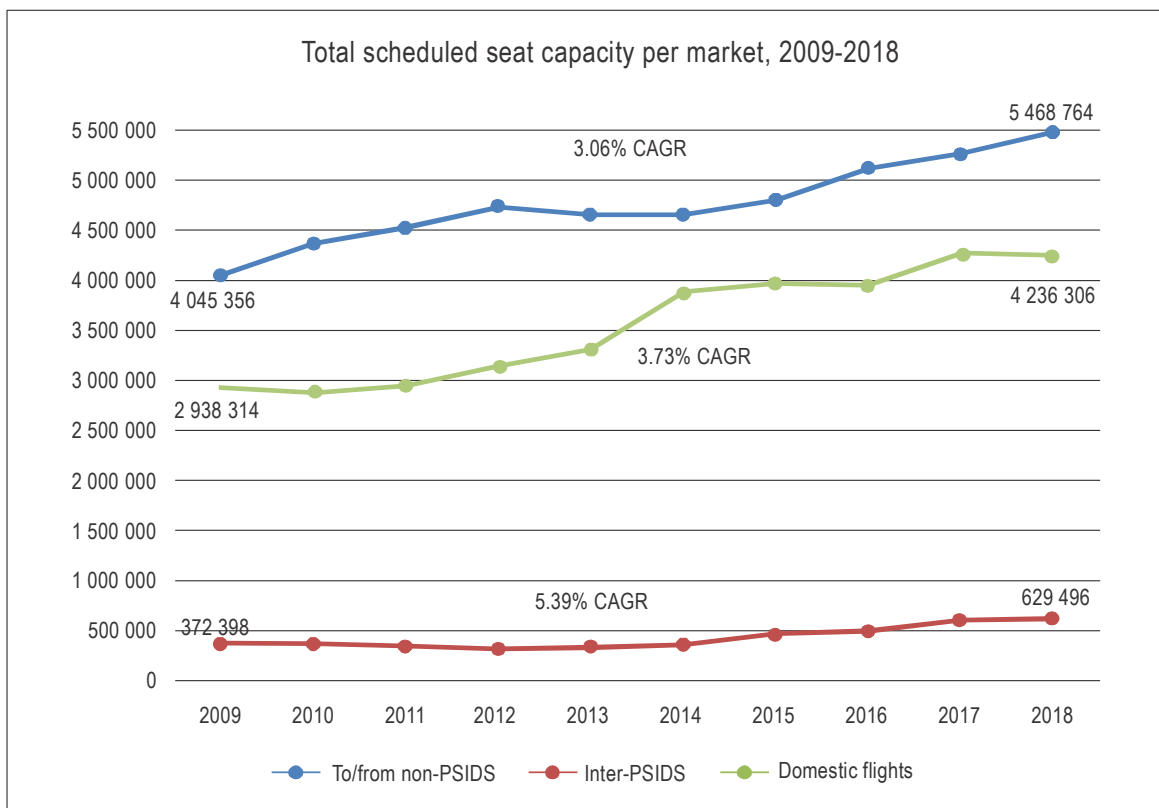


Figure 2-19. Total scheduled seat capacity per market, 2009-2018

2.2.3 Main PSIDS air operators

Table 2-1 below presents information related to the main PSIDS air operators, including the date of foundation, the States and territories served, the fleet and scheduled seats in 2018.

Table 2-1. Main PSIDS operators in 2018

<i>Air operator</i>	<i>Date of foundation</i>	<i>Ownership</i>	<i>States and territories served (2018)</i>	<i>Fleet in operation (2018)</i>	<i>Scheduled Seats (2018)</i>
Fiji Airways (Fiji)	1951	Mixed ownership corporation	Fiji (domestic), Australia, Hong Kong, Japan, Kiribati, New Zealand, Samoa, Singapore, Solomon Islands, Tonga, Tuvalu, United States, Vanuatu.	Airbus A330; Airbus A330-200; Airbus A330-300; ATR 72; ATR 42/ATR72, Boeing 737-700, Boeing 737MAX 8 passengers; DHvilld-Bombardier DHC 4 Caribou; DHvilld-Bombardier DHC6 T/Otter	2 304 115
Air Niugini (PNG)	1973	Mixed ownership corporation	PNG (domestic), Australia, China, Fiji, Hong Kong, Indonesia, Japan, Malaysia, Micronesia (Federal States of), Philippines, Singapore, Solomon Islands, Vanuatu.	Boeing 737-700; Boeing 737-800 (winglets); Boeing 737-800; Boeing 757; Boeing 767-300; DHvilld-Bombardier DHC8 Dsh 8; DHvilld-Bombardier DHC8-300 Dsh 8/8Q; Fokker 100; Fokker 70.	2 217 089
Air Vanuatu (Vanuatu)	1981	100% government-owned	Vanuatu (domestic), Australia, Fiji, New Caledonia, New Zealand.	ATR42/ATR72; Boeing 737-800; Boeing 737-300; BN 2a/BN-2b Islander; DHvilld-Bombardier DHC6 T/Otter.	565 700
Nauru Airlines (Nauru)	1969	100% government-owned	Australia, Fiji, Kiribati, Marshall Islands, Micronesia (Federal States of), Nauru, Solomon Islands.	Boeing 737	126 232
Solomon Airlines (Solomon)	1962	100% government-owned	Solomon Islands (domestic), Australia, Fiji, Kiribati.	Fokker 70; Airbus A320; Boeing 737-700; DHvilld-Bombardier DHC6 T/Otter; DHvilld-Bombardier DHC8 Dsh 8.	305 398

<i>Air operator</i>	<i>Date of foundation</i>	<i>Ownership</i>	<i>States and territories served (2018)</i>	<i>Fleet in operation (2018)</i>	<i>Scheduled Seats (2018)</i>
PNG Air Limited (PNG)	1987	Private-owned	PNG (domestic); Australia.	ATR42/ATR72; DHvilld-Bombardier DHC8 Dsh 8; ATR 72; DHvilld-Bombardier DHC8 Dsh 8.	1 266 548
Real Tonga (Tonga)	2013	100% government-owned	Tonga (domestic); Samoa.	Harbin Yunshuji Y12; Saab 340; Saab 340B; BN BN-2a/BN-2b Islander; BAe Jetstream 32; Xian Yunshuji Ma-60.	58 161
Air Rarotonga (Cook Islands)	1978	Private-owned	Cook Islands (domestic)	Saab 340; Embraer 110 Bandeirante.	99 085
Air Kiribati (Kiribati)	1995	100% government-owned	Kiribati (domestic); Tuvalu.	DHvilld-Bombardier DHC6 T/Otter; DHvilld-Bombardier DHC8-100 Dsh 8/8Q; Harbin Yunshuji Y12.	68 494
Air Marshall Islands (Marshall Islands)	1980	100% government-owned	Marshall Islands (domestic)	DHvilld-Bombardier DHC8-100 Dsh 8/8Q; Fairchild Dornier 228.	62 482
Samoa Airways (Samoa)	1959	100% government-owned	American Samoa, Australia, New Zealand.	Boeing 737-800; Airbus A320.	207 774
Palau Asia Pacific Air*	2014	Private-owned	Macau, Japan, Hong Kong.	Airbus A320	N/A
* Palau Asia Pacific Air succeeded Palau Pacific Airways, which ended operations in 2018.					
Source: Airlines websites and OAG.					

2.2.4 Origin and destination traffic flows

2.2.4.1 Overview

2.2.4.1.1 In 2017, the total traffic departing from the PSIDS was around 4.9 million passengers. Only 6% of that traffic was between PSIDS (inter-PSIDS flights). PNG and Fiji together accounted for almost 66% of the total traffic from PSIDS. As Table 2-2 below shows, while Fiji dominates the traffic between PSIDS (32%) and to 'non-PSIDS' (40%), PNG has 71% of the total domestic passengers among the PSIDS. About 80% of PNG traffic originated from domestic passengers.

Table 2-2. Total traffic departing from PSIDS

	<i>Total pax</i>	<i>% Total</i>	<i>Total pax domestic</i>	<i>% Total</i>	<i>Total pax inter-PSIDS</i>	<i>% Total</i>	<i>Total pax to non-PSIDS</i>	<i>% Total</i>
Papua New Guinea	2 129 824	42.78%	1 746 959	70.56%	33 165	10.11%	349 700	16.08%
Fiji	1 188 962	23.88%	203 851	8.23%	104 678	31.91%	880 433	40.48%
Vanuatu	348 398	7.00%	186 695	7.54%	22 787	6.95%	138 916	6.39%
Cook Islands	250 775	5.04%	69 807	2.82%	1 664	0.51%	179 304	8.24%
Samoa	248 299	4.99%	–	–	17 239	5.26%	231 060	10.62%
Solomon Islands	225 813	4.54%	135 706	5.48%	34 689	10.58%	55 418	2.55%
Palau	136 058	2.73%	–	–	6 499	1.98%	129 559	5.96%
Tonga	135 389	2.72%	8 112	0.33%	26 696	8.14%	100 581	4.62%
FSM	110 025	2.21%	39 552	1.60%	14 722	4.49%	55 751	2.56%
Kiribati	92 308	1.85%	66 142	2.67%	19 491	5.94%	6 675	0.31%
Marshall Islands	65 546	1.32%	18 872	0.76%	27 610	8.42%	19 064	0.88%
Nauru	26 466	0.53%	–	–	11 706	3.57%	14 760	0.68%
Niue	13 544	0.27%	–	–	228	0.07%	13 316	0.61%
Tuvalu	7 498	0.15%	–	–	6 845	2.09%	653	0.03%
TOTAL	4 978 905	100%	2 475 696	49.72%	328 019	6.59%	2 175 190	43.69%

2.2.4.1.2 Figures 2-20 and 2-21 below show the market share of PSIDS companies (air operators) in the overall PSIDS market, and specifically for international flights. In 2017, PSIDS airlines transported 75% of the total number of passengers flying from PSIDS, and about half of passengers flying from PSIDS on international flights.

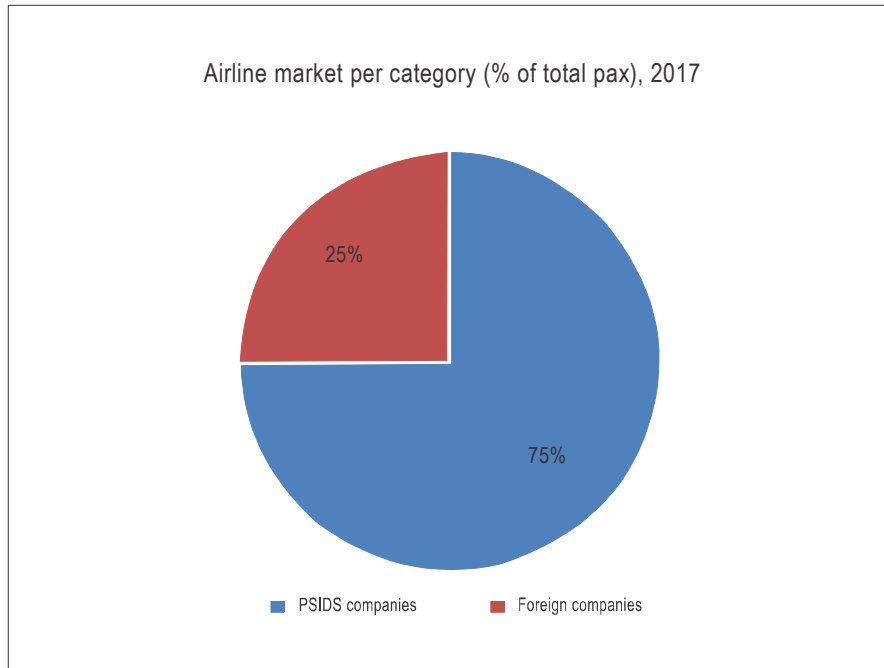


Figure 2-20. Airline market per category (% of total pax), 2017

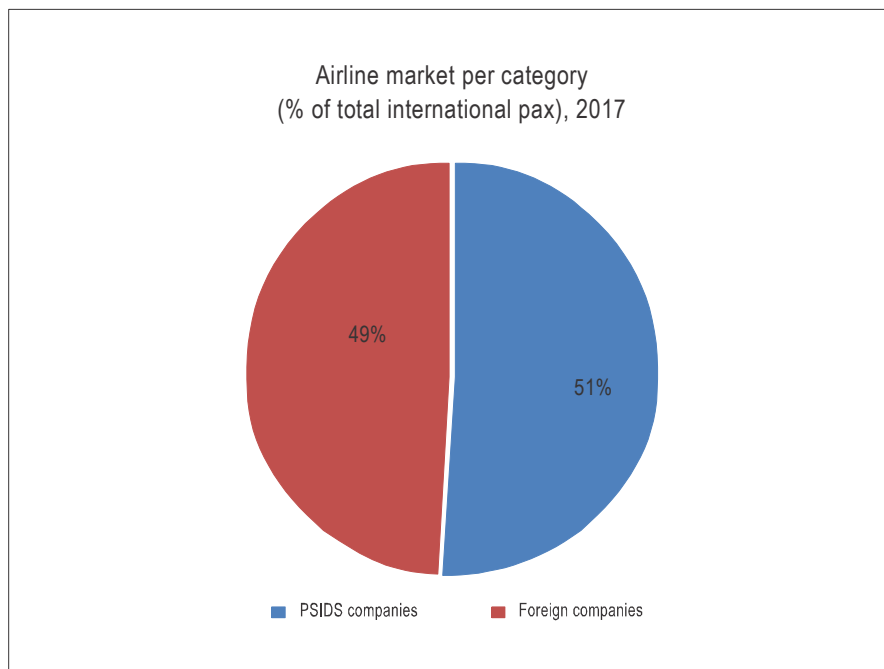


Figure 2-21. Airline market per category (% of total international pax), 2017

2.2.4.1.3 As Figures 2-22 and 2-23 below show, Air Niugini (PNG) transported the highest number of passengers in 2017, followed by Fiji Airways. Air Niugini had a significant part of the domestic market, while Fiji Airways had a significant part of the international market. Fiji Airways transported 29% of the total international passengers, followed by Air New Zealand with 16%.

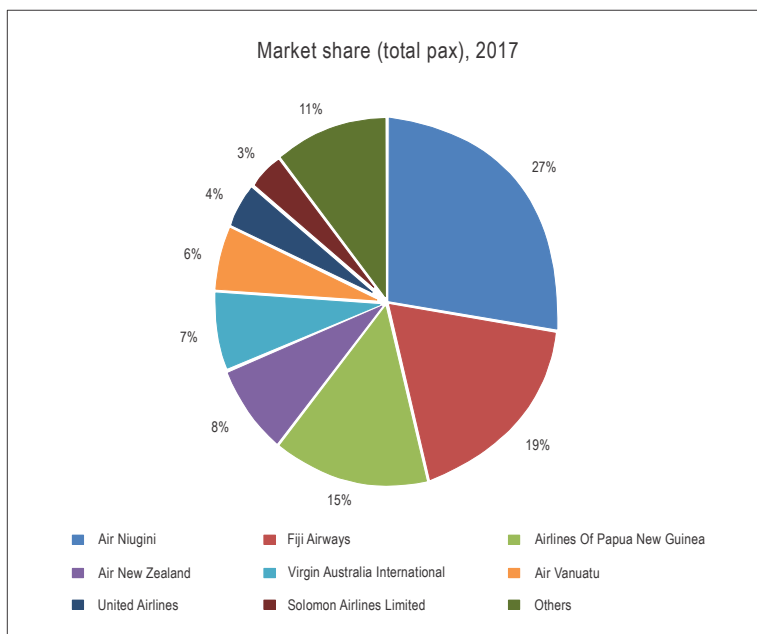


Figure 2-22. Market share (total pax), 2017

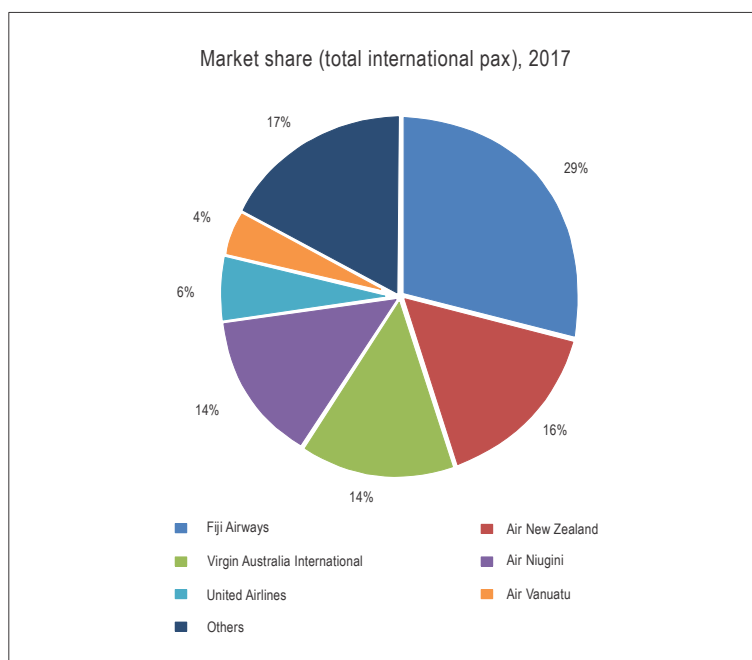


Figure 2-23. Market share (total international pax), 2017

2.2.4.2 Busiest airports in the PSIDS region

2.2.4.2.1 As shown in Figure 2-24 below, the top 20 busiest PSIDS origin airports accounted for 81% of the total number of passengers flying from PSIDS. Port Moresby (PNG) and Nadi (FJ) are by far the busiest airports, with almost 1 million departing passengers each in 2017.

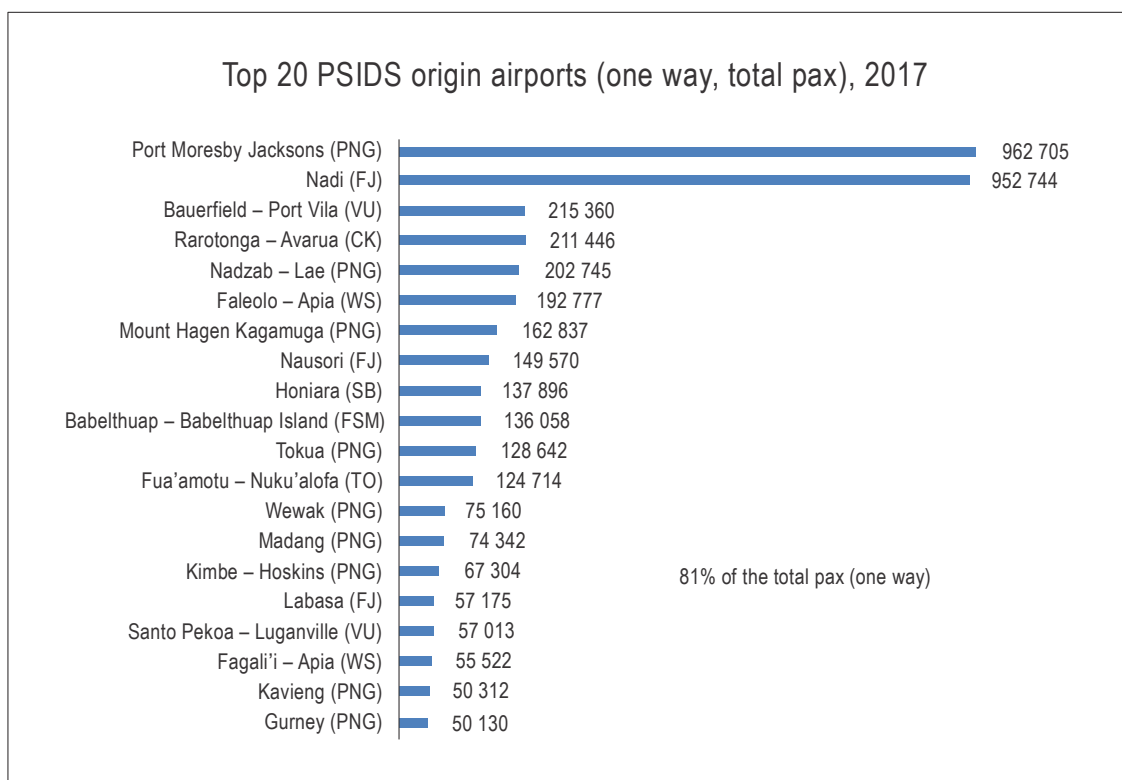


Figure 2-24. Top 20 PSIDS origin airports (one way, total pax), 2017

2.2.4.2.2 With respect to international traffic, as shown in Figure 2-25 below, Nadi (FJ) received the highest number of international passengers, while more than half the passengers in Port Moresby airport flew domestically. The top 20 busiest PSIDS airports accounted for 96% of the total international traffic from PSIDS.

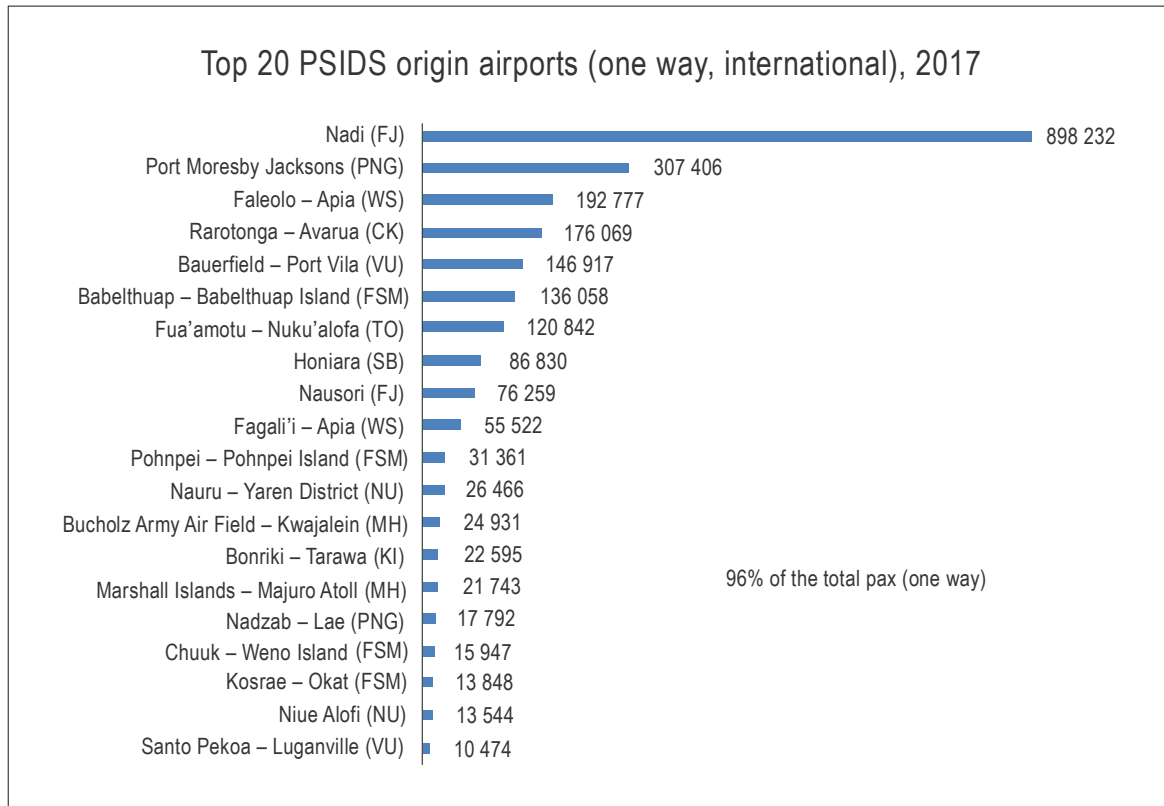


Figure 2-25. Top 20 PSIDS origin airports (one way, international), 2017

2.2.4.3 Busiest inter-PSIDS routes

2.2.4.3.1 In 2013, the top 10 inter-PSIDS routes made up 58% of total passengers in PSIDS routes. As Figure 2-26 below shows, 6 out of 10 routes included Nadi (Fiji) as origin or departure city, illustrating the role of Nadi airport as a major hub in the PSIDS region.

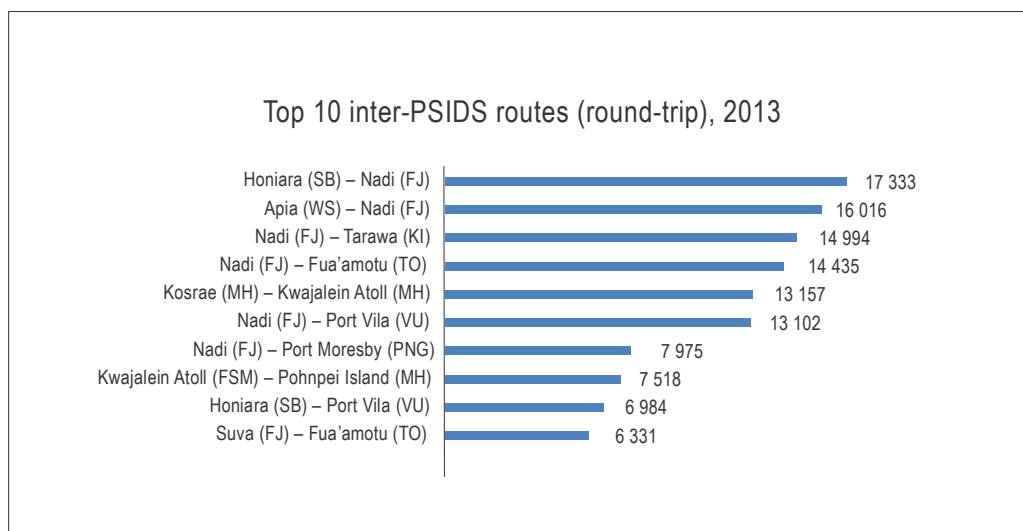


Figure 2-26. Top 10 inter-PSIDS routes (round-trip), 2013

2.2.4.3.2 Seven years later, in 2017, the top 10 inter-PSIDS routes made up 53% of total passengers in PSIDS routes. As shown in Figure 2-27 below, there were some changes in the top 10 routes. The Nadi (FJ) – Tarawa (KI) route took over as the busiest one amongst the PSIDS. Growth were registered for the following routes: Suva (FJ) – Fua'amotu (TO) (3.21% CAGR), Nadi (FJ) – Port Moresby (+11.40 CAGR), Honiara (SB) – Port Vila (VU) (8.56% CAGR), Nadi – Apia (+5.53% CAGR) and Kosrae (MF) – Kwajalein Atoll (MH) (5.08% CAGR). The route Honiara (SB) – Nadi (FJ) did not show any growth, while the Kwajalein Atoll (MF) – Pohnpei Island (MH) (-1.79% CAGR) and Nadi (FJ) – Port Vila (VU) (-0.95% CAGR) routes decreased in the 2013–2017 period.

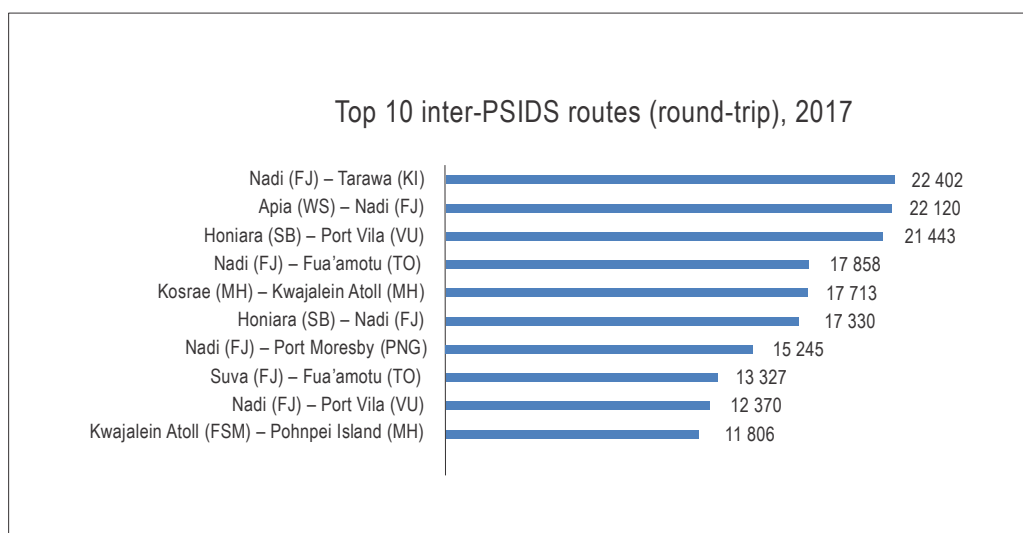


Figure 2-27. Top 10 inter-PSIDS routes (round-trip), 2017

2.2.4.4 Busiest from/to non-PSIDS routes

2.2.4.4.1 In 2013, the top 20 from/to non-PSIDS routes made up 83% of total passengers in non-PSIDS routes. As Figure 2-28 below shows, routes from/to Fiji accounted for 4 of the top 10 routes, placing the State as the main point of entry to the PSIDS.

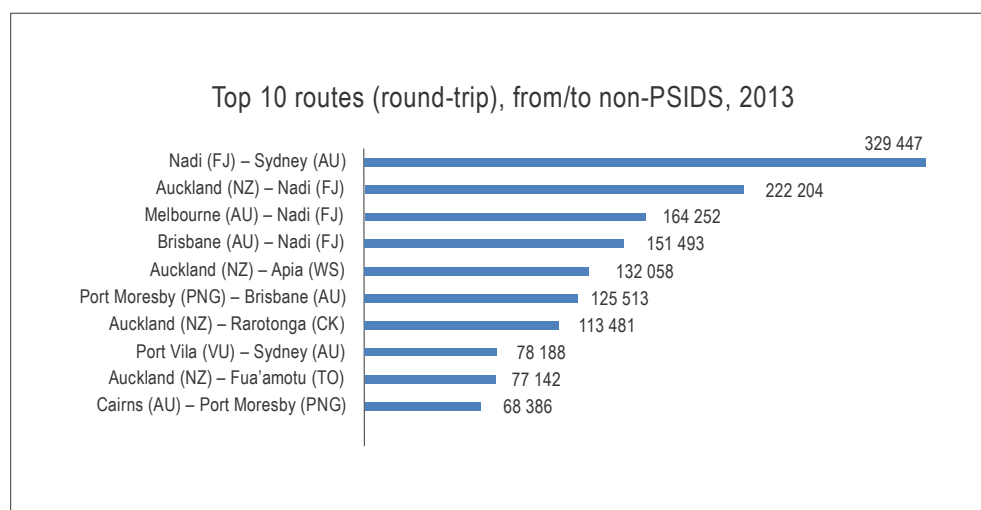


Figure 2-28. Top 10 routes (round-trip), from/to non-PSIDS, 2013

2.2.4.4.2 Seven years later, in 2017, the top 10 from/to non-PSIDS routes made up 77% of total passengers in international routes. As shown in Figure 2-29 below, there were few changes in the top 10 routes and some of them grew more than others. The Nadi – Christchurch route (+10% CAGR) figured for the first time in the top 10, while the routes to/from New Zealand grew considerably in the period 2013–2017: Auckland – Fua'amotu (5.50% CAGR), Rarotonga – Auckland (5.98% CAGR), Auckland – Nadi (4.62% CAGR) and Auckland – Apia (3.90% CAGR). The number of the passengers for the Port Vila – Sydney (-4.78% CAGR), Nadi – Brisbane (0% CAGR) and Nadi – Melbourne (0.2% CAGR) routes decreased or showed no growth in the same period. The Cairns – Port Moresby route no longer figured in the top 10.

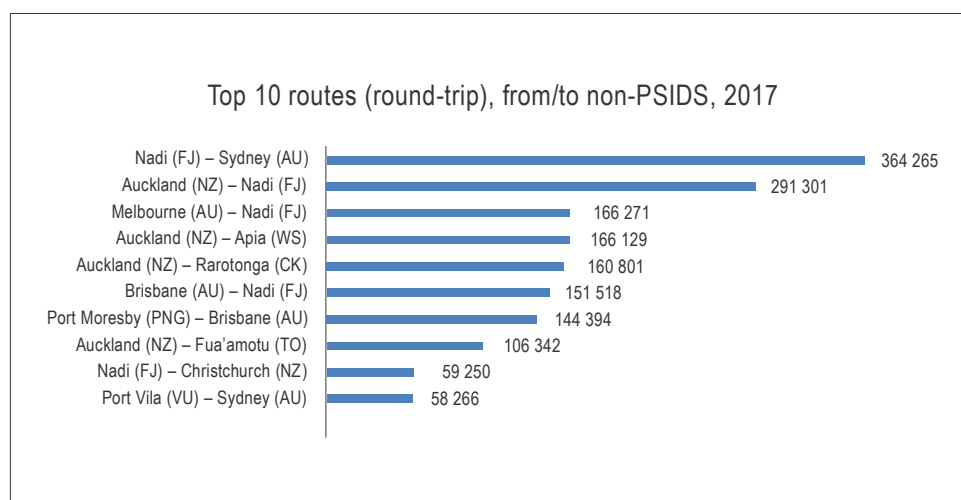


Figure 2-29. Top 10 routes (round-trip), from/to non-PSIDS, 2017

2.2.5 Airfares for inter-PSIDS routes in comparison with GDP per capita in the PSIDS

2.2.5.1 Table 2-3 below shows the typical airfare (in USD) for flights in the top 10 inter-PSIDS routes. These airfares were estimated using Google Flights for each round-trip flight and the airlines operating these routes in 2019. The information related to Gross Domestic Product (GDP) per capita originates from the World Bank database for 2017. The percentage means the proportion of the round-trip flight ticket in comparison with the GDP per capita (the GDP per capita 1 column refers to the GDP per capita of the first PSIDS mentioned, while the GDP per capita 2 refers to the second).

Table 2-3. Typical airfare (in USD) for flights in the top 10 inter-PSIDS routes

<i>Route</i>	<i>Distance (km)</i>	<i>Typical airfare (USD)</i>	<i>GDP per capita 1</i>	<i>%</i>	<i>GDP per capita 2</i>	<i>%</i>	<i>Airlines operating the route</i>
Nadi (FJ) – Tarawa (KI)	2 168	1 013	5 600	18%	1 700	60%	1 (Fiji Airways)
Apia (WS) – Nadi (FJ)	1 210	647	4 400	15%	5 600	12%	1 (Fiji Airways)
Honiara (SB) – Port Vila (VU)	1 289	400	2 150	19%	3 125	13%	2 (Solomon Islands and Air Niugini)
Nadi (FJ) – Fua'amotu (TO)	857	650	5 600	12%	3 950	16%	1 (Fiji Airways)
Kosrae (FM) – Kwajalein Atoll (MH)	646	572	3 187	18%	3 750	15%	1 (United Airlines)
Honiara (SB) – Nadi (FJ)	2 099	477	2 150	22%	5 600	9%	2 (Solomon Islands and Air Niugini)
Nadi (FJ) – Port Moresby (PG)	3 391	1 200	5 600	21%	2 600	46%	1 (Air Niugini)
Suva (FJ) – Fua'amotu (TO)	744	560	5 600	10%	3 950	14%	1 (Fiji Airways)
Nadi (FJ) – Port Vila (VU)	964	350	5 600	6%	3 125	11%	3 (Fiji Airways, Solomon Airlines, Air Vanuatu)
Kwajalein Atoll (MH) – Pohnpei Island (FM)	1 063	521	3 750	14%	3 187	16%	1 (United Airlines)
For reference, airfares for the three busiest “from/to non-PSIDS” routes are shown below:							
Nadi (FJ) – Sydney (AUS)	3 159	400					
Auckland (NZ) – Nadi (FJ)	2 135	547					
Auckland (NZ) – Fua'amotu (TO)	1 993	350					

2.2.5.2 The information presented above shows that airfares for routes between the PSIDS (inter-PSIDS flights) are generally high. Flights departing from New Zealand or Australia to PSIDS are cheaper (e.g. Nadi – Sydney (400 USD) and Auckland – Fua’amotu (350 USD)) than shorter, inter-PSIDS flights (e.g. Nadi – Fua’amotu (650 USD) and Nadi – Apia (647 USD)). A preliminary analysis would highlight that the lower expected load factor, the relatively low number of airlines flying the inter-PSIDS routes (in the top 10 PSIDS routes, seven are provided by only one airline) and the long distances are factors explaining the relatively high airfares. Such high airfares contribute to maintaining the demand low in two ways:

- a) passengers flying to PSIDS from other regions (tourists) are less prone to take flights from one of the PSIDS to another PSIDS, as frequency is low and airfares are higher than flights from their home countries to the PSIDS; and
- b) most PSIDS citizens cannot afford to travel from one PSIDS to another. For example, a round-trip flight from Nadi to Tarawa (Kiribati) can cost 18% of the annual income of a Fijian citizen and 60% of the annual income of a Kiribati citizen.

2.2.6 ICAO forecast for the 30-year period (2016–2045)

The ICAO forecast for international passengers flying from PSIDS shows a growth of 4.19% CAGR for the 2016–2045 period, with a stable load factor of around 70% as shown in Figure 2-30 below. This will result in the number of international passengers in PSIDS being multiplied by 3.5 in that period.

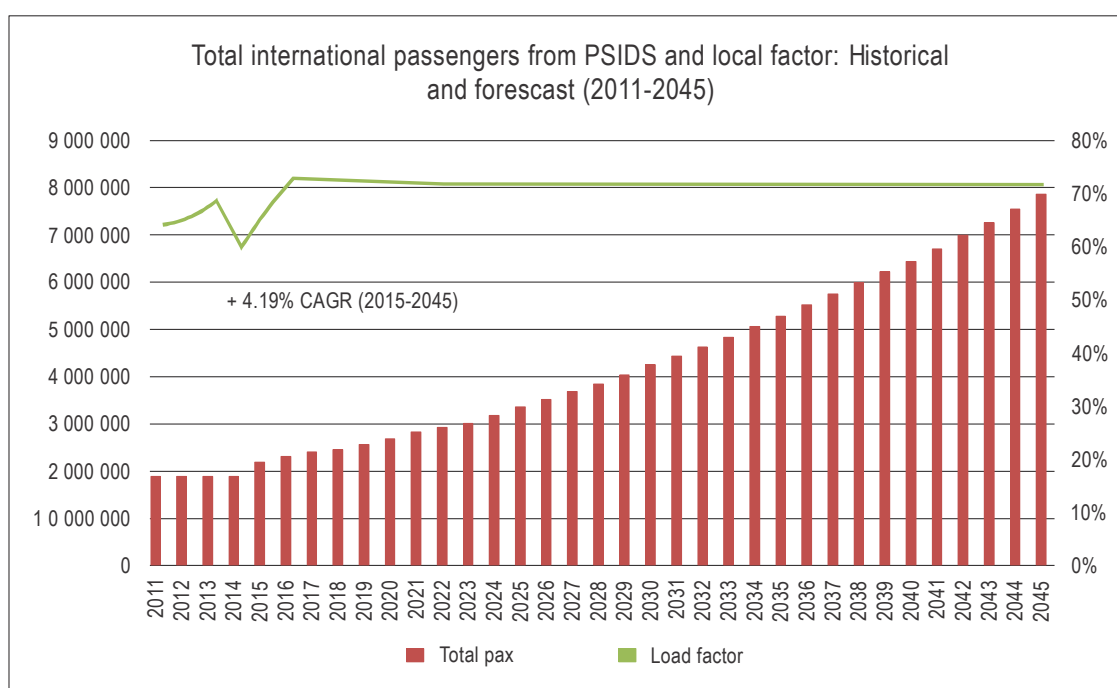


Figure 2-30. Total international passengers from PSIDS and local factor: Historical and forecast (2011-2045)

2.3 ASPECTS RELATED TO THE AVIATION LEGISLATION IN THE PSIDS

2.3.1 Overview of the situation in the PSIDS region

2.3.1.1 The analysis in this section focuses primarily upon the extent to which the current legislation of the States achieves satisfactory vesting of regulatory powers. It also aims at determining the extent to which the legal framework currently in place in the PSIDS enables the delegation of functions and authority to an RSOO/RSSOO as well as the adoption of operating regulations from another State, e.g. the New Zealand Civil Aviation Rules (NZ CARs). The study performed by Kim Murray for the Asian Development Bank, which is dated January 2014, has been used as one of the sources for this analysis.

2.3.1.2 An overview of the current situation in the PSIDS with respect to aviation legislation is shown in Table 2-4 below:

Table 2-4. Overview of the current situation in the PSIDS in terms of aviation legislation

<i>State</i>	<i>PICASST signature/ratification or accession</i>	<i>Basic Law</i>	<i>Regulations</i>
Cook Islands	15 November 2005	Civil Aviation Act 2004	NZ Rules
Fiji	N/A (Not a signatory)	Civil Aviation Act 1976 Civil Aviation Authority Act 1979 Civil Aviation (Reform) Act 1999	Air Navigation Regulations
Kiribati	7 August 2004 Ratified on 22 May 2006	Civil Aviation Act No. 8 of 2004	NZ Rules, 2005 and 2017
Marshall Islands	No	Civil Aviation Safety Act 1988 MIRC Title 12, Civil Aviation, 2014 revised edition	Partial adoption of FAR-based Regulations
Micronesia (Federal States of)	No	FSM Code, Title 20: Aeronautics	Some FAR-based Regulations (out of date and incomplete)
Nauru	25 June 2007	Civil Aviation Act No. 3 of 2011	Air Navigation Regulations
Niue	16 March 2007	Civil Aviation Act 1999	NZ Rules adopted under S.52 of Act
Palau	No	PNC Title 8, Aeronautics	Regulations 2002, Parts 1-11 based on FAR Parts (covering Annexes 1, 6 and 8) Part 19 covering Annex 14, Vol. I
Papua New Guinea	22 May 2006	Civil Aviation Act 2000 Civil Aviation (Amendment) Act 2010 Civil Aviation (Amendment) Act 2016	Civil Aviation Regulations 1975 (amended in 1978, 1982, 1984 and 1988)

<i>State</i>	<i>PICASST signature/ratification or accession</i>	<i>Basic Law</i>	<i>Regulations</i>
Samoa	7 August 2004 Ratified on 12 October 2004	Civil Aviation Act 1998 (as amended in 1999) Civil Aviation (Amendment) Act No. 7 of 2014, Act No. 5 of 2017	Civil Aviation Regulations 2000 (adoption of NZ Rules)
Solomon Islands	11 May 2005 Ratified on 20 June 2006	Civil Aviation Act No. 7 of 2008	Adoption of NZ Rules
Tonga	7 August 2004 Withdrew on 7 April 2006 and re-acceded on 24 August 2006	Civil Aviation Act No. 24 of 2014	Adoption of NZ Rules
Tuvalu	8 May 2008	Civil Aviation Act 2006 Civil Aviation (Amendment) Act 2014	No regulations in force
Vanuatu	7 August 2004 Ratified on 2 November 2005	Civil Aviation Act No. 16 of 1999 Civil Aviation (Amendment) Act No. 5 of 2005 Civil Aviation (Amendment) Act No. 30 of 2006 Pacific Islands Civil Aviation Treaty (Ratification) Act No. 24 of 2005	Numerous NZ Rules adopted by reference by Notice dated 21 July 2006

2.3.2 Review of PSIDS' national legal frameworks

2.3.2.1 Cook Islands

2.3.2.1.1 The Civil Aviation Act 2002 provides for the application of the provisions of the Chicago Convention and the promulgation of Civil Aviation Rules.

2.3.2.1.2 The Minister is responsible for the application of the provisions of the Convention and for making Ordinary Rules under Section 29. The Minister may delegate his functions to the Director of Civil Aviation under Section 21.

2.3.2.1.3 Section 39 provides for the adoption of rules of another contracting State by reference. Under the provisions of this section, Cook Islands has adopted the NZ CARs (with modifications) with effect from 1 April 2003.

2.3.2.1.4 Section 6(2)(b) provides that the Minister may in consultation with the Secretary and the Director contact one or more approved organizations for the provision of advice and recommendations to the Director for the grant or renewal of aviation documents.

2.3.2.2 *Micronesia (Federal States of) (FSM)*

2.3.2.2.1 In FSM, civil aviation is addressed by the FSM Code, Title 20: Aeronautics. The style and format of the aviation legislation follows those of the US Federal Aviation Regulations (FARs).

2.3.2.2.2 The FSM Code, Title 20, Chapter 2 (General Powers of the Secretary) confers on the Secretary to the Department of Transport and Communications various powers, duties and functions under Section 201, as follows:

The Secretary is empowered to perform such acts, to conduct such investigations, to issue and amend such orders, and to make and amend such general or special rules, regulations, and procedures, necessary to carry out the provisions of this title.

2.3.2.2.3 Chapter 3 to Title 20 makes provision for the organization of the Civil Aviation Authority (CAA) and the powers and duties of the Secretary. This chapter empowers the Secretary to organize the CAA as the Secretary sees fit. Section 305 sets out the powers of the Secretary in a similar manner to Section 201. Subsection 305(5) is significant as it empowers the Secretary to grant exemptions from any of the above rules and regulations in the public interest.

2.3.2.2.4 Section 307 provides that the Secretary's exercise of the rule making power is subject to the provisions of the FSM Code, Title 17 (Administrative Procedures) as well as of this title.

2.3.2.2.5 Section 309 to Chapter 3 (Delegation by the Secretary) is significant in the context of the present study. It provides as follows:

In exercising the powers and duties vested in him by this title, the Secretary may, subject to such regulations, supervision, and review as he may prescribe, delegate to any properly qualified private person, or to any employee or employees under the supervision of such person, any work, business, or function respecting (1) the examination, inspection and testing necessary to the issuance of certification under this title, and (2) the issuance of such certificates in accordance with standards established by him. The Secretary may establish the maximum fees which such private person may charge for their services and may rescind any delegation made by him ... at any time and for any reason which he deems appropriate.

2.3.2.2.6 However, as there does not appear to be a definition of "private person" in the legislation, the question is whether an RSOO/RSOO would be a private person for these purposes.

2.3.2.2.7 Title 20, Chapter 6 deals with the regulation of civil aviation. Section 601(1) provides for the Secretary to prescribe standards, rules and regulations to give effect to this title. In fulfilling that function, Section 601(2) provides that in prescribing such standards, rules and regulations, the Secretary shall do so consistently with the provisions of the Convention, its Annexes and all relevant standards issued by ICAO.

2.3.2.2.8 Section 608 to Chapter 6 should be noted, as it empowers the Secretary to amend, suspend or revoke any certificates issued under this title. The section does not appear to confer such power on any other person.

2.3.2.2.9 FSM has promulgated a set of Regulations (CARs), which appear to be based upon the Model Regulations published by the FAA some years ago. It has previously been noted that the CARs are incomplete and somewhat out of date. According to the website of the Civil Aviation Division, they would appear to cover in the main only Annexes 1, 6 and 8. There do not appear to be any regulations covering, for example, aerodromes and air navigation services. Furthermore, it will necessary to establish if there is a system in place to provide for timely updating of the legislation and regulations, to give effect to amendments to the Annexes and ICAO Procedures.

2.3.2.3 Fiji

2.3.2.3.1 The aviation legislation Fiji comprises the Civil Aviation Act 1976, the Civil Aviation Authority Act 1979, the Civil Aviation (Reform) Act 1999, the Air Navigation Regulations (ANRs), other regulations issued at ministerial level, and the Standards Document (issued by CAAF). The Standards Document contains the means of compliance with the legislation, and are the means by which the Civil Aviation Authority of Fiji (CAAF) can be satisfied as to the basis for the issue, renewal or maintenance of licences, certificates, approvals and other aviation documents.

2.3.2.3.2 Under Section 3(1) of the Civil Aviation Act 1976, the Minister has the power to make Regulations as may appear to the Minister to be requisite or expedient for carrying out the Convention and any Annex thereto relating to international standards and recommended practices.

2.3.2.3.3 The Civil Aviation Authority of Fiji was established under Part II, Section 3 of the Civil Aviation Authority Act 1979 and Part II provides for its governance and other such arrangements. The Act was amended by the Civil Aviation (Reform) Act 1999.

2.3.2.3.4 Part III (Administrative) provides for the appointment of a Chief Executive and confers the necessary powers on the Chief Executive, his officers and servants and authorised persons. An “authorised person” is defined in Section 2 (Interpretation) as “a person authorised by the Authority under Section 17(1)(b)”. Whilst the power of appointment does not specifically refer to any person other than an officer or employee of the Authority neither would it appear to exclude such an appointment.

2.3.2.3.5 Section 12A sets out the powers and functions of authorised persons including access to aircraft, aerodromes and other facilities and the power to conduct examinations enquiries and other investigations; and to take possession of documents and generally to exercise all the powers of the Authority as the regulator.

2.3.2.3.6 Part II also establishes several provisions relating to administrative functions including, in Section 13, protection from personal liability. Section 13(1) provides indemnity to the Authority, or any officer or servant thereof, for actions undertaken *bona fide* for the purposes of the Act. However, this protection would not appear to apply to persons other than officers and servants of the Authority.

2.3.2.3.7 Section 17(1)(b) referred to above provides that the Authority shall have the power to authorise in writing suitably qualified persons to be authorised persons to carry out any work or to perform any act in furtherance of its powers or to perform its functions or powers.

2.3.2.3.8 There does not appear to be any specific provisions in the legislation regarding delegation of powers to qualified persons or entities.

2.3.2.4 Kiribati

2.3.2.4.1 Until recently Civil Aviation in Kiribati was governed by the Civil Aviation Act No. 8 of 2004. However, it is understood that Kiribati has recently enacted new primary aviation legislation.

2.3.2.4.2 Under Section 40 of the above Act the Minister is empowered to make regulations by adoption based on the rules of another contracting State. The Minister has done so by adopting the New Zealand Rules in 2005 (in part) and in 2017 (as to the remaining rules).

2.3.2.5 Marshall Islands

2.3.2.5.1 Civil Aviation in the Marshall Islands is governed by the Civil Aviation Safety Act 1988. This Act constitutes Title 12, *Civil Aviation*, under the Marshall Islands Republic Code, Chapter 1. As in FSM, the style and format of the aviation legislation follows those of the FARs.

2.3.2.5.2 Part II (Organization of Directorate) provides in Section 103 for the creation of a Civil Aviation Directorate, headed by a Director of Civil Aviation who is appointed by the Minister. Under subsection (5) the responsibilities of the Director included responsibility for establishing, maintaining, managing or operating facilities at commercial airports. However, this latter responsibility appears now to vest in the RMI Ports Authority as a result of the enactment of the Ports Authority Act 2003.

2.3.2.5.3 Part III of the Act provides for the administration of the Directorate; and Section 107 provides for the Director with the approval of the Minister to use other agencies of the Republic. In the context of this project, Section 109 (Authorization to contract) is of more interest as it provides as follows:

The director is hereby authorised with the approval of the Minister and subject to available appropriations and in furtherance of the proper exercise of his powers and duties under this Act, to contract or otherwise arrange for the services of private persons and private, public or governmental organizations.

2.3.2.5.4 The most significant section in the context of this project is Section 111 (Delegation of functions) which provides as follows:

With the approval of the Minister the Director is authorised to delegate any of his powers and duties to any properly qualified private person, subject to such regulation, supervision and review as may be prescribed.

2.3.2.5.5 The above two sections taken together would appear to provide a clear basis for the delegation of powers and functions to an RSOO/RSSOO. The Act does not contain any definition of "private person".

2.3.2.5.6 Part IV to the Act sets out general powers and duties of the Director. Under Section 127, the Director has power to make and amend regulations and rules. It appears that a modified version of the US Federal Aviation Regulations (FARs) have been adopted but only in part in relation primarily to Annexes 1, 6 and 8. However, these have not been updated by the Marshall Islands for a long time.

2.3.2.6 Nauru

2.3.2.6.1 Civil aviation in Nauru is governed by the provisions of the Civil Aviation Act No. 3 of 2011. The Act came into force on 25 February 2011.

2.3.2.6.2 Part 3, Section 11 provides for the establishment of the Civil Aviation Authority. Section 12 sets out its object and functions.

2.3.2.6.3 Part 4 (Director of Civil Aviation) makes provision for the appointment of the Director and prescribes the Director's powers and functions, the principal one (Section 26) being to take appropriate action in the public interest to enforce this Act, including carrying out inspections and audits.

2.3.2.6.4 Part 13 of the Act contains powers of delegation. Section 168 provides that the Authority may delegate any of its powers or functions under this Act to: (a) a member of staff of the Authority; or (b) another person with the written consent of the Minister. Section 169 is more relevant in that it provides that "the Director may with the consent of the Minister delegate any of the Director's powers and functions under this Act, except the power to impose sanctions in relation to an aviation document".

2.3.2.6.5 Part 14 provides for the making of subordinate legislation. Section 171 provides for the Cabinet to make regulations under this Act prescribing matters required or permitted by this Act to be prescribed or necessary or convenient to give effect to this Act.

2.3.2.6.6 Section 175 provides that the Minister may make a rule described as an ordinary rule for the following: (a) the implementation of Nauru's obligations under the Convention; (b) the provision of services under this Act; (c) any matter incidental to the functions of the Authority, the Director or the Minister under this Act; (d) any other matter necessary or convenient for the operation of the Civil Aviation system.

2.3.2.6.7 Section 177 prescribes a procedure for making ordinary rules by adoption and provides as follows: "The Minister may make an ordinary rule by adopting with or without modification a foreign rule as in force or existing (a) at a specified time or (b) from time to time." An adopted rule remains in force even if the foreign rule ceases to have force in the country of its origin unless it is repealed in Nauru. An adopted rule must be published in the Gazette with an adoption statement.

2.3.2.7 Niue

The civil aviation legislation in Niue is the Civil Aviation Act 1999 (Act 1999/250). It came into force on 15 August 1999. Under Section 52 to the Act the New Zealand Rules are made applicable. By an agreement made on 3 May 2007 between the Director of Civil Aviation and the Civil Aviation Authority of New Zealand, the latter agreed to provide assistance to the Director in the oversight of civil aviation in Niue in accordance with the New Zealand Rules.

2.3.2.8 Palau

2.3.2.8.1 Civil aviation in Palau is addressed by Title 8, Aeronautics, of the National Code. Chapter 1 deals with the general powers of the Minister to perform acts and issue and amend orders, and promulgate and amend reasonable rules, regulations and procedures regarding largely the establishment and operation of airports.

2.3.2.8.2 Chapter 2 provides for the organization of administration by the establishment of the National Aviation Administration headed by an administrator who is authorized to execute all the powers and duties to give effect to the provisions of the Act. The Administrator is authorized to appoint officers and other persons to the CAA.

2.3.2.8.3 Section 301 of Chapter 3 authorises the Administrator to use in the exercise of his powers other Palau government agencies.

2.3.2.8.4 Section 303 provides that the Administrator may subject to the National Code Title 6 in exercise of his powers and duties contract or arrange for the services of any person or governmental organization. It appears that this provision could permit the Administrator to engage the services of PASO or a similar organization.

2.3.2.8.5 Chapter 4 to the Code empowers the Administrator to promulgate air traffic regulations and orders. Chapter 6 empowers the Administrator to promulgate rules, regulations and procedures for safety.

2.3.2.8.6 According to the ICAO USOAP Report of 2010 Palau has promulgated regulations in 2002 (parts 1 to 11) to cover broadly Annexes 1, 6 and 8. In 2006, part 19 regulations were promulgated to implement Annex 14, Volume I. Regulations are promulgated under the provisions of the Administrative Procedures Act by the Administrator and approved (signed off) by the President. The regulations follow the Model Civil Aviation Regulations (MCARs) developed by the FAA.

2.3.2.8.7 However, it appears that these regulations, after their initial adoption, have not been officially promulgated and published. In addition, they have not been updated after their initial adoption.

2.3.2.9 Papua New Guinea

2.3.2.9.1 Civil Aviation in Papua New Guinea (PNG) is governed by the Civil Aviation Act 2000 (No. 20 of 2000) as amended by the Civil Aviation (Amendment) Act 2010 (No. 7 of 2010) and by the Civil Aviation (Amendment) Act 2016 (No. 33 of 2016). Among the primary objects of the Act, as stated in Section 2 to Part I, is the establishment of “rules of operation and divisions of responsibility within the Papua New Guinea civil aviation system in order to promote aviation safety and security at a reasonable cost”.

2.3.2.9.2 Part II to the Act contains the functions, powers and duties of the Minister, Departmental Head, Authority and the Director.

2.3.2.9.3 Under Section 8, the principal functions of the Minister are prescribed and include ensuring that PNG's obligations under international civil aviation agreements are implemented. Furthermore, the Minister also has the function to “enter into international agreements with any person, government or international organizations in relation to matters pertaining to civil aviation and meteorology”.

2.3.2.9.4 Subsections (3) and (4) to Section 8 are of significance in relation to the role and functions of PASO or any other regional organization. These subsections provide as follows, respectively:

The Head of State, acting on advice, may, by regulation, publish the whole or any part of an international agreement entered into under subsection 2(c), and the whole or any part of any treaty pertaining to civil aviation entered into by Papua New Guinea under Section 117 of the Constitution and on the making of that regulation, the international agreement or that treaty, or part so published as the case may be, shall, except to the extent of any inconsistency with this Act have the force of law as if contained in this Act.

Where an international agreement or treaty or part of an international agreement or treaty published in accordance with subsection (3) provides for the exercise by some person or international organization, other than those authorised by or under this Act, of any power or function under this Act a reference in this Act to a person or an officer or authority of Papua New Guinea shall be read, as appropriate, as a reference to the relevant person or international organization specified in the document so published.

2.3.2.9.5 Section 11(2) provides that the principal functions of the Civil Aviation Safety Authority (CASA) include:

- a) developing, establishing and promulgating safety and security standards relating to entry into the civil aviation system;
- b) monitoring adherence to safety and security standards within the civil aviation system;
- c) conducting comprehensive aviation industry surveillance on an individual and industry-wide basis;

together with all the other functions to be expected of a fully functional safety regulatory authority.

2.3.2.9.6 The service provision functions previously performed by CASA were removed by the 2010 Amendment Act.

2.3.2.9.7 CASA is formally re-established under amended Section 18 to the Act as a body corporate. Section 37 provides for the appointment of a Director of Civil Aviation who is the Chief Executive of CASA. Section 42 provides for the delegation of CASA's functions or powers to the Director and employees of CASA. Section 43 provides for the delegation of the Director's powers and functions to any employee of CASA.

2.3.2.9.8 Section 44 is a key section and provides for the delegation of CASA's or the Director's functions or powers to persons outside CASA. The section provides as follows:

- "a) Subject to this section CASA may, by writing under the hand of the Chairman, delegate to a person who is not an employee of CASA all or any of its functions or powers under this Act or any other Act.
- b) Subject to this section the Director may, by writing under his hand, delegate to a person who is not an employee of CASA any of his functions or powers under this Act or any other Act other than:
 - 1) the power under section 17 to revoke aviation documents; or
 - 2) the power under section 17 to suspend or revoke aviation documents.
- c) No delegation shall be made under this section except with the written consent of the Minister."

2.3.2.9.9 Part VI to the Act deals with Rules. Section 69 provides for the Minister to make ordinary rules for, *inter alia*, implementation of the Convention; and Section 70 provides for the making of rules relating to safety and security. Under Section 73, the Director has power to make emergency rules.

2.3.2.9.10 Section 78(1) is quite significant as it makes provision for incorporation by reference into a rule made by the Minister or the Director of "standards, requirements or recommended practices of international aviation organizations". Furthermore, Section 78(1) subsection (b) provides for the incorporation by reference of standards, requirements or rules prescribed under law by any other contracting State of ICAO. Any material incorporated by reference shall be deemed to be part of the rule.

2.3.2.9.11 Finally, Section 314 provides that, for the purposes of Sections 69 to 73, regulations and rules made thereunder may adopt regulations, rules or orders applying to the regulation of civil aviation matters in a contracting State ("foreign rules").

2.3.2.10 Samoa

2.3.2.10.1 In Samoa, civil aviation is governed by the Civil Aviation Act 1998 (Act No. 4 1998).

2.3.2.10.2 Part I to the Act contains the functions, powers and duties of participants in the civil aviation system, including the Minister and the Director of Civil Aviation. Part III to the Act deals with rulemaking; and Part XIII with the adoption of foreign regulations and codes. The structure of the Act appears to be like that of New Zealand.

2.3.2.10.3 Section 5(1) provides that, for all purposes including international convention obligations of Samoa, the Ministry of Transport shall be the Civil Aviation Authority of Samoa.

2.3.2.10.4 Section 6 contains the functions of the Minister. In broad terms, the principal function shall be to promote safety in civil aviation and to ensure that Samoa's obligations under international agreements are implemented. In specific terms the Minister's functions are detailed in Section 6(2) and include:

- "a) to administer Samoa's participation in the Convention and any other international aviation convention, agreement or understanding to which the government of Samoa is a party;
- b) to establish procedures relating to entry into the Samoa civil aviation system and to exercise control over that entry through the granting of aviation documents;
- c) to monitor adherence to safety and security standards within the civil aviation system."

2.3.2.10.5 Section 7 provides that the Chief Executive (to the Ministry) may exercise those Ministerial functions which are delegated to the Chief Executive by the Minister under Section 15.

2.3.2.10.6 Section 8(1) provides for the appointment of a Director of Civil Aviation by the Public Service Commission under the Public Service Act 2004. Under subsection (2) the Director shall have and may exercise such functions, powers and duties as maybe conferred or imposed on the Director by this Act, and as may be delegated under Section 15.

2.3.2.10.7 In the context of this study, Section 8(3) is of interest. This provides that subject to this Act, the Director shall in the course of performing his functions or exercising his powers consider whether these could be more efficiently or effectively delegated or contracted out to appropriate organizations or persons selected following a competitive process.

2.3.2.10.8 The Act contains all the usual functions and powers of an oversight authority including, inspections and surveillance. However, under Section 11, the power to revoke an aviation document is conferred upon the Minister on the recommendation of the Director.

2.3.2.10.9 Section 15 provides that the Minister may delegate to any employee of the Ministry (including the Director) any of the functions, powers or duties of the Minister under this Act, other than the power under Section 13 to revoke aviation documents.

2.3.2.10.10 Section 16 is of more significance in the context of this study, as it provides that the Minister may from time to time, in writing, either generally or particularly, delegate to such persons, not being employees of the Ministry, as the Minister specifies any of the Minister's functions or powers under this Act other than, for example, (a) the power under this section to delegate functions and powers and (b) the power to revoke and suspend aviation documents.

2.3.2.10.11 Section 16(2) further provides that "subject to any general or special directions given or imposed by the Minister, any person to whom any functions or powers are delegated under this section may perform those functions and exercise those powers in the same manner and with the same effects as if they had been conferred or imposed upon the person directly and not by delegation".

2.3.2.10.12 Section 27 of Part III to the Act provides for the Head of State, on the advice of the Cabinet, to make ordinary rules for any purpose, including the implementation of Samoa's obligations under the Convention. Without limiting the power under Section 27, Sections 28 and 29 provide for rules relating to safety and security, and general matters. Section 30 provides the power for the Director to make emergency rules.

2.3.2.10.13 As noted above, Part XIII to the Act provides for the adoption of foreign regulations and codes. Section 137 provides as follows:

For the purposes of sections 27, 30, 104 and 126, Regulations and rules made thereunder may adopt Regulations, Rules or Codes of Practice applying to the regulation of civil aviation matters in foreign countries (hereinafter referred to in this Act as "foreign rules").

2.3.2.10.14 Section 139 provides that a foreign rule shall remain in force notwithstanding that it may have at any time ceased to operate in the country of its origin.

2.3.2.10.15 It is understood that, by Proclamation dated 7 November 2000, Samoa adopted the New Zealand Rules as its Civil Aviation Regulations 2000.

2.3.2.11 Solomon Islands

2.3.2.11.1 Civil aviation is addressed in the Solomon Islands by the Civil Aviation Act 2009 (Act No. 7 of 2008 promulgated on 18 December 2008).

2.3.2.11.2 Part II of the Act deals with the roles and functions of the Minister, the CAA and the Director. Section 5(1) sets out provisions relating to the functions of the Minister. Those functions include: (a) to promote safety and security in Civil Aviation; (b) to administer participation of Solomon Islands in the Convention and any other international aviation convention agreement or understanding which Solomon Islands is party; and (d) to make rules under this Act.

2.3.2.11.3 Section 5(1)(e) provides that the Minister may declare an organization or body to be an approved organization. Furthermore, Section 5(1)(f) makes provision as follows:

To contract in consultation with the Authority and the Director with one or more approved organizations for the provision of advice and recommendations to the Director in relation to the granting and renewal of aviation documents.

This last subsection is particularly relevant in the context of PASO.

2.3.2.11.4 Section 5(2)(b) provides that the Minister shall ensure that the obligations of Solomon Islands under international civil aviation agreements are implemented.

2.3.2.11.5 Division 2 to the Act contains the provisions relating to the establishment of the CAASI (Section 9) and sets out its objectives and functions (Section 10). Section 13 provides for the Authority to delegate or contract out its functions to appropriate persons selected after an appropriate competitive process.

2.3.2.11.6 Division 3, Section 15 provides for the appointment of a Director of Civil Aviation by the Minister on the recommendation of the Authority. The Director shall have and may exercise such functions and powers as may be conferred or imposed on the Director by this Act or its regulations or rules and such functions and powers as may be delegated to the Director by the authority under Section 26.

2.3.2.11.7 Under subsection (3), the principal function of the Director is the exercise of control into the civil aviation system by the grant of aviation documents. The Director is further authorized to take such action as may be appropriate in the public interest to enforce this Act and its regulations and rules, including the carrying out or requiring of inspections and monitoring.

2.3.2.11.8 Subsection (4) to Section 15 makes provision for the granting, suspension and revocation of aviation documents and the granting of exemptions. The proviso to this subsection is significant: "In respect of any particular case, the Director shall act independently and shall not be subject to the directions of the Minister, the Authority or any other persons for the performance or exercise of such functions or powers."

2.3.2.11.9 Division 4 relates to the delegation of functions and powers. By Section 25 the Minister may delegate any of his functions and powers under the Act to the Authority. Sections 26 and 27 provide for the delegation functions by the Authority and by the Director to an employee.

2.3.2.11.10 Section 28 is significant. This section provides for the delegation of functions by the Authority or the Director to persons outside the Authority. Section 28(1) provides that subject to this section the Authority may by notice in the Gazette either generally or particularly delegate to any person who is not an employee of the Authority any of the Authority's functions and powers under this Act or its regulations or rules.

2.3.2.11.11 There is a similar power vested in the Director, other than in respect of the power under Section 20, to revoke aviation documents. Any delegation under this section requires the consent of the Minister. Subsection (4) contains a power for the person so delegated to delegate to any other person those functions or powers. Once delegated, the person may exercise the functions as though they had been conferred directly by the Act.

2.3.2.11.12 Part IV to the Act deals with the making of rules. Section 32 is worth noting as it provides:

In relation to any of the Minister's powers to make ordinary rules in this Part, make is deemed to include the power of the Minister to adopt by reference any civil aviation rule part or rule parts of a foreign jurisdiction pursuant to section 42.

2.3.2.11.13 The Minister may not delegate his powers to make ordinary rules under the Act. The ordinary rules and emergency rules shall be consistent with the standards of ICAO relating to aviation safety and security to the extent adopted by Solomon Islands and the international obligations of Solomon Islands relating to aviation safety and security (Section 40).

2.3.2.11.14 Section 42 which is referred to in Section 32 provides as follows:

- "a) Notwithstanding any other procedure by which the Minister may make ordinary rules under this Act the Minister may when he deems it appropriate make an ordinary rule or rules by adopting, with or without modification, any civil aviation rule part or parts of a foreign jurisdiction under this section. Any such adopted rule part or parts shall be incorporated by reference as an ordinary rule part or parts of Solomon Islands and shall have full force and effect in Solomon Islands notwithstanding that the foreign rule part from which Solomon Islands rule part is derived may at any time have ceased to be in force within the jurisdiction of its origin.
- b) In this section an aviation rule part of a foreign jurisdiction means any ordinary civil aviation rule part which has been duly promulgated and published by any member state of ICAO other than Solomon Islands and which may be readily accessed by the public in Solomon Islands in electronic form or otherwise."

2.3.2.11.15 Under subsection (4) the Minister may in consultation with the Director and the Authority, amend or repeal a rule made under this section as if the amendment or repeal were an ordinary rule made under this Part. There are numerous other provisions in the Act which reinforce and legitimise the above. Section 46 provides that Ordinary rules may be incorporated by reference into a rule made by the Minister or the Director to give effect to:

- a) standards requirements or recommended practices of international aviation organizations;
- b) standards, requirements or rules prescribed under law by any other contracting State of ICAO;
- c) standards, requirements or rules of any aviation sport or aviation recreational organization; or
- d) any other written material or document that in the opinion of the Minister or the Director is too large or impractical to be printed as part of the rule.

2.3.2.11.16 The above provisions are referred to in detail as they may provide useful precedents for the future.

2.3.2.12 Tonga

2.3.2.12.1 Civil aviation in Tonga is governed by the Civil Aviation Act 2014 (Act No. 24 of 2014). This Act repealed the Civil Aviation Act 1990 and regulations made thereunder. Part II to the Act contains the powers and functions of the Minister and the Director.

2.3.2.12.2 Section 5 of Part II specifies the functions and objectives of the Minister, Section 5(1) provides as follows, *inter alia*:

“The functions of the Minister under this Act are to:

- a) promote safety and security in civil aviation;
- b) administer the participation of the Kingdom in the convention and any other international aviation convention agreement or understanding to which the government of the Kingdom is a party;
- c) make ordinary rules under this Act;
- d) declare an organization or body to be an approved organization;
- e) contract, in consultation with the Director, with one or more approved organizations for the provision of advice and recommendations to the Director in relation to the granting and a renewal of aviation documents;
- f) contract, in consultation with the Director, with one or more approved regional or national institutions outside the Kingdom, for the provision of safety and security oversight services on behalf of the Kingdom.”

2.3.2.12.3 The above provisions provide a good example of the sort of provisions that are needed in the primary legislation of the States to facilitate the functions of PASO.

2.3.2.12.4 Section 6 sets out the functions and objectives of the Director which, in principle mirror those of the Minister, and include the function to promote civil aviation safety and security in the Kingdom; and to promote civil aviation safety and security beyond the Kingdom in accordance with the Kingdom’s international obligations. A principal function of the Director is to monitor adherence within the civil aviation system to any regulatory requirements relating to safety and security.

2.3.2.12.5 Section 10 provides that, subject to the Act, the Director shall, in the course of performing his functions and powers, consider whether the Director could most efficiently and effectively perform those functions and powers by means of his own operations or by delegating or contracting out those operations to appropriate persons selected after an appropriate competitive process.

2.3.2.12.6 The Director of Civil Aviation is appointed by the Minister under Section 14, on the advice of the Chief Executive Officer to the Ministry. Under Section 14(2), the Director shall have and may exercise search functions and powers as maybe conferred or imposed on the Director by this Act, or regulations or rules made under this Act, and such functions and powers as may be delegated to the Director by the Minister under Section 24. Without limiting subsection (2), the Director shall:

- “a) exercise control over entry into the civil aviation system through the granting of aviation documents (including validation of foreign aviation documents) and the issue of medical certificates or granting or recognition of foreign medical certificates under this Act; and

- b) take such action as may be appropriate in the public interest to enforce the provisions of this act and of Regulations and Rules made under this Act, including the carrying out or requiring of inspections and monitoring.”

2.3.2.12.7 Subsection (4) to section 14 which provides that in relation to any of the functions or powers to grant, suspend or revoke any aviation document, or in the granting of exemptions or the enforcement of the provisions of the Act, or any other Act, or Rule or Regulation made thereunder contains a proviso at the end which is significant. It provides that “In respect of any particular case the director shall act independently and shall not be responsible to the Minister or the CEO for the performance or exercise of such functions or powers.”

Note. — This provision is like that contained in the legislation of the Solomon Islands.

2.3.2.12.8 The delegation of the Director’s functions or powers is governed by the provisions of Section 26, in which provisions are set out in full hereunder. This type of provision will be required in the legislation of the States if PASO is to function effectively. It reads as follows:

“Delegation of Director’s functions or powers to persons outside the Civil Aviation Division (of the Ministry)

- a) Subject to this section the Director may from time to time either generally or particularly delegate to any person who is not an employee of the Civil Aviation Division any of the Director’s functions and powers under this Act or any Regulations or Rules made under this Act.
- b) Subject to this section the Director may from time to time either generally or particularly delegate to any person who is not an employee of the Civil Aviation Division any of the Director’s functions and powers under this Act or any Regulations or Rules made under this Act, other than:
 - 1) the power under section 19 to revoke aviation documents; or
 - 2) the power under section 50 to suspend or revoke aviation documents.
- c) Every delegation under this section shall be in writing.
- d) No delegation under this section shall be made without the consent of the Minister.
- e) In any case where the Director has delegated any functions or powers to any person under this section that person may with the prior approval in writing of the Minister delegate to any other person such of those functions or powers as are so approved.
- f) Subject to any general or special directions given or conditions imposed by the Director any person to whom any functions or powers are delegated under this section may perform those functions and exercise those powers in the same manner and with the same effect as if they had been a conferred or imposed on that person directly by this Act and not by delegation.
- g) Any delegations under this section may be made to a specified person or persons of a specified class or to the holder or holders for the time being of a specified office or specified class of office.
- h) Every delegation under this section shall be given for a specified period but in any event shall be revocable at will.

- i) No delegation under this section shall affect or prevent the performance of any function or the exercise of any power by the Minister or by the Director, as the case may be, nor shall any such delegation affect the responsibility of the Minister or the Director, as the case may be, for the actions of any person acting under the delegation.
- j) Every delegation under this section shall, until it is revoked or it expires, continue in force according to its tenor, notwithstanding the fact that the person by whom it was made may cease to hold office, and shall continue to have effect as if it was made by the person for the time being holding that office.
- k) Every person purporting to act under any delegation under this section shall, when reasonably requested to do so, produce evidence of his authority to so act.
- l) Any person who exercises any function or power under a delegation made under this section may charge the person in respect of whom the function or power is exercised a reasonable fee in respect of the exercise of that function or power.”

2.3.2.12.9 Part IV to the Act deals with rulemaking. Section 30 provides for interpretation. It provides that “make” shall be deemed to include the power of the Minister to adopt by reference any civil aviation Rule part or Rule parts of a foreign jurisdiction pursuant to section 40; and “make”, “making” and “made” shall, in the context of ordinary rules, have a corresponding meaning throughout the Act.

2.3.2.12.10 Section 31 confers on the Minister the power to make ordinary rules for, *inter alia*, implementation of the obligations of the Kingdom under the Convention; and any matter related to the Minister’s functions under Section 5 and the Director’s functions under Section 6. Without limiting Section 31, Sections 32 and 33 provide for the making of rules relating to safety and security and airspace and Section 35 to general matters.

2.3.2.12.11 Section 36 confers power on the Director to make emergency rules.

2.3.2.12.12 Section 40 to the Act provides for the making of ordinary Rules by adoption. Subsection (1) to Section 40 provides as follows:

- “a) Notwithstanding any other procedure by which the Minister may make ordinary rules in accordance with the provisions of this Act, the Minister may when he deems it appropriate make an ordinary rule or rules by adopting, with or without modification, a civil aviation Rule part or parts of a foreign jurisdiction pursuant to the provisions of this section. Any such adopted Rule part or parts shall be incorporated by reference as an ordinary Rule part or parts of the Kingdom and shall have full force and effect in the Kingdom notwithstanding that the foreign Rule part from which the Tonga Rule part is derived may at any time have ceased to be in force within the jurisdiction of its origin.
- b) For the purposes of this section “a civil aviation Rule part of a foreign jurisdiction” shall mean any ordinary civil aviation Rule part which has been duly promulgated and published by any member state of ICAO other than the Kingdom and which may be readily accessed by the public in the Kingdom in electronic form or otherwise.”

2.3.2.12.13 The remaining sections and subsections to this Part set out the procedures for rulemaking. The adoption of foreign Rules is promulgated by Proclamation made in accordance with Schedule 2 to the Act. It is understood that Tonga has adopted the New Zealand Rules.

2.3.2.12.14 Section 44 is important as it provides for the incorporation by reference in a rule of, *inter alia*, standards, requirements or recommended practices of international aviation organizations; as well as standards, requirements or rules prescribed under law by any other contracting State of ICAO. Any material so incorporated shall be deemed to part of the rule.

2.3.2.12.15 Part V (Regulations) provides for the Minister to make regulations but these appear to relate to, for example, fees and charges and offences and penalties.

2.3.2.13 *Tuvalu*

2.3.2.13.1 Civil aviation in Tuvalu is governed by the Civil Aviation Act 2006, as amended by the Civil Aviation (Amendment) Act 2014.

2.3.2.13.2 Part II (Administration of civil aviation) provides in Section 3 for the establishment of the Office of the Director of Civil Aviation. The Director of Civil Aviation shall be appointed by the Minister with the approval of the Cabinet.

2.3.2.13.3 Section 4 prescribes the functions of the Director, these include: (c) registering aircraft and ensuring safety of air navigation; (d) securing sound development of the air transport industry in Tuvalu.

2.3.2.13.4 Section 5 prescribes the powers of the Director. The Director shall be responsible for the exercise of all powers and discharge of all functions imposed by the Act or any enactment and shall have control of all personnel and activities in the Director's office. A primary role of the Director is the regulation of civil aviation in such manner as to best promote safety. In that respect, the Director has power to perform such acts, conduct such investigations, issue and amend such orders, and make such general or special rules and regulations and establish such procedures as required under the Act.

2.3.2.13.5 Section 6 (as amended) provides for the delegation of powers. Section 6A provides for the Minister, from time to time, to delegate (in writing) to the Director all or any of the Minister's functions and powers under the Act. No delegation under the section shall include the power to delegate under that section.

2.3.2.13.6 Section 6B provides for the Director to delegate to any employee of the Ministry any of the Director's functions and powers under the Act or any other Act or under any regulations or rules made under the Act.

2.3.2.13.7 Section 6C is relevant to this study. It provides for the Director to delegate (in writing) to any person who is not an employee of the Ministry any of the Director's functions and powers under the Act or any Regulations or Rules made under the Act, other than the power to revoke aviation certificates. Any delegation under this section shall be with the written consent of the Minister.

2.3.2.13.8 The section further provides that a person to whom functions or powers are delegated may perform the functions or exercise the powers as though they had been directly conferred or imposed and not delegated. There is power under subsection (10) for any person who exercises any function or power under a delegation made under that section to charge the person in respect of whom the function or power is exercised a reasonable fee approved by the Minister in that respect.

2.3.2.13.9 Section 7 (Power to give effect to the Chicago Convention), as amended, provides that the Minister may in accordance with the provisions of this Act make such provision as appears to the Minister to be a requisite or expedient for carrying out the Chicago Convention, any Annex thereto, relating to international Standards and Recommended Practices.

2.3.2.13.10 Section 8(1) (Power to regulate air navigation) provides for the Minister to make regulations to provide generally for securing the efficiency, regularity and safety of air navigation in Tuvalu and for the safety of aircraft and persons and property carried therein. Section 8(2) then details all of the usual activities requiring to be regulated.

2.3.2.13.11 A new Part IIIA (Rules) is inserted into the Act after Section 18. Section 18A provides that "make" shall adopt by reference a rule under the Act.

2.3.2.13.12 Section 18B confers power on the Minister to make ordinary rules for the principal purpose of implementing Tuvalu's obligations under the Convention. Sections 18C and 18D relate to the making of Rules for safety and security and for airspace and 18F for general matters.

2.3.2.13.13 Under Section 18G the Director has power to make emergency rules but only in circumstances where it is impracticable for the Minister to make ordinary rules.

2.3.2.13.14 Section 18K provides for the making ordinary rules by adoption. The provisions are in the same form as those found in other States and are not repeated here. Section 18O provides for incorporation by reference into a rule made by the Minister or Director of, *inter alia*, standards, requirements or recommended practices of international aviation organizations and standards, requirements or rules prescribed under law by any other contracting State of ICAO.

2.3.2.13.15 Regarding the regulatory framework in the State, it appears that Tuvalu has not yet promulgated civil aviation regulations.

2.3.2.14 Vanuatu

2.3.2.14.1 It has proven quite difficult to establish the precise situation regarding the legislation in force in Vanuatu as very limited information is accessible online. The same problem was encountered in previous studies, including the study performed for the Asian Development Bank (ADB), dated January 2014.

2.3.2.14.2 The primary aviation law in force in Vanuatu is the Civil Aviation Act 1999 (Chapter 258), which came into force on 17 September 1999. The Act is based on the New Zealand Civil Aviation Act 1990. The Act was amended by the Civil Aviation (Amendment) Act No. 5 of 2005.

2.3.2.14.3 Part 2, Section 5(1) to the Act provides that the Department of Civil Aviation that was in existence immediately before commencement continues in existence under the control of the Director on and after commencement. Section 5(2) provides that for the purposes of International Convention obligations of Vanuatu, the Minister is the Civil Aviation Authority for Vanuatu. Section 5(3) provides that for the purposes of the administration of this Act and any other matter relating to civil aviation the Civil Aviation Authority is the administering authority.

2.3.2.14.4 In Section 2 (Interpretation), the "Civil Aviation Authority" means the Civil Aviation Authority replacing the Department of Civil Aviation. Finally, subsections (5) and (6) provide that the person holding the office of Director of Civil Aviation, and any other person who holds an office or position in the Department immediately before commencement is to continue as Director or office holder on and after commencement on the same terms and conditions of service.

2.3.2.14.5 Part 3 contains the functions, powers and duties of participants in the civil aviation system. Division 2 to that Part details the functions and duties of the Minister and the Director. Section 15 details the principal functions of the Minister as follows:

- "a) to promote safety in Civil Aviation at a reasonable cost; and
- b) to ensure that Vanuatu's obligations under international civil aviation agreements are implemented; and
- c) to administer Vanuatu's participation in the Convention and any other international aviation convention, agreement or understanding to which the Government of Vanuatu is a party."

2.3.2.14.6 Section 16 provides that the Director has such functions and may exercise such powers as may be conferred or imposed by this Act or delegated to the Director under Section 23. The Director's principal functions are to undertake activities which promote safety in civil aviation at a reasonable cost; and to establish safety and security

standards relating to entry into the civil aviation system, and to monitor adherence to such safety and security standards within the system. The following sections to the Act confer on the Director all the usual oversight powers, including the power to issue, suspend and revoke aviation documents.

2.3.2.14.7 Section 23 provides for the Minister to delegate to the Director all or any of the Minister's functions and powers under the Act. Similarly, Section 24 empowers the Director to delegate the Director's powers and functions with the written consent of the Minister.

2.3.2.14.8 Section 25 is a key section as it provides for delegation of the Director's functions or powers to a person outside the department. This does not include the power to delegate functions or powers, or to suspend or revoke aviation documents or issue infringement notices. The power may only be exercised with the written consent of the Minister. Once delegated, a person has the same powers as if they had been conferred or imposed directly under the Act.

2.3.2.14.9 Part 4 to the Act deals with rules. The Minister has the power to make ordinary rules under Section 30 to implement Vanuatu's obligations under the Convention. Section 31 provides for the Minister to make rules for safety and security and, under Section 32, for airspace. Under Section 35 the Director has power to make emergency rules.

2.3.2.14.10 Section 36A provides for the adoption of foreign rules by reference into the Vanuatu rules, after which it becomes a part of the Vanuatu rules. It is understood that Vanuatu has adopted some of the New Zealand Rules by this means.

2.3.3 Highlights on some identified shortcomings with respect to PSIDS' aviation legislation

2.3.3.1 The analysis of the aviation legal frameworks in the PSIDS indicates that they are currently not wholly sufficient to form a relevant, comprehensive and fit-for-purpose basis for these States' regulatory oversight systems and to facilitate the activities of an RSOO/RSSOO. All PSIDS have, to a greater or lesser degree, primary legislation in the form of Civil Aviation Acts and Amendment Acts. However, in most cases the primary aviation legislation is in need of an amendment, including an update and expansion. Although most PSIDS heavily rely on external support for safety and security oversight tasks, in most of them the primary legislation does not permit the delegation of some safety and security oversight functions from the State/CAA to an RSOO/RSSOO. The primary legislation often lacks specificity or precision in the provisions relating to delegation of oversight functions and associated powers and enforcement capabilities to an external body, and lacks provisions regarding protection from liability for organizations and individuals performing delegated functions.

2.3.3.2 With respect to the regulatory framework, many PSIDS are falling short in fulfilling their obligations to put in place and maintain fit-for-purpose regulations in conformity with the Annexes to the Convention. In some PSIDS, the lack of publication, dissemination and/or update of the regulations results in an ineffective or quasi non-existent regulatory framework. The risk of ineffective regulatory framework is higher in the North Pacific States, given their isolation and lack of regulatory oversight support.

2.3.3.3 Regarding PASO Member States specifically, none of them appears to have enacted legislation to give specific effect to the PICASST. In addition, some of these States have not actually ratified the treaty itself, or the 2009 Amendments. Despite the above, some States are using the services of PASO under Service Level Agreements (SLAs). However, this would not compensate the failure of States to act upon their treaty obligations. Additionally, it leaves the activities of PASO open to challenge; and possibly leaves PASO and its officers and contractors without protection from liability.

2.3.3.4 With respect to the aviation safety and security regulatory framework, the absence of harmonized operating regulations in the PSIDS region does not facilitate the activities of an RSOO/RSSOO. Again, there is a division between the Central and South Pacific, where most States have adopted the New Zealand Civil Aviation Rules (NZ CARs), and the North Pacific, where this is not the case.

2.3.3.5 Regarding the adoption of NZ CARs, this solution has been the most practical as New Zealanders currently comprise the main resource available for assisting PSIDS (in the Central and South Pacific) in the performance of safety and security oversight tasks. However, despite all benefits of adopting NZ CARs, challenges for the concerned States include the difficulty for the respective CAA staff to fully understand these regulations (and amendments thereto) and the inadequacy of some these rules to accurately reflect or address the PSIDS' operating environments as opposed to the operating environment in New Zealand, from where the CARs originate. The tendency is for this gap to widen as NZ CARs are progressively evolving towards more performance-based requirements, which may be suitable for New Zealand but are not suitable at this stage for PSIDS, as these States are still challenged to ensure compliance with prescriptive requirements.

2.3.3.6 In several areas, the NZ CARs are not fully fit-for-purpose for the PSIDS. As an example, in the area of airworthiness, many PSIDS do not issue Airworthiness Directives (ADs) but instead adopt ADs issued by the State of Design (SoD). However, Part 39 of the NZ CARs includes provisions for the CAA to issue their own ADs. Another example is in the area of personnel licensing. Some of the PSIDS only validate or convert flight crew licences but yet have adopted Parts 62 and 141 of the NZ CARs, which include the initial issuance of flight crew licences and approval of aviation training organization. While such steps can be deemed as future proofing, it presents a legal dilemma as the regulations allow for the initial issuance of licence and approval of aviation training organizations. If an applicant intends to apply for an initial licence or to have an aviation training organization approved, no procedures have been established and implemented to allow for it.

2.3.3.7 In the AVSEC area, in the majority of PASO MS, the NZ CARs have been adopted but have not been sufficiently adapted to reflect the situation in the State with respect to AVSEC. Moreover, in many of these States, while the statement of adoption of the NZ CARs stipulates that the CARs only take effect to the extent that a specific subject is not addressed by prevailing national legislation, a specific mapping exercise to identify the primacy of legislation has not been conducted.

2.4 SITUATION AND CHALLENGES WITH RESPECT TO OVERSIGHT IN THE FLIGHT SAFETY AREAS (PERSONNEL LICENSING, AIRCRAFT OPERATIONS AND AIRWORTHINESS)

2.4.1 Introduction

2.4.1.1 PSIDS with on-site visits by the Flight Safety, Aerodromes and AVSEC Team Members

2.4.1.1.1 The attachments of the Flight Safety, Aerodromes and AVSEC experts to the PSIDS Study, albeit for a limited time and with a limited budget, enabled them to collect information on the situation, views and challenges of a sample of PSIDS during on-site visits to these States. All three Team Members, together with the Senior Advisor, conducted on-site visits in Fiji, Kiribati, Nauru, Samoa, Tonga and Vanuatu. In addition, the Aerodromes Team Member, together with the Senior Advisor, conducted an on-site visit in Palau. This complemented the information otherwise available to ICAO on these PSIDS, most of it resulting from USOAP and USAP activities. It should be noted that the Senior Advisor conducted on-site visits in a total of 10 PSIDS (the seven above mentioned States, as well as Cook Islands, Niue and PNG) to collect information on the situation, views and challenges of these States through interviews with Ministers in charge of civil aviation and Heads of CAAs. The remaining four PSIDS without dedicated on-site visits, due to the time and budget constraints of the study, were all invited to send representatives to meet and discuss with the Senior Advisor on the matters relevant to the PSIDS Study.

2.4.1.1.2 As mentioned in the foreword of this report, the views expressed in the report, in particular Sections 2.4 to 2.6, do not represent in their entirety results from USOAP and USAP activities or preclude any future findings under these audit and monitoring programmes. As they result from on-site visits, they do not fully reflect the specificities of all PSIDS. The PSIDS Study has however shown that most PSIDS share similar challenges, to various extents, with a greater severity in the North Pacific due to the lack of regulatory oversight support in that sub-region, especially in the flight safety areas.

2.4.1.2 Introduction regarding the preparation and conduct of on-site visits by the Flight Safety Team Member

2.4.1.2.1 During his attachment to the PSIDS Study, the Flight Safety Team Member met with CAA officers responsible for personnel licensing/aircraft operations/airworthiness during on-site visits in six PSIDS (Fiji, Kiribati, Nauru, Samoa, Tonga and Vanuatu). Interviews with these officers were conducted using a set of questions that focused on extracting an appreciation of the current aviation activities within these PSIDS such as the scope of aviation activities, the number of service providers, the type and number of valid licences issued and the number of registered aircraft. The organizational setup of the safety oversight team, how the safety oversight obligations were being discharged, the challenges faced and the possible opportunities for improvement were also discussed. Information presented herein has been obtained and captured “as is” from the face-to-face interviews with the respective officers.

2.4.1.2.2 Past USOAP results of the visited PSIDS were used to provide a pre-interview understanding of the challenges faced by the visited PSIDS and to correlate with the information collected through the interview sessions. Due to time constraints, visits to service providers were not conducted.

2.4.1.2.3 The Flight Safety Team Member also met and interviewed relevant personnel from PASO to discuss the Organization’s role in providing oversight services in the flight safety areas in PASO Member States and the growing needs and expectations of States from PASO.

2.4.2 Levels of activity in the visited PSIDS

2.4.2.1 Information was gathered from the visited PSIDS on the number of international, domestic and foreign air operators; the number of aircraft registered and the type and number of licences issued (see Figures 2-31, 2-32 and 2-33 below). In addition, information relating to approved organizations involved in airworthiness was also requested. It was noted that the six visited PSIDS did not approve any organization for conduct of aircraft design work or production of aircraft parts/articles. In the case of Nauru, the State has not issued any Air Operator Certificate (AOC) and has not registered any aircraft into a national register. In addition, it has not issued licences to air traffic controllers and has not approved any training organization.

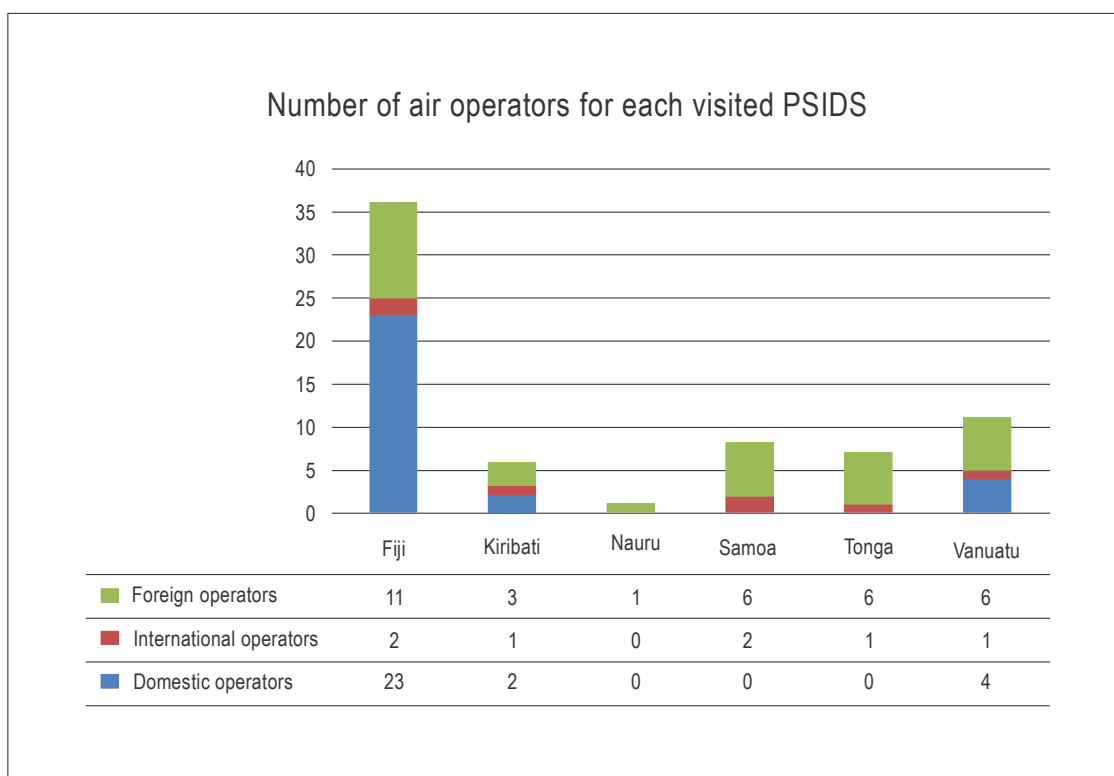


Figure 2-31. Number of air operators for each visited PSIDS

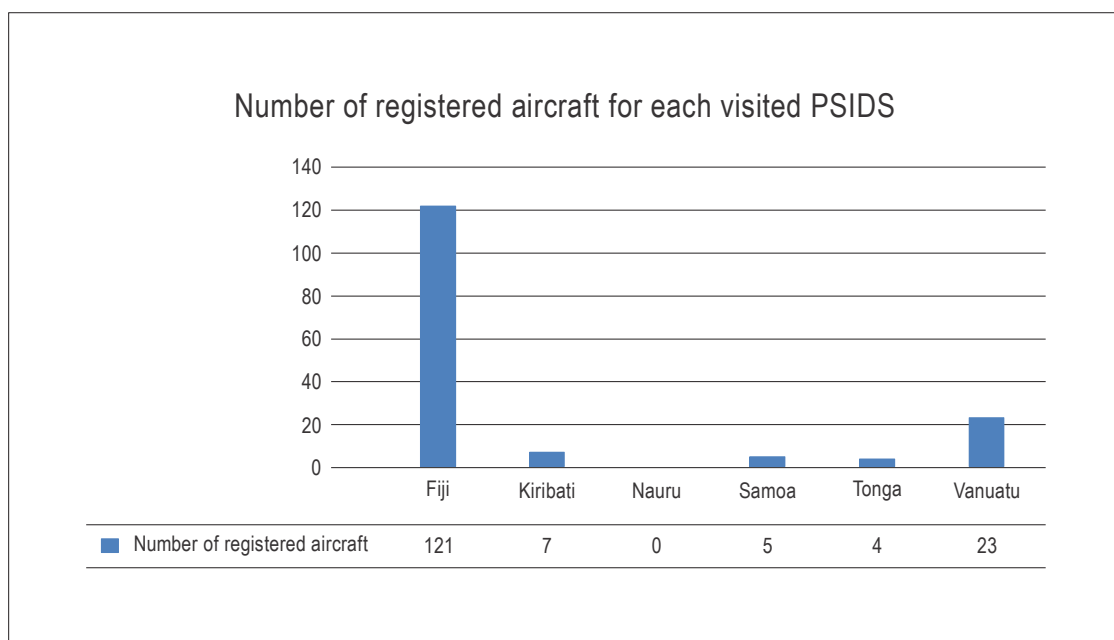


Figure 2-32. Number of registered aircraft for each visited PSIDS

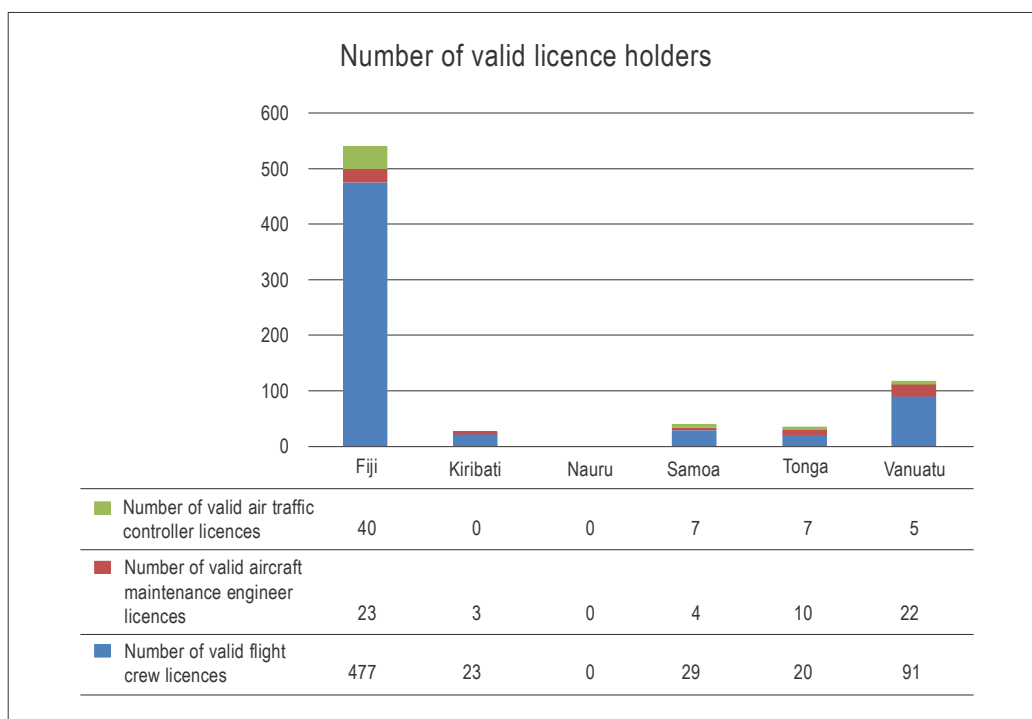


Figure 2-33. Number of valid licence holders

2.4.2.2 Fiji has the largest number of Air Operator Certificate (AOC) holders. It also has the highest number of domestic air operators and foreign air operators. At the opposite end, Nauru has not issued any AOC. The national operator of Nauru, Nauru Airlines, has an AOC issued by Australia. All safety oversight activities on Nauru Airlines are performed by the Civil Aviation Safety Authority of Australia (CASA), based on the Australian legislation. In terms of routes flown by international operators, Fiji has the highest number of routes and the longest routes as well.

2.4.2.3 Other than Fiji, which does its own issuance and renewal of AOCs and Foreign Air Operator Certificates (FAOCs), all other visited PSIDS rely heavily on PASO to assist them in certification activities. Upon request from the State, PASO deploys a flight operation inspector and an airworthiness inspector on-site for a duration of between three and five days to undertake the technical evaluations for the issuance or renewal of the AOC. This includes an audit of the AOC holder including ramp checks and documentation checks. Once PASO's inspectors complete the certification or re-certification evaluation activities, a report with recommendations is submitted to the concerned CAA for review and decision on the AOC issuance/renewal. In most PSIDS, the AOC validity period is determined based on the maturity of the AOC holder and its safety performances. In one of the visited PSIDS, a new AOC was given a 6-month validity, subsequently a 1-year validity during the following 3 years, before being eventually given a 2-year validity. Other than Fiji, all the other visited PSIDS enlist PASO to conduct the assessment for the AOC to operate a new aircraft type.

2.4.2.4 Continued surveillance of AOC holders, including scheduled ramp inspection, in-flight inspection and audits of overseas stations, is left to the respective CAAs. In practice, in the visited PSIDS, these activities are seldom undertaken due to lack of human resources with the required qualifications within the CAA. As part of the effort to equip their current officers/inspectors with the required competency, some CAAs schedule for their officers/inspectors to accompany PASO's inspectors while they conduct audits. This is considered by the CAA as part of on-the-job training (OJT) for these officers/inspectors. PASO is currently working with the CAAs on a project to properly document this part of OJT.

2.4.2.5 All visited PSIDS were of the view that aviation activities within their State would continue to grow. Some are expecting new aircraft types being introduced into their register as early as end 2019. Others are expecting additional aircraft to be registered. With this introduction of new and additional aircraft, new air routes are being planned and need to be approved accordingly. In addition, several of the PSIDS are already expecting more foreign air operators to start to fly into their State. The Government of one PSIDS is interested in introducing long haul flights to their State and contemplating two foreign operators from East Asia to operate some of the long haul routes. Other than the expected increase in air transport activities, the CAAs are now also occupied with the regulation of a rapidly growing number of drones.

2.4.2.6 Fiji has the largest number of registered aircraft, ranging from turbojets to turboprops to rotary and float planes. Given that the CAA of Fiji (CAAF) has five airworthiness inspectors supported by one administrative assistant, the large number of aircraft and the diversity of aircraft type are likely to present a challenge for the oversight of the airworthiness matters, including responsibilities of the Aircraft Inspection Division (AID) and Aircraft Engineering Division (AED). In addition, there are about 31 Approved Maintenance Organizations (AMOs) in Fiji (10 local and 21 overseas), adding on to the safety oversight workload of the CAAF.

2.4.2.7 Similar to how they conduct safety oversight activities on AOC holders, the five other PSIDS engage PASO for the conduct of evaluations for the issuance or renewal of the Certificate of Airworthiness (CoA), conduct audit of AMOs and perform first-of-type aircraft activities including the evaluation of the Type Certificate (TC) to enable the CAA to issue a TC Acceptance. One of the PSIDS provides ad hoc validation of overseas AMOs to do urgent maintenance on the operator's aircraft. This is mostly done in NZ and Australia holding their AMO approval. The validity of such approval is for 6 months maximum but typically three months. This is done in particular for C-Check, major repair, engine change, end of lease aircraft.

2.4.2.8 None of the visited PSIDS has approved any organization to conduct aircraft design or production activities. For repairs that are not covered in the existing maintenance and repair manuals, most PSIDS accept the repair design prepared by the aircraft manufacturer and the repair work done by their AMOs. One of the PSIDS allows their AOC holders to engage Part 146 (Aircraft Design) Organizations approved by the CAA NZ or CASA Australia to provide the repair design without their involvement and shared that they were not sure if this was feasible under their existing rules. Another PSIDS would validate a foreign approved Design Organization for a limited period to provide repair design or modification design for their registered aircraft. One of the PSIDS shared that it did not have an established process for approval of repair designs out of the manufacturer documentations and that it was in the process of addressing this matter.

2.4.2.9 All the visited PSIDS adopt and make applicable Airworthiness Directives (ADs) issued by the State of Design. One of the PSIDS shared that AD monitoring was done by its airworthiness officer but only during CoA renewal.

2.4.2.10 The number of licence holders in each of the visited PSIDS generally corresponds to the number of aircraft registered in their States. Fiji has the highest number of registered aircraft and therefore the highest number of licence holders. Similarly, Vanuatu has the second highest number of aircraft and the second highest number of licence holders.

2.4.2.11 Fiji is the only visited PSIDS that has approved training organization for training of *ab initio* pilots and aircraft maintenance engineers. Correspondingly, Fiji issues initial licences while also validating and converting foreign licences. One of the PSIDS issues initial Aircraft Maintenance Engineers (AME) licences based on applicants attending a theoretical knowledge programme in a maintenance training organization approved by the European Union Aviation Safety Agency (EASA), NZ CAA or CASA and passing the corresponding theoretical examination. Applicants will then complete four years of practical training with the CAA's approved AMO, take an air law examination and attend an oral test before initial licences can be issued.

2.4.2.12 Only one of the visited PSIDS has approved an Air Traffic Controller Training Organization while the others have no approved training organizations for air traffic controllers. Approval for the training of air traffic controllers by some visited PSIDS is done as part of the approval for the ATS service provider. In such cases, the check controllers that are designated to conduct competency check on behalf of the CAA are part of the ATS service provider.

2.4.2.13 For those PSIDS that do not issue initial licences, they primarily do validation of foreign licences and/or conversion of foreign licences. Most of the foreign licences that are validated or converted are from NZ followed by Australia. As shared by these PSIDS, the validation process is quite similar for all of them, involving the review of training history and qualification, the verification with foreign authorities and the need to pass an examination pertaining to local air laws, except for one PSIDS which is in the process of mandating this. Additionally, one of the visited PSIDS also requires police clearance from local and foreign authority.

2.4.2.14 Aircraft type rating training for pilots is approved under the AOC *Aircraft Operations Manual* and other than Fiji, the rest of the five PSIDS have designated flight examiners within their AOC holders. In some cases, the instructor who instructs pilots for the new aircraft rating is also the flight examiner checking the competency of the pilots on behalf of the CAA.

2.4.2.15 All the visited PSIDS either recognize Flight Simulation Training Devices (FSTDs) approved by the local CAA, which are primarily by NZ CAA or CASA, where most of the FSTDs to be used are based, or take credit from the local CAA's qualification of the FSTD to aid in their respective approval. In cases where it is necessary to conduct an evaluation of the FSTD, other than Fiji, the rest of the visited PSIDS engage PASO's aircraft operations inspectors to do so.

2.4.3 CAA staffing levels in the flight safety areas in the visited PSIDS

2.4.3.1 Figure 2-34 below shows the human resources available to the CAAs of the visited PSIDS in the flight safety areas.

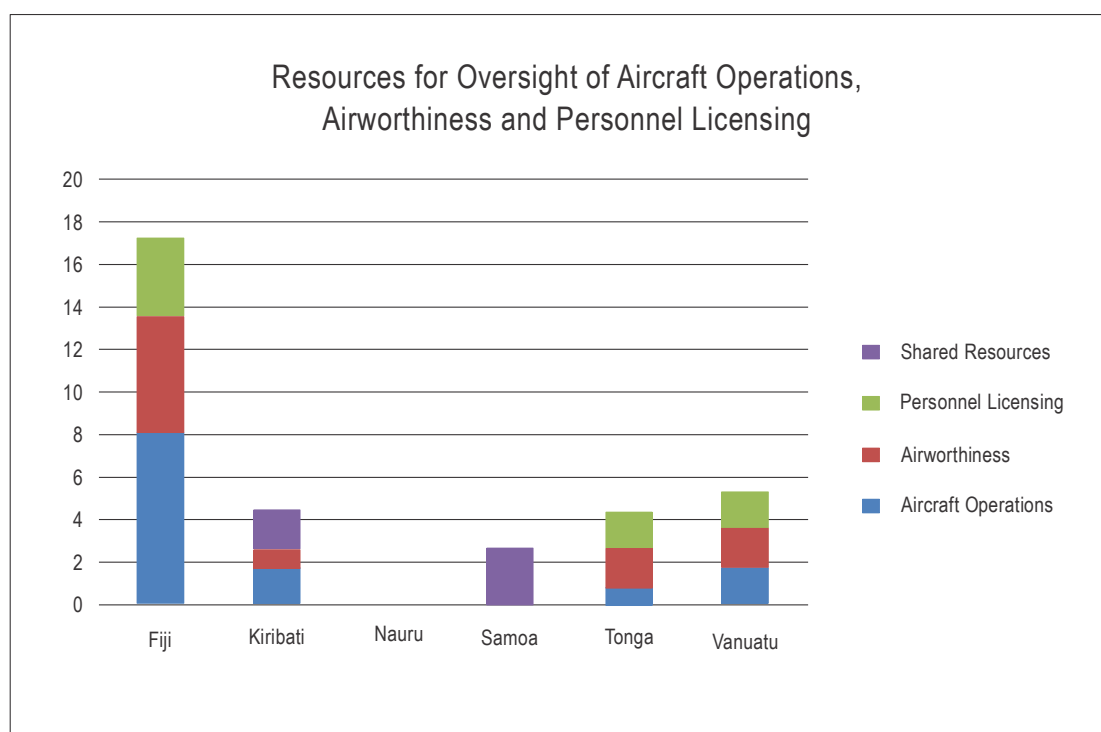


Figure 2-34. Resources for Oversight of Aircraft Operations, Airworthiness and Personnel Licensing

2.4.3.2 Regarding safety oversight of aircraft operations, airworthiness and personnel licensing, activities are undertaken by the respective officers/inspectors within each of the PSIDS CAA or, for PASO Member States, through varying levels of delegation of tasks to PASO.

2.4.3.3 In the case of Fiji, the CAA officers/inspectors report to middle management in charge of Flight Safety. In all other visited PSIDS, the flight safety officers/inspectors report directly to senior management (CAA Director level).

2.4.3.4 As the scope of work for a locally issued AOC is much more as compared to the issuance of a FAOC, the latter was not considered in the computation of the ratio. It is noted that while Fiji has the highest number of safety officers/inspectors for the safety oversight of aircraft operations, airworthiness and personnel licensing, its officers/inspectors handle more organizations by person (aircraft and licence holders) as compared to the other PSIDS, as can be seen in Figure 2-35. Furthermore, the other four PSIDS use PASO's inspectors to assist in their safety oversight activities.

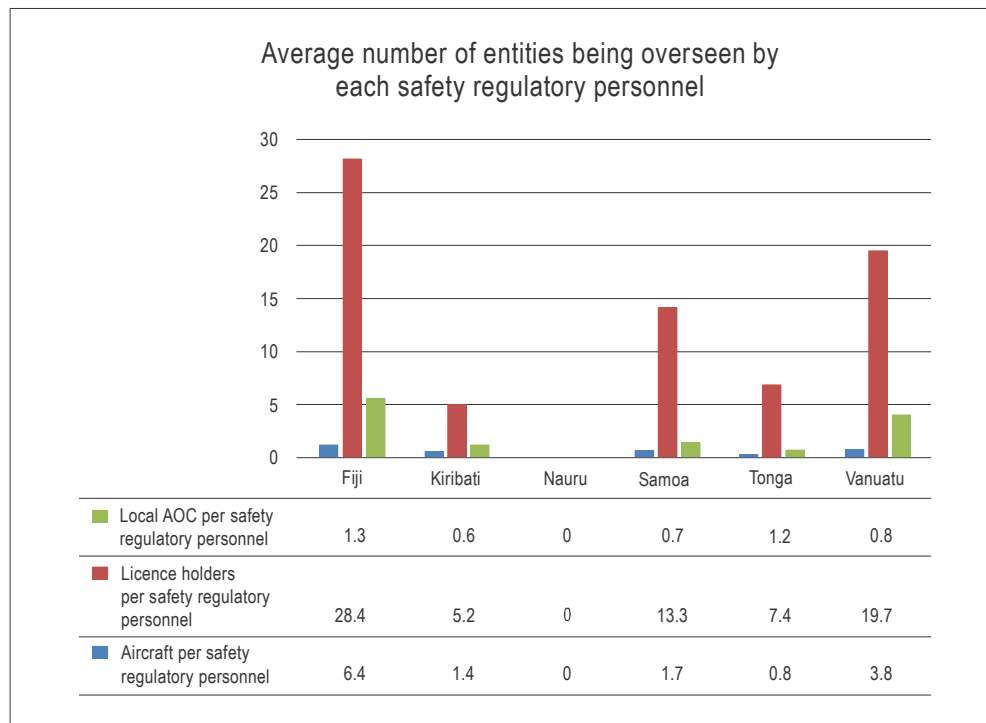


Figure 2.35. Average number of entities being overseen by each CAA safety regulatory personnel

2.4.4 Situation and challenges with respect to critical elements 2 to 5

2.4.4.1 The situation with respect to the primary aviation legislation (CE 1) has been presented in detail in Section 2.3 of this report. With respect to CE 2, with the exception of Fiji, all visited PSIDS have adopted NZ CARs for use as specific operating regulations in the State. In some of these States, some NZ CARs (e.g. Part 147) are not adopted due to the absence of related activity in the State. However, it appears that the requirements contained in the NZ CARs are not all fully appropriate to the PSIDS due to the differences in scope and level of activity as well as the operating conditions from New Zealand.

2.4.4.2 As was already mentioned in Section 2.3.3 of this report, as an example, many PSIDS do not issue airworthiness directives (ADs) but instead adopt ADs issued by the State of Design (SoD). However, Part 39 of the NZ CARs includes provisions for NZ CAA to issue their own ADs, which will not be the case for the PSIDS since they do not approve aircraft design nor aircraft design organizations. Additionally, some of the PSIDS only validate or convert flight crew licences but yet have adopted NZ CAA Parts 61 and 141 which include the initial issuance of flight crew licences and approval of aviation training organization. While such steps can be deemed as future proofing, it however presents a legal dilemma as the regulations allow for the initial issuance of licence and approval of aviation training organizations. If an applicant intends to apply for an initial licence or to have an aviation training organization approved, no procedures have been established and implemented to allow for it.

2.4.4.3 While the adoption of foreign regulations is less effort-intensive for a State as compared to having to develop and maintain its own regulations, this does not absolve the adopting State from ensuring the adopted regulations comply with the SARPs contained in the relevant Annexes to the Chicago Convention. Some PSIDS have subscribed to notifications from NZ CAA of changes to the NZ CARs. However, these PSIDS do not have the qualified human resources for continued monitoring and assessment of the adopted regulations.

2.4.4.4 Furthermore, in most cases, there is no mechanism in place to ensure that service providers are informed about amendments to the applicable regulations and are aware of the implications of such amendments.

2.4.4.5 Most visited PSIDS lack documented, relevant, comprehensive and detailed job descriptions for the various job positions within the CAA. In some cases, some of the CAA's safety oversight personnel's primary responsibility is to coordinate with PASO for the safety oversight of their approval holders including seeking advice from PASO. They are occasionally involved in audits conducted by PASO's inspectors as part of an OJT process. However, this is not clearly reflected in the CAA personnel's job descriptions.

2.4.4.6 Due to the very limited human resources in some visited PSIDS, some officers perform tasks related to numerous areas. As such, officers/inspectors are required to perform functions in areas for which they do not have any relevant qualification. In addition, many CAAs have not been able to fill up some of the positions within the CAA, due to the shortage of qualified personnel in such small States as the PSIDS as well as employment conditions that are not sufficiently competitive to attract, recruit and retain qualified and experienced technical staff. In some cases, the positions have been vacant for about two years. In one case, half of the CAA officer/inspector positions were vacant.

2.4.4.7 In all visited PSIDS, the CAAs were depending on funding from the government. Even in cases where fees and charges were collected by the CAA for safety oversight activities, in most cases, the collected revenue went to the government and not to the CAA.

2.4.4.8 The study is yet to indicate the cost that will be incurred from the recommendations that have been suggested in the study to improve safety. These costs using the principle of cost relatedness, transparency, non-discrimination and consultation with users will have to be recovered using guidance in Doc 9082 — *ICAO's Policies on Charges for Airports and Air Navigation Services*, potentially as an air navigation charge. ATB has been requested to provide critical data to facilitate the funding of these suggested recommendations using guidance from Doc 9082, and this will be done in the implementation phase that is expected to follow this initial study.

2.4.4.9 Most visited PSIDS have not established relevant, comprehensive and detailed qualification and experience requirements for the recruitment of their technical staff. This is rendered more difficult as relevant, comprehensive and detailed job descriptions for the related positions have not been established.

2.4.4.10 Training programmes for CAA technical job positions are non-existent in many of the visited PSIDS. Although in some cases, training plans have been established, they have not been effectively implemented due to lack of training budget. In practice, training has been provided to CAA staff based on an ad hoc basis and on opportunities, especially when such training has been sponsored by a State or Organization. In some CAAs, the inability to fill up positions also results in the officer or inspector not being released to attend training, as there would not be any covering officer or inspector to deal with operational matters.

2.4.4.11 In addition, the visited PSIDS are challenged regarding the provision of OJT to their technical staff. The contributing factors include the lack of clarity in the job description for this staff, the absence of a documented OJT process, the lack of opportunities for OJT and the lack of budget when funding is required.

2.4.4.12 Fiji has some procedures in place to guide its inspectors in the conduct of the various oversight activities. For the remaining visited PSIDS, other than some ramp inspection checklists observed in one State, the CAAs rely on PASO's procedures and checklists for the audit and inspections of their approval holders.

2.4.5 Situation and challenges with respect to critical elements 6 to 8

2.4.5.1 Fiji has implemented processes and procedures for the conduct of licensing, certification and other approval activities. For example, while there are two independent designated flight examiners, the CAAF conducts the flight tests and will only assign flight testing tasks to designated flight examiners if its staff is not available.

2.4.5.2 The other five visited PSIDS rely heavily on PASO for the conduct of technical evaluations for the certification and re-certification audits and inspections. After conducting audits or inspections, PASO's inspectors submit a report to the CAA. The report contains findings and observations to be followed up as well as the recommendation regarding the issuance or renewal of the certificate or approval. The CAA makes the final review and decision with regard to the approval or renewal of the certificate. The level of review of the outcome of PASO contractors' activities by the relevant CAA staff may vary from one State to another. However, the CAAs remain ultimately responsible for the issuance or renewal of the certificate or approval.

2.4.5.3 The main issue faced relates to the availability of PASO's inspectors to conduct the necessary audit at the timing requested by the CAA. While most audits can be scheduled and planned in advance, operational needs by the approval certificate holders may require ad hoc evaluation and assessment to be done. It was noted that one of the PSIDS had to approach a fellow PSIDS for assistance to conduct safety audit, as PASO was not able to provide an inspector to undertake the task within the timelines specified by the CAA.

2.4.5.4 With respect to CE 7, Fiji conducts some limited surveillance of its approval holders through activities such as ad hoc inspections and audits on training organizations and AMOs, ramp inspections, in-flight inspections and foreign station audits on its AOC holders, using its own inspectors.

2.4.5.5 For the other visited PSIDS, while the services of PASO are used for the issuance and renewal of certificates and approvals, they are not used for continued surveillance activities on certificate/approval holders. Continued surveillance is therefore left to the staff of the respective CAAs. In practice, except in the case of Fiji, minimal continuing surveillance is performed by the CAAs of the visited PSIDS. For example, with respect to aircraft operations, most CAAs of the PASO Member States visited only perform ramp inspections. They do not conduct flight inspections and foreign station inspections for their AOC holders.

2.4.5.6 With respect to CE 8, Fiji has established procedures to track identified deficiencies and take enforcement actions, however with limited implementation in practice. In the other visited PSIDS, the CAAs do not have a system in place to ensure the effective and timely resolution of identified deficiencies, including non-compliances identified during audit activities performed by PASO's inspectors. In addition, in the absence of surveillance activities in most of the visited PSIDS, there is no ability to ensure the tracking and resolution of safety issues which are normally identified within a surveillance cycle. As a result, in most cases, the only opportunity to review the actions taken by service providers to resolve identified deficiencies is the following audit by a PASO contractor.

2.4.5.7 Another factor that may affect the ability of PSIDS to ensure the resolution of identified deficiencies is the possible interventions by external stakeholders, in particular when the State is involved in the management of service providers, including air operators. Such interventions may be more probable in the absence of effective safeguards in the State's legislation and organizational structure and in particular in the absence of effective mechanisms to prevent actual, potential or perceived conflicts of interest. The primary legislation in the visited PSIDS does empower the CAA in a manner to ensure effective and unhindered resolution of safety issues, including through enforcement actions when needed.

2.5 SITUATION AND CHALLENGES WITH RESPECT TO SAFETY OVERSIGHT OF AERODROMES

2.5.1 Introduction

2.5.1.1 During his attachment to the PSIDS Study, the Aerodrome Team Member met and held discussions with CAA staff responsible for aerodromes in seven States, namely Fiji, Kiribati, Nauru, Palau, Samoa, Tonga, and Vanuatu. The Aerodrome Team Member also met and interviewed relevant personnel from PASO to discuss the Organization's role in providing aerodrome oversight services in PASO Member States. This enabled the Aerodrome Team Member to identify challenges and needs related to aerodromes by:

- a) reviewing the safety oversight activities of CAA staff responsible for aerodromes;
- b) reviewing the current state of aerodrome infrastructure;
- c) identifying ongoing and planned infrastructure projects; and
- d) reviewing future planning efforts with regard to sustainable development and the mitigation of threats from natural disasters and other environmental considerations.

2.5.1.2 On two occasions, the Aerodrome Team Member met with aerodrome operators (Tonga Airports Limited and Airports Vanuatu Limited) to gather their views on the challenges and needs related to aerodromes in the PSIDS region. CAA staff accompanied the ICAO Aerodrome Team Member during these discussions.

2.5.1.3 All seven visited States have already been audited under USOAP. None of the seven visited States has achieved high EI scores in the Aerodromes and Ground Aids (AGA) area. In addition, in the majority of these States, the EI in the AGA area is lower than 25%, as can be seen in Figure 2-36 below.

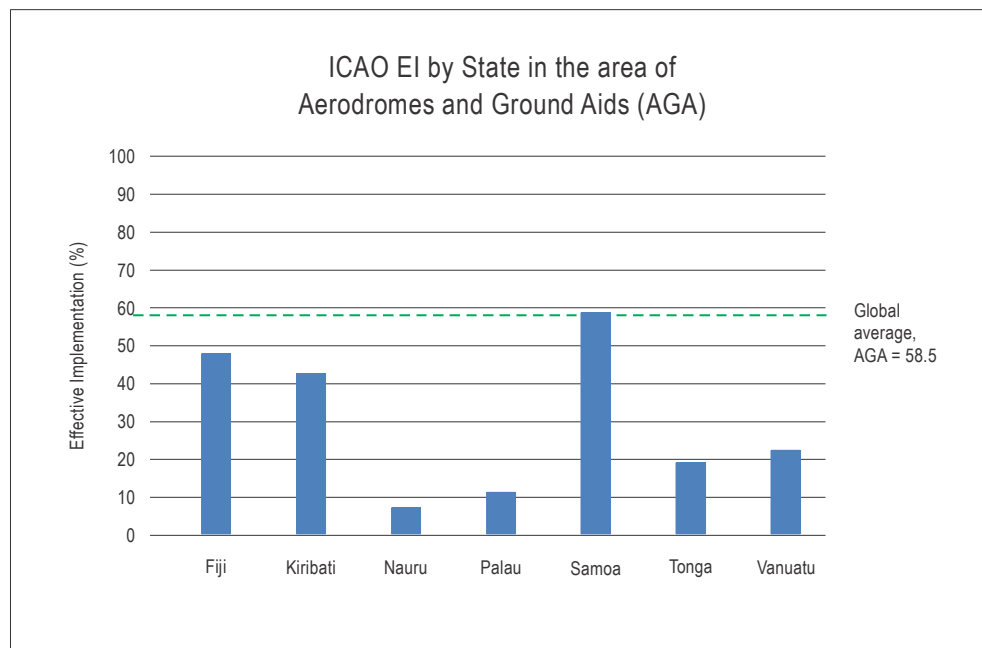


Figure 2-36. ICAO EI by State in the area of Aerodromes and Ground Aids (AGA)

2.5.2 Levels of activity in the visited PSIDS

2.5.2.1 Information on the volume of air traffic in the PSIDS is contained in Section 2.2 of this report. The size of the aerodrome systems in each of the seven States varies significantly. At the top end, Vanuatu has 29 aerodromes. Nauru, in comparison, has only one aerodrome. The seven visited States have between one and three aerodromes with international operations. The total number of aerodromes (with international and domestic operations) in each State is shown in Figure 2-37 below. During the interview with CAA staff in Vanuatu, the ICAO Aerodrome Team Member was informed that the Government of Vanuatu is currently looking to bring international service to two domestic aerodromes. This would raise the total number of aerodromes with international operations in Vanuatu to five.

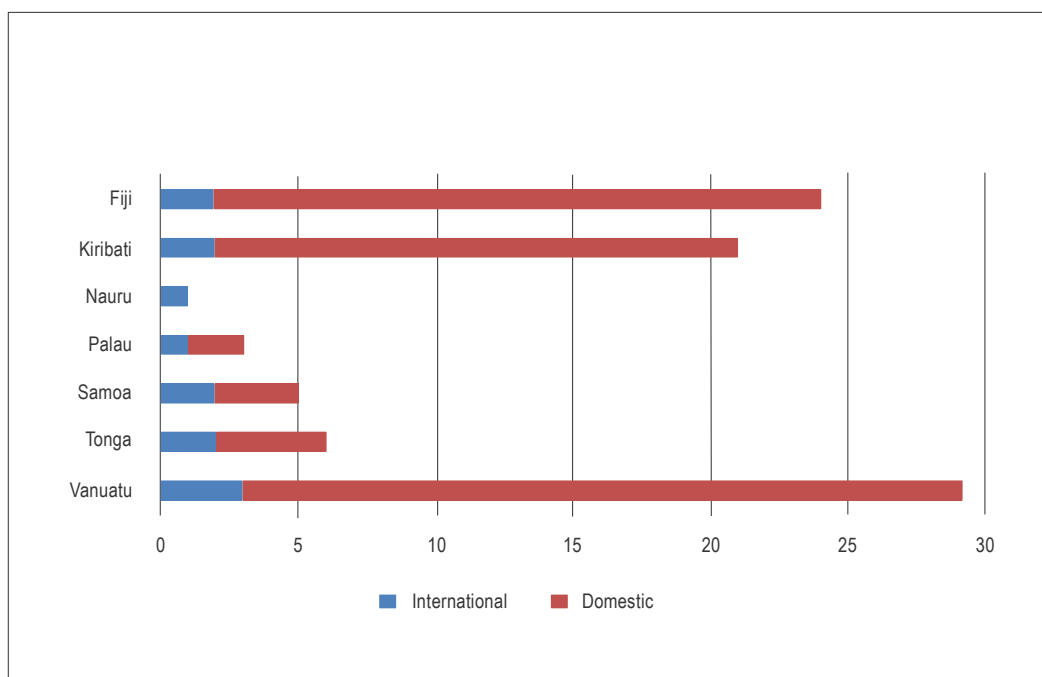


Figure 2-37. Number of aerodromes in each State

2.5.2.2 Table 2-5 below shows the runway dimensions for the longest runway at the main international aerodrome in each of the seven visited States. For the purposes of this report, the main international aerodrome is the busiest in terms of activity in each State. None of the interviewed staff expressed concerns about runway length or capacity issues, on either the landside or airside, of the main international aerodromes.

Table 2-5. Runway dimensions in each of the seven visited States

<i>State</i>	<i>Main International Aerodrome</i>	<i>Number of Runways</i>	<i>Length/Width of Longest Runway</i>
Fiji	Nadi International Airport (Nadi)	2	3 200 x 45 m
Kiribati	Bonriki International Airport (Tarawa)	1	2 011 x 60 m
Nauru	Nauru International Airport (Yaren)	1	2 150 x 45 m
Palau	Roman Tmetuchl International Airport (Koror)	1	2 195 x 45 m
Samoa	Faleolo International Airport (Apia)	1	3 000 x 45 m
Tonga	Fua'amotu International Airport (Nuku'alofa)	2	2 671 x 45 m
Vanuatu	Bauerfield International Airport (Port Vila)	1	2 600 x 45 m

2.5.3 Situation and challenges with respect to critical elements 2 to 5

2.5.3.1 The situation with respect to the primary aviation legislation (CE 1) has been presented in detail in Section 2.3 of this report. With respect to CE 2, five of the seven visited States (all except Fiji and Palau) have adopted the New Zealand Civil Aviation Rules (NZ CARs). Most interviewed CAA staff in these States expressed difficulty with fully understanding the intent and meaning of parts of the rules applicable to aerodromes. Interviewed personnel also expressed challenges with knowing when amendments are made by New Zealand, and understanding how to apply them to the operating environment in their specific State. Interviewed personnel in Fiji did not express any concerns about understanding and applying Fiji's civil aviation regulations. In Palau, civil aviation regulations have never been amended since their initial issuance and CAA personnel expressed challenges with understanding and/or applying their civil aviation regulations.

2.5.3.2 In all visited States except Nauru, the CAA is structurally separate from the aerodrome operator. Overall staffing levels in the CAAs of the visited States are very limited. None of the visited States, except Fiji, has a qualified aerodrome inspector within their organization. The majority of these States only have one individual serving as an aerodrome officer (or partially, depending on the individual's duties) for aerodrome-related issues within the CAA. Most of the PSIDS do not have documented job descriptions for their aerodrome officer or aerodrome inspector positions. CAA staff members responsible for aerodromes often take on other responsibilities within their organization. Interviewed personnel within the CAAs expressed that workload is the biggest challenge, due to the low staffing levels. In addition, some of the visited States did not have an awareness of the whole spectrum of safety oversight functions normally carried out by a CAA in the aerodrome area. In practice, in five of the seven visited States (all except Fiji and Palau), the CAA aerodrome officers do not perform inspectorate tasks. These tasks are performed by PASO on request from the State. CAA staff members responsible for aerodromes in these States often accompany the PASO contractors and gain some exposure during this process.

2.5.3.3 Most of the visited States have not established qualification and experience requirements for the recruitment of their aerodrome staff. Some of the visited States did not have an understanding of the qualification and experience requirements needed by aerodrome inspectors.

2.5.3.4 All of the interviewed personnel have previously taken aerodrome-related training courses, most of which were held in Australia, New Zealand, and Singapore. Some have taken ICAO-sponsored training courses recently held in Fiji. Interviewed CAA personnel expressed concerns about the length of time to travel to and/or from training courses in locations outside of the Pacific Islands region. The lengthy travel times take personnel out of the office for extended periods, which is difficult considering the limited staffing at CAAs in the visited PSIDS States. Interviewed personnel also expressed concerns that training budgets within their organizations are not large to begin with, and that these budgets are often reduced as funding is directed towards other needs. All of the personnel expressed that additional training would help them in their current roles, and stated that hands-on experience, beyond the classroom, would be helpful. The following types of training were identified as training that would be desired in the future: Aerodrome Inspector Training; Technical Writing; Accident Investigation; Root Cause Analysis Training; and Training on the NZ CARs.

2.5.3.5 In Fiji, the CAA has developed some policies and procedures for use by its aerodrome staff. In the other visited PSIDS, the availability of guidance material, including policies and procedures, is very limited in most PSIDS' CAAs. The guidance available to this staff is mostly that developed by the NZ CAA, leaving the CAA aerodrome personnel without the necessary policies and procedures to guide and govern their safety oversight activities.

2.5.4 Situation and challenges with respect to critical elements 6 to 8

2.5.4.1 With respect to CE 6, according to CAA personnel responsible for aerodromes, four of the seven visited States have certified all of their aerodromes with international operations. Personnel from two States expressed that they have plans to certify their aerodromes with international operations in the future. Processes that most of the CAAs use for certifying aerodromes are based on New Zealand CARs, but often with limited implementation level. Aerodrome certification activities are generally performed by one person only, rather than by a multi-disciplinary team in which the various aerodrome specialties would be represented. In consequence, in many PSIDS, the level of effectiveness of the aerodrome certification process is limited. In particular, non-compliances (with the applicable national and international requirements) may not be systematically identified. In addition, identified non-compliances are not appropriately addressed through the necessary risk assessment process, including through the development and provision of aeronautical studies/risk assessments by the aerodrome operator, their review by the CAA and the resulting decisions, including regarding possible exemptions (and associated mitigation measures and exemption publication).

2.5.4.2 In five of the seven visited States (all except Fiji and Palau), aerodrome certificates are valid for a period of up to five years (which is consistent with New Zealand CARs). In Fiji, aerodrome certificates are valid for a period of up to one year. With respect to Palau, the CAA personnel present during the on-site visit could not retrieve the aerodrome certificate of Koror airport and could not indicate the validity period thereof.

2.5.4.3 With respect to CE 7, five of the seven visited States (all except Fiji and Palau) are PASO Member States and contract PASO to conduct annual aerodrome inspections on behalf of the CAAs. When conducting aerodrome inspections, PASO contractors regularly work with the local CAA staff responsible for aerodromes to provide them exposure on the inspection process. Continued surveillance activities in these States are limited. In Fiji, the CAA aerodrome inspectors perform continued surveillance activities over aerodromes. With respect to Palau, the US FAA provides technical assistance to the CAA for aerodrome inspections, but does not actually conduct the inspections on behalf of the organization.

2.5.4.4 With respect to CE 8, most of the interviewed CAA personnel stated that their organizations have processes to collect safety-related information that is applicable to aerodromes, although none described these processes as being robust. Several employees expressed concerns that the quality is lacking in the information their organizations collect, and that it is not clear that the aerodrome operators and/or other entities report all incidents in full.

In some cases, the aerodrome operator is also a government entity within a State (in addition to the CAA), which may lead to potential issues with the reporting of safety information.

2.5.4.5 In most visited PSIDS, in the area of aerodromes, like in the flight safety areas, there is no mechanism in place to ensure an effective and timely resolution of identified non-compliances and other safety issues. The main reasons for these shortcomings are the same as for the flight safety areas and have been presented in Section 2.4.5. As a consequence, findings made to aerodrome operators often remain open for long periods, without effective follow up and resolution.

2.5.5 Aerodrome planning

2.5.5.1 Aerodrome planning creates a process to help identify needs and guide future development, yet none of the CAAs of the visited States conducts any form of planning for their system of aerodromes or forecast future passengers and operations at aerodromes in their countries. Several CAAs stated that they encourage aerodrome operators to prepare aerodrome master plans when undertaking a large development project. Based on interviews with CAA staff responsible for aerodromes, it is unclear how often master plans are actually prepared for aerodromes in the PSIDS region.

2.5.5.2 Several of the CAAs stated that the aerodrome operator and/or airlines serving aerodromes in their State prepare forecasts for future passengers and operations on a regular basis and share with the CAAs. However, none of the CAAs analyses this information or approves planning documents created by aerodrome operators.

2.5.5.3 Aerodrome infrastructure is a critical piece of the aviation systems in the PSIDS, and the lack of robust planning at a system level and aerodrome-specific level creates a risk that aerodrome facilities may not be able to effectively serve their communities in the long term. Aerodrome planning can also help ensure that proposed development projects receive buy-in from surrounding communities and Government authorities. Without proper planning, there is high risk of operational and safety impacts due to deteriorating infrastructure. This overall lack of planning within the PSIDS has the potential to negatively affect the movement of people and goods throughout the region. All of the CAAs of the visited States stated that their lack of planning and analysis is attributed to low staffing levels.

2.6 SITUATION AND CHALLENGES WITH RESPECT TO CIVIL AVIATION SECURITY OVERSIGHT

2.6.1 Introduction

2.6.1.1 During his attachment to the PSIDS Study, the AVSEC Team Member met and interviewed the relevant officer(s)-in-charge from the designated appropriate authority for AVSEC (Civil Aviation Authority) in Fiji, Kiribati, Nauru, Samoa, Tonga and Vanuatu and, where possible, interviewed the AVSEC service providers during short visits to the airport facilities in the visited States to discuss and observe AVSEC arrangements and operations. The AVSEC Team Member also met and interviewed relevant personnel from PASO to discuss the Organization's role in providing AVSEC oversight services in PASO Member States.

2.6.1.2 The AVSEC Team Member conducted a review of ICAO USAP reports for all PSIDS States. These USAP reports were based on audits conducted for the aforementioned States, under the second cycle of the USAP audits (2008–2013). In addition, the AVSEC Team Member reviewed the USAP reports for the three PSIDS States audited under the USAP-CMA, namely the Solomon Islands (2016), the Marshall Islands and FSM (both in 2018) and reviewed other relevant documents relating to the study.

2.6.2 Situation and challenges in the visited PSIDS

2.6.2.1 Situation and challenges with respect to critical elements 2 to 5

2.6.2.1.1 The situation with respect to the primary aviation legislation (CE 1) has been presented in detail in Section 2.3 of this report. With respect to CE 2, with the exception of Fiji, each of the visited PSIDS has adopted the NZ CARs into their regulatory framework. Fiji develops its own set of rules, which reflects the State's own aviation environment and AVSEC system. In the majority of PASO Member States (MS), the NZ CARs have been adopted but have not been sufficiently adapted to prevailing situations in the State. Moreover, in many cases, the statement of adoption of the NZ CARs in individual States stipulates that the CARs only take effect to the extent that a specific subject is not addressed by prevailing national legislation. A specific mapping exercise to identify the primacy of legislation has not been conducted in the PASO MS. In addition, the States have not established and implemented an effective system to identify their level of compliance with the SARPs contained in Annex 17 and security-related provisions of Annex 9, and to notify existing differences with ICAO.

2.6.2.1.2 Each of the visited PSIDS has established a National Civil Aviation Security Programme (NCASP) and in most cases a National Quality Control Programme (NQCP) and a National Civil Aviation Security Training Programme (NCASP). However, in some instances, the NQCP and NCASP are still in draft form and have not been finalized and formally approved. In addition, in all the visited States, the relevant national level AVSEC programmes have not been maintained up-to-date. Consequently, they do not fully reflect the latest Amendments to Annex 17.

2.6.2.1.3 For PASO Member States, the PICASST establishes PASO with a mandate related to AVSEC, but limited to providing technical advice as well as periodic quality control activities in the form of audits and inspections. In particular, PASO's mandate does not include the provision of AVSEC training to its MS. In addition, PASO does not have any mandate to provide technical support in matters related to the resolution of identified security concerns.

2.6.2.1.4 Each of the visited PSIDS has established and designated to ICAO their Civil Aviation Authority (CAA) or Civil Aviation Department (CAD) as the appropriate authority for aviation security responsible for the development, implementation and maintenance of the national civil aviation security programme in accordance with Annex 17, Standard 3.1.2. However, with the possible exception of Fiji, in all the visited PSIDS, the CAA was under resourced to fully meet the State's AVSEC regulatory responsibilities including, but not limited to, the development and maintenance of relevant national AVSEC programmes, certification and approval obligations, the conduct of AVSEC quality control and follow-up activities within the State. With the exception of Fiji, the visited PSIDS generally had only one officer responsible for AVSEC within the CAA. In most cases, this officer had not undergone extensive training to assist in the performance of this officer's duties and was not a fully qualified AVSEC inspector. In addition, in some of the visited PSIDS that had more than one international airport and a number of domestic airports, there was insufficient funding to allow the performance of quality control activities at all international and domestic airports.

2.6.2.1.5 Basic training requirements for airport and aircraft operators are stipulated throughout the NZ CARs which have been adopted by PASO Member States, as well as in relevant section(s) of the established NCASPs. However, these documents only provide general training requirements. They do not establish specific national-level pass marks or test criteria and do not adequately stipulate training requirements for personnel performing State oversight functions.

2.6.2.1.6 Based on the NZ CARs, PASO Member States follow an outcome-based approach for their training requirements. Therefore, the airport and aircraft operators are required to establish and describe detailed training programmes as part of their respective certification processes under relevant Rule (Part 140 for AVSEC service providers and Part 108 for national and foreign aircraft operators). In practice, the oversight and quality control system of PASO Member States do not ensure that training is described and fully implemented for all AVSEC functions and all personnel carrying out such functions.

2.6.2.1.7 A small number of CAA regulatory and airport operational level personnel interviewed during the State visits have had the opportunity to attend risk management workshops (RMW).

2.6.2.1.8 In all visited PSIDS, the entities or organizations involved in case of an act of unlawful interference have not been adequately trained in an airport environment to deal with an act of unlawful interference and have not taken part in aviation security-related exercises. In addition, in all visited PSIDS, adequately trained resources from the police or military are not available to effectively respond to an act of unlawful interference with civil aviation.

2.6.2.1.9 In the majority of the visited States, appropriate quality control checklists, forms and protocols have been developed at the national level for the conduct of inspections, surveys and tests. In most visited States, ICAO documents and other technical publications are readily available.

2.6.2.1.10 Guidance material is provided through the prescriptive nature of the NZ CARs and in related advisory circulars issued by New Zealand and adopted by most PSIDS. However, in most cases, this guidance material has not been adapted by these PSIDS to meet their local requirements.

2.6.2.1.11 With regard to risk management methodology, there is little guidance material available to the PSIDS and an appropriate methodology has not been established for a risk management process in the visited States. Processes related to the sharing of threat information and for the protection, handling and dissemination of security information have not been established in the PSIDS and there is no centralized process within the region for this type of activity on a routine basis. Australia conducted a risk management workshop some years ago and an AVSEC Risk Context Statement was initially developed but not kept up-to-date. New Zealand has also conducted training in this area more recently but many relevant personnel within the PSIDS have still not received such training and developed the required expertise.

2.6.2.2 Situation and challenges with respect to critical elements 6 to 8

2.6.2.2.1 Fiji has implemented an AVSEC certification system for aviation security screeners. However, as was shared with the PSIDS Study AVSEC Team Member, the practical examination aspect of the certification to determine security screener's ability to identify threat objects in x-ray images has room for improvement. The other visited PSIDS rely on training and an examination process that has been provided by New Zealand, which is a relatively new development. Certifications for security screeners under this process are not issued in the name or under the auspices of the relevant CAAs in respective PSIDS.

2.6.2.2.2 There is no centralized role, process or mandate for screener certification at present in the PSIDS. However, the PSIDS Study Team Member was advised that discussions are underway between New Zealand and one of the PSIDS concerning the establishment of a training and certification center for this purpose, which would be a considerable assistance to the region to ensure that staff performing security screening are suitably qualified and tested to ensure their continued proficiency.

2.6.2.2.3 The AVSEC Team Member was advised that relevant airport-level programmes, such as airport security programmes (ASPs) and aircraft operator security programmes (AOSPs), have been reviewed and approved by the relevant CAAs. However, it was also noted that similar to the NCASPs in the visited States, the ASPs and/or AOSPs have not been updated for significant periods of time. In the case of one State, an entirely new airport terminal has been constructed and opened for operations but the ASP in place describes operations at the old terminal/airport and does not reflect the current operations at all. While there are only a few aircraft operators providing services in the PSIDS, there is no system to review and approve aircraft operator security programmes on a regional basis and this is outside of the mandate of PASO.

2.6.2.2.4 As the provision of training is limited in almost all of the PSIDS, a comprehensive system of AVSEC instructor certification has not been established on a national or regional basis.

2.6.2.2.5 An independent surveillance regime has been implemented *via* the security audits conducted by PASO based on compliance with the relevant requirements of the NZ CARs. Annual audits are carried out by PASO contracted inspectors and supported by follow-up activities conducted by the relevant CAAs related to the respective corrective action plans (CAPs) provided by the audited entities. Although certificate holders under NZ CARs (Part 140 for AVSEC service provider and Part 108 for aircraft operators) are required to implement their own quality control regime, the extent to which such requirement has been implemented is unclear and this aspect has not been routinely overseen by the PSIDS' CAAs.

2.6.2.2.6 The PSIDS Study AVSEC Team Member was advised that there is very limited national level surveillance and quality control activities conducted, such as audits, inspections, surveys and tests carried out apart from the annual audits by PASO and the aforementioned follow-up to the CAPs.

2.6.2.2.7 Furthermore, both the national and the operational-level quality control activities conducted by PASO Member States do not encompass all security areas or functions, including but not limited to, training requirements and foreign aircraft operators. In addition, neither PASO nor the PSIDS' CAAs or the airport level operators are conducting a systematic programme of covert testing of security operations.

2.6.2.2.8 The overall amount of oversight and quality control activities carried out by PASO has been limited and is often seen as costly by the Member States. The frequency and prioritization of the surveillance activities are not based on a risk assessment process but are decided upon requests by Member States, based on other considerations, such as availability of financial resources. Secondary international airports and domestic airports in each State have been subjected to minimal formal quality control activities, if any.

2.6.2.2.9 The PSIDS' CAAs are responsible to ensure the implementation of corrective action plans following audits conducted by PASO. Under the terms of the Civil Aviation Acts in the PSIDS, follow-up activities may be supported by a sanction mechanism.

2.6.2.2.10 However, the PSIDS Study Team Member was advised that the follow-up activities are not always carried out effectively and efficiently in order to ensure a swift and timely correction of identified AVSEC deficiencies. In some States, this results in the same deficiencies being identified in subsequent audit conducted by PASO. Furthermore, in most instances, the sanction regime includes administrative proceedings but does not include immediate enforcement actions.

2.6.2.2.11 There is no effective mechanism in place, at national or regional level, to track deficiencies and conduct analyses of quality control activity results in order to identify underlying trends and patterns with regard to common deficiencies and areas of non-compliance.

2.7 SITUATION AND CHALLENGES WITH RESPECT TO ACCIDENT AND INCIDENT INVESTIGATIONS

2.7.1 Out of the 14 PSIDS, only Papua New Guinea has established a separate authority for the investigation of aircraft accidents and serious incidents. This authority, namely the Papua New Guinea Accident Investigation Commission (AIC), was established in 2000 as an independent agency of the Government under Section 218, Part XIII of the Civil Aviation Act 2000 and is accountable to Parliament through the Minister for Civil Aviation. The AIC has a team of 11 investigators and one investigation support office, with expertise in Flight Operations, Aircraft Maintenance Engineering, Flight Recorder Replay and Analysis, Air Traffic Services, Cabin Safety, Safety Management Systems and Human Factors.

2.7.2 Fiji has not yet established a permanent and independent investigation authority. However, its Government is currently taking steps for that purpose.

2.7.3 For the other 12 PSIDS, which do not have a permanent and independent investigation authority, the limitations in resources for regulatory oversight tasks and the very low level of operations would not justify trying to develop technical capabilities for aircraft accident and incident investigations. Some of these PSIDS, especially the very small States, would need to sign a binding agreement with another State or a Regional Accident and Incident Investigation Organization (RAIO) for fully delegating the conduct of accident and serious incident investigations on a systematic basis. Other States may wish to develop and retain the capability of having an investigator-in-charge (IIC) role within their State. Such States should, in addition to developing that capability, sign a binding agreement with another State or a RAIO for partially delegating the conduct of accident and serious incident investigations on a systematic basis.

2.7.4 However, there is currently no RAIO in the Pacific Region. In addition, no State with robust investigation capabilities in the Pacific Region has entered in agreements to systematically accept the delegation of all accident and serious incident investigations from one or more PSIDS. Some PSIDS have entered into Memoranda of Understanding (MoUs) with other States regarding accident and incident investigation. However, none of those MoUs have a binding nature, ensuring that the concerned PSIDS would always be able to delegate to the other State all accident and serious incidents which it is responsible to conduct, mostly as State of Occurrence but also as State of Registry, e.g. for occurrences over the high seas.

2.7.5 In the absence of effective notification and investigation systems in the PSIDS, in most cases serious incidents are either not reported or are not the object of investigations as required under Annex 13, leaving only accidents to be investigated. Similarly, in the absence of effective safety data collection and processing systems (SDCPS) in the vast majority of PSIDS, safety occurrences are not acted upon at State level and underlying safety issues are not identified and resolved.

2.7.6 There is therefore a need to create a RAIO in the Pacific Region, which should be established and staffed in a manner that enables a RAIO Member State (if it decides to do so) to fully or partially delegate accident and serious incident investigations to the RAIO on a systematic and binding basis.

2.7.7 In addition, as required⁷ by ICAO under Standard 3.2 of Annex 13, there is also a need for each PSIDS to have, at national level, an independent entity ("authority" as per Annex 13) for the investigation of aircraft accidents and serious incidents. This entity could be a small multimodal structure, at least covering the aviation and maritime domains. The functions of this entity should at least include the following:

- a) ensuring the establishment and maintenance of the necessary legislation, policies and procedures governing accident and incident investigations (consistent with the delegation agreement);
- b) processing accident and incident notifications received within the State and from other States and the subsequent decision regarding the institution of the investigation;
- c) liaising with accident first responders to ensure safety at an accident site;
- d) ensuring the protection of all relevant evidence following an accident or serious incident, in coordination with the State's judicial authorities;
- e) coordinating with the RAIO or the State to which investigations are delegated;
- f) coordinating with all concerned authorities and stakeholders within the State;

7. Guidance on these aspects has been issued by ICAO in 2018 as part of amendment to ICAO Doc 9756 — *Manual of Aircraft Accident and Incident Investigation*, Part I — *Organization and Planning*.

- g) coordinating matters related to the participation of the State in investigations conducted by other States, when applicable.

2.8 HIGHLIGHT ON SOME CHALLENGES FACED BY THE AVIATION INDUSTRY IN THE PSIDS

2.8.1 Air operators

2.8.1.1 With a few exceptions, most PSIDS air operators are small, or very small, organizations, particularly in the smaller PSIDS. They face a unique set of financial, operational, safety and security challenges, which include:

- a) the lack of financial sustainability;
- b) the shortage of competent personnel (in a situation where several entities are competing for the same limited resources);
- c) personnel retention issues;
- d) an ageing fleet;
- e) equipment acquisition;
- f) capacities in excess of traffic levels (leading to some services operating only once or twice a week); and
- g) meeting all applicable regulatory requirements.

2.8.1.2 As a result, air operations in the PSIDS region have often been discontinued, further aggravating the situation of poor connectivity, especially with respect to inter-PSIDS flights (see Section 2.2.4 of this report).

2.8.2 Aerodromes

2.8.2.1 Challenges related to compliance

2.8.2.1.1 With respect to aerodromes, over the past several years, there have been a number of infrastructure projects completed on both the landside and airside of aerodromes in the seven visited States. Funding for most of these improvements was provided by the World Bank and/or foreign States. While not necessarily a comprehensive list, aerodromes in PSIDS have benefited from improvement projects in the following areas:

- a) terminal buildings (new construction and renovations);
- b) runway overlays;
- c) new aprons;
- d) new air traffic control towers; and

- e) new Aircraft Rescue and Firefighting (ARFF) buildings and donations of vehicles.

2.8.2.1.2 Despite these recent improvements in the PSIDS region, infrastructure-related challenges remain. Not all of the aerodromes with international operations have benefited from such improvement projects. In addition, as shared by CAA personnel during the on-site visits performed as part of the PSIDS Study, many challenges were present, including for the aspects and domains listed below:

- a) maintenance of infrastructure in general, whether recent or dated;
- b) the risk of contractors doing infrastructure improvements not having the necessary expertise for aviation-related projects;
- c) issues related to the acquisition of aggregate for pavement-related projects;
- d) issues related to maintenance and reliability of airfield lighting;
- e) maintenance of navigational aids;
- f) wildlife hazard mitigation;
- g) obstacle limitation surfaces;
- h) runway markings; and
- i) Aircraft Rescue and Firefighting (ARFF) equipment capabilities and training of ARFF personnel.

2.8.2.2 Aerodromes' vulnerability

Many aerodromes in the PSIDS are located on the coasts at low-lying elevations and face significant threats from climate-related changes, such as sea level rise and increased storm surges. For the seven States which were visited by the Aerodrome Team Member and which have such aerodromes, all acknowledged these threats but none had taken any concrete steps towards mitigating them. None of these States requires aerodrome operators to take sea level rise, and similar threats from climate-related changes, into consideration when planning for infrastructure improvements. One CAA provided information on long-term plans to potentially construct a seawall near one of its aerodromes, although plans have not been finalized and funding has not been secured for that purpose.

2.8.3 Challenges related to AVSEC at industry level

2.8.3.1 Fiji and Papua New Guinea have invested in modern aviation security screening equipment and infrastructure at their airports. For the remainder of airports within the PASO Member States, they are heavily reliant on the provision of security and screening equipment donated by New Zealand. In the past, these donations have been in the form of older security and screening equipment replaced through periodic upgrades within the AVSEC Service and airports in New Zealand.

2.8.3.2 However, under a substantial grant (amounting to approximately 11 million NZD) provided and managed by the New Zealand Ministry of Foreign Affairs and Trade (MFAT), all PASO States, with the exception of Papua New Guinea, are receiving state-of-the-art new security screening equipment including explosive detection systems and in some cases computer tomographic x-ray systems.

2.8.3.3 The provision, installation of this equipment and relevant training for security staff will be conducted on a scheduled basis for the PSIDS and the grant includes provisions for maintenance and consumables for the equipment. The provision of this new security equipment coupled with training will greatly enhance aviation security capabilities within the PASO Member States. Non-PASO Member States such as the Marshall Islands, FMS and Palau have relationships with the United States that allow for the provision of security equipment.

2.9 EVALUATION OF THE PICASST

2.9.1 Evaluation with respect to international law on treaties

2.9.1.1 The provisions of the international law on treaties are embodied in the Vienna Convention on the Law of Treaties 1969, done at Vienna on 23 May 1969. The Convention applies to any treaty between States which is the constituent instrument of an international organization. The basic principle underlying the law of treaties is that States should enter into a treaty freely and in good faith, i.e. with the intention to be bound by its provisions.

2.9.1.2 Under article 2.1 (a) to the Vienna Convention, “treaty” means an international agreement concluded between States in written form and governed by international law whether embodied in a single instrument or in two or more related instruments and whatever its particular designation. Four other terms are defined in that same article which are relevant to the analysis. They are: “ratification”, “acceptance”, “approval” and “accession” which mean, in each case, the international act so named whereby a State establishes on the international plane its consent to be bound by a treaty.

2.9.1.3 It is therefore necessary to take account of the provisions of the above Convention in order to determine whether the PICASST is in full force and effect.

2.9.1.4 Firstly, one must establish if a treaty has been signed by the States to whom it is intended to apply. It is also necessary to establish if the person signing the treaty has “full powers”. Under the above article 2.1, “full powers” means a document emanating from the competent authority of a State designating a person or persons to represent the State for the purpose of negotiating and adopting a treaty. Normally this would be a Minister of State or Head of a Diplomatic Mission (article 7). The consent of a State to be bound by a treaty is expressed by the signature of its representative when the treaty provides that signature shall have that effect.

2.9.1.5 In accordance with article 14.1 to the Vienna Convention, the consent of a State to be bound by a treaty is expressed by ratification when the treaty concerned provides for such consent to be expressed by means of ratification. Under article 15 to the above Convention the consent of a State to be bound by a treaty is expressed by accession when the treaty provides that such consent may be expressed by that State by means of accession. Instruments of ratification, acceptance, approval or accession are to be deposited with the depositary of the treaty.

2.9.1.6 Finally, in order for the provisions of a treaty to be brought fully into effect in each of the participating States it is necessary to give effect to it in national legislation. Otherwise, the rights, obligations, powers, functions and duties vested in PASO, as an international organization, its officers, servants and agents cannot be relied upon and protected within the State.

2.9.2 Status and content of the PICASST

2.9.2.1 The Pacific Aviation Safety Office (PASO) was established in early 2005 by the provisions of the PICASST and under the auspices of the Pacific Islands Forum (PIF). The Treaty provides the legal foundation for PASO and specifies its mandate, scope and functions. The Treaty came into force on 11 June 2005.

2.9.2.2 The Treaty was signed initially by five of the States which it is intended to cover but has now been approved and/or acceded to by 10 of the States; the exceptions being FMS, Marshall Islands and Palau. This is according to the Status Report dated 16 June 2015 deposited with the Secretary General to the PIF. Australia, New Zealand and Fiji are associated States under the Treaty. However, not all of the States have accepted or adopted the subsequent 2005/06 and 2009 amendments of the Treaty.

2.9.2.3 As a general comment, it is noted that the Treaty is somewhat loosely worded and lacking in precision in many respects. It is a legal document of considerable status in international law and its terms must therefore be extremely precise and embracing.

2.9.2.4 In its Preamble, the Treaty recognises the difficulties faced by individual States in discharging their obligations and responsibilities under the Convention; and, furthermore, recognises the advantages to individual States of a standardized regional approach to civil aviation safety and security oversight. Having recognised the above difficulties of the States and the advantages to the States, the Treaty confirms the decision of the Pacific Islands Forum Aviation Ministers:

To establish a cooperative and regionally based safety and security regulatory organization to meet the needs of the Pacific Island States.

2.9.2.5 One may question why the term “office” was employed in “Pacific Aviation Safety Office” rather than “organization”. This can cause confusion regarding its status as an international organization under international and national law; and all that this implies in terms of its legal personality, rights and protections.

2.9.2.6 The situation is further confused as it is understood that a formal PASO Constitution has been established. Under article 1 to the Treaty, “Constitution” means the Constitution of PASO which provides direction to the Council and staff of PASO. There are several references to the Constitution in the Treaty but no formal article setting out the basis thereof. Indeed, it is necessary to stress that it is the Treaty itself which is the Constitution of PASO, and which directs the Council. The Council then broadly directs the activities of PASO in a similar manner to the Board of Directors of a Corporation or Statutory Authority.

2.9.2.7 Article 2 to the Treaty recognises that each Party (State) has complete and exclusive sovereignty over its airspace and, more importantly in the context of the present study, responsibility for aviation safety and security regulatory oversight within its territory. This latter aspect is the crucial element that must be fully recognised in any proposed future arrangements.

2.9.2.8 Article 3 to the Treaty states that, without prejudice to article 2 and the rights and obligations of the Parties under international law, the Parties agree that certain regulatory oversight obligations will be met in a regional and collaborative manner. The obligations relate to: (i) Airworthiness; (ii) Flight Operations; (iii) Airports; (iv) Security; and (v) Personnel Licensing for these subjects. The scope of the Treaty therefore originally only extended to five of the present 19 Annexes to the Convention. It is worth noting that at that time States were being audited by ICAO under the USOAP Programme only against their compliance with Annexes 1, 6 and 8 (*Personnel Licensing, Operation of Aircraft and Airworthiness of Aircraft*).

2.9.2.9 There is however no clear definition of what is meant by the term “regulatory oversight obligations” in this context. It seems to imply that it is PASO which will be discharging the regulatory oversight obligations; rather than advising on and supporting the States in discharging those obligations. At first glance, there appears to be a conflict between the provisions of article 3 and the provisions of articles 4.1 and 4.2.

2.9.2.10 The Treaty has purportedly been amended several times. The last such amendment was adopted in 2009 and entered into force on 27 May 2015. However, it should be noted that the amendment does not appear to have been accepted by Papua New Guinea and the Marshall Islands, and FMS remains a non-signatory; according to the above referenced Status Report of 16 June 2015.

2.9.2.11 The above amendment adopted a revised text to article 3 to extend the scope of PASO's remit to cover the following 13 Annexes to the Convention:

- Annex 1 — Personnel Licensing*
- Annex 2 — Rules of the Air*
- Annex 3 — Meteorological Service for International Air Navigation*
- Annex 4 — Aeronautical Charts*
- Annex 5 — Units of Measurement to be Used in Air and Ground Operations*
- Annex 6 — Operation of Aircraft*
- Annex 7 — Aircraft Nationality and Registration Marks*
- Annex 8 — Airworthiness of Aircraft*
- Annex 10 — Aeronautical Telecommunications*
- Annex 11 — Air Traffic Services*
- Annex 14 — Aerodromes*
- Annex 15 — Aeronautical Information Services*
- Annex 17 — Security*

2.9.2.12 Annexes 9 (*Facilitation*), 12 (*Search and Rescue*), 13 (*Aircraft Accident and Incident Investigation*), 16 (*Environmental Protection*) and 18 (*The Safe Transport of Dangerous Goods by Air*) are not included in the PASO remit/scope; nor is Annex 19 (*Safety Management*). This is relevant in the case of Annex 13, as functions related to the conduct of investigations should not be vested in an RSOO but rather in a Regional Accident and Incident Investigation Organization (RAIO) for the sake of independence.

2.9.2.13 It appears that by a decision of the PASO Council meeting in May 2018 the following resolution was adopted:

Confirm in accordance with its discretion under article 7 of the PICASST, that it will be a function of PASO to provide technical safety oversight advice around all Annexes except 9, 12 and 13.

2.9.2.14 However, that Council decision has not to date resulted in an amendment to the terms of PICASST; and its legal effect is therefore questionable.

2.9.2.15 On that basis, PASO is now therefore receiving requests for assistance in respect of 16 of the 19 Annexes; although it should be noted that the Treaty has not yet been formally amended to cover all the additional Annexes. It is doubtful whether article 7 (1) paragraphs (a) and (b) is sufficiently widely drafted to allow the extension of the scope of functions pending a formal amendment or revision of the Treaty.

2.9.2.16 Several States have entered into Service Level Agreements (SLAs) with PASO for the performance of safety oversight functions. However, SLAs cannot in and of themselves remedy any shortcomings in the scope of functions provided for in the Treaty.

2.9.2.17 Article 4.1 to the Treaty formally establishes PASO as a “centralised technical advisory organization”; and is the mechanism identified to meet the obligations contained in article 3. The term advisory is considered significant. This is confirmed by the provisions of article 4.2, which states that PASO shall provide to any Party on request “advice and technical assistance on matters related to the regulatory oversight of civil aviation safety and security oversight of that Party”.

2.9.2.18 The States which are Parties to the Treaty undertake various responsibilities in accordance with article 5. Among the most significant are the responsibilities to:

- a) meet their financial contributions as set by the Council;

- b) institute and maintain an aviation safety and security legislative framework in a standardised and consistent manner; and
- c) review and respond to, and act appropriately upon such reports and recommendations as PASO may provide to fully meet international obligations.

2.9.2.19 The fulfilment of this last responsibility by the States is of course crucial to the success of the arrangements.

2.9.2.20 There is also an obligation to ensure that any fees charged by PASO to recover costs for the provision of its services are reimbursed in a timely manner. It is important that the legislation in each State enable PASO to receive payment for the services that it renders; particularly if payment is to come from the entity which is the subject of the service performed.

2.9.2.21 PASO is governed by a Council of Directors, consisting of representatives of the Parties and of such other organizations as may be decided by the Council; and detailed in the Constitution (see above). The governance and administrative processes of the PASO Council are set out in article 6 of the Treaty. The Council is the governing body to PASO.

2.9.2.22 Article 7 which is referred to above is a key article. This article describes the functions of PASO. Paragraph 1 (a) provides for PASO to “conduct aviation safety and security regulatory tasks as requested by and agreed with any Party”. There is no definition of “regulatory tasks” in this paragraph or in article 1 (Definitions). It is a matter of debate as to the precise interpretation of the term regulatory tasks in this context. It is, furthermore, a matter of debate as to what was intended. The terminology used in this article is somewhat at odds with the scope of PASO’s functions, as detailed in article 4.2 above.

2.9.2.23 Paragraph 1 (b) provides that PASO shall “provide any Party upon request with advice and technical assistance relating to the regulatory oversight of civil aviation safety and security by that Party, using as a basis the standardised rules and procedures under that Party’s legislative framework”. This latter provision refers back to the responsibility upon the Parties under article 5 as noted above.

2.9.2.24 One significant omission from article 7 is any mention of the provision or organization of training in civil aviation regulation for nationals of the member States, nor is there any reference to any role as a representative of the Pacific Region with ICAO, and other regional and international organizations.

2.9.2.25 Another shortcoming in the Treaty is the absence of provisions to address the issue of protection from liability of PASO, its officers and contractors.

2.9.3 Outcome of the evaluation

Taking into account the fact that the PICASST was executed 15 years ago and the extensive number of changes and developments within the international civil aviation system over that period of time, such as the need for certification of aerodromes and the introduction of safety management concepts, as well as the growth in the focus on regionalization of safety and security oversight, the provisions of the PICASST are considered to be no longer entirely fit for purpose.

2.10 CONTRIBUTION OF AVIATION AND TOURISM TO PSIDS' SOCIO-ECONOMIC DEVELOPMENT

2.10.1 Introduction

2.10.1.1 Aviation benefits

2.10.1.1.1 Aviation provides major socio-economic benefits. Examples of such benefits are documented in the reports of the Industry High Level Group (IHLG), an informal group established in 2013 by the ICAO Secretary General, bringing together the Heads of four industry organizations: the Airports Council International (ACI), the Civil Air Navigation Services Organisation (CANSO), the International Air Transport Association (IATA) and the International Coordinating Council of Aerospace Industries Associations (ICCAIA).

2.10.1.1.2 Aviation is a key driver of economic development. The economic benefits of aviation encompass direct, indirect and induced impacts. Air transport activities affect multiple sectors of the economy, especially tourism. The connectivity brought by air transport is at the heart of tourism development, providing substantial economic benefits for all those involved in the tourism value chain.

2.10.1.1.3 Aviation also provides significant social benefits. The availability of reliable air transport services provides people with access to what they need, including decent livelihoods, food, healthcare, education, and safe communities and spaces. Aviation provides the only possible means of transportation to provide healthcare to many remote communities, and it is a fast and reliable way to deliver urgent humanitarian aid during emergencies, such as those caused by natural disasters, famine and war. Furthermore, educational opportunities are made available to students around the world, especially for those students from developing countries who must travel abroad for higher quality education. Aviation also contributes to improving quality of life by broadening travellers' leisure and cultural experiences. It provides a means to visit distant friends and relatives, and fosters awareness of other cultures.

2.10.1.2 Aviation benefits in the PSIDS region

2.10.1.2.1 Most of the islands forming the PSIDS are scattered and widely dispersed, with some islands so remote that air or shipping services are non-existent or inadequate because of the economic costs and operational challenges involved in servicing such islands. As a result, people on these islands do not have the same level of access to economic opportunities and social services and therefore are disadvantaged. The further development of air transport would be a key driver for PSIDS' socio-economic development.

2.10.1.2.2 Air transport provides vital national, regional and international connectivity. A reliable network of air links within and among island countries and to major hubs such as major airports in Australia and New Zealand and beyond is therefore essential to the viability of these countries from humanitarian, political and economic perspectives. Without a safe and reliable air transport system, many island nations will miss precious growth opportunities.

2.10.1.2.3 Air transport provides job opportunities and essential services for communities' livelihood that are critical for supporting isolated and small communities' socio-economic needs such as education, healthcare, employment, tourism, emergency services, and the import and export of materials and goods, which are crucial for food security among others.

2.10.1.2.4 As most of the tourists to PSIDS arrive by air, civil aviation is the enabler of tourism, which in turns significantly contributes to the sustainable development of the PSIDS.

2.10.1.2.5 The information in this section is based on the content of the Annual Review of Visitor Arrivals in Pacific Island Countries⁸, a report produced by the South Pacific Tourism Organisation (SPTO). The information specifically related to the PSIDS was isolated from the other Pacific Islands mentioned in the report.

2.10.2 Tourist arrivals into the PSIDS

2.10.2.1 Destinations in the PSIDS welcomed 1 729 313 tourist arrivals (by air) in 2017, as shown in Table 2-6 below. This represents a 4.69% gain over 2016. Contributing to this growth were the sustained outbound travel demand, increased connectivity, massive promotional campaigns and improved infrastructure developments. By destinations, double-digit growth was recorded in Cook Islands, Kiribati, Niue, Solomon Islands and Vanuatu with moderate growth in FSM, Fiji, Samoa, Tonga and Tuvalu. Tourist arrivals decreased in Nauru (-1.18%), Palau (-11.34%) and PNG (-27.67%). Fiji accounts for 50% of tourist arrivals in the PSIDS followed by Cook Islands (9.6%), Samoa and PNG (9.2% and 8.5% respectively).

Table 2-6. Tourist arrivals in PSIDS in 2017

	<i>Tourist arrivals</i>		<i>% change</i>	<i>% share</i>
	<i>2016</i>	<i>2017</i>		
Cook Islands	146 473	161 362	10.17%	9.61%
FSM	29 485	30 060	1.95%	1.79%
Fiji	792 320	842 884	12.69%	50.19%
Kiribati	5 018	5 663	12.85%	0.34%
Marshall Islands	5 431	6 034	11.10%	0.36%
Nauru	3 038	3 002	-1.18%	0.18%
Niue	8 918	9 805	9.95%	0.58%
Palau	138 416	122 726	-11.34%	7.31%
PNG	197 632	142 943	-27.67%	8.51%
Samoa	145 176	155 098	6.83%	9.24%
Solomon Islands	23 192	25 709	10.85%	1.53%
Tonga	59 130	62 434	5.59%	3.72%
Tuvalu	2 465	2 530	2.64%	0.15%
Vanuatu	95 117	109 063	14.66%	6.49%
TOTAL	1 651 811	1 679 313	1.66%	100.00%
Source: South Pacific Tourism Organisation (SPTO)				

8. The full report can be downloaded at:
<https://www.corporate.southpacificislands.travel/wp-content/uploads/2017/02/2017-AnnualTourist-Arrivals-Review-F.pdf>

2.10.2.2 Table 2-7 below shows the country or region of origin of tourists coming to the PSIDS. Australia and New Zealand contribute to about 60% of tourists in the PSIDS. There is a good potential for growth in the other markets, particularly in China, as they currently only contribute at single digit percentage levels.

Table 2-7. Tourist arrivals in PSIDS by source market in 2017

	Tourist Arrivals		% change	% share
	2016	2017		
Australia	569 473	580 988	2.02%	34.60%
New Zealand	417 567	420 799	0.77%	25.06%
United States	127 161	136 813	7.59%	8.15%
United Kingdom	29 310	26 936	-8.10%	1.60%
Europe	72 137	70 138	-2.77%	4.18%
China	137 318	129 738	-5.52%	7.73%
Japan	45 715	43 178	-5.55%	2.57%
Other countries in Asia	107 364	108 230	0.81%	6.44%
Pacific Islands	114 795	129 358	12.69%	7.70%
Other countries outside of Asia	30 971	33 135	6.99%	1.97%
TOTAL	1 651 811	1 679 313	1.66%	100.00%

2.10.3 Contribution of tourism to PSIDS' economies

2.10.3.1 Tourism Earnings

2.10.3.1.1 As shown in Table 2-8 below, total receipts from tourism in the PSIDS, generated from 1.6 million arrivals by air, reached an estimated total of 2.45 billion USD in 2017. Fiji is the leading destination, with a 889.3 million USD receipt, followed by PNG with 326.8 million USD, Cook Islands with 254.1 million USD, and Samoa with 236.8 million USD, Vanuatu with 207 million USD and Palau with 196.4 million USD. All the remaining States recorded annual receipts of less than 100 million USD each. The value of tourism earnings in nominal terms varies greatly among the destinations, but illustrates the strength of each State's industry during the year. The results also indicated that more arrivals do not necessarily coincide with higher receipts due to the differences on the average daily expenditure and the length of stay of tourists in each destination.

Table 2-8. Tourism earnings by PSIDS in 2017

	<i>Receipts in 2017 (Estimates in millions of USD)</i>	<i>Receipts per capita 2017 (Estimates in USD)</i>	<i>Receipts per arrival in 2017 (Estimates in USD)</i>	<i>Population (2015-2016)</i>
Cook Islands	254.1	14 557	1 575	17 459
FSM	81.8	779	2 721	104 966
Fiji	889.3	1 005	1 055	884 887
Kiribati	9.1	82	1 602	110 136
Marshall Islands	11.8	215	1 961	55 000
Nauru	3.3	303	1 089	10 800
Niue	8.3	5 176	850	1 611
Palau	196.4	11 032	1 600	17 800
PNG	326.8	38	2 286	8 500 000
Samoa	236.9	1 218	1 528	194 523
Solomon Islands	71.0	109	2 760	651 700
Tonga	156.7	1 557	2 510	100 651
Tuvalu	2.7	234	1 066	11 534
Vanuatu	207.0	765	1 898	270 470
TOTAL	2 455.3	—	1 750 (in average)	10 932 137
<i>Notes.— Estimates are based on SPTO's calculations. Local currencies are converted to USD for consistency. Revised from 2017 Facts & Figures. Tourism receipts are derived from travel model (total visitor arrivals multiplied by average length of stay multiplied by average daily spend). Tourism receipts per capita are calculated as total tourism receipts divided by annual population. Tourism receipts per arrival are generated by total tourism receipts divided by annual visitor arrivals.</i>				

2.10.3.1.2 Tourism earnings per capita allow easier comparisons across States with vastly different population sizes. By destinations, tourism receipts per capita ranged from 38 USD in PNG to 14 557 USD in Cook Islands. The results indicated that while PNG generated estimated total earnings of 326.8 million USD, receipts per capita were low due to a high population (more than 8 million inhabitants). In contrast, Cook Islands, with total receipts of 254.1 million USD, recorded the maximum receipts per capita of 14 557 USD due to its smaller population of less than 20 000 inhabitants.

2.10.3.2 Tourism employments and earnings share to gross domestic product (GDP)

2.10.3.2.1 The share of tourism earnings in the GDP reflects the contribution of tourism in an economy. In 2017, in the PSIDS, the average contribution of tourism in the GDP was about 23%, as the contribution was 69% in Cook Islands, 46% in Vanuatu, 41% in Niue, 40% in Fiji, 26% in FSM, 20% in Samoa, 18% in Tonga, 12%, and 10% in the Solomon Islands. All the remaining destinations recorded shares of less than 10% each.

2.10.3.2.2 Tourism is a significant employer in those PSIDS where tourism is a major industry. In 2017, the tourism sector employed 97 920 people. In the PSIDS, the average contribution of tourism to employment was about 15% in 2017. In particular, this contribution was about 34% in Cook Islands, 32% in Niue, 26% in Vanuatu and FSM, 19% in Palau, 19% in Tonga, 14% in Fiji and 9% in Samoa.

2.10.3.2.3 Table 2-9 below shows the data related to GDP and employment for each PSIDS.

Table 2-9. Annual tourism employment and earnings as percentage of GDP in 2017

	<i>Latest year on available employment data</i>	<i>Number of tourism employees¹</i>	<i>Total number of employees²</i>	<i>Tourism employment as % of total employment</i>	<i>Tourism earnings as % of GDP (2017 estimates)</i>
Cook Islands	2014	2 386	6 938	34.39%	69.1%
FSM	2014	1 802	6 938	25.97%	25.9%
Fiji	2017	42 300	303 647	13.93%	40.3%
Kiribati	2017	462	28 158	1.64%	5.5%
Marshall Islands	2014	605	12 600	4.80%	5.3%
Nauru	2017	N/A	N/A	N/A	2.8%
Niue	2014	226	700	32.29%	41%
Palau	2014	1 172	6 000	19.53%	6.7%
PNG	2016	21 000	2 344 733	0.90%	2.3%
Samoa	2016	4 080	45 161	9.03%	20.4%
Solomon Islands	2017	6 400	208 016	3.08%	10.4%
Tonga	2017	6 400	33 422	19.15%	18.2%
Tuvalu	2014	87	3 869	2.25%	6.9%
Vanuatu	2017	11 000	42 295	26.01%	46.1%
TOTAL	–	97 920	3 042 477	14.84% (in average)	22.93% (in average)
Sources: NSOs, NTOs, ADB, World Bank, World Tourism Council Travel, SPC and SPTO.					
1. Employees employed by accommodation, attraction, restaurant, shops, tour operators and transport service industries.					
2. Total number of employees in a destination.					

2.10.3.3 Tourism and government revenue

2.10.3.3.1 Tourism also generates important tax revenues for PSIDS. In most PSIDS, tourist related taxes, including hotel, departure and services taxes, and in some cases environmental levies, have enabled State budgets to significantly benefit from tourism. Tourism tax revenues generated from available data on departure tax and tourist tax levy are estimated at 40.1 million USD in 2017. Table 2-10 below provides data for each PSIDS.

Table 2-10. Annual tourism tax revenues by destinations in 2017

	<i>Airport departure tax (national currencies)</i>	<i>Departure tax (USD)</i>	<i>Estimated tax revenues from tourists (thousands of USD)</i>
Cook Islands	55 NZD	40	6 419
FSM	40 USD	40	1 202
Fiji	No airport tax but 5% tourist tax levy		20 659
Kiribati	20 AUD	15	87
Marshall Island	20 USD	20	104.0
Nauru	50 AUD	38	115.1
Niue	80 NZD	58	572
Palau	50 USD	50	6 136
PNG	30 PGK	9	1 328
Samoa	40 STA	16	2439
Solomon Islands	40 SBD	5	132
Tonga	25 TOP	11	687
Tuvalu	30 AUD	23	58
Vanuatu	200 VUV	2	200
TOTAL			40 138

Source: NTOs, Departure National Tax from IATA Travel Centre. Estimates SPTO Calculations.

Note.— Estimated tourism tax revenues are derived by destination total number of arrivals multiplied by the departure tax (all in USD). For Fiji, tax revenue is generated by the 5% tax levy multiplied by the total number of arrivals (converted to USD).

2.10.4 Contribution of aerodromes to relief efforts

The socio-economic development of PSIDS may be severely hindered by their exposure and vulnerability to disasters, especially climate-related ones. Aerodromes in the PSIDS play an important role in disaster relief efforts. While some of the visited States have a network/system of aerodromes, the overall number of aerodromes within each State is limited and most aerodromes only have one runway. Should aerodrome infrastructure be affected in a natural disaster (such as damage to a runway), the aerodrome may no longer be in condition to be used for disaster relief air operations. None of the States has contingency plans in place for such a scenario with damaged infrastructure.

2.10.5 Lack of prominence of aviation in strategic policies and plans in the PSIDS region

2.10.5.1 Despite all the benefits of aviation for States and its critical importance for PSIDS, there is a lack of prominence of aviation in the strategic policies and plans in the PSIDS region, both at regional and national levels.

2.10.5.2 While the PIF issued the first Quadrennial Pacific Sustainable Development Report to track the region's progress in realizing the 2030 Sustainable Development Agenda, the SAMOA Pathway and other global commitments, the aviation sector is largely not addressed in this report and the contribution of the aviation sector has not been linked with Sustainable Development Goals (SDGs) in the PIF region. With respect to the Sendai Framework, the current strategic policies of the PIF do not explicitly recognize the key importance of aviation in disaster relief efforts following natural disasters.

2.10.5.3 There is a lack of prioritization given to ensuring compliance to the applicable international and national aviation safety and security requirements. In particular, in the few cases where aviation is mentioned in regional or national strategic plans, most of the time the focus is on infrastructure development without components relating the effective compliance with the applicable international and national requirements, therefore missing the key importance of compliance as a prerequisite and enabler of civil aviation development.

2.11 INTERACTIONS WITH, AND SUPPORT BY THE ICAO APAC REGIONAL OFFICE

This section addresses specifically the 13 PSIDS which are ICAO Member States, i.e. all except Niue.

2.11.1 PSIDS' attendance to key ICAO regional meetings

2.11.1.1 The cost and time of travel of PSIDS representatives to attend events at the ICAO Regional Office in Bangkok, paired with the risk of slow administrative processes to grant authorizations to State/CAA officers for official travel, often results in having very few or no participants at all from these States, including for major regional events such as meetings of the Regional Aviation Safety Group (RASG-APAC) and Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG). This problem is often compounded by the significant lack of experts in PSIDS to adequately represent their States in these regional meetings. In the most recent key APAC aviation event, the 56th APAC DGCA meeting (held in Kathmandu, Nepal, in August 2014), only four PSIDS sent participants. These States were Fiji, Kiribati, PNG and Tonga.

2.11.1.2 Table 2-11 below shows the participation of PSIDS in RASG-APAC meetings in the last five years. The number of participating PSIDS has constantly been very low. In 2014, 2017 and 2018, only one PSIDS sent participants to the RASG-APAC meeting (Solomon Islands in 2014, Fiji in 2017 and Samoa in 2018). In the best case (2016), there were only three PSIDS represented. The PSIDS participation level was always very low, accounting for about 2% to 3% of the total number of participants.

**Table 2-11. Participation of PSIDS in RASG-APAC meetings
in the last five years**

States/Administrations	<i>RASG-APAC/4</i> (2014)	<i>RASG-APAC/5</i> (2015)	<i>RASG-APAC/6</i> (2016)	<i>RASG-APAC/7</i> (2017)	<i>RASG-APAC/8</i> (2018)
Cook Islands	–	–	–	–	–
Fiji	–	2	1	2	–
Kiribati	–	–	–	–	–
Marshall Island	–	–	–	–	–
Micronesia (Federal States of)	–	–	–	–	–
Nauru	–	–	–	–	–
Palau	–	–	–	–	–
Papua New Guinea	–	–	1	–	–
Samoa	–	–	–	–	2
Solomon Islands	3	–	–	–	–
Tonga	–	1	1	–	–
Tuvalu	–	–	–	–	–
Vanuatu	–	–	–	–	–
Number of participants from PSIDS	3	3	2	2	2
Total number of participants	91	109	169	88	89
% of participants from PSIDS	3.30%	2.75%	1.78%	2.27%	2.25%

2.11.1.3 Table 2-12 below shows that the participation of PSIDS in APANPIRG meetings in the last five years. While only one PSIDS (Fiji) participated in 2014, four PSIDS participated in 2018 (Fiji, Kiribati, PNG and Samoa). The PSIDS participation level remains very low, accounting for less than 4% of the total number of participants.

**Table 2-12. Participation of PSIDS in APANPIRG meetings
in the last five years**

States/Administrations	APANPIRG/25 (2014)	APANPIRG/26 (2015)	APANPIRG/27 (2016)	APANPIRG/28 (2017)	APANPIRG/29 (2018)
Cook Islands	–	–	–	–	–
Fiji	2	2	2	2	1
Kiribati	–	–	2	2	1
Marshall Island	–	–	–	–	–
Micronesia (Federal States of)	–	–	–	–	–
Nauru	–	–	–	–	–
Palau	–	–	–	–	–
Papua New Guinea	–	–	2	2	2
Samoa	–	–	–	–	2
Solomon Islands	–	–	–	–	–
Tonga	–	–	–	–	–
Tuvalu	–	–	–	–	–
Vanuatu	–	–	–	–	–
Nb of participants from PSIDS	2	2	6	6	6
Total Nb of participants	131	152	166	175	173
% of participants from PSIDS	1.53%	1.32%	3.61%	3.43%	3.47%

2.11.2 Support provided to PSIDS by the ICAO APAC Regional Office

2.11.2.1 Recognizing the challenges faced by PSIDS and in accordance with the No Country Left Behind (NCLB) initiative, the APAC RO, despite limited resources, has increased support activities such as meetings, seminars, training, workshops and technical assistances for the benefit of PSIDS over the last few years. The increase in the number of APAC RO missions in the Pacific region can be seen in Figure 2-38 below:

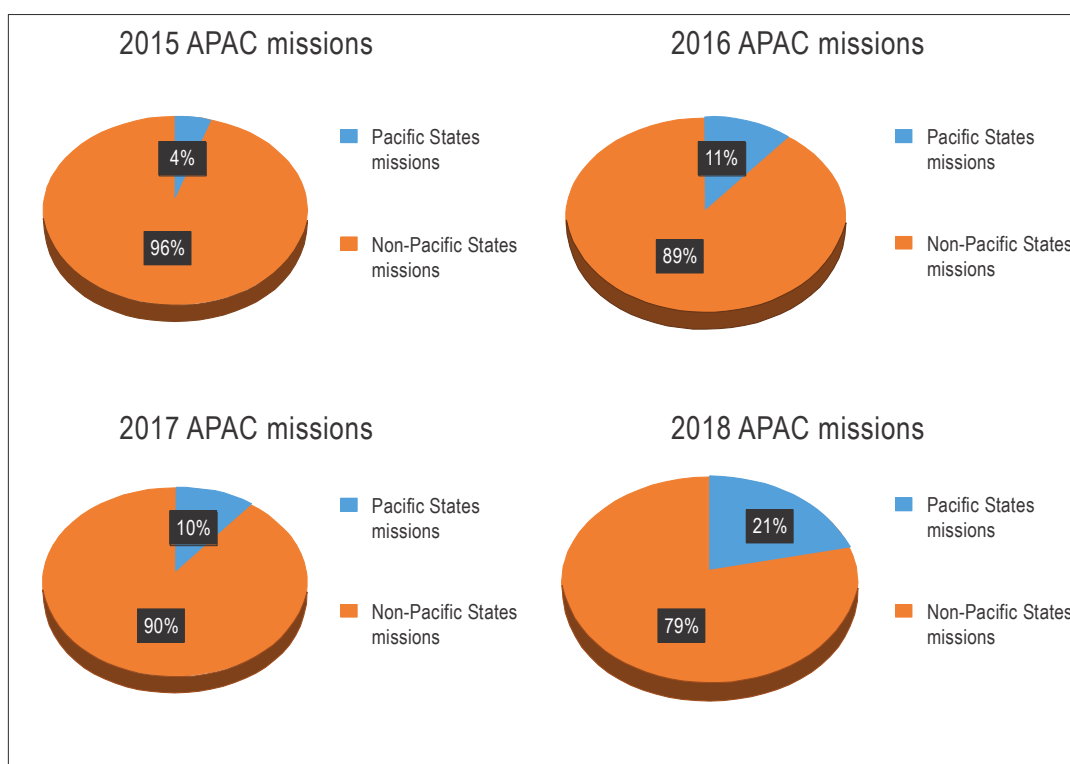


Figure 2-38. Increased number of APAC RO missions in the Pacific Region

2.11.2.2 Over the last few years, the APAC RO has launched a Combined Action Team (CAT) assistance programme for PSIDS. CAT missions are targeted technical assistance activities and may cover multiple areas, such as legislation, organization, personnel licensing aircraft operations, airworthiness, air navigation services, aerodromes, accident and incident investigation and, as of 2019, aviation security).

2.11.2.3 In the PSIDS, three CAT missions were conducted in 2016 (PNG, Solomon Islands and Tonga), two in 2017 (PNG and Fiji), and five in 2018 (Samoa, Vanuatu, Solomon Islands, Tonga and Fiji). As per the established plan, by the end of 2019 CAT missions will have been conducted for at least five PSIDS.

2.11.2.4 Other ongoing support programmes for the PSIDS which the ICAO APAC RO is supporting include:

- a) the ICAO Programme for Aviation Volunteers (IPAV): IPAV is an on-site technical assistance programme carried out by aviation volunteers and fully funded by the Technical Cooperation Bureau (TCB) of ICAO. The expert is usually a retired aviation professional who would like to continue sharing the expert's expertise and contribute back to the aviation community. It is short-term, usually not more than one month, whereby the expert would work with the State counterparts providing assistance and guidance on matters relating to the identified area of assistance;
- b) aerodrome-specific regulatory capacity building activities, including an aerodrome certification seminar organized in cooperation with Airports Council International (ACI), held in Sydney, Australia, in June 2018);
- c) workshops on the Online Framework of the USOAP CMA (OLF), which are supported and partly funded by New Zealand. They were conducted in 2015, 2017 and 2018 and were attended by 10 PSIDS and PASO; and
- d) regular participation of the Regional Director/Deputy Regional Director in the PASO Council meetings.

2.11.2.5 It should be noted that the training activities related to the USOAP CMA have focused on the use of OLF tools but have not addressed in details the establishment of an effective State Safety Oversight System through the effective implementation of its eight critical elements (CEs), although this is a priority training area for PSIDS.

2.11.2.6 Although the APAC RO was able to increase the number of on-site support activities, including workshops and assistance missions, in the PSIDS, the cost of such activities remains an obstacle. A review requested by the Senior Advisor for the purpose of this study showed that the average travel cost of an ICAO APAC regional officer for a mission to the Pacific Region is between two and five times higher than the average travel cost for a mission to the Asia Region.

2.11.2.7 Additional activities are sometimes decided based on additional funding received by the APAC RO during the year, e.g. carryover funds or Safety Fund (SAFE). Such funding, on its own, would not however enable long-term support planning and commitment by the ICAO APAC RO to the PSIDS.

2.11.3 The need for an ICAO presence in the Pacific Region

2.11.3.1 As was observed during the on-site visits conducted as part of this study, most PSIDS face challenges in communicating, liaising and coordinating with ICAO at headquarters and regional office levels. They are particularly challenged in coping with the numerous electronic communications from ICAO, due to the lack of expertise to properly understand the content of these communications, lack of manpower and poor internet connectivity in these States. Time difference between the Pacific Region and Bangkok further aggravates communication challenges. Due to the cost and time of travel to Bangkok, paired with the risk of slow administrative processes to grant authorizations to State/CAA officers for official travel, most PSIDS do not attend the key regional ICAO meetings and, as consequence, do not benefit from all information, including updates and discussions on important aviation matters for the Pacific Region.

2.11.3.2 Compared to these States' needs, and despite ICAO's efforts, such as a recent increase in assistance missions, there is an insufficient number of visits, workshops and other interventions by ICAO in the PSIDS, largely due to budget limitations, given the relatively high travel costs between Bangkok and the Pacific Region. Because of the situation described above, the personnel of the ICAO APAC RO may not have full and current knowledge about the situation and challenges faced by some of the PSIDS, as well as the unique situation of such PSIDS. Non-participation of States in various regional and sub-regional meetings, as well as low levels of response to ICAO communications further widens this knowledge gap. With decades of limited interactions between the PSIDS and the ICAO APAC RO, and with ongoing challenges faced by PSIDS in coping with all correspondence and requests from ICAO, the

relationships between the PSIDS and ICAO would require further strengthening, of which an ICAO presence in the Pacific would be an essential component.

2.12 SUPPORT PROVIDED TO PSIDS BY OTHER STATES

2.12.1 Introduction

2.12.1.1 With respect to civil aviation, PSIDS have benefited from support from numerous stakeholders, including various States. This support has encompassed assistance to regulatory authorities and service providers as well as support to building aviation infrastructure.

2.12.1.2 The sections below summarize the main support provided by States to regulatory authorities at the national and/or regional level in the PSIDS. Other States which have provided support in the PSIDS include China, Japan and the Republic of Korea.

2.12.2 Support provided by Australia

2.12.2.1 Support provided to PASO

Australia has been providing important support to PASO. Both CASA and the Department of Infrastructure contribute to PASO as Council Representatives to PASO. This provides an opportunity for Australia to support the direction of PASO by providing strategic guidance to the General Manager and PASO staff on organizational objectives, training and the ongoing performance of the organization. The Department of Infrastructure also provides an annual subscription fee to PASO of around 44 000 AUD, and the Australian government contributed approximately 3 million USD in 2013 towards the World Bank PASO reform project. On a technical basis, CASA's and PASO's engagement is supported by the Working Arrangement regarding the provision of advice and assistance on matters relating to civil aviation safety between the Civil Aviation Safety Authority of Australia and the Pacific Aviation Office (the Working Arrangement). The Working Arrangement enables CASA to assist PASO to provide policy and technical advice to PASO Member States on a cost recovery basis. However, in practice, this arrangement has not yet been executed, due to financial aspects.

2.12.2.2 Support provided to Papua New Guinea

On a bilateral basis, Australia provided support to Papua New Guinea. The *Agency Support Arrangement between the Australian High Commission, Papua New Guinea and the PNG Civil Aviation Safety Authority (ASA)* facilitates the framework of financial assistance and support the Australian Government provides to CASA PNG to shape organizational self-sufficiency to contribute to international compliance in aviation regulation. The ASA provides a plan for implementing a series of activities to strengthen aviation safety and security and was designed after an assessment of CASA's capacity to meet current and future priorities. The Arrangement, funded by the Australian Government, seeks to enhance CASA's compliance with both domestic and international safety and security regulations whilst delivering rigorous training across the aviation sector. As well as providing a governance framework and objectives of the engagement, the ASA captures an implementation framework, funding arrangements, risk management and a monitoring reporting and evaluation framework. The set of activities funded by the ASA amounts to 9.6 million PGK (equivalent to almost 3 million USD) over the period from May 2015 to November 2019.

2.12.3 Support provided by New Zealand

2.12.3.1 Ministry of Foreign Affairs and Trade (MFAT) support to PASO

2.12.3.1.1 New Zealand, through MFAT, has provided important financial support to PASO, as follows:

- a) an initial support assistance of 418 000 NZD in the 2017/2018 fiscal year;
- b) a core funding of 1.5 million NZD over 3 years, up to 30 June 2021, with the aim to deliver the following outputs/outcomes:
 - i) Priority 1 — PASO has strong programs and support services for its Members;
 - ii) Priority 2 — A well-developed pool of inspectors;
 - iii) Priority 3 — PASO maintains robust Safety Management Systems;
 - iv) Priority 4 — PASO exhibits strong corporate and financial governance;
 - v) Priority 5 — PASO reform is delivered;
 - vi) Priority 6 — PASO has excellent internal and external relationships;
 - vii) Priority 7 — PASO maintains an equitable and supportive Host Agreement; and
- c) an additional funding of 500 000 NZD allocated in April 2019 for a project related to USOAP.

2.12.3.1.2 In total, MFAT has contributed to a total direct of funding of 2 418 000 NZD since the 2017/18 fiscal year. In addition, through an MoU with the NZ CAA, MFAT has funded 2.5 million NZD, from February 2016 to 30 June 2019, with the intention to provide USOAP gap analysis, technical assistance and PASO Council representation and liaison. Where technical assistance was provided to PSIDS, much of this was paid to PASO through contracting of PASO's pool of technical advisors for technical and regulatory assistance.

2.12.3.2 MFAT direct support to PSIDS

2.12.3.2.1 MFAT has provided aviation security funding directly to PSIDS as follows:

- a) 2.49 million NZD through MoU with CAA aviation security technical advice to PSIDS and some equipment (including some regulatory support); and
- b) 9.4 million NZD for aviation security scanning equipment at 13 airports in nine PSIDS (contract still under negotiation).

2.12.3.2.2 MFAT has also provided funding for airport infrastructure through NZ bilateral teams (e.g. Munda airport in the Solomon Islands), a Pacific Aeronautical Charting and Procedures programme worth over 3 million NZD at 37 airports (delivered by Airways International), and Very Small Aperture Terminal (VSAT) funding of 650 000 NZD through the World Bank's TAIC programme to provide this equipment at Rarotonga and Niue airports (as Niue and the Cook Islands are not part of the World Bank's PAIP programme).

2.12.3.3 NZ CAA support to PASO and to PSIDS

The NZ CAA has provided direct assistance to PASO on matters related to aviation safety and security on the basis of a working arrangement signed between both organizations in June 2011, supplementing a Memorandum of Cooperation signed in 2005. The working arrangement foresees the assistance of the NZ CAA to PASO, on a cost-recovery basis, in order to conduct regulatory oversight tasks under the provisions of the service level agreements signed between PASO and each PASO Member State.

2.12.4 Support provided by Singapore

Singapore has been providing training and technical assistance to PSIDS, in particular in areas related to civil aviation regulatory oversight. To date, the Singapore Aviation Academy (SAA) has trained some 1 900 participants from the PSIDS, in courses covering safety, ANS, security, airport emergency, airport management, legal, aviation policy and leadership development. Of these, over 700 officials were sponsored by the Singapore Government, including 49 under the Singapore-ICAO Developing Countries Training Programme, since its implementation in 2001. One hundred and fifty fellowships and eight scholarships are also available to the PSIDS and other Asia-Pacific States under the Singapore-ICAO Programme for Young Aviation Professionals, implemented in 2018.

2.12.5 Support provided by the United States

The United States (US), through its Federal Aviation Administration (FAA) and Transportation Security Administration (TSA), provides aviation technical assistance to States throughout the world to help increase global safety and security standards and enhance aviation safety and efficiency. In the PSIDS, most of the recent assistance has been to FMS, the Marshall Islands, and Palau.

2.12.5.1 FAA assistance to Micronesia (*Federal States of*), the Marshall Islands and Palau

2.12.5.1.1 The US has long-standing relationships with FMS, the Marshall Islands and Palau. All three States were formerly part of the United Nations Trust Territory of the Pacific Islands, administered by the US, until their independence in the 1980s and 1990s. At the time of their independence, all three States entered into Compacts of Free Association with the US. The Compacts of Free Association are international agreements that give the US full authority and responsibility for security and defense of each State, while also formalizing arrangements for economic assistance, programs, and services. Under the Compacts of Free Association between the US and each State, FAA is required to provide the following air traffic-related services, including:

- a) en route air traffic services (for airspace in the North Pacific delegated to the US by ICAO);
- b) flight inspection services;
- c) maintenance and installation of FAA owned navigational equipment;
- d) procedure development; and
- e) the issuance of Notices to Airmen (NOTAMs), as appropriate.

2.12.5.1.2 Since 2004, FAA's authorizing legislation has allowed FSM, the Marshall Islands and Palau to receive Airport Improvement Program (AIP) grant funding for their airports. The FAA Airport Improvement Program is a federal grant program that provides funding to airports in the US for planning and infrastructure projects that enhance airport safety, capacity, and security. Six commercial service airports within the three States have received AIP grant funding,

including Yap International Airport, Kosrae International Airport, Pohnpei International Airport, and Chuuk International Airport in FSM; Marshall Islands International Airport in the Marshall Islands; and Roman Tmetuchl International Airport in Palau. Since becoming eligible for AIP funding, the three States have received a combined 325 million USD in grants for airport improvement projects. This funding has been used in all three States to:

- a) procure Aircraft Rescue and Firefighting (ARFF) vehicles/equipment and construct ARFF buildings;
- b) install airport perimeter fencing;
- c) rehabilitate runways, taxiways, and aprons;
- d) fund airport master plans; and
- e) improve Runway Safety Areas.

2.12.5.1.3 Over the last several years, FAA has provided technical assistance to the CAAs of the three States in the observation and validation of full-scale airport emergency exercises, the assessment of ARFF facilities and equipment, and the assessment of airport inspection programs.

2.12.5.1.4 FAA has also helped support Aerodrome Workshops in the FSM region on an annual basis. These workshops have rotated between FMS, the Marshall Islands and Palau. During these workshops, FAA has shared best practices related to aerodrome certification processes with attendees, which have included personnel from airport operators and CAAs in each State.

2.12.5.2 TSA assistance to Micronesia (*Federal States of*)

2.12.5.2.1 Over the past few years, the United States Transportation Security Administration (TSA) Transportation Security Specialists (TSS) from the Honolulu Regional Operation Center (HNL ROC) engaged at various levels with airport and government officials to address serious concerns of TSA regarding the lack of a mature quality control regime in the FSM. In coordination with the TSA Representative (TSAR), this led to a TSS facilitated quality control workshop in Pohnpei in February 2018, the first technical assistance of its kind to be provided to the FSM.

2.12.5.2.2 Representatives from the national government and each of the four airport authorities, with last point of departure (LPD) service to the US, attended the workshop, where TSS shared best practices from both the TSA and the International Civil Aviation Organization (ICAO) quality control regimes. This was followed-up by a workshop delivered in YAP (July 2018) with the local airport officials and has become an outreach focus when teams visit the FSM.

2.12.5.2.3 The strong partnership between the national officials and the HNL ROC TSS has led to continued engagement, whereby technical assistance has been provided to FSM as they have updated and approved FSM's first National Civil Aviation Quality Control Program. The HNL ROC has also reviewed and provided input for the National Civil Aviation Security Programme (NCASP) and the National Civil Aviation Security Training Programme (NCSTP). Many of the best practices discussed during the workshop, subsequent conference calls, and recommendations made by teams during on-site assessments have been incorporated into the Airport Quality Control Programs and regimes. As reported by the TSA, subsequent assessments by TSA of FSM airports have seen positive trends towards the establishment of a sustainable quality control regime in the FSM. A review of Kosrae International Airport, Airport Security Programme (ASP), is ongoing and the team will review with the host government in September 2019.

2.12.5.3 TSA assistance to Fiji

2.12.5.3.1 In March 2019, TSA Transportation Sector Security Assistance (TSSA) delivered the Introduction to Behavior Awareness course to the CAA of Fiji. The course covered basic skills and techniques to increase employees' domain awareness in relation to their everyday duties in an aviation environment. The TSA Behavior Detection model was used as the framework for this course, producing a training that offered participants the opportunity to develop domain awareness, identify suspicious behavior, and articulate concerns. The training took place at the CAAF Headquarters and was held in three parts: a three-day behavior awareness course; a train-the-trainer session with Fiji's national aviation instructors; and three days consisting of TSA observing the Fiji national instructors present the behavior awareness course to members of their various aviation communities.

2.12.5.3.2 TSA provided extensive training with the goal of long-term sustainment by allowing the new trainees the opportunity to participate in an instructor course, learn the materials, spend extra time with TSA instructors to clarify key points, and have the opportunity to facilitate instruction of the materials themselves with TSA assistance, thus ensuring a high likelihood of knowledge sustainment and skills implementation the course provided.

2.12.5.4 FAA assistance to PSIDS through ICAO Training Workshop

In 2018, an FAA subject-matter expert (SME) served as an instructor during an ICAO Regional Workshop on Aerodrome Certification incorporating *Procedures for Air Navigation Services — Aerodromes* (ICAO Doc 9981) for Asia and Pacific States. The training was held in Nadi, Fiji from 3-7 December 2018 with participants from a number of States in the Pacific Islands Region.

2.13 SUPPORT PROVIDED TO PSIDS BY MULTILATERAL DEVELOPMENT BANKS

2.13.1 Introduction on Multilateral Development Banks (MDBs)

2.13.1.1 MDBs are international financial institutions formed by a group of States which are the main shareholders of the organization. The banks prioritize development goals, such as eradicating poverty or encouraging business in developing countries, often lending at low interest rate and providing grants and technical assistance to fund projects in education, health, energy, environment, institutional strengthening, and infrastructure.

2.13.1.2 The MDBs organize their investments in developing States through the following instruments:

- a) a list of countries where investments will be prioritized based on socioeconomic indicators. The loan conditions and grant requirements follow the same methodology;
- b) a corporate strategy that defines the main issues in the targeted regions, with an action plan and goals for 10-15 years;
- c) sector frameworks, through which the MDB sector divisions (i.e. transport, energy, education) define their scope of work, with priorities and goals; and
- d) country Strategy/Framework, through which the MDBs agree with each State or region to a 4-to-5-year action plan to prioritize its investments, with priorities, potential projects, funding mechanisms and goals.

2.13.1.3 Each project and grant have an assigned team from the MDB to negotiate the technical and fund conditions and prepare the documentation following the MDBs policies and priorities to be approved by the Board of Directors. The targeted government is in charge of implementing the project, while the MDB project team is responsible for monitoring the project's implementation and evaluating at the end of the period.

2.13.1.4 The PSIDS are (for some of them) members of three MDBs, namely the Asian Development Bank (ADB), the World Bank (WB) Group and the Asian Infrastructure Investment Bank (AIIB).

2.13.2 The Asian Development Bank (ADB)

2.13.2.1 Overview

2.13.2.1.1 As shown in Table 2-13, currently, all PSIDS are voting and borrowing members of ADB. Niue was the last State to join the ADB membership in 2019. They count with the 0.2033% of the shares of the capital stock of ADB and 4.047% of voting power.

Table 2-13. PSIDS membership at ADB and voting power

<i>Country</i>	<i>Date of Membership</i>	<i>Subscribed capital (% of total), as of 2018</i>	<i>Voting power (% of total), as of 2018</i>
Cook Islands	1976	0.003	0.301
Fiji	1970	0.068	0.353
Kiribati	1974	0.004	0.302
Marshall Islands	1990	0.003	0.301
Micronesia (Federal States of)	1990	0.004	0.302
Nauru	1991	0.004	0.302
Niue*	2019	N/A	N/A
Palau	2003	0.004	0.302
Papua New Guinea	1971	0.094	0.373
Samoa	1966	0.003	0.301
Solomon Islands	1973	0.007	0.304
Tonga	1972	0.004	0.302
Tuvalu	1993	0.001	0.300
Vanuatu	1981	0.007	0.304
TOTAL	—	0.2033	4.047
* Niue just joined ADB in 2019. The information is not available, since the Financial Statements of the ADB Annual Report 2018 do not include Niue yet.			

2.13.2.1.2 ADB has country offices in 31 States, including PNG and Fiji. The Pacific Liaison and Coordination Office (PLCO), located in Sydney, is involved in the programming, processing and administration of assistance in Nauru, Solomon Islands and Vanuatu. The Pacific Subregional Office (SPSO) in Suva serves as the focal point of ADB for programming, processing, and administering assistance in the Cook Islands, Fiji, Kiribati, Samoa, Tonga and Tuvalu. ADB also has Development Coordination Offices in Vanuatu, Cook Islands, FSM, Kiribati, Marshall Islands, Nauru, Palau and Tuvalu, as well as other extended missions in Solomon Islands and Tonga.

2.13.2.2 Strategies

2.13.2.2.1 ADB has three main strategic documents that guide the MDB's investments in the transport sector: *Strategy 2030 (Sustainable Transport Initiative — Operational Plan)*, *Pacific Approach 2016-2020* (for the 11 smaller Pacific States), and the strategies elaborated by the ADB with each individual country.

2.13.2.2.2 As part of the *Strategy 2030*⁹, ADB has the mandate to promote quality infrastructure investments that are “green, sustainable, resilient and inclusive”, and to promote connectivity within and between countries to spur economic growth and further reduce poverty. ADB has committed through its strategy to foster investments in the SIDS in order to strengthen connectivity and access in areas such as maritime and air transport. Regarding the private sector, ADB is committed to expanding infrastructure sector coverage and diversifying in other sectors.

2.13.2.2.3 As part of the *Sustainable Transport Initiative — Operational Plan*¹⁰, ADB is supporting its Pacific developing member States where aviation and maritime transport have a unique role due to limitations in land transport, generally linked to factors such as geography and low population density. ADB's target is to expand investments on air transport from 15% in 2010 to 45% of the total transport portfolio.

2.13.2.2.4 The *Pacific Approach 2016-2020*¹¹ is ADB's operational framework for the Pacific Region and the overall country partnership strategy for the 11 smaller Pacific Island countries –(Cook Islands, Kiribati, FSM, Marshall Islands, Nauru, Palau, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu)¹². ADB's infrastructure program focuses on transport, information and communication technology, and renewable energy to reduce the costs of connectivity and energy. Furthermore, improving the business environment, reforming State-owned enterprises, and creating public-private partnerships also assist in reducing the costs of doing business and delivering services, and promote growth led by the private sector (ADB, 2016). All the physical investments are complemented by the support for capacity development and institutional reform. However, there is no explicit mention about the challenges and activities in the civil aviation sector.

2.13.2.2.5 With the Fiji Islands¹³, ADB follows the *Country Partnership Strategy (2019-2023)*, whose main objectives related to transport infrastructure are:

- a) promoting private sector investment and growth through investments in infrastructure to boost competitiveness; and
- b) broadening access to quality services and economic opportunities through inclusive infrastructure investments.

9. The document can be found at <https://www.adb.org/sites/default/files/institutional-document/435391/strategy-2030-main-document.pdf>

10. The document can be found at <https://www.adb.org/sites/default/files/institutional-document/31315/sustainable-transport-initiative.pdf>

11. The document can be found at <https://www.adb.org/sites/default/files/institutional-document/190666/rcspacific-2016-2020.pdf>

12. Fiji, Papua New Guinea and Timor-Leste have their own country strategy.

13. The document could be found at <https://www.adb.org/sites/default/files/institutional-document/495256/cps-fiji-2019-2023.pdf>

2.13.2.2.6 The ADB points out as one of key activities for Fiji the increased investments in infrastructure, particularly for connectivity (land transport, air transport and information and communications technology). ADB proposes a sovereign and non-sovereign financing program of 600 million USD for the 2019–2023 period, subject to financing availability, government demand, market environment, co-financing mobilization, project readiness, and portfolio performance. However, although air transport is briefly mentioned at the beginning of the strategy, it is not addressed as part as the envisaged activities and the associated indicators.

2.13.2.2.7 With the PNG¹⁴, ADB follows the Country Partnership Strategy (2016-2020), whose main objectives are to improve investments in roads, civil aviation and ports. A strong portfolio has been developed in land transport and civil aviation, with possible future opportunities in maritime transport. ADB is reviewing all infrastructure projects for their potential to be delivered directly by the private sector or via public-private partnerships (PPP). ADB also helps develop innovative contractual and financial structures to encourage private participation in public works.

2.13.2.2.8 PNG is a Group B¹⁵ country and is therefore eligible for a blend of Asian Development Fund (ADF)¹⁶ and ordinary capital resources (OCR) borrowing. About 68% of indicative resources for the 2016–2018 assistance program has been allocated to the transport sector, split evenly between land transport (including roads and bridges) and civil aviation. Civil aviation safety and security is part of ADB's areas of interventions.

2.13.2.3 Investments

Transport is one of the main sectors that ADB supports. Transport has accounted for 21% of ADB lending since it was established in 1966, and 27% during the 2005–2009 period. Air Transport represented 2% of the transport portfolio between 1970-2009, and around 15% in 2010 (Sustainable Transport Initiative, 2010). Currently, ADB has focused its investments in the aviation sector on Papua New Guinea, PASO (regional project) and Solomon Islands.

A. Papua New Guinea

The Civil Aviation Development Investment Program is a 470 million USD loan phased in three tranches. ADB is preparing a new project for PNG: the Civil Aviation Sector Investment Program, a 550 million USD program to improve airstrips in rural areas and upgrade airport infrastructure. The National Airports Corporation of PNG and ADB also signed a transaction advisory services agreement, leveraging a PPP to develop a new international passenger terminal and infrastructure development at Jacksons International Airport in Port Moresby. The new terminal will enable the airport to meet traffic demands over the next 30 years. Table 2-14 below summarizes the main projects for PNG.

14. The document can be found at <https://www.adb.org/sites/default/files/institutional-document/157927/cps-png-2016-2020.pdf>

15. Palau and Papua New Guinea are members of the Group B. Kiribati, Micronesia (Federal States of), Marshall Islands, Nauru, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu are members of Group A, which means they are below the per capita GNI cut-off or are defined as a least developed country, according to the United Nations. Group A States are eligible to receive only ADF resources. Fiji and Cook Islands are members of Group C, which means that they are eligible only for loans that come from ordinary capital resources.

16. ADF is a fund administered by ADB that provides grants to ADB's lower income developing member countries.

Table 2-14. Main projects for PNG

<i>Project</i>	<i>Objective</i>	<i>Amount (USD)</i>	<i>Type</i>	<i>Start/End year</i>
PNG: Civil Aviation Development Investment Program (CADIP) — Tranche 1	ADB is helping PNG upgrade its national airports to strengthen aviation safety and services. The first project under the program included improving pavements and fencing in five airports: Wewak, Hoskins, Gurney, Mt. Hagen and Jacksons, and installing new security fences in Kavieng and Goroka.	Total: 113.30 million ADB: 89.70 million	Loan	2009-2016 CLOSED
PNG: Civil Aviation Development Investment Program — Tranche 2	Tranche 2 establishes a sustainable civil aviation network to support the economic growth of the country. The expected outcome is safer, more secure, and more efficient all-weather access to air transport services in the project areas.	Total (ADB): 130 million	Loan	2013-2019 ACTIVE
PNG: Civil Aviation Development Investment Program — Tranche 3	Tranche 3 continues after Tranches 1 and 2 to establish a sustainable civil aviation network to support the economic growth of the country. Tranche 3 further strengthens and sustains the operations of National Airports Cooperation (NAC), PNG Air Services Limited (PNG ASL), and CASA PNG. Tranche 3 improves and upgrades nine national airports including pavement strengthening, runway extensions, security fencing, apron extensions, fire stations, traffic control tower and terminal buildings. In addition, runway lights at seven airports, runway security fencing at three other airports and new market sheds will be constructed for women to promote local artifacts.	Total (ADB): 248 million	Loan	2016-2019 ACTIVE
PNG: Preparing the Civil Aviation Investment Program	The proposed TA analyzes lessons from Civil Aviation Development Investment Program and prevalent sector issues to (i) prepare and/or update aviation sector roadmap, policy framework and medium to long-term investment plan, where policy framework will identify critical policy actions to achieve operational efficiency, compliance with ICAO	Total (ADB): 1.5 million	Technical Assistance	2018-2020 ACTIVE

<i>Project</i>	<i>Objective</i>	<i>Amount (USD)</i>	<i>Type</i>	<i>Start/End year</i>
	safety standards and enable equitable and affordable air transport services to wider PNG population; (ii) introduce hub-and-spoke concepts for air transport services and validate feasibility of modernizing and upgrading selected national and regional airports as well as viability of selected rural airstrips; and (iii) undertake due diligence to prepare subsequent program including aviation sector assessment; technical, economic, and financial appraisals; environmental, social, and poverty impact, and procurement assessments.			
Civil Aviation Sector Investment Program	The program will include investments to upgrade selected domestic airports to receive larger aircrafts, and rehabilitation of selected airstrips in rural areas to improve connectivity. It will also include policy instruments to increase overall sector efficiency and cost recovery.	Total: 550 million ADB: 274 million	Loan	(approval in 2020) PROPOSED

B. PASO

Since 2003, ADB became involved in the establishment and strengthening of PASO (around 3.3 million USD in two technical assistance projects¹⁷; and one joint technical assistance-loan, since 2003). Table 2-15 below summarizes the main projects for PASO's establishment.

Table 2-15. Main projects for PASO's establishment

<i>Project</i>	<i>Objective</i>	<i>Amount (USD)</i>	<i>Type</i>	<i>Start/End year</i>
Regional: Regional Civil Aviation Safety and Security	The TA conducted a feasibility study for establishing PASO and prepared a regional project suitable for ADB lending. It (i) assessed the future demand for air transport oversight services in the Pacific Region and project likely fee income; (ii) prepared a	Total (ADB): 0.15 million	Technical Assistance	2003-2004 CLOSED

17. Technical assistance projects are ADB grants (non-reimbursable assistance) that provide technical support such as studies, strategies and plans.

<i>Project</i>	<i>Objective</i>	<i>Amount (USD)</i>	<i>Type</i>	<i>Start/End year</i>
	priority investment program for PASO; (iii) assessed the likely extent and timing of future members joining PASO and willingness of members to pay increased annual levies; (iv) identified least cost technical solutions for the proposed investments and financing, including use of ADB's proposed technical loan; (v) assessed the likely sources and extent of co-financing; and (vi) assessed the capability of PASO to become self-sustaining, as well as the likely timing of its break-even stage.			
Regional: Establishment of PASO	The goal of the project was to ensure that the Pacific aviation sector meets all international requirements for safety and security regulation and oversight. The project's objectives were (i) harmonization of updated legislative and regulatory frameworks in each member country along with training and capacity building; (ii) ensuring compliance with international requirements through airline recertification; and (iii) establishing and institutionalizing a regional surveillance and inspection system through creation of a Minimum Required Annual Inspection plan, technical guidance material in each specialized discipline, and development of an inspection documentation and issues resolution system.	Total: 2.28 million ADB: 1.569 million ADB TA: 0.031 million	Loan	2005-2011 CLOSED
Regional: Institutional Strengthening for Aviation Regulation	The project had the objective to enhance aviation security and safety in member countries by ensuring that laws, regulations, technical documentation, and procedures are current, compliant with ICAO requirements, and harmonized across the region. A fragmented system would be replaced with a consistent and proactive operating environment, thus improving security and safety and reducing costs. It also had the objective to create economies of scale to allow PASO to become financially self-sustaining, while at the same time	TOTAL: 0.9 million	Technical Assistance	2010-2014 CLOSED

<i>Project</i>	<i>Objective</i>	<i>Amount (USD)</i>	<i>Type</i>	<i>Start/End year</i>
	lowering costs and improving service quality.			

C. Solomon Islands

As shown in Table 2-16, ADB has approved a 6.96 million USD grant to finance a Transport Sector Project Development Facility for Solomon Islands, whose objective is to support the Government to improve the design and implementation readiness of priority transport projects in the road, maritime, and aviation sectors. The Ministry of Infrastructure Development, Solomon Islands Port Authority, and Ministry of Communication and Aviation are the facility's main beneficiaries. No studies or activities have yet been carried out in the aviation sector.

Table 2-16. Main project for the Solomon Islands

<i>Project</i>	<i>Objective</i>	<i>Amount (USD)</i>	<i>Type</i>	<i>Start/End year</i>
Solomon Islands: Transport Sector Project Development Facility	The Transport Sector Project Development Facility (PDF) will support the Government of Solomon Islands (the government) to improve the start-up efficiency of priority transport projects in the roads, maritime and aviation sectors by: (i) preparing feasibility studies, and detailed designs; and (ii) providing implementation support for procurement, social and environmental safeguards activities at the early stage of project implementation. PDF will also support capacity building of key implementing agencies.	TOTAL: 6.69 million ADB: 6 million	Technical Assistance	2018-2022 ACTIVE

2.13.3 The World Bank (WB)

2.13.3.1 Overview

All PSIDS, except Cook Islands and Niue, are members of the World Bank. They count with the 0.37% of the shares of the capital stock of WB and 0.72% of voting power, as seen in Table 2-17.

Table 2-17. PSIDS membership at the World Bank and voting power, as of 2018

<i>Country</i>	<i>Date of membership</i>	<i>Subscribed capital (% of total)</i>	<i>Voting power (% of total)</i>
Fiji	1971	0.05	0.08
Kiribati	1986	0.03	0.06
Marshall Islands	1992	0.02	0.05
Micronesia (Federal States of)	1993	0.02	0.05
Nauru	2016	0.03	0.05
Palau	1997	0.00	0.03
Papua New Guinea	1975	0.08	0.11
Samoa	1974	0.03	0.06
Solomon Islands	1978	0.03	0.06
Tonga	1985	0.03	0.06
Tuvalu	2010	0.02	0.05
Vanuatu	1981	0.03	0.06
TOTAL	–	0.37	0.72

2.13.3.2 Strategies

2.13.3.2.1 The World Bank (WB) is scaling up its assistance in the PSIDS through increased funds with the International Development Association (IDA). The IDA is part of the World Bank and provides loans and grants for the world's poor countries. FSM, Kiribati, Marshall Islands, PNG, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu are IDA beneficiaries. In the Pacific Region, the World Bank has offices in Australia (Regional office for Papua New Guinea and Pacific Islands), Fiji, Kiribati, Samoa, Solomon Islands, Tonga and Vanuatu.

2.13.3.2.2 The World Bank released in 2016 the Regional Partnership Framework¹⁸, a roadmap for regional opportunities and country-specific action plans until 2021 for nine PSIDS (PIC9: FSM, Kiribati, Marshall Islands, Nauru, Palau, Samoa, Tonga, Tuvalu and Vanuatu). In this strategy, the World Bank acknowledges in the strategy three fundamental constraints to the development of the so-called PIC9:

- a) small size and remoteness, which limits economic opportunities;
- b) geographic dispersion between populations between small and big islands; and
- c) high exposure to economic crises and natural disasters.

18. The document can be found at:

<http://documents.worldbank.org/curated/en/137341508303097110/Pacific-Islands-Regional-partnership-framework-FY17-FY21>

2.13.3.2.3 One of the objectives to tackle these challenges is increasing the access to basic services and improved connective infrastructure, including air connectivity. Under this objective, the WB is continuing working with these 9 PSIDS with the objective of improving operational safety and oversight of international air transport infrastructure, which would directly support the development of tourism. Table 2-18 below shows the indicators defined by the WB and the PIC9 to monitor the connective infrastructure aviation sub-objective.

Table 2-18. Activities and indicators under the Regional Partnership Framework

<i>Connective Infrastructure Aviation</i>		
<i>Activity 1: Regulatory certification of safety and security at project airports</i>		
<i>Country</i>	<i>Baseline</i>	<i>Target</i>
Kiribati	No (12/2016)	Yes for 2 airports
Samoa	Yes (07/2016)	Yes – Re-validation
Tonga	No (12/2016)	Yes for 2 airports
Tuvalu	No (12/2016)	Yes for 1 airport
Vanuatu	Yes (12/2016)	Yes – Re-validation
<i>Activity 2: Airport terminals/runaways upgraded and rehabilitated</i>		
<i>Country</i>	<i>Baseline</i>	<i>Target</i>
Kiribati (Bonriki and Cassidy Terminals)	No (12/2016)	Both terminal upgraded
Vanuatu (Bauerfield runway)	No (12/2016)	Bauerfield runway rehabilitated
<i>Activity 3: Navigation and safety aids fully operational</i>		
<i>Country</i>	<i>Baseline</i>	<i>Target</i>
Kiribati	10% (06/2016)	100%
Samoa	0% (07/2016)	100%
Tonga	70% (12/2016)	100%
Tuvalu	75% (10/2016)	100%
Vanuatu	0% (12/2016)	100%
Source: World Bank, Regional Partnership Framework, 2016.		

2.13.3.2.4 With PNG, the WB follows the PNG Partnership Framework (2018-2023)¹⁹, which mentions transport infrastructure in the unserved regions as one of the main focus areas. However, the WB decided to focus investments at the road network, leaving the aviation sectors to ADB, Australia and Japan, as mentioned in the framework.

2.13.3.2.5 With the Solomon Islands, the WB follows the Solomon Islands Partnership Framework (2018-2023)²⁰, which mentions air transport infrastructure as a means to improve domestic and international connectivity, bringing about economic growth. To achieve this objective, the WB provides investment support to enhance operations of the Honiara International Airport and Munda Airport aiming at compliance with international standards. Table 2-19 below shows the indicators used to monitor and evaluate the implementation of the strategy.

Table 2-19. Activities and indicators under the Solomon Islands Partnership Framework

<i>Indicator 1: Number of days Honiara Airport is closed due to flooding</i>	
<i>Baseline</i>	<i>Target</i>
8 (2014)	0 (2023)
<i>Indicator 2: Honiara runway resurfaced</i>	
No (2018)	Yes (2023)

2.13.3.2.6 Currently, Fiji does not have a Country Partnership Framework with the World Bank.

2.13.3.3 Investments

2.13.3.3.1 In 2018, the World Bank Group's Air Transport Portfolio amounted to 979 million USD at the global level. The Air Transport segment makes up only around 2% of the WBG's 48 billion USD transport portfolio. The Air Transport portfolio includes 44 lending and non-lending projects or project components through the International Bank for Reconstruction and Development (IBRD) and International Development Association (IDA), as well as the International Finance Corporation (IFC)'s Investment portfolio. More than 320 million USD has being dedicated to the PSIDS (Kiribati, Samoa, Tonga, Tuvalu, Vanuatu, Solomon Islands, Papua New Guinea and PASO). Currently, four projects totaling 26 million USD are in the 2019 pipeline.

A. Kiribati

2.13.3.3.2 Kiribati has one active project (with an additional grant financing) financed by the WBG totaling 41.06 million USD (WB: 30.01 million USD). Table 2-20 below summarizes these projects.

19. The document can be found at: <http://pubdocs.worldbank.org/en/855611558494047116/CPF-PNG-FY19-23.pdf>

20. The document can be found at: <http://documents.worldbank.org/curated/en/187191533591240759/pdf/122600-CORR-PUBLIC-IDA-R2018-0249-2.pdf>

Table 2-20. Main projects for Kiribati

<i>Project</i>	<i>Objective</i>	<i>Amount (USD)</i>	<i>Type</i>	<i>Start/End year</i>
Pacific Aviation Investment – Kiribati	The objective of the Project is to improve operational safety and oversight of international air transport infrastructure. The components are: (1) investments in the aviation infrastructure at Kiribati's international airports; (2) Sector reform and training component finance technical assistance to the MCTTD and other ministries; (3) strengthening airport operations and management capacity component finances technical assistance for the establishment of an independent public entity for the management of Kiribati's airports and its operation; and (4) project support component finances the provision of technical, advisory and administrative support to MCTTD.	Total: 26.73 million (WBG: 22.91 million) Additional Grant Financing (AF): 7.1 million (total 14.33 million)	Grant	2011-2019 ACTIVE

B. Samoa

2.13.3.3.3 As shown in Table 2-21, Samoa has one active project financed by WB totaling 59.85 million USD (WBG: 43.82 million USD). Faleolo International Airport was previously upgraded through the Infrastructure Asset Management Project, from 1999-2004, by 8.78 million USD.

Table 2-21. Main projects for Samoa

<i>Project</i>	<i>Objective</i>	<i>Amount (USD)</i>	<i>Type</i>	<i>Start/End year</i>
Samoa Aviation Investment Project	The objective is to improve operational safety and oversight of international air transport and associated infrastructure.	Total: 38.63 million (WB: 25 million) Additional Grant Financing (AF) I: 17.87 million (WB: 16.62 million) Additional Grant Financing (AF) II: 3.35 million (WB: 2.20 million)	Grant	2014-2020 ACTIVE
Infrastructure Asset Management	The Infrastructure Asset Management Project seeks to achieve an objective so that transport and coastal infrastructure assets are economically, environmentally, and socially sustainable and managed by an	Total: 18.80 million (WB: 14.40 million) Airport component:	Grant	1999-2004 CLOSED

<i>Project</i>	<i>Objective</i>	<i>Amount (USD)</i>	<i>Type</i>	<i>Start/End year</i>
	effective partnership of all stakeholders. One of the components was related to air transport and aviation: (1) international airport infrastructure increased the capacity for safe handling of international air traffic and improved Samoa Airport Authority's financial viability. It supported rehabilitation and extension of runway, improvement of terminal building and control tower facilities, acquisition of fire emergency vehicles, and engineering and architecture services for design and construction supervision.	8.78 million.		

C. Tonga

2.13.3.3.4 As seen in Table 2-22 below, Tonga has one active air transport infrastructure project financed by WB totaling 41.45 million USD (WB: 34.46 million USD). The State has had a previous project to certify Fua'amotu Airport and navigation aids upgrade, as part of an umbrella transport consolidation project (2008-2018).

Table 2-22. Main projects for Tonga

<i>Project</i>	<i>Objective</i>	<i>Amount (USD)</i>	<i>Type</i>	<i>Start/End year</i>
Pacific Climate Resilient Transport Program – Tonga	The development objective of the climate resilient transport project under the Pacific climate resilient transport project for Tonga is to improve the climate resilience of the Recipient's transport sector, and in the event of an eligible crisis or emergency, to provide an immediate response to the eligible crisis or emergency.	Total: 27.25 million (WB: 26.02 million)	Grant	2018-2024 ACTIVE
Pacific Aviation Investment Project – Tonga	The objective of the Pacific Aviation Investment Project for East Asia and Pacific is to improve operational safety and oversight of international air transport infrastructure. Components for Tonga are: (1) aviation infrastructure investments component which will invest in the aviation infrastructure at Fua'amotu and Vava'u airports; (2) aviation sector reform and training component will provide the technical assistance to Tonga Airport Limited (TAL), the MOT and other ministries; (3) strengthening airport operations and management capacity	Total: 32.81 million (WB: 27.21 million) Additional Grant Financing (AF) I: 8.64 million (WB: 7.25 million)	Grant	2011-2019 ACTIVE

<i>Project</i>	<i>Objective</i>	<i>Amount (USD)</i>	<i>Type</i>	<i>Start/End year</i>
	component will co-ordinate three studies related to improving the regional aviation market in the Pacific Island Countries and increasing revenues from the flight information regions; (4) project support component will finance the provision of technical, advisory and administrative support to TAL and other ministries.			
Transport Sector Consolidation Project	The objective of the Transport Sector Consolidation Project for Tonga was to assist the Recipient to develop its transport sector to have: (i) stronger policy, planning and regulatory institutions and framework; (ii) improved safety and security facilities and compliance with international safety and security standards, and (iii) greater domestic capacity for road rehabilitation and maintenance.	Total: 6.52 million (WB: 5.44 million) Additional Grant Financing (AF): 4 million (2016)	Grant	2008-2018 CLOSED

D. Tuvalu

2.13.3.3.5 Tuvalu has one active project, as seen in Table 2-23 below, totaling 22.76 million USD (WB: 20.79 million USD) in order to upgrade Funafuti International Airport.

Table 2-23. Main project for Tuvalu

<i>Project</i>	<i>Objective</i>	<i>Amount (USD)</i>	<i>Type</i>	<i>Start/End year</i>
Aviation Investment Project – Tuvalu	The objective of the Pacific Aviation Investment Project for East Asia and Pacific is to improve operational safety and oversight of international air transport infrastructure. Components for Tuvalu project are: (1) investments in the aviation infrastructure at Funafuti international airport; (2) aviation sector reform and training component will provide technical assistance to the MTC and other ministries; (3) Strengthening airport operations.	Total: 13.82 million (WB: 11.85 million) Additional Grant Financing (AF) I: 6.06 million (2013) Additional Grant Financing (AF) II: 2.88 million (2016) Additional Grant Financing (AF) III: 8.75 million (2017)	Grant	2011-2020 ACTIVE

E. Vanuatu

2.13.3.3.6 As seen in Table 2-24 below, Vanuatu has one active aviation project financed by the World Bank Group totaling 73.90 million USD (WB: 73.60 million USD).

Table 2-24. Main project for Vanuatu

<i>Project</i>	<i>Objective</i>	<i>Amount (USD)</i>	<i>Type</i>	<i>Start/End year</i>
Aviation Investment Project – Vanuatu	The project development objective is to improve operational safety and oversight of international air transport and associated infrastructure in Vanuatu.	Total: 59.80 million (WB: 59.50 million) Additional Grant Financing: 14.1 million.	Grant	2015-2019 ACTIVE

F. Solomon Islands

2.13.3.3.7 As seen in Table 2-25 below, Solomon Islands has one active aviation project financed by the World Bank Group totaling 54.60 million USD (WB: 51 million USD).

Table 2-25. Main project for the Solomon Islands

<i>Project</i>	<i>Objective</i>	<i>Amount (USD)</i>	<i>Type</i>	<i>Start/End year</i>
Solomon Islands Roads and Aviation Program	The objective of this project is to improve operational safety and oversight of air transport and associated infrastructure, strengthen the sustainability and climate resilience of the project roads, and in the event of an eligible crisis or emergency, to provide an immediate response to the eligible crisis or emergency.	Total: 54.60 million (WB Loan: 30.5 million; Grant: 20.5 million)	Grant Loan	2019-2024 ACTIVE

G. Papua New Guinea

2.13.3.3.8 The World Bank financed a transport project in PNG from 1986-1994 by 45.5 million USD. Some of the components were resealing/regraveling airstrips, taxiways and aprons for the 11 airports and improvements of fire stations, control towers, and fixing damages in two airports.

H. Pacific Safety Office Reform Project

2.13.3.3.9 A 2.15 million USD IDA grant for PASO was approved by the World Bank in 2014 as well two Additional Financing (AF) of 0.95 million USD in 2017 and 3.55 million USD in 2018, with an extended closing date of end of 2021. The main objective is to strengthen PASO's capacity to deliver regional aviation safety and security oversight, and technical and advisory services to its member States. The main outcome was as follows:

- a) completion of a Financial Management and Sustainability Analysis to evaluate options to move from PASO's current funding structure to the revenues collected through a regional safety and security levy on departing international passengers;

- b) completion of Quality Assurance Systems and targeted consultancies providing regulatory and marketing support to PASO;
- c) recruitment by PASO of an Operations Manager and a Corporate Services Manager in 2018;
- d) development of the following documentation (which has been adopted by the PASO Council): (i) PASO Employment Policy and Procedures Material; (ii) PASO's Financial Management Policies and Procedures Manual; (iii) Skills Development and Training Policy; (iv) PASO Suite of Manuals;
- e) completion of PASONET IT Strategy in 2018; and
- f) installation of new Very Small Aperture Terminal (VSAT) in the Cook Islands and Niue to provide regional aeronautical communication network upgrades.

E. Projects in Pipeline

2.13.3.3.10 The World Bank Group is preparing an additional project in the PSIDS region (see Table 2-26 below). The dialogue with the concerned PSIDS is still in progress and no commitment in funding has been made yet.

Table 2-26. World Bank Group project

<i>Project</i>	<i>Description</i>	<i>Total (USD)</i>
Sustainability of Aviation in the Pacific Island Countries	Pacific Aviation Infrastructure Maintenance Support and technical assistance for regulatory reform. It would finance a performance-based contract to engage the private sector in providing long-term maintenance to aviation infrastructure investments, improve the reliability of airport infrastructure and reduce downtime associated with unplanned outages. It will cover 12 airports within Kiribati, Samoa, Tonga, Tuvalu, Vanuatu and Solomon Islands.	21 million (IDA Grant).

2.13.4 The Asian Infrastructure Investment Bank (AIIB)

2.13.4.1 The AIIB is a multilateral development bank with a mission to improve social and economic outcomes in Asia. Headquartered in Beijing, it began operations in January 2016 and has now grown to 97 approved members worldwide.

2.13.4.2 Currently, only two PSIDS (Fiji and Samoa) are voting and borrowing members of the AIIB, as seen in Table 2-27 below. They count with the 0.0152% of the shares of the capital stock of ADB and 0.3554% of voting power.

Table 2-27. PSIDS membership at the AIB and voting power, as of 2018

<i>Country</i>	<i>Date of membership</i>	<i>Subscribed capital (% of total)</i>	<i>Voting power (% of total)</i>
Fiji	2017	0.013	0.1825
Samoa	2018	0.0022	0.1729
TOTAL	–	0.0152	0.3554

2.13.4.3 On its website, AIB mentions as prospective regional members Tonga, Papua New Guinea and Cook Islands. The Bank still does not have a strategy for the transport or air transport investments. However, it is committed to invest in all types of transport infrastructure and work closely to other institutions for co-financing or strategic partnership. The organization does not have local offices or a defined Liaison for the Pacific Region.

2.13.5 Identified limitations

2.13.5.1 Although the WB and ADB have been providing significant financing support to PSIDS in the aviation sector, and although both MDBs have institutional strengthening components as part of their strategies, these institutions have limited aviation resources as part of their personnel to support the design, implementation, and monitoring/evaluation phases of aviation-related projects. As a result, MDBs normally have to mobilize additional resources with aviation knowledge. These aviation experts may however lack regulatory experience (i.e. in the regulation, certification and surveillance of aerodromes).

2.13.5.2 At project level, project documents may address compliance aspects, but without the necessary clarity and details to help ensure an effective verification of compliance with the applicable international and national requirements. This would include the identification of a methodology and competent entity and personnel to verify compliance (with all applicable national and international requirements) and, in particular, appropriately handle any non-compliances. In addition, project documents do not systematically contain plans for capacity building at regulator level.

2.13.5.3 At strategic level, although both MDBs are actively supporting SDGs and mention in their strategic documents the importance of the civil aviation for improving connectivity between States, the linkage of their aviation-related activities to SDGs is not clearly defined.

2.13.5.4 With respect to coordination with ICAO, the WB has an aviation expert at Headquarters, who is in close liaison with ICAO. However, the regional and local offices of the WB and ADB in the PSIDS do not have mechanisms in place for coordination with ICAO at regional level (i.e. coordination with the ICAO APAC Regional Office).

Chapter 3

OPPORTUNITIES FOR AN ENHANCED REGIONAL OVERSIGHT SUPPORT SYSTEM AND FOR AN ICAO PRESENCE IN THE PACIFIC REGION

3.1 INTRODUCTION

3.1.1 In ICAO documentation, in particular in Doc 9734 — *Safety Oversight Manual*, Part B — *The Establishment and Management of a Regional Safety Oversight Organization*, the term Regional Safety Oversight Organization (RSOO) is used as a generic one, encompassing regional solutions of different legal, organizational and institutionalized forms. The defining characteristics that are common to all RSOOs lie in their objective to assist Member States in performing safety oversight, through expert advisory and consultative services, the provision of technical assistance and/or the execution of some safety oversight functions. As a general principle, compared to a COSCAP, an institutionalized RSOO more expressly commits its Member States, better enables the effective delegation of tasks and functions to the RSOO and better provides for sustainability and resilience. PASO already is an institutionalized RSOO, being an inter-governmental organization established on the basis of a treaty. Moving from an institutionalized RSOO to a COSCAP, which is a less institutionalized form, would not provide the necessary level of effectiveness, sustainability and resilience, all the more since most PASO Member States are small, or very small States, heavily in need of delegation of technical oversight tasks to external entities. A strengthened or enhanced RSSOO would therefore be a suitable and pragmatic solution in the PSIDS region. An institutionalized RSOO can eventually evolve into a regional CAA (RCAA), in due time and after years of effective and efficient contributions, provided there is sufficient political will in the region and the legal and organization prerequisites can be achieved. The information provided in Section 3.2.4 shows that the only two currently existing aviation bodies with characteristics of an RCAA were established following decades of pre-existing institutionalized RSOOs.

3.1.2 As PASO provides regulatory support both for safety oversight and security oversight, the term Regional Safety and Security Oversight Organization (RSSOO) is used in this report.

3.2 ENHANCED REGIONAL OVERSIGHT SUPPORT SYSTEM

3.2.1 The three main forms of regional oversight support mechanisms

3.2.1.1 In civil aviation, regional oversight support mechanisms may take three main forms, namely:

- a) regional cooperative arrangements (Option 1);
- b) institutionalized RSOOs/RSSOOs (Option 2); or
- c) RCAAs (Option 3).

3.2.1.2 In Option 1 (regional cooperative arrangements) the regulatory support provided to the participating States is mostly of an advisory role, which typically promotes continuing dialogue, coordination and cooperation amongst the most developed and least developed participating CAAs, focusing on creating an environment for enhancing regulatory oversight capabilities. Support is also provided to achieve effective and cost-efficient solutions for the training of regulatory oversight personnel and industry stakeholders. These arrangements take the form of Cooperative Development of Operational Safety and Continuing Airworthiness Programmes (COSCAs) for aviation safety and Cooperative Aviation Security Programme (CASP) for aviation security. COSCAs and CASPs are established by their respective ICAO Programme or Project Documents. Institutionalized RSOOs/RSSOs are governed by international inter-State agreements and are established as full international organizations in their own right or as agencies of a regional economic and/or political community or union.

3.2.1.3 In Option 2, the regulatory support provided to the participating States is much more significant. Such support could include carrying out part or all of technical evaluations for tasks related to certification/licensing/approval, surveillance/quality control, and resolution of identified safety/security issues. It could also include the development of regional safety/security requirements to be adopted into the national legal framework of each participating State. Each State retains the power to issue, suspend, and revoke the certificates, licences, approvals and other authorizations it has issued.

3.2.1.4 In Option 3, the participating States no longer have national CAAs. All tasks previously carried out by the national CAA of each State are now carried out by the RCAA, including the issuance, suspension and revocation of certificates, licences, approvals and other authorizations.

3.2.2 Examples of regional cooperative arrangements

3.2.2.1 *The three COSCAs established in Asia*

3.2.2.1.1 The Cooperative Development of Operational Safety and Continuing Airworthiness Programmes are ICAO Regional Technical Cooperation Programmes with as the main objective to coordinate the provision of assistance to States to implement, improve and harmonize safety oversight and safety management, including State Safety Programmes, in collaboration with Partner States, Organizations and Industry.

3.2.2.1.2 There are three COSCAs in the APAC region for the sub-regions of North Asia, South Asia and South East Asia. The COSCAs are implemented by the ICAO APAC Regional Office and are administered by the Technical Cooperation Bureau (TCB) of ICAO. They receive technical support by the Air Navigation Bureau (ANB) of ICAO and are governed by a Steering Committee of Member States DGCA. The COSCAs are integrated into the ICAO APAC Regional Office Operational Plan and aligned with the Regional Aviation Safety Group – APAC (RASG-APAC) and Asia Pacific Regional Aviation Safety Team (APRAST) and APAC Beijing Ministerial Declaration priorities and targets. The financial and in-kind resources for COSCAs are provided by Member States contributions, support from Partners, and ICAO.

3.2.2.1.3 The COSCAs are considered in ICAO Doc 9734 — *Safety Oversight Manual*, Part B — *The Establishment and Management of a Regional Safety Oversight Organization* as RSOOs. Their goals are as follows:

- a) enhance the safety and efficiency of air transport in the Member States through adoption and application of harmonized and uniformly applied aviation safety regulations and oversight procedures, in conformity with ICAO Annexes, requirements and guidance material; and thus contribute to the social and economic development of the sub-region;
- b) regional collaboration in aviation safety is an ICAO Assembly Resolution mandate, GASP goal, and APAC Beijing Ministerial Declaration principle; and

- c) ICAO Global Strategy and Action Plan for the improvement of RSOOs and the establishment of a global system for the provision of Safety Oversight supports COSCAPs.

3.2.2.1.4 The COSCAP objectives are to support States to develop capacity in the following:

- a) preparation and implementation of USOAP CMA corrective action plans (CAP) in all audit areas;
- b) implementation of safety enhancement initiatives within the framework of the RASG-APAC and APRAST;
- c) SSP implementation, including SMS oversight;
- d) PBN implementation – Operational Approvals;
- e) training provision and coordination;
- f) experts/instructors/inspectors sharing coordination; and
- g) partners' collaboration in providing assistance to States.

3.2.2.1.5 The COSCAP activities include:

- a) State assistance needs identification, analysis and prioritisation;
- b) advice, guidance and coordination of assistance to support States;
- c) assistance missions to States (e.g. matters related to USOAP CMA, Runway Safety, Performance-Based Navigation (PBN));
- d) training courses, seminars and workshops (regional and in-country);
- e) Steering Committee and Regional Aviation Safety Team/National Coordinators meetings; and
- f) CAA capacity building projects.

3.2.2.2 *The Cooperative Aviation Security Programme in Asia and Pacific (CASP-AP)*

3.2.2.2.1 The CASP-AP is an ICAO Regional Technical Cooperation Project aimed at assisting Members in ensuring compliance with international Conventions, ICAO SARPs and guidance material related to Annex 17 (*Security*) and the security provisions of Annex 9 by enhancing the aviation security capabilities of the Programme's participating Member States and Administrations. The CASP-AP Members continue to require assistance, to varying degrees, in addressing the shortcomings in aviation security oversight identified by the ICAO USAP Cycle II and CMA audits. The CASP-AP has commenced the Phase IV cycle from July 2019 to June 2024.

3.2.2.2.2 As an ICAO Regional Technical Cooperation Project, the Member States and Administrations (24 from the APAC region including the PSIDS of Fiji, Solomon Islands and Vanuatu) have ownership of the project and are governed by a Steering Committee of Member States appropriate national authorities for aviation security (many of these are DGCAs, however several States have alternative arrangements). The CASP-AP is administered by the Technical Cooperation Bureau (TCB) of ICAO, and overseen by the ICAO APAC Regional Office. The financial and in-kind resources for CASP-AP are provided by Member States contributions, in-kind assistance from Members and Partners, and donor contributions. The Programme is implemented by three employees (a Programme Coordinator/Senior

Aviation Security Advisor, a Training and Capacity Building Officer, and an Administrative Assistant). The CASP-AP receives technical support from the ICAO ATB/ISD-SEC, and capacity assistance is delivered in close coordination with the ICAO APAC Regional Office Aviation Security and Facilitation Section. The CASP-AP can be considered as a capacity assistance mechanism, fulfilling the objectives of the fifth strategic priority (*Increase Cooperation and Support*) from the ICAO Global Aviation Security Plan (GASeP), in providing assistance to Members to achieve the GASeP and APAC Roadmap Effective Implementation targets.

3.2.2.2.3 The CASP-AP goals are as follows:

- a) prioritized, targeted and customized assistance for sustainable capacity building for appropriate authorities to both establish and implement mature State Aviation Security Oversight Systems that strengthens the security of air transport operations utilizing risk management methodologies to maximize the effectiveness of available resources, as well as greater cooperation, coordination, and harmonization of aviation security matters among Members, using regional assets as far as possible;
- b) provision of assistance to ensure effective implementation (EI) issues identified during USAP audits and other evaluations are addressed; and
- c) strengthening all critical elements (CEs) of the State Aviation Security Oversight System to ensure sustainability of the implementation of effective aviation security.

3.2.2.2.4 The CASP-AP, Phase IV objectives are to support States to develop capacity in the following:

- a) provide ongoing assistance to Members in the sustainable capacity building required to effectively meet all international responsibilities;
- b) continue to provide assistance to Members with establishing appropriate organization, processes and procedures in the development of mature State Aviation Security Oversight Systems, that strengthens the security of air transport operations, airports, air traffic service providers, aircraft operators, civil aviation installations, personnel and the travelling public, including the increased use of risk-management methodologies to maximize the effectiveness of available resources;
- c) further assist Members in removing deficiencies identified from ICAO USAP Cycle II and USAP-CMA Programme;
- d) further assist Members with the implementation of Standards and Recommended Practices (SARPs) under Annex 17 and the security provisions of Annex 9 (as amended), with the objective of reducing the potential for acts of unlawful interference against civil aviation being committed in the Asia/Pacific Region;
- e) further increase the harmonization of processes, the coordination of activities and the mutual acceptance of Members' national standards and outcomes;
- f) increase Member and Partner support, provided cooperatively to CASP-AP, to maximize the use of regional subject matter experts (SMEs) and support-in-kind and assistance from Members and Partners to better achieve the required Programme outcomes;
- g) ensure appropriate staff support for the CASP-AP Programme for the implementation of timely, optimal and cost-effective assistance to Members; and

- h) provide Members with other related assistance, including activities tailored to meet specific needs of Members in overcoming any aviation security-related challenges and shortcomings in facilities, services and equipment, to the extent possible.

3.2.2.2.5 The CASP-AP develops its own work plans geared to the needs of its Members, which include the following range of activities:

- a) State assistance needs identification, analysis and prioritisation;
- b) advice, guidance and coordination of assistance to support States, including model documentation such as national-level and operator-level security programmes;
- c) assistance missions to States (e.g. matters related to USAP-CMA);
- d) training courses, seminars and workshops (sub-regional and in-country). This includes the development of specialized training to address specific implementation issues common to many Members;
- e) support for aviation security personnel mentoring at ICAO Aviation Security Training Centers; and
- f) Steering Committee Meetings, and Annual Technical and Operational Meetings.

3.2.2.2.6 It should be noted that PSIDS' participation in the CASP-AP has not been stable over the years. In addition to the three currently participating PSIDS (Fiji, Solomon Islands and Vanuatu), three other States (Kiribati, Marshall Islands and PNG) had either been participating in the CASP-AP in the past and then ceased to (this is the case for PNG) or taken steps to join the CASP-AP but never paid their contributions and therefore never participated (this is the case for Kiribati and Marshall Islands).

3.2.3 Examples of institutionalized RSOOs/RSSOOs

3.2.3.1 The Banjul Accord Group Aviation Safety Oversight Organization (BAGASOO)

3.2.3.1.1 BAGASOO was established in 2010 from the institutionalization of the Cooperative Development of Operational Safety and Continuing Airworthiness Programme (COSCAP) for the Banjul Accord Group (BAG) via a cooperative agreement signed by the seven BAG Member States: Gambia, Ghana, Guinea, Liberia, Nigeria, Cabo Verde and Sierra Leone. The agreement requires BAG Member States to harmonise their policies and procedures on civil aviation and foster the development of international civil aviation through cooperative arrangements between the States. BAGASOO Member States do not yet have harmonized regulations but BAGASOO maintain a set of generic regulations and assists its Member States with developing their regulations when requested to do so.

3.2.3.1.2 The primary functions of BAGASOO, in accordance with the BAGASOO cooperative agreement, encompass safety-related areas and include the following:

- a) assisting in the development of a harmonized regulatory regime for the Member States;
- b) assisting in the development and implementation of training programmes and a regional safety programme;

- c) performing certification and surveillance tasks on behalf of Member State CAAs (BAGASOO can participate in certification and surveillance activities but any certificate, licence or approval is issued by the State itself);
- d) evaluating the status of aviation safety in the Member States through the conduct of audits and other quality assurance activities; and
- e) planning and facilitating the sharing of aviation technical expertise and facilities between Member States.

3.2.3.2 *The Caribbean Aviation Safety and Security Oversight System (CASSOS)*

3.2.3.2.1 In 2001, several Member States of the Caribbean Community¹ (CARICOM) agreed to the formation of an Association of Civil Aviation Authorities of the Caribbean (ACAAC) under the aegis of ICAO. A Memorandum of Understanding (MoU) setting out the Association main objectives was signed by the Directors of Civil Aviation of Barbados, Belize, Guyana, Haiti, Jamaica, the OECS² Members, Suriname and Trinidad and Tobago. In accordance with that agreement, the interim Regional Aviation Safety Oversight System (RASOS) was established as the operating arm of ACAAC. The mandate of RASOS was to assist the Member States in fulfilling their obligations with specific regard to Annexes 1, 6 and 8 to the Chicago Convention. This assistance involved aiding, facilitating, harmonising and sharing resources for the provision of aviation safety oversight services in the Member States. RASOS has now evolved into the Caribbean Aviation Safety and Security Oversight System (CASSOS).

3.2.3.2.2 The agreement establishing CASSOS entered into force on 3 July 2008, in accordance with Article XX. CASSOS was formally launched in February 2009. It succeeds RASOS with functions which have been redefined; and broadened in scope to include all the Annexes to the Convention. CASSOS is managed by a Board of Directors appointed by the Member States and is to be largely funded by equal contributions by each Member State.

3.2.3.2.3 In the Preamble to the Agreement, there is recognition of the need for a harmonized approach and close collaboration in promoting safe, orderly, efficient and economical civil aviation operations. Furthermore, the Preamble expresses the conviction that the harmonization of regulations, standards, practices and procedures within the Community would facilitate the effective sharing of resources to foster the development of individual Member States. CASSOS is designated as an Institution of the Community in accordance with Article 21 to the Revised Treaty of Chaguaramas. Article V to the Agreement accords full juridical personality to CASSOS and each State Party undertakes to take the required measures to ensure that the provisions of that Article are effective in their respective jurisdictions.

3.2.3.2.4 Paragraph 1 of Article III to the Agreement sets out the primary objectives of CASSOS as follows:

- a) assist the States Parties in meeting their obligations as contracting States to the Chicago Convention by achieving and maintaining full compliance with the ICAO Standards and Recommended Practices; and
- b) facilitate and promote the development and harmonisation of civil aviation regulations, standards, practices and procedures amongst its States Parties consistent with the Annexes to the Chicago Convention.

1. CARICOM itself was established under the Treaty of Chaguaramas, including the CARICOM Single Market and Economy.

2. The Organization of Eastern Caribbean States; created by the Treaty of Basseterre in 1981.

3.2.3.2.5 Paragraph 2 of the same Article provides that CASSOS shall, *inter alia*:

- a) assist, as far as possible, the States Parties which cannot fully satisfy their obligations as contracting States respecting ICAO SARPS in taking the necessary steps to do so;
- b) be the main forum through which its States Parties will harmonise and update their civil aviation safety and security regulations;
- c) be the regional institution to provide on request technical guidance to States Parties, Community Organs and Institutions on all matters within its competence relating to civil aviation; and
- d) facilitate the sharing of regional technical expertise and the mobilisation of financial and other resources from the international aviation and donor community and Government agencies in support to support its activities.

3.2.3.2.6 It appears, based on the above, that each State is responsible for undertaking safety and security oversight in its own territory; with the support as needed of resources provided by, or via, CASSOS. In order to enable these arrangements to work, each State is responsible for adopting harmonized regulations, practices and procedures.

3.2.3.3 *The Civil Aviation Safety and Security Oversight Agency (CASSOA) (Eastern Africa)*

3.2.3.3.1 CASSOA is an agency of the East African Community (EAC). It was established in 2009 under the East African Community Treaty of 30 November 1999 by the EAC Civil Aviation Safety and Security Agency Act 2009 (CASSOA Act). The Act was enacted by the EAC Legislative Assembly and assented to by the Heads of State.

3.2.3.3.2 The Treaty was signed by Kenya, Tanzania and Uganda; and the States of Burundi, Rwanda and South Sudan later acceded to it. Regulations can be made in accordance with the Treaty by the EAC Council of Ministers. The EAC has a Legislative Assembly, which is responsible for the promulgation of primary legislation in identified fields, a Court of Justice and a Secretariat.

3.2.3.3.3 The key elements of the Treaty are trade and transport. Chapter 15, Article 89 outlines the common transport policies and Article 92 sets out the framework for civil aviation with specific reference in Article 92.3 to compliance with the Convention and the Annexes.

3.2.3.3.4 Although the Treaty provides for legislation to be made by the EAC Legislative Assembly, and for the Council of Ministers to promulgate regulations, each of the Partner States enacts a Civil Aviation Act, under which Regulations are made by a National Government Official.

3.2.3.3.5 For example, the primary civil aviation legislation in force in Kenya is the Civil Aviation Act No. 21 of 2013. Section 4 to that Act establishes the Kenya Civil Aviation Authority, Section 7 sets out its functions and Section 8 its powers; which are all of those associated with a regulatory authority. Section 82 to the Act provides for the Cabinet Secretary to make regulations “to give effect to and for the better carrying out of the objects and purposes of this Act, to provide generally for regulating of navigation, air transport, air accident investigation and carrying out and giving effect to any convention”.

3.2.3.3.6 Accordingly, Section 4 to the CASSOA Act provides that the principal objectives of the Agency are to:

- a) develop policies on the development of safe, reliable, efficient and economically viable civil aviation with a view to developing appropriate infrastructure, aeronautical skills and technology as well as the role of civil aviation in support of other economic activities;

- b) assist the Partner States in meeting their safety and security oversight obligations and responsibilities under the Treaty and the Chicago Convention and its Annexes; and
- c) provide the Partner States with an appropriate forum and structure to discuss, plan and implement common measures required for achieving the safe and orderly development of international civil aviation through the implementation of international standards and recommended practices relating to the safety and security of civil aviation.

3.2.3.3.7 Under Section 5 to the CASSOA Act the functions of the Agency include, *inter alia*:

- a) strengthen the institutional framework within the Partner States in aviation safety and security and assist in the development of a harmonized regulatory regime for the Partner States;
- b) coordinate civil aviation safety and security oversight activities amongst the Partner States;
- c) monitor and provide input to the formulation of ICAO SARPs;
- d) evaluate the status of aviation safety and security in the Partner States, provide information to the Partner States and recommend necessary interventions or corrective measures for the resolution of constraints or deficiencies;
- e) assist the Partner States to meet or comply with ICAO SARPs, national standards and regulations in force;
- f) plan and facilitate the sharing between Partner States of technical expertise and facilities in civil aviation.

3.2.3.3.8 The role of CASSOA is therefore similar to that of CASSOS and other regional bodies, other than perhaps in having a more formal legal structure, in providing general policy advice, assistance and support and in developing harmonized rules and regulations. It has no direct hands-on regulatory role as such.

3.2.4 Examples of Regional Civil Aviation Authorities (RCAAs)

3.2.4.1 Introduction

There are currently two examples of aviation bodies with characteristics of Regional Civil Aviation Authorities: the European Union Aviation Safety Agency (EASA) and the Eastern Caribbean Civil Aviation Authority (ECCAA). The common, defining characteristic of these organizations is that each is an agency or institution of an existing economic and/or political community or union bound together by Treaty.

3.2.4.2 The European Union Aviation Safety Agency (EASA)

3.2.4.2.1 The cooperation between European aviation regulatory authorities was enhanced in 1970 with the creation of the Joint Airworthiness Authorities, the objectives of which were to produce common certification standards for large aircraft and aircraft engines to facilitate a European aviation manufacturing industry. It was later replaced by the Joint Aviation Authorities (JAA), an RSOO gathering civil aviation regulatory authorities of a number of European States, members as well as non-Members of the European Union (EU), which had agreed to cooperate in developing and implementing common safety regulatory standards and procedures. Over time, the scope of the JAA was extended to include aircraft operations, maintenance, licensing and certification/design standards for all classes of aircraft. The JAA

did not directly regulate aviation in its Member States, as each State had to transpose the Joint Aviation Requirements (JARs) into their national legal framework.

3.2.4.2.2 In 2002, the European Aviation Safety Agency (EASA) was created as an agency of the European Union, initially responsible for airworthiness-related matters. Its scope was subsequently extended to air operations and pilot licensing, aerodromes and ATM/ANS. The initial regulations were based on the JARs. In 2009, the JAA system was disbanded. Only the training organisation (JAA-TO) remains, providing courses for CAA staff of European States.

3.2.4.2.3 EASA's competencies are established under EU law, including the Basic Regulation (which is at the level of primary legislation in the European legal framework). The basis for this is the transfer of competence from Member States to the European Union under the European legislation. Since its creation, the competences of EASA have gradually expanded, including, in addition to airworthiness, personnel licensing, aircraft operations, most air navigation services, aerodromes and safety management. The process of expansion of EASA's scope of competence is still ongoing. EASA has its headquarters in Cologne, Germany, and also has an office in Brussels, Belgium as well as it has representations in several States outside Europe. The Organization has approximately 700 staff members.

3.2.4.2.4 The legal basis governing the establishment of EASA has been progressively amended to provide for the evolution of the Organization and in particular the expansion of its scope of competence. In order to establish EASA, on 15 July 2002, the European Community adopted Regulation (EC) No. 1592/2002 of the European Parliament and of the Council on common rules in the field of civil aviation and establishing EASA. The regulation provided for the transfer of regulatory competencies in the fields of airworthiness, continuing airworthiness, environmental certification from Member States of the EU to EASA. Regulation (EC) No. 1592/2002 was repealed and replaced by Regulation (EC) No. 216/2008 of the European Parliament and of the Council of 20 February 2008, which extended the scope of EU/EASA competence to the fields of aircrew licensing and air operations. Regulation (EC) No 216/2008 was subsequently amended by Commission Regulation (EC) No. 690/2009 of 30 July 2009; Regulation (EC) No. 1108/2009 of the European Parliament and of the Council of 21 October 2009, extending the scope of EU/EASA competence to the fields of aerodromes, air traffic management (ATM) and air navigation services; Commission Regulation (EU) No. 6/2013 of 8 January 2013; Commission Regulation (EU) No. 2016/4 of 5 January 2016.

3.2.4.2.5 The most recent amendment of the Basic Regulation was through Regulation (EU) No. 2018/1139 of the European Parliament and of the Council of 4 July 2018. This change introduces State Safety Programme (SSP) and plans into the EU regulatory framework and manifests or enhances EASA's engagement in supporting its Member States, European crisis management, research, international cooperation as well as a better articulation between safety and security. It also enables EASA to issue certificates in the areas of OPS, training and maintenance organisations to entities located in the EU and mandates EASA to act as the European RSOO in the ICAO framework³.

3.2.4.2.6 EASA currently has 32 Member States, of which 28 are EU Member States and four are European Free Trade Association (EFTA) Member States. Except for Liechtenstein, all are ICAO Member States and have duly notified ICAO of the transfer of the relevant competencies to EASA as provided for by the Basic Regulation.

3.2.4.2.7 EASA is a unique set up, which is effective in the European geopolitical context, and which is the result of more than 60 years of close cooperation between European States on civil aviation safety oversight. In several domains, especially in the area of airworthiness, EASA has the characteristics of a Regional CAA (GASOS Level 3), as it is empowered to directly regulate, issue, suspend or revoke certificates and approvals (e.g. Type Certificates and Design Organization Approvals). In other domains, EASA has the characteristics of a GASOS Level 2 RSOO as the certificates (e.g. AOCs) are issued by EASA Member States themselves.

3. Regulation (EU) No. 2018/1139 changed the name of the Agency to European Union Aviation Safety Agency; the abbreviation EASA remains in use.

3.2.4.2.8 EASA's tasks can be summarized as follows:

- a) draft regulations in all fields pertinent to the EASA's mission;
- b) certify and approve products and organizations, in fields where EASA has exclusive competence (e.g. type certification, third-country operators authorizations) or where it acts as the competent authority alongside its Member States;
- c) provide oversight and support to Member States in fields where EASA has shared competence (e.g. Air Operations, Air Navigation Services);
- d) promote the use of European and worldwide standards; and
- e) cooperate with international actors in order to achieve the highest safety level for EU citizens globally (e.g. EU safety list, Third Country Operators authorizations).

3.2.4.3 *The Eastern Caribbean Civil Aviation Authority (ECCAA)*

3.2.4.3.1 The ECCAA is a legally established regional authority, being an Institution of the Organization of Eastern Caribbean States (OECS). The Member States are Antigua and Barbuda; Dominica⁴; Grenada; Saint Kitts and Nevis; Saint Lucia; and Saint Vincent and the Grenadines.

3.2.4.3.2 The OECS was created by treaty done at Basseterre on 18 June 1981 by the West Indies (Associated States) Council of Ministers. The Treaty followed the signing on 11 June 1968 by the same Council of Ministers of an Agreement establishing the East Caribbean Common Market. The States are all former colonies of the United Kingdom (UK) and members of the Commonwealth and have common/compatible systems of law based on the Common Law and the UK's legislative practice.

3.2.4.3.3 The OECS has similarities with the European Economic Community (as originally constituted). The purposes for which it was established are stated in Article 3.1 to the Treaty and include:

- a) to promote cooperation among the Member States and at the regional and international levels having due regard to the Treaty establishing the Caribbean Community and the Charter of the United Nations;
- b) to assist the Member States in the realisation of their obligations and responsibilities to the international community with due regard to the role of international law as a standard of conduct in their relationship; and
- c) to pursue the said purposes through its respective institutions by discussion of questions of common concern and by agreement and common action.

3.2.4.3.4 Article 3.2 to the Treaty recognises several fields of activity in which Member States will endeavour to coordinate, harmonise and pursue joint policies, including "External Transportation and Communications including Civil Aviation".

3.2.4.3.5 The ECCAA has legal personality and has, in the territory of each Member State, legal authority, capacity and jurisdiction to perform its functions under the Treaty; at least in theory.

4. Dominica has only recently become the 193rd contracting State to the Chicago Convention.

3.2.4.3.6 The ECCAA evolved from the Directorate of Civil Aviation — Eastern Caribbean States which was one of the oldest institutions in the Eastern Caribbean Region. A Director of Civil Aviation was first appointed in 1957 by the UK Government. The remit was “to advise the Governments of the Leeward and Windward Islands on all matters relating to civil aviation including airfields and airport developments, the implementation of ICAO conventions and the adequacy of air services”. In 1982 the Directorate became an institution of the OECS.

3.2.4.3.7 At the 35th meeting of the OECS Heads of Government in 2002 it was decided that:

- a) a fully autonomous body should be established with the responsibility to regulate civil aviation activities within OECS Member States; and
- b) the body should be self-financed.

3.2.4.3.8 Acting on the above mandate, in October 2003, the OECS Ministers responsible for civil aviation signed the agreement establishing the ECCAA. This agreement was then given legal effect by an Act of Parliament in each Member State. Each Member State thereafter was required to enact an Eastern Caribbean Civil Aviation Authority Agreement Act. For example, Antigua & Barbuda enacted the legislation on 27 January 2004 — Act No. 24 of 2003. The authority and powers, among others, of the ECCAA are then set out in Part III to the Civil Aviation Act 2003 — Act No. 25 of 2003. Under Section 49 of Act No. 25, the Minister has the power to make regulations for carrying out the Convention and any Annex to the Convention relating to standards and recommended practices; and any amendments to the Convention and Annexes. It is clear therefore that the power to make regulations rests with each Member State and not with the ECCAA. It should be noted that Saint Kitts and Nevis does not appear to have enacted its legislation until 2017.

3.2.4.3.9 The ECCAA has all the legal powers, duties, authority and jurisdiction (to secure compliance) in each of the participating Member States in the same manner as a national CAA. Its principal remit is to “regulate civil aviation safety and security and to develop harmonized civil aviation regulations, policies, and practices by applying ICAO SARPS uniformly”. By way of example the Eastern Caribbean Civil Aviation Authority Agreement Act, No. 24 of 2003 of Antigua and Barbuda provides, in Article 4 (Purposes of the Authority), as follows, *inter alia*:

- a) to regulate matters relating to civil aviation safety and security in the Participating States; and
- b) to develop and seek approval for harmonized civil aviation regulations, policies and practices to be adopted by Participating States and apply the Standards and Recommended Practices adopted by the ICAO uniformly within the Participating States.

3.2.4.3.10 The harmonized regulations are therefore in fact to be adopted, or made, in each of the Member States. Therefore, one of the major challenges facing the ECCAA and the Participating States will be to ensure harmonisation and maintenance of the regulations promulgated in each of them.

3.2.4.3.11 Provided that the Member State has discharged its legal obligations, the ECCAA is a legally constituted body with all powers, duties and responsibilities in each participating Member State, with all necessary authority and jurisdiction to issue licences, certificates, etc., and to secure a resolution of deficiencies and compliance with the laws and regulations. Article 5 (Powers of the Authority) to the above Antigua and Barbuda legislation provides, *inter alia*, as follows:

- a) recommend the making and adoption of regulations to each Participating State;
- b) issue civil aviation documents in accordance with the Act;
- c) recommend to Participating States rules, regulations and aviation standards;

- d) enforce existing rules, regulations and aviation standards and impose administrative fines and penalties for violations of the rules, regulations and aviation standards; and
- e) regulate civil aviation in the Participating States on behalf of and in collaboration with the Participating States.

3.2.5 Proposed solution and mitigations

3.2.5.1 When deciding on establishing or enhancing a regional oversight support mechanism, careful consideration should be given to the region's specific situation and needs. There is no universal model which would be fit for purpose in all regions. In particular, the mere fact of bringing together a group of States with poor or inexistent regulatory oversight capabilities would not help overcome these States' challenges unless the regional support mechanism is set up, with the necessary legal framework, human and financial resources, in a relevant, effective, efficient, sustainable and resilient manner.

3.2.5.2 A region may have the majority of its States with established (although not fully effective) regulatory oversight systems, CAAs and inspectorate staff. In such a case, the region would have as a priority the further strengthening of its regulatory oversight system, including CAAs and inspectors. A regional cooperative arrangement could be an effective solution for this type of region, although the region may wish to engage in building an institutionalized RSOO/RSSOO or even an RCAA for a number of reasons, including effectiveness, cost-efficiency, sustainability and resilience, or/and the existence of an economic or political union. In addition, as was the case for BAG Member States (Section 3.2.3.1 refers), a cooperative arrangement may evolve and become an RSOO/RSSOO over time, when the necessary conditions, including political will, are gathered.

3.2.5.3 A prerequisite for States to benefit from COSCAP support with assistance, training and regulatory oversight capacity building is that the States should at least have an existing basic regulatory organization and staffing to build up. A regional cooperative arrangement, on its own, would not meet the needs of a region, like the PSIDS region, where most States lack regulatory oversight capability and in particular lack qualified inspectorate staff. The priority need in this case would be for the States to delegate regulatory oversight tasks, at least for the technical evaluations necessary for certification, licensing, surveillance, quality control and follow-up, which require expertise and experience in the concerned technical domains. These States should therefore consider establishing an RSOO/RSSOO or an RCAA. Typically, establishing an RSOO/RSSOO is the first option to be considered, as it is much more flexible in nature, would not affect States' sovereignty or perception thereof, and would not require the pre-existence of complex regional frameworks, such as a regional economic or political union (see Section 4.2.4 of this report for examples of RCAAs). It should be noted that, in addition to the ability to delegate tasks, RSOO/RSSOO Member States also benefit from advice, training and opportunities for sharing of information and experience through regional meetings or other events.

3.2.5.4 Once States have recognised the need for the establishment of some form of regional regulatory oversight mechanism, the States intending to participate (become members) must determine a well-defined vision, strategy and policy within their region; in terms of the intended purpose and objectives of the mechanism and the scope and functions of the regional entity to be established. Only then can consideration be given to what is required legally, both regionally and nationally, to give effect to the policy. Sections 2.2 and 2.3 of Chapter 2 of ICAO Doc 9734 — *Safety Oversight Manual*, Part B — *The Establishment and Management of a Regional Safety Oversight Organization* provide guidance on the strategy for establishing an RSOO and the development process. Chapter 3 of that same document sets out the relevant factors for an RSOO's legal framework (Section 3.1) and the options for the development of a legal framework (Section 3.2).

3.2.5.5 As an initial step to establishing an RSOO/RSSOO, the concerned States should identify possible mechanisms for funding the RSOO/RSSOO in an effective, sustainable and resilient manner. This would benefit from the establishment of in a multi-stakeholder taskforce, including ICAO and other stakeholders, such as donor States and Multilateral Development Banks (MDB). This would help identify adequate funding mechanisms, based on the Region's

specificities and taking benefit from the experience gained in other parts of the world. In addition, in order to enable the initial set up and operations of the RSOO/RSSOO, and a corpus of funds should be established.

3.2.5.6 In legal terms, a number of legal arrangements would need to be put in place, both at the regional level and domestically in the participating States themselves. Such arrangements would include:

- a) the development and subsequent maintenance of a common or harmonized civil aviation legislative and regulatory framework across all relevant areas; and the adoption of standardised procedures in relation to the safety/security oversight activities;
- b) the strengthening of the RSSOO's organizational or institutional framework in relation to the above development and/or the reconciliation of any differences in the above; and
- c) the establishment of legally robust working arrangements between the RSSOO and the responsible authorities in each of the participating States.

3.2.5.7 In addition, the legal system in place in each individual State would need to provide for effective and timely resolution of identified safety issues, including enforcement actions when needed, as the related responsibility remains within each State.

3.2.5.8 Another important element that needs consideration in the establishment of an RSOO/RSSOO is the subject of liability; and the related topic of protection or indemnity. This subject would need to be addressed in the primary legislation of each Member State; alongside that of the actual legal status of the RSSOO in each Member State.

3.2.5.9 As consideration should be given to the already existing regional framework, the Enhanced Regional Safety and Security Oversight Organization (ERSSOO) should be established as an evolution of PASO (strengthened PASO) in order to ensure continuity with PASO's operations and avoid affecting the ability to support Member States' aviation safety and security oversight activities.

3.2.5.10 The functions of the proposed ERSSOO would include the following:

- a) provide advice, guidance and technical support to Ministers and Directors of Civil Aviation in the Member States; including advice on proposed amendments to the Annexes to the Chicago Convention and advice on primary legislation;
- b) be a representative of, or advocate for, the Pacific Island States with ICAO and in other forums in the Pacific Region and elsewhere;
- c) develop in consultation with the Member States, and other States in the region, and thereafter maintain harmonised regional regulatory requirements (hereinafter referred to as "Pacific Aviation Requirements") related to aviation safety and security, for adoption into the operating regulations of the Member States, in order to facilitate the performance of, and support to safety and security oversight functions within the region;
- d) assist Member States in the identification, notification and publication as needed of their differences with ICAO SARPs and other relevant ICAO provisions, such as those contained in the *Procedures for Air Navigation Services* (PANS);
- e) conduct safety and security oversight tasks in support of the Member States' CAAs;

- f) advise the Member States' CAAs regarding the definition of functions at organizational level (CAA and CAA departments) and individual level (for each technical job position within the CAA);
- g) provide training to the Member States' CAAs and to support the Member States' CAAs in developing and implementing relevant, comprehensive and detailed training programmes for their technical staff;
- h) support the Member States' CAAs in developing relevant, comprehensive and detailed policies and procedures to cover all aspects of the aviation safety and security regulatory activities;
- i) support the Member States' CAAs in performing their activities related to safety and security oversight, including for the initial issuance and re-issuance of certificates, licences, approvals or other authorizations; continuing surveillance/quality control; and the resolution of identified safety and security deficiencies;
- j) assist Member States in handling non-compliances to the applicable requirements by applicants or certificate/licence/approval holders through the appropriate processes, including exemption processes when applicable;
- k) provide advice to Member States regarding the follow-up on identified safety and security deficiencies; and
- l) support the Member States in progressing in the implementation of a State Safety Programme (SSP), including the review, acceptance and continuous monitoring over the service providers' Safety Management Systems (SMS).

3.2.6 Risk/benefit assessment of change versus status quo

3.2.6.1 Risks, mitigations, benefits and residual risks

3.2.6.1.1 The table shown in Section 4.3.2.2 provides an overview of current risks related to aviation regulatory oversight on the PSIDS, for which the severity and/or the probability may vary from one PSIDS to the other. This list does not intend to be exhaustive but aims at highlighting the benefits that PSIDS could gain through the mitigation measures introduced with an enhanced RSSOO (ERSSOO) framework.

3.2.6.1.2 Such a framework would have the following pillars:

- a) a revised Treaty establishing the ERSSOO and containing all necessary provisions to enable it to provide regulatory support to its Member States in an effective, sustainable and resilient manner;
- b) amended primary legislation in each Member State (MS), which provides for effective delegation of authority and functions to the ERSSOO, its officers and contractors; and which provides for their protection;
- c) the development and maintenance of harmonized Pacific Aviation Requirements, fit-for-purpose for the PSIDS region, and adopted in each MS' regulatory framework;
- d) the establishment and implementation of sustainable funding mechanisms for the ERSSOO;

- e) the recruitment of qualified and experienced permanent technical and legal staff for the ERSSOO (at least two permanent full-time staff members in each main domain of activity), complemented by a roster of qualified and experienced part-time staff and contractors;
- f) the establishment and implementation of a comprehensive training system, including OJT, for all ERSSOO technical staff, including part-time staff and contractors;
- g) the development and implementation of appropriate, clear, comprehensive and detailed policies and procedures for use by the ERSSOO when performing their tasks; and
- h) the development and implementation of binding, appropriate, clear, comprehensive and detailed Service Level Agreements (SLAs) between each MS and the ERSSOO, reflecting each MS' specific capabilities and needs.

3.2.6.1.3 The benefits have been estimated for the current PASO Member States, compared to the present situation and framework. For the same mitigations, the benefits would be even greater for the three North Pacific States if they were to join the ERSSOO. Indeed, these States have even more severe limitations in resources and regulatory oversight capabilities as they do not benefit from the opportunities offered to PASO MS, including advice, training, technical evaluations and sharing of information and experience through meetings and other events.

3.2.6.1.4 As for Fiji, the ERSSOO would provide new opportunities to the State, which would enjoy benefits such as:

- a) access to competencies that may be missing in in the State's CAA (CAAF);
- b) access to additional training opportunities;
- c) participation in regional events, efforts and synergies; and
- d) external technical evaluations when needed.

3.2.6.1.5 External evaluations (by the ERSSOO) can contribute to enhancing quality control in CAAF oversight activities, providing second opinions on complex technical matters, and mitigating potential risks of conflict of interest when such cases may happen. These benefits are comparable to those that PNG has enjoyed to date as a PASO Member State.

3.2.6.1.6 It should be noted that, for all ERSSOO Member States, even after the proposed mitigation measures have been implemented, residuals risks would still be existing. These would include the possible lack of financial resources and/or clear and consistent political will at State and Government levels.

3.2.6.2 Risk/benefit assessment tables

Table 3-1. Risks applicable to all PSIDS in relation with aviation safety and security oversight

<i>Risk category</i>	<i>Risk description/Event statement</i>	<i>Proposed mitigation measures</i>	<i>Benefits for ERSSOO Member States (MS)</i>	<i>Residual risks</i>
RESOURCES	States are not able to make their CAAs competitive employers, able to attract, recruit and retain sufficiently qualified and experienced technical personnel.	Establishment of an enhanced RSSOO (ERSSOO) as a competitive employer, able to attract, recruit and retain qualified and experienced personnel. Actual recruitment by the ERSSOO of permanent legal and technical personnel with the necessary qualification and experience. In addition, maintenance by the ERSSOO of a roster of sufficiently qualified, experienced and trained contractors.	Ability to count on an effective and sustainable source of regulatory oversight support.	
OPERATIONAL	There may be situations leading to immediate safety and security risks, due to the State's lack of ability to ensure compliance with ICAO SARPS on an initial and continuous basis.	Priority given to the enhanced ERSSOO personnel to work with the MS to identify and address priority/immediate concerns, based on risk.	Identification of top safety/security oversight and operational risks, facilitating their effective and timely resolution, including through immediate mitigation measures if needed.	MS may not be willing to engage with the ERSSOO on such a review. They may not be willing to take the appropriate actions recommended by the ERSSOO to address the identified risks, including immediate risks.
LEGISLATION	States do not have all necessary provisions in their primary aviation legislation, including with respect to delegation of functions.	ERSSOO legal and technical personnel to work together, in coordination with the MS, to develop the standardized essential provisions to be incorporated in the States' primary legislation.	Adoption of a robust and comprehensive framework enabling the establishment and maintenance of an effective, sustainable and resilient regulatory oversight system at national and regional levels.	The process to amend the primary legislation in some States may be slow and/or ineffective.
LEGISLATION	States do not have specific operating regulations, in all domains that are fit-for-purpose for their operating environment.	ERSSOO legal and technical personnel to work together, in coordination with the MS, to develop standardized Pacific aviation requirements that are fit-for-purpose	Fit-for-purpose and harmonized regulatory framework across the region, facilitating compliance by the industry, verification of compliance by the States with the support	The process to adopt the regional regulations in the national legal framework in some States may be slow and/or ineffective. States and/or

<i>Risk category</i>	<i>Risk description/Event statement</i>	<i>Proposed mitigation measures</i>	<i>Benefits for ERSSOO Member States (MS)</i>	<i>Residual risks</i>
		for the PSIDS region.	of the ERSSOO.	regulators may not be in favor of changes in the regulations used.
RESOURCES	The low level of aviation operations in most PSIDS does not provide for the critical mass necessary to justify employment of full-time qualified and experienced technical personnel in each domain and for this personnel to gain experience in a timely manner.	ERSSOO personnel are able to intervene in all MS, in function of the SLAs, therefore acquiring experience much more rapidly than if they were working in one of the MS CAAs, with limited exposure and activity.	Increased effectiveness and cost-efficiency for the performance of safety oversight tasks.	
RESOURCES	There are very limited opportunities for aviation professionals from the industry in PSIDS to become CAA inspectors at sufficiently attractive employment conditions, preventing a Pacific Islander inspectorate workforce from being created.	ERSSOO job positions to be offered in priority to experts from PSIDS, including from the industry, with all necessary qualifications and experience, including operational experience as applicable.	Opportunities offered to the experts from the State to work for the ERSSOO.	Some of the CAAs may be impacted if some of their personnel join the ERSSOO. However, this would have consequences only marginally (few positions within the ERSSOO and potentially many applicants from industry) and in the short term.
FUNCTIONS	The detailed functions of the CAA in each PSIDS are not provided for and described in a relevant, comprehensive and detailed manner.	ERSSOO and CAA personnel to work together on identifying the CAA's safety/security oversight capabilities and its needs in terms of delegation of tasks. ERSSOO and CAA personnel to work together on a detailed review, in each State, of the functions of each MS CAA with respect to safety and security oversight, considering that delegated functions would be documented in the SLA.	More relevant, comprehensive and detailed description of functions at CAA level, facilitating strategic and operational decisions, including on the allocation of resources.	
FUNCTIONS	The detailed functions of each job position in each PSIDS CAA are not provided for and described in a relevant,	ERSSOO and CAA personnel to work together on a detailed review, in each State, of the functions and	More relevant, comprehensive and detailed description of functions at each CAA job position level,	

<i>Risk category</i>	<i>Risk description/Event statement</i>	<i>Proposed mitigation measures</i>	<i>Benefits for ERSSOO Member States (MS)</i>	<i>Residual risks</i>
	comprehensive and detailed manner.	responsibilities of each job position within each MS CAA.	facilitating the establishment of relevant qualification and experience requirements for these positions, and enabling the establishment and implementation of appropriate training programmes and plans. Increased relevance and return on investment for training provided to CAA personnel.	
TRAINING	CAA personnel in PSIDS do not benefit from sufficient training opportunities, including OJT.	ERSSOO, with support from assistance donors, to provide OJT to the MS CAA technical personnel, consistent with their functions and responsibilities under the reviewed job descriptions.	Enhanced individual and organizational competence within the CAA.	
TRAINING	CAA personnel in PSIDS may not take ownership after the CAA has received assistance from a State or Organization.	Additional role of the ERSSOO personnel to support on a continuous basis capacity building within the MS CAA, in line with the functions and responsibilities of each MS CAA and its personnel.	Enhanced individual and organizational competence within the CAA.	
OPERATIONAL	CAA personnel in PSIDS may be placed in situations of actual, potential or perceived conflict of interest.	ERSSOO to establish and implement appropriate policies and procedures for the prevention of conflict of interest. ERSSOO personnel (including contractors) not to intervene directly in their State of origin to avoid actual or perceived conflict of interest.	Ability to perform safety oversight, including taking enforcement actions as needed, without the risk of actual or perceived conflict of interest.	
OPERATIONAL	PSIDS CAAs may not know how to address non-compliances at the initial approval stage (certification, licensing or other approval processes) and during continuing surveillance and resolution of safety/security issues.	Possibility offered to MS (embedded in the Treaty and in the Service Level Agreements, if the State so wishes) to delegate to the ERSSOO technical evaluations in case of non-compliances at the	Ability to deal with non-compliances through a risk-based process, ensuring an adequate level of safety/security.	

<i>Risk category</i>	<i>Risk description/Event statement</i>	<i>Proposed mitigation measures</i>	<i>Benefits for ERSSOO Member States (MS)</i>	<i>Residual risks</i>
		initial approval stage (advice and technical evaluations regarding any request from exemption by applicants, e.g. reviews of risk assessments or aeronautical studies conducted by the applicant) and at the continuous surveillance stage (advice and technical evaluations regarding follow-up on identified deficiencies) .		
OPERATIONAL	PSIDS may not be fully committed to take the actions needed when faced with non-compliance to SARPS.	Detailed and documented evaluations by the ERSSOO personnel (including with respect to the handling of non-compliances) to be forwarded to the MS.	Increased transparency and consistency in decision making.	Some States may still not be willing to address identified non-compliances. States may disagree with the outcome of the evaluations by the ERSSOO.
OPERATIONAL	PSIDS do not have effective safety data collection and processing systems (SDCPS).	Possibility offered to MS (embedded in the Treaty and in the Service Level Agreements, if the State so wishes) to delegate to the ERSSOO functions related to SDCPS, such as the collection, storage and analysis of safety data and information.	Ability to monitor safety performance and trends.	Some States may not be willing to delegate functions related to SDCPS.
TRAINING	PSIDS do not often participate in important international or regional aviation meetings and events, due to budget limitations.	Ability, thanks to financial resources, of the ERSSOO personnel, to attend international and regional aviation meetings and events, e.g. role of the ERSSOO personnel to share information and knowledge learnt with the MS.	Ability to follow issues of relevance at international and national level, e.g. ability to anticipate and understand requests and/or updates from ICAO.	

Table 3-2. Risks specifically related to PASO's current organization and framework

<i>Risk category</i>	<i>Risk description/Event statement</i>	<i>Proposed mitigation measures</i>	<i>Benefits for ERSSOO Member States (MS)</i>	<i>Residual risks</i>
RESOURCES	The current funding mechanism for PASO is not sustainable.	Sources of sustainable funding mechanisms for the ERSSOO to be identified, agreed upon by MS and established in the revised Treaty, following recommendations to be elaborated by a multi-stakeholder group.	Sustainable and resilient regulatory oversight support to the State.	Some States may not agree with the identified funding mechanism and may opt out of the Treaty.
FUNCTIONS	There is no clear and long-standing delegation of functions to PASO by PASO MS.	Appropriate provisions related to delegation of functions to be incorporated in the revised Treaty, complemented by provisions in the primary aviation legislation of each MS. For each MS: clear, detailed and documented service level agreements (flexible in their contents and evolution, but binding once signed) to be elaborated and signed between the ERSSOO and each MS.	Clarity and consistency in the strategy adopted by each MS regarding tasks delegated to the ERSSOO, e.g. enhanced effectiveness, cost-efficiency and sustainability in the support provided by the ERSSOO to the MS.	Some States may not be realistic regarding their capabilities and the functions they want to retain.
LEGISLATION	PASO MS do not benefit from support by PASO in all aspects of regulatory oversight due to the limitation to PASO's mandate under the current PICASST.	Expansion of the mandate of the ERSSOO to cover all ICAO Annexes except Annex 13.	Comprehensive regulatory oversight support to the State, including the ability to intervene in areas requiring cross-domain approaches.	
RESOURCES	PASO MS do not plan the regulatory oversight support requests in an effective and/or timely manner.	Recruitment of permanent staff for the ERSSOO, complemented by a roster of consultants, sustainable funding mechanisms, timely development of comprehensive activity plans for the ERSSOO, elaborated in coordination with all States and based on clear, documented and detailed service level agreements.	Increased ability of the ERSSOO to provide effective and timely support to its MS.	The ERSSOO may not have a sufficient number of trained staff to meet the demands and/or needs of its MS, especially in the first few years after its establishment.

<i>Risk category</i>	<i>Risk description/Event statement</i>	<i>Proposed mitigation measures</i>	<i>Benefits for ERSSOO Member States (MS)</i>	<i>Residual risks</i>
RESOURCES	There is no mechanism to ensure that the technical experts employed by PASO have all qualifications needed for their assigned tasks.	Recruitment by ERSSOO of permanent legal and technical personnel with the necessary qualification and experience. To complement the permanent staff, creation and maintenance by the ERSSOO of a roster of sufficiently qualified, experienced and trained contractors. Comprehensive training, with full OJT including final OJT assessment, to be provided to ERSSOO technical personnel and contractors.	Enhanced effectiveness, standardization and reliability in the activities conducted by the ERSSOO staff upon delegation from the MS.	
RESOURCES	The cost of PASO services is high in for a developing country	Reduced cost of ERSSOO services whenever ERSSOO personnel are used.	Increased cost-efficiency.	Some States may still consider the cost of ERSSOO services too high, especially when ERSSOO contractors are used.

3.3 AN ICAO PRESENCE IN THE PACIFIC REGION

3.3.1 The initial request form PSIDS was for ICAO to consider the feasibility of establishing an ICAO sub-regional office (SRO) in the Pacific. It was then clarified, through discussion between the Senior Advisor and PSIDS representatives that their expectation was that the SRO staff would be able to directly carry out safety and security oversight tasks on their behalf, such as certification, surveillance and/or quality control. Such direct support is however not within the scope of work of ICAO regional offices and it would generate a conflict of interest.

3.3.2 Direct support to the State's regulatory oversight tasks would be achieved through the creation and operation of an enhanced RSSOO (ERSSOO). Nevertheless, this would not resolve the various challenges faced by PSIDS in interacting with ICAO, as highlighted in Section 2.11 of this report. There is therefore a need for a solution which would enable PSIDS to interact with ICAO in a more effective, efficient and timely manner. The analysis of the available information regarding the interactions between PSIDS and ICAO (Section 2.11.3 refers) has shown that there is a need for an ICAO presence in the Pacific Region.

3.3.3 In order to rationalize the cost of an ICAO office in the Pacific Region (which could be fully or partially funded through resource mobilization), it would appear that the most effective and cost-efficient option would be for ICAO to establish a position of PSIDS liaison officer to facilitate support to the PSIDS. This officer should have sufficient current or past experience working in ICAO to be able to provide the necessary guidance to PSIDS and other stakeholders, including PASO and the PIFS, as soon as possible after the liaison officer's deployment on site. This is all the more important since the region would be implementing significant changes with respect to civil aviation at strategic, legal, organizational and operational levels. The liaison officer could also be supported by technical and/or administrative staff seconded by States or Organizations on a voluntary basis. To facilitate the activities of the liaison officer, the liaison officer's location should be in the Pacific Region offering good flight and IT connectivity.

3.3.4 The liaison officer, reporting to the ICAO Regional Director, APAC, and working in close coordination with the relevant experts at the ICAO APAC RO and ICAO Headquarters, would also be able to facilitate coordination and cooperation, as applicable, with all relevant stakeholders, including assistance donors, training institutions, MDBs and other UN organizations with offices in the PSIDS region.

3.3.5 The liaison officer would need to maintain independence with regards to PASO (or, once established, the ERSSOO), but would still be able to provide support and guidance to this Organization as needed. In addition, the liaison officer would be able to facilitate continuous monitoring over the regional regulatory oversight support system with respect to both aviation safety and aviation security aspects.

3.3.6 In order to assess the effectiveness and efficiency of the ICAO PSIDS liaison officer mechanism, it would be appropriate for ICAO to perform a post implementation assessment in due time after the initial deployment of the liaison officer, with due consideration of the views of PSIDS and other concerned stakeholders. The evaluation would need to be repeated periodically, e.g. every three years, in order to assess the continuing effectiveness and efficiency of the ICAO PSIDS liaison officer mechanism, but also to determine if such a position would still be needed. Indeed, once the ERSSOO staff has acquired experience in dealing with ICAO matters, they would be in a better position to assist the ERSSOO Member States in processing correspondence and requests from ICAO. However, other key functions of the liaison officer may not be covered by the ERSSOO staff, and ICAO would need to determine if the presence of a liaison officer in the Pacific Region would still be the most effective and cost-efficient option.

3.3.7 Establishing an ICAO liaison office in the Pacific would address the need and long-standing demand of the Pacific States. It would help overcome the challenges faced by PSIDS in interacting with ICAO, thereby bringing ICAO closer to these States, leaving none of them behind.

Chapter 4

CONCLUSIONS AND RECOMMENDATIONS

4.1 MAIN CONCLUSIONS ON PSIDS' SITUATION, CHALLENGES AND NEEDS

4.1.1 Aviation operations in the PSIDS region

4.1.1.1 The PSIDS have relatively low levels of aviation operations. Although the scheduled seat capacity in the PSIDS region has increased by 3.75 % compound annual growth rate from 2009 to 2018, going from 10.6 million to 15.1 million per year, this accounts up for only 0.27% of the global scheduled seat capacity.

4.1.1.2 With a few exceptions, most of the PSIDS' service providers are small, or very small, organizations and face challenges to attract, recruit and retain appropriately qualified and experienced staff. This is particularly the case in the smaller PSIDS, which have vulnerable air operators facing operational, safety and security challenges in addition to a lack of financial sustainability.

4.1.2 Importance of civil aviation for PSIDS

4.1.2.1 Civil aviation is vital for PSIDS, especially for their connectivity, socio-economic development and disaster relief efforts.

4.1.2.2 Many of the PSIDS depend on tourism for their socio-economic development and the vast majority of tourists arrive to these States by air. In 2017, in the PSIDS, the average contribution of tourism was 23% of GDP and 15% of total employment. In some States, the contribution of tourism reached about 70% of the GDP and 34% of total employment.

4.1.3 Connectivity issues

4.1.3.1 In addition to the numerous vulnerabilities shared with other Small Island Developing States (SIDS), including with respect to the impacts of climate change, PSIDS face specific challenges due to remoteness in terms of distances, poor connectivity and high travel cost with other States as well as between the many islands within each State.

4.1.3.2 Issues of poor connectivity are particularly significant between the North Pacific States (FSM, Marshall Islands and Palau) and South Pacific States, resulting in an isolation of the North Pacific States from most of the Pacific Region.

4.1.4 The Pacific Aviation Safety Office (PASO)

4.1.4.1 The main organization currently providing safety and security oversight support in the PSIDS region is PASO, a Regional Safety and Security Oversight Organization (RSSOO) established in 2004 under the Pacific Islands Civil Aviation Safety and Security Treaty (PICASST). PASO itself receives support from the New Zealand Civil Aviation Authority (NZ CAA) under a Memorandum of Cooperation and working arrangements.

4.1.4.2 Only 10 out of the 14 PSIDS are PASO Member States, namely Cook Islands, Kiribati, Nauru, Niue, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu. Associate Member States, which are not parties to the PICASST, are Australia, Fiji and New Zealand.

4.1.4.3 None of the three North Pacific States is a member of PASO.

4.1.4.4 The establishment of PASO has enabled the provision of some aviation safety and security regulatory support to its Member States. In addition, the PASO Council has recognized in last few years improvements in the governance and functioning of the organization.

4.1.4.5 However, PASO currently has very limited human and financial resources. PASO does not have any technical personnel (inspector) in a full-time or even part-time staff member capacity. Instead, the organization retains a roster of experienced aviation safety and security contractors (inspectors), in addition to possible support from the NZ CAA, for contracting as consultants to conduct inspections and audits and/or provide technical advice as required by its Member States and at the State's cost. This outsourced activity comes at what is seen by many PSIDS as a high cost for developing States, which normally pass this on to the service providers.

4.1.4.6 Furthermore, some PASO Member States do not always utilize PASO services for their various oversight needs but resort to engaging independent experts from time to time.

4.1.5 Categories of States within the PSIDS region

4.1.5.1 Although each of the PSIDS has a unique situation and set of challenges, the following categories may be suggested to facilitate awareness and understanding by stakeholders outside the region:

- a) a group comprised of the three North Pacific States (FSM, Marshall Islands and Palau), which have received support from the United States under the Compacts of Free Association and which are not PASO Member States;
- b) a group of nine Central and South Pacific States (Cook Islands, Kiribati, Nauru, Niue, Solomon Islands, Samoa, Tuvalu, Tonga and Vanuatu), which have adopted or adapted the New Zealand Civil Aviation Rules (NZ CARs) or are working towards it, are all PASO Member States and heavily rely on PASO's services for most safety and security oversight functions;
- c) Papua New Guinea (PNG), which is a PASO Member State, while having its own set of regulations (with some adaptations from NZ CARs), has benefited from capacity-building support by Australia and uses external support (including from PASO and New Zealand) for specific purposes; and
- d) Fiji, which is not a PASO Member State, has its own set of regulations (not following the NZ CARs) and occasionally uses external support.

4.1.6 Significant needs for direct safety and security oversight support

4.1.6.1 Most PSIDS do not have the capability to fully discharge their obligations under the Chicago Convention and the Annexes thereto. USOAP information show that the PSIDS' average Effective Implementation (EI) score of the eight critical elements (for those PSIDS States having received a USOAP audit) is significantly lower than the global and APAC averages. With respect to security oversight, the PSIDS average EI score (for those PSIDS having received a USOAP audit) also falls below the global and APAC averages.

4.1.6.2 There is a high number of unresolved Significant Security Concerns (SSeCs) in the PSIDS region, compared to the rest of the world, and a high risk of situations that could lead to Significant Safety Concerns (SSCs).

4.1.6.3 While differences exist amongst PSIDS in terms of aviation safety and security oversight capability, most of these States require significant support from external organizations for fulfilling their national and international obligations related to regulatory oversight. This is particularly true for the smallest States (some of them having a population of circa 10 000 or even, in one case, 1 500 inhabitants).

4.1.6.4 The three North Pacific States face even greater challenges. In addition to the "disconnect" with the South Pacific States, they lack regulatory oversight support in some areas (as they are not members of PASO), especially in the flight safety areas (personnel licensing, aircraft operations and airworthiness).

4.1.7 Levels of aviation safety and security

4.1.7.1 The production of comprehensive safety data and information for the PSIDS region is hindered by the low level of safety reporting and the lack of effective safety data collection and processing systems (SDCPS) within the region. Limited information is available regarding the safety performance of aviation service providers, including air operators and aerodrome operators, in the PSIDS region.

4.1.7.2 Due to the low level of operations in the PSIDS, the number of accidents is limited. Five accidents, including two fatal accidents (causing a total of 29 fatalities) occurred in the PSIDS during the 2008-2018 period. The lack of occurrence of any major accident in the PSIDS may have contributed to a lack of prominence of aviation safety and compliance within the region. Similarly, the absence of a repeated history of acts of unlawful interference with civil aviation in the PSIDS and the perception of a relatively low level of terrorist threat to aviation within the region may also have contributed to a lack of prominence of aviation security (AVSEC) within the region.

4.1.8 Regional political framework

4.1.8.1 The main inter-governmental organization active in the Pacific Region is the Pacific Islands Forum (PIF), which has 18 members, including all 14 PSIDS.

4.1.8.2 The Secretariat of the Pacific Community (SPC) is another inter-governmental organization which exists as a technical agency. However, SPC no longer maintains an aviation programme or addresses aviation issues within its scope of activities.

4.1.8.3 The Pacific Islands Forum Secretariat (PIFS), in addition to its role in harmonizing and advocating regional positions on various political and policy issues, also has technical programmes in economic development, climate resilience and trade, *inter alia*. PIFS does not currently have an aviation expert and often relies on PASO for technical assistance and advice on aviation-related issues. There are plans for PIFS to recruit a Regional Connectivity Expert.

4.1.8.4 PASO is one of nine regional agencies that comprise the Council of Regional Organisations of the Pacific (CROP), which was established by Pacific Island Forum Leaders in 1988 with the mandate to improve inter-regional cooperation, coordination, and collaboration in achieving the common goal of sustainable development in the Pacific region.

4.1.9 The PICASST and the regional legal framework

4.1.9.1 The Pacific Islands Civil Aviation Safety and Security Treaty (PICASST), signed 15 years ago, has enabled the establishment of PASO and the provision of some aviation safety and security regulatory support to the PASO Member States.

4.1.9.2 There are however a number of shortcomings regarding the Treaty and its ratification by the States which are party thereto. Although all PASO Member States have signed or acceded to the PICASST, not all of them have fully ratified the Treaty and approved or accepted the amendments, or proposed amendments, thereto.

4.1.9.3 In addition, the PASO Council decision of May 2018 to expand the scope of PASO's remit to cover 16 of the 19 Annexes to the Convention has not been adopted as an amendment to the Treaty. The scope of PASO's remit therefore remains somewhat more limited than intended.

4.1.9.4 There are also several anomalies in the text of the Treaty, resulting in a lack of clarity about the status and functions of PASO; in particular regarding the level of delegated authority to undertake regulatory oversight functions. The Treaty lacks provisions for granting, or securing in the Member States, the necessary protection from liability to PASO, its personnel and contractors in the performance of functions on behalf of Member States.

4.1.9.5 The Treaty contains no commitment on the part of the Member States on developing harmonized regulatory requirements for adoption into the national legal systems and on securing the implementation of PICASST provisions in national legislation, including the recognition of the role of PASO as an RSSOO.

4.1.9.6 Although SLAs have been signed between some PASO Member States and PASO, these documents do not define — and in themselves cannot expand — the scope of functions under the PICASST delegated to PASO in the various domains in a clear, comprehensive and detailed manner.

4.1.10 National legal frameworks

4.1.10.1 In many cases, the PSIDS' legal frameworks are not wholly sufficient to form a relevant, comprehensive and fit-for-purpose basis for these States' regulatory oversight systems. Primary aviation legislation has been promulgated in all PSIDS, but in most cases is in need of amendment, including update and expansion.

4.1.10.2 Although most PSIDS heavily rely on external support for safety and security oversight tasks, in most of them the primary legislation does not effectively permit the delegation of some safety and security oversight functions from the State/CAA to an external, regional or other international safety and/or security oversight body.

4.1.10.3 In most PSIDS, the primary legislation lacks specificity or precision in the provisions relating to delegation of oversight functions and associated powers to an external body, and lacks provisions regarding protection from liability for organizations and individuals performing delegated functions.

4.1.10.4 In some PSIDS, the lack of publication, dissemination and/or update of the regulations results in an ineffective or quasi non-existent regulatory framework. The risks related to regulatory frameworks are more severe in the North Pacific States, given their isolation and lack of regulatory oversight support.

4.1.10.5 In those PSIDS having adopted or adapted the New Zealand Civil Aviation Rules (NZ CARs), and despite all benefits of such a solution, challenges include the difficulty for the respective CAA staff to fully understand the NZ CARs (and amendments thereto) and the inadequacy of some of these rules to accurately reflect or address the PSIDS' operating environments as opposed to the operating environment in New Zealand, where the CARs originate. The tendency is for this gap to widen as NZ CARs are progressively evolving towards more performance-based requirements, which may be suitable for New Zealand but are not suitable at this stage for PSIDS, as these States are still challenged to ensure compliance with prescriptive requirements.

4.1.11 State system and functions

4.1.11.1 PSIDS, to different degrees, do not offer employment conditions enabling their CAAs to attract, recruit and retain qualified and experienced technical staff (inspectors).

4.1.11.2 Most CAAs have a severe shortage of qualified and experienced inspectors and heavily depend on external assistance for safety and security oversight.

4.1.11.3. In some PSIDS, due to the lack of expertise, the State may not even be aware of its responsibilities under the Chicago Convention, e.g. as a State of Registry. The risk of such situations occurring is higher in some of the North Pacific States, given their isolation and lack of regulatory oversight support.

4.1.11.4 In most PSIDS, there is a lack of clear, comprehensive and detailed description of functions at the organizational level (CAA and CAA departments/offices, as applicable) and individual level (job positions).

4.1.11.5 Most PASO Member States have not established a clear delineation of functions between the State's CAA and PASO.

4.1.12 Training

4.1.12.1 PSIDS' CAAs lack financial resources for the provision of training to their staff. As training institutions are located outside the PSIDS, the cost of training is often not affordable to these States, unless the training is sponsored, e.g. through scholarships or fellowships (in particular from Singapore) or, in the case of PASO Member States, by PASO. In addition, while the ICAO APAC RO has provided some training opportunities to PSIDS with regard to aviation safety and security, these opportunities have been limited, due to financial resources constraints for the regional office.

4.1.12.2 In the vast majority of cases, training has been received on an ad hoc manner, based on available opportunities. PSIDS CAA personnel lack training and in particular on-the-job training (OJT) in most areas. In some cases, the training received by the PSIDS' CAA staff members has not always been the most relevant one for their functions, resulting in a lack of return for investment for the State. The situation is further aggravated, as the CAAs are even more under-resourced during the staff members' leave for training, which may lead the CAAs deciding to postpone the required training.

4.1.12.3 A specific challenge is the provision of on-the-job training (OJT), in the absence of sufficient funding, availability of experienced trainers and of adequate training policies, programmes and practices. In practice, OJT is often limited to exposure; for example, during an activity performed by a PASO contractor.

4.1.12.4 Training institutions, despite efforts to be client (trainee) oriented, are often unaware of the specificities of the PSIDS and their CAA and of their priority training needs, e.g. at strategic level vs. operational or technical level. There is also a lack of strategic and systemic approach for the identification of training needs and the actual provision of training within the PSIDS.

4.1.12.5 The main training needs in the PSIDS are twofold: training at senior and middle management level, which should at least clarify States' responsibilities under ICAO and key components of State safety and security oversight systems; and training at CAA officer level, which should be adapted to the actual functions that these officers will perform and should include OJT.

4.1.13 Issuance of certificates, licences, approvals or other authorizations

4.1.13.1 With respect to aviation safety, in most PSIDS, there has not been an effective initial verification of compliance (with all applicable international and national requirements) for the issuance or re-issuance of certificates, licences, approvals or other authorizations.

4.1.13.2 In most cases, during such processes, non-compliances are either not identified, due to lack of resources and/or expertise, or identified but not addressed through an appropriate process, including the review of risk assessments or aeronautical studies, in order to either grant exemptions (with related mitigations and/or restrictions along with the necessary publication) or deny the issuance of the certificate, licence, approval or other authorization concerned.

4.1.13.3 Although PASO Member States benefit from the services of PASO contractors to help them identify non-compliances as part of this initial compliance verification process, these States do not always take the actions needed to address identified non-compliances, which are often documented in repetitive findings by PASO contractors.

4.1.13.4 North Pacific States face even greater challenges in the initial compliance verification in the flight safety areas (personnel licensing, aircraft operations and airworthiness) due to the lack of resources, expertise and regulatory oversight support.

4.1.13.5 With respect to AVSEC, while most PSIDS have certification and approval activities in place to help ensure a certain level of compliance with Annex 17, this is often achieved only with support from other States and/or Organizations. Improvements are still needed in these areas, in particular with respect to AVSEC screener and instructors certification, the approval obligations of the regulatory authority and quality control activities to ensure compliance with the relevant National Civil Aviation Security Programme(s) setting the national requirements to be met and reflected within the airport-level programmes, such as airport security programmes (ASPs) and Aircraft Operator Security Programmes (AOSPs).

4.1.13.6 As the provision of training is limited in most of the PSIDS, a comprehensive system of AVSEC instructor training and certification has not been established on a national or regional basis in most States, although in recent years the number of ICAO certified AVSEC instructors in PSDIS has increased. These instructors still have limited opportunities to practice and further develop their instruction techniques and expertise.

4.1.13.7 There is currently no centralized role, process or mandate for screener certification and in particular screeners' ability to identify and detect threats to civil aviation through the AVSEC screening process in majority of the PSIDS.

4.1.14 Continuing surveillance/quality control and the resolution of identified safety and security issues

4.1.14.1 With respect to continuing surveillance for aviation safety, in many PSIDS there are minimal activities, or no surveillance activities at all, in between each process of re-issuance of a certificate, licence, approval or other authorization. This is also the case in most PASO Member States, as PASO is currently not involved in continuing surveillance activities with respect to aviation safety.

4.1.14.2 With respect to AVSEC, in most PSIDS, very limited surveillance and quality control activities are conducted at the national level. In PASO Member States, although PASO's services are provided in support of the CAA activities, the combined quality control activities conducted by PASO and the CAAs are insufficient to fully ensure the effective implementation of the critical elements of the States' AVSEC oversight systems and compliance with the provisions of Annex 17 to the Chicago Convention, particularly as PASO's AVSEC quality control services are limited to assessing compliance with the CARs rather than the CARs and Annex 17 SARPs.

4.1.14.3 The overall amount of surveillance and quality control activities carried out by PASO has been limited and is seen as costly by some PASO Member States. The frequency and prioritization of the surveillance activities are not based on a systematic risk assessment process but are decided upon and requested by the Member States based on other considerations, such as the availability of financial resources. Secondary international airports and domestic airports in each State have been subjected to very little formal quality control activities, if any.

4.1.14.4 In most PSIDS, both for aviation safety and security, there is no effective mechanism in place to ensure the effective and timely resolution of identified issues, nor for the analysis of surveillance and quality control results to identify trends and patterns in non-compliance, and ascertain and address root causes.

4.1.15 Accident and incident investigation

4.1.15.1 Out of the 14 PSIDS, only Papua New Guinea has established a separate and independent authority for the investigation of aircraft accidents and serious incidents.

4.1.15.2 In most cases, serious incidents are either not reported or are not the object of investigations as required under Annex 13, leaving only accidents to be investigated.

4.1.15.3 There is no Regional Accident and Incident Investigation Organization (RAIO) in the Pacific Region. In addition, no State with robust investigation capabilities in the Pacific Region is currently in a situation to accept systematic delegation of all accident and serious incident investigations that PSIDS are responsible to conduct.

4.1.15.4 In the absence of independent authorities for the investigation of aircraft accidents and serious incidents, and in the absence of effective safety data, collection and processing systems (SDCPS), safety occurrences are not acted upon at State level and underlying safety issues are not identified and resolved.

4.1.16 Strategic policies and plans

4.1.16.1 The Pacific Islands Forum (PIF), which is the main inter-governmental organization in the Pacific Region, has adopted many strategies and plans to assist its States in coping with the many challenges they face, and in particular to meet the UN Sustainable Development Goals (SDGs). However, with respect to aviation, and despite the vital importance thereof for PSIDS and their socio-economic development, there is currently no prominence of the aviation sector in the strategic policies and plans at regional level and, in most cases, at the national level as well.

4.1.16.2 While the PIF issued the first Quadrennial Pacific Sustainable Development Report to track the region's progress in realizing the 2030 Sustainable Development Agenda, the SAMOA Pathway and other global commitments, the aviation sector is largely not addressed in this report and the contribution of the aviation sector has not been linked with SDGs in the PIF region. With respect to the Sendai Framework, the current strategic policies of the PIF do not explicitly recognize the key importance of aviation in disaster relief efforts following natural disasters.

4.1.16.3 There is a lack of prioritization given to ensuring compliance to the applicable international and national aviation safety and security requirements. In particular, in the few cases when aviation is mentioned in regional or national strategic plans, most of the time the focus is on infrastructure development without components regarding

compliance with the applicable international and national requirements, therefore missing the key importance of compliance as a prerequisite and enabler of civil aviation development.

4.1.16.4 The recent decision of the PIF Forum Leaders to convene a Regional Aviation Ministers Meeting in 2020 will help increase the prominence of aviation matters in the region.

4.1.17 Interactions with and support from ICAO

4.1.17.1 As far as relationships between the PSIDS and the ICAO Secretariat are concerned, they are characterized by a significant disconnect.

4.1.17.2 Most PSIDS face challenges in communicating, liaising and coordinating with ICAO at headquarters and regional office levels. They are particularly challenged in coping with the numerous electronic communications from ICAO, both due to the lack of expertise to properly understand the content of these communications, lack of manpower and poor internet connectivity in these States. Time difference between the Pacific Region and Bangkok further aggravates communication challenges.

4.1.17.3 Due to the cost and time of travel to Bangkok, paired with the risk of slow administrative processes to grant authorizations to State/CAA officers for official travel, most PSIDS do not attend the key regional ICAO meetings and, as consequence, do not benefit from all information, including updates and discussions on important aviation matters for the Pacific Region.

4.1.17.4 Compared to these States' needs, and despite ICAO's efforts (such as a recent increase in assistance missions), there is an insufficient number of visits, workshops and other interventions by ICAO in the PSIDS, largely due to budget limitations, given the relatively high travel costs between Bangkok and the Pacific Region.

4.1.17.5 In this situation, the personnel of the ICAO APAC RO may not have full and current knowledge about the situation and challenges faced by some of the PSIDS, as well as the unique situation of such PSIDS. Non-participation of States in various regional and sub-regional meetings, as well as low levels of response to ICAO communications further widens this knowledge gap.

4.1.17.6 With decades of limited interactions between the PSIDS and the ICAO APAC RO, and with ongoing challenges faced by PSIDS in coping with all correspondence and requests from ICAO, the relationships between the PSIDS and ICAO would require further strengthening, of which an ICAO presence in the Pacific would be an essential component.

4.1.18 Support provided to PSIDS by other States

4.1.18.1 PSIDS have received significant assistance in aviation safety and security from various States and organizations. This assistance has been instrumental to support the most under-resourced of these States. However, the overall effectiveness and efficiency of the support framework has been limited by a lack of systemic coordination between the various assistance donors. Furthermore, the assistance provided has sometimes been on an ad hoc basis, as a one-off effort, rather than as part of a long-term strategy and plan.

4.1.18.2 In addition, with a few exceptions (such as the capacity building assistance provided by Australia to the Civil Aviation Safety Authority of Papua New Guinea), the assistance provided has not followed a risk-based systemic approach (with clear objectives, actions plans, timelines and measurable outcome) and has not resulted in effective, sustainable and resilient capacity building.

4.1.18.3 In many cases, the PSIDS' CAA staff members still face challenges in progressively taking ownership during and following the completion of assistance projects.

4.1.19 Support provided to PSIDS by Multilateral Development Banks

4.1.19.1 Investments to enhance aviation infrastructure will be needed as the number of international passengers in PSIDS is forecasted to increase by 3.5 times by 2045.

4.1.19.2 Multilateral Development Banks (MDBs) have been providing significant financing support to PSIDS in the aviation sector, particularly for airport-related projects. The two active MDBs in the PSIDS region are the World Bank (WB) and the Asian Development Bank (ADB). All MDBs, including the WB and ADB, have institutional strengthening components as part of their strategies. However, these institutions do not have aviation regulatory experts as part of their personnel to support the design, implementation, and monitoring/evaluation phases of aviation-related projects. As a result, MDBs do not have the necessary knowledge to ensure that their aviation-related projects are embedded in a framework ensuring compliance (with all applicable aviation safety and security related requirements) and long-term, sustainable and resilient regulatory capacity building.

4.1.19.3 At project level, project documents lack the necessary content and clarity to help ensure an effective verification of compliance with the applicable international and national requirements. In addition, they do not systematically contain plans for long-term sustainability (e.g. for infrastructure maintenance or adaptation to the impacts of climate change) and for capacity building at regulator level.

4.1.19.4 At strategic level, although both MDBs are actively supporting SDGs and mention in their strategic documents the importance of the civil aviation for improving connectivity between States, they have not explicitly acknowledged the importance of the aviation sector to the State's SDGs and have not clearly linked their aviation-related activities to the SDGs.

4.1.19.5 The regional and local offices of these MDBs in the PSIDS do not have mechanisms in place for coordination with the ICAO APAC Regional Office.

4.1.20 Priority regulatory oversight support needs of PSIDS

4.1.20.1 As most PSIDS are small, or very small, and do not have all necessary resources and expertise for fulfilling their aviation safety and security oversight obligations, their priority need is direct safety and security oversight support. This includes the ability to delegate the conduct of some or all of the technical evaluations necessary for certification, licensing, approval, surveillance, quality control and follow-up activities, which require expertise and experience in the concerned technical domains.

4.1.20.2 In addition to the ability to delegate technical functions, PSIDS are also in significant need of advice, training and opportunities for sharing of information and experience.

4.2 RECOMMENDATIONS

4.2.1 One of the aspirations of Pacific Islanders is to benefit from reliable and affordable air transport. To date, this is a wish but not a reality for most of them.

4.2.2 PSIDS, individually and collectively, have made efforts to enhance their aviation systems with the support of assistance of donors and MDBs. However, compliance with aviation safety and security requirements, which is a prerequisite for the development of air transport, is still a major challenge for these States.

4.2.3 Many initiatives have been taken over the years to help overcome these challenges, but more efforts would be needed, and this would require a level of change. Not only with respect to *what* should be done, or *how much more* should be done, but *how* things should be done.

4.2.4 In that connection, and in addition to the establishment of an ERSSOO and an ICAO PSIDS liaison officer position in the Pacific, many enhancement opportunities have been identified as a result of the study. Based on the information gathered and the analyses performed, and within the time and resource constraints of the study, a total of 30 recommendations have been formulated, for the consideration of the PSIDS, the Pacific Islands Forum and ICAO, as applicable.

4.2.5 Some of the recommendations for ICAO's consideration aim at encouraging assistance donors, training institutions and MDBs to take further actions to support PSIDS.

4.2.6 The recommendations issued enable a holistic approach in the development and implementation of a Pacific aviation roadmap to achieve effective, sustainable and resilient aviation regulatory systems in the region.

4.2.7 Their implementation would require PSIDS and ICAO, in coordination with all concerned stakeholders, to develop long-term roadmaps, identifying steps, timelines and accountable entities. As part of these roadmaps, short-term deliverables should also be identified so as to achieve progress rapidly whenever needed, for example in relation to actual or potential situations of immediate risk for aviation safety and/or security.

4.2.8 From all stakeholders involved in supporting the PSIDS, some adjustments would be needed in order to better meet these States' specific needs and enhance the effectiveness, sustainability and resilience of their aviation regulatory oversight systems.

4.2.9 The PSIDS would also need to show a clear and consistent commitment to work with the ERSSOO, empower their national CAAs and enhance regional cooperation.

4.2.10 Recommendation for the consideration of to the Pacific Islands Forum (PIF)

Rec/PIF/1/Strategic policies and plans

The PIF should review its regional strategic policies and plans in order to:

- a) highlight the key importance of the aviation sector for its States' sustainable socio-economic development (including sustainable tourism, economic development and connectivity) and for the States' resilience, including in the context of relief efforts following natural disasters;
- b) link the aviation activities to SDGs at the regional level;
- c) include regional action plans and associated accountable stakeholders, timelines and performance indicators to support civil aviation development in the PSIDS region, in line with the Global Aviation Safety Plan (GASP), Global Aviation Security Plan (GASeP) and Global Air Navigation Plan (GANP);
- d) place regulatory compliance and effective regulatory oversight as basic components of all initiatives related to aviation; and

- e) enhance as needed the contribution of civil aviation in disaster management mechanisms, such as national disaster committees.

4.2.11 Recommendations for the consideration of the Pacific Island Developing States (PSIDS)

Rec/PSIDS/1/Establishment of an Enhanced Regional Safety and Security Oversight Organization (ERSSOO)

4.2.11.1 The PSIDS, in a collaborative manner and reaching out to all PIF Members, should take actions to strengthen PASO's organization and framework by establishing an enhanced Regional Safety and Security Oversight Organization (ERSSOO), which should have at least the functions listed below:

- a) provide advice, guidance and technical support to Ministers and Directors of Civil Aviation in the Member States; including advice on proposed amendments to the Annexes to the Chicago Convention and advice on primary legislation;
- b) be a representative of, or advocate for, the Pacific Island States with ICAO and in other forums in the Pacific Region and elsewhere;
- c) develop in consultation with the Member States, and other States in the region, and thereafter maintain harmonised regional regulatory requirements (hereinafter referred to as "Pacific Aviation Requirements") related to aviation safety and security, for adoption into the operating regulations of the Member States, in order to facilitate the performance of, and support to safety and security oversight functions within the Region;
- d) assist Member States in the identification, notification and publication as needed of their differences with ICAO SARPS and other relevant ICAO provisions, such as those contained in the *Procedures for Air Navigation Services* (PANS);
- e) conduct safety and security oversight tasks in support of the Member States' CAAs;
- f) advise the Member States' CAAs regarding the definition of functions at organizational level (CAA and CAA departments) and individual level (for each technical job position within the CAA);
- g) provide training to the Member States' CAAs and to support the Member States' CAAs in developing and implementing relevant, comprehensive and detailed training programmes for their technical staff;
- h) support the Member States' CAAs in developing relevant, comprehensive and detailed policies and procedures to cover all aspects of the aviation safety and security regulatory activities;
- i) support the Member States' CAAs in performing their activities related to safety and security oversight, including for the initial issuance and re-issuance of certificates, licences, approvals or other authorizations; continuing surveillance/quality control; and the resolution of identified safety and security deficiencies;
- j) assist Member States in handling non-compliances to the applicable requirements by applicants or certificate/licence/approval holders through the appropriate processes, including exemption processes when applicable;
- k) provide advice to Member States regarding the follow-up on identified safety and security deficiencies; and

- l) support the Member States in progressing in the implementation of a State Safety Programme (SSP), including the review, acceptance and continuous monitoring over the service providers' Safety Management Systems (SMS).

Rec/PSIDS/2/Multi-stakeholder taskforce on the establishment and funding of the ERSSOO

4.2.11.2 The PSIDS, in a collaborative manner and reaching out to all PIF Members, should take actions to establish a multi-stakeholder taskforce, including ICAO and other stakeholders, such as donor States and Multilateral Development Banks (MDBs) to:

- a) review the prerequisites for the operation of the ERSSOO (as proposed by the PSIDS Study) and recommend possible mechanisms for funding an enhanced RSSOO (hereinafter referred to as "ERSSOO"), staffed with a minimum of two officers in each main domain of activity (e.g. legal, personnel licensing, aircraft operations, airworthiness, air navigation services, aerodromes and aviation security) in an effective, sustainable and resilient manner; and
- b) identify means to create a corpus of funds for facilitating the initial set up and operations of the ERSSOO.

Rec/PSIDS/3/Revised Treaty

4.2.11.3 The PSIDS, in a collaborative manner and reaching out to all PIF Members, should take actions to revise the Pacific Islands Civil Aviation Safety and Security Treaty (PICASST), inviting all its Member States, including the three North Pacific States (FSM, Marshall Islands and Palau) and Fiji, to enter into the Treaty. In particular, the revised Treaty should:

- a) establish the ERSSOO and contain all necessary provisions regarding the operation of the ERSSOO;
- b) name the ERSSOO in a manner that reflects a scope encompassing at least aviation safety and security;
- c) allow flexibility in the level of delegation of tasks from each individual Member State to the ERSSOO and should include a provision to authorize the ERSSOO to accept a delegation from an individual Member State within the scope of its competence under the treaty;
- d) mandate each Member State which is party thereto to enter into an agreement (Service Legal Agreement) with the ERSSOO to define in a relevant, clear, comprehensive and detailed manner, the scope of functions delegated to the ERSSOO in each domain;
- e) consider expanding the scope of competence of the ERSSOO to all areas covered by the Annexes to the Chicago Convention except Annex 13, including all air navigation services and environmental protection;
- f) list of Annexes to the Chicago Convention within the scope of competence of the ERSSOO; and
- g) contain provisions to give protection from liability to the ERSSOO, its personnel and contractors in the performance of functions on behalf of the Member States.

Rec/PSIDS/4/Post-implementation evaluation of the ERSSOO

4.2.11.4 The ERSSOO Member States, in due time and in a collaborative manner, should ensure that a post-implementation assessment of the ERSSOO is conducted in order to determine its level of effectiveness and efficiency, with due consideration of the views of its Member States.

Rec/PSIDS/5/Primary legislation

4.2.11.5 Each PSIDS should review and amend its primary legislation as needed in order to give effect to the provisions of the new or amended Treaty (in replacement of the current PICASST) in its national legislation and, in particular, to ensure that the ERSSOO, its personnel and contractors are duly authorized, as well as protected from liability, for conducting safety and security oversight tasks on behalf of the State.

Rec/PSIDS/6/Service Level Agreement with the ERSSOO

4.2.11.6 Each PSIDS should enter into an agreement, such as a Service Level Agreement (SLA), with the ERSSOO, reflecting the tasks for which the State CAA does not have full capability, with possible revisions if and when additional safety oversight and/or security oversight capability is built within the CAA. For that purpose, for each specific area (e.g. aircraft operations, airworthiness, aerodromes or aviation security), due consideration should be given to the ability of the PSIDS CAA to attract, recruit and retain within its CAA technical personnel with the appropriate qualifications and experience, in particular considering the employment conditions offered by the CAA compared to those offered by the industry and other potential employers.

Rec/PSIDS/7/Effective implementation of Critical Elements 2 to 5

4.2.11.7 Each PSIDS should take the necessary actions, with support from the ERSSOO as needed, to enhance the effective implementation of critical elements 2 to 5 of its safety oversight and security oversight systems and in particular:

- a) undertake a comprehensive legal review in order to ensure that specific operating regulations are fit for purpose having regard to their obligations under the Chicago Convention and Annexes thereto;
- b) promulgate aviation safety and security operating regulations that transpose the Pacific Aviation Requirements into the national legal framework;
- c) ensure that its CAA is appropriately organized, funded and empowered to effectively carry out its functions;
- d) for all functions which are not delegated to the ERSSOO, develop and establish relevant, clear, comprehensive and detailed descriptions of functions at organizational level (CAA and CAA departments as applicable) and individual level (for each technical job position within the CAA);
- e) ensure that the technical job positions within the CAA are effectively filled with appropriately qualified and experienced personnel;
- f) develop, establish and implement effective mechanisms to prevent actual, potential or perceived conflicts of interest in the performance of safety and security oversight functions;
- g) develop, establish and implement relevant, comprehensive and detailed training programmes for the benefit of the CAA technical staff, including relevant on-the-job training (OJT) by qualified and experienced staff; and

- h) develop and establish relevant, comprehensive and detailed policies and procedures in order to facilitate the performance of safety and security oversight functions within the region, which should be consistent with the delineation of functions between each State and the ERSSOO, and compatible with the ERSSOO's internal policies and procedures.

Rec/PSIDS/8/Effective implementation of Critical Elements 6 to 8

4.2.11.8 Each PSIDS should take the necessary actions, with support from the ERSSOO as needed, to enhance the effective implementation of critical elements 6 to 8 of its safety oversight and security oversight systems and in particular:

- a) ensure that the initial verification of compliance (with all applicable international and national requirements) for the issuance or re-issuance of certificates, licences, approvals or other authorizations, are performed in an effective, thorough, standardized and documented manner, by appropriately qualified and experienced staff, following the established policies and procedures;
- b) ensure that all non-compliances identified during the above-mentioned process are addressed through an appropriate process, including the review of risk assessments or aeronautical studies, in order to either grant exemptions (with related mitigations and/or restrictions along with the necessary publication) or deny the issuance of the certificate, licence, approval or other authorization concerned;
- c) establish and implement continuing surveillance and quality control programmes and plans in order to verify continuous compliance with all applicable international and national requirements; and
- d) establish and implement effective enforcement policies and procedures to ensure the effective and timely resolution of identified safety and security concerns.

Rec/PSIDS/9/Threat assessment

4.2.11.9 Each PSIDS should assign responsibility for relevant entities to monitor the level of threat to civil aviation within their territory and airspace above it and to share relevant information with the CAAs to perform risk assessments as appropriate.

Rec/PSIDS/10/Aerodrome planning

4.2.11.10 Each PSIDS should conduct robust aerodrome planning, in line with the guidance laid down in ICAO Doc 9184 — *Airport Planning Manual*, Part I — *Master Planning* and Part II — *Land Use and Environmental Management*, so that the aerodrome infrastructure and facilities can meet the long-term needs of the Region. Such planning should include aspects related to disaster management and contingency planning.

Rec/PSIDS/11/ Pacific Regional Accident and Incident Investigation Organization (RAIO)

4.2.11.11 The PSIDS, in a collaborative manner and reaching out to all PIF Members, should take actions to ensure the establishment and effective operation of a Pacific Regional Accident and Incident Investigation Organization (Pacific RAIO), separate from the ERSSOO, to enable the provision of assistance to the national independent investigation authority that each State is required to establish under Standard 3.2 of Annex 13. The Pacific RAIO should be established and staffed in a manner that enables a RAIO Member State (if it decides to do so) to fully or partially delegate accident and serious incident investigations to the RAIO on a systematic and binding basis.

*Rec/PSIDS/12/National independent investigation authority and possible agreement for delegation of investigations**Rec/PSIDS/12.1*

4.2.11.12 Each PSIDS should take actions to ensure the establishment and effective operation of a national independent authority (which could be a multimodal authority) for the investigation of aircraft accidents and serious incidents, in line with the provisions contained in Annex 13 and related guidance material.

Rec/PSIDS/12.2

4.2.11.13 PSIDS with no technical capabilities for the conduct of investigations should sign an agreement with the Pacific RAIO or with another State (willing to accept full delegations on a systematic basis, based on a binding agreement) in order to fully delegate the conduct of accident and serious incident investigations to the RAIO (or the other State), with the investigator-in-charge (IIC) being from the RAIO (or the other State).

Rec/PSIDS/12.3

4.2.11.14 PSIDS with limited technical capabilities for the conduct of investigations should sign an agreement with the Pacific RAIO or with another State (willing to accept partial delegations on a systematic basis, based on a binding agreement) in order to partially delegate the conduct of accident and serious incident investigations to the RAIO (or the other State), with the investigator-in-charge (IIC) being from the delegating State's independent investigation authority.

Rec/PSIDS/13/Continuous monitoring

4.2.11.15 Each PSIDS should establish and implement means, with support of the ERSSOO and/or assistance donors as needed, to build capacity for the performance and periodic reviews of thorough and reliable self-assessments of its safety and security oversight systems using USOAP and USAP protocol questions (PQs).

Rec/PSIDS/14/Strategic policies and plans

4.2.11.16 Each PSIDS, in line with the amended regional strategic policies and plans, should develop and amend or issue national regional strategic policies and plans to:

- a) highlight the key importance of the aviation sector for the State's sustainable socio-economic development and resilience, including in the context of relief efforts following natural disasters;
- b) write the aviation activities to SDGs at the national level;
- c) include national action plans and associated accountable stakeholders, timelines and performance indicators to support civil aviation development, in line with the GASP, GAsEP and GANP;
- d) place regulatory compliance and effective safety and security oversight as basic components of all initiatives, including infrastructure developments; and
- e) enhance as needed the contribution of civil aviation in the State's disaster management mechanisms, such as a national disaster committee.

4.2.12 Recommendations for the consideration of ICAO in relation with its resources and activities

Rec/ICAO/1/ PSIDS liaison officer mechanism

4.2.12.1 ICAO should implement the necessary means, including the allocation of sufficient financial resources (possibly through resource mobilization), to establish a position of PSIDS liaison officer, reporting to the Regional Director, APAC, and ensuring that such liaison officer:

- a) has broad aviation knowledge and sufficient current or past experience working in ICAO, in order to be able to provide the necessary guidance to the PSIDS and other concerned stakeholders, in coordination with the APAC RO management and officers;
- b) is located in a suitable base in the Pacific Region, with good flight connectivity as well as information technology connectivity;
- c) has the following main functions:
 - i) enhancing communication and coordination between ICAO and PSIDS, in particular with respect to the various correspondence and requests from ICAO, including proposed/adopted amendments to SARPS;
 - ii) enhancing communication and coordination between ICAO, PASO (or the ERSSOO once established) and the PIFS;
 - iii) enhancing communication and coordination between ICAO, other UN organizations with offices in the PSIDS region, MDBs and other relevant international/regional stakeholders;
 - iv) liaising with the APAC RO to enhance and facilitate technical assistance; and
 - v) facilitating continuous monitoring over the regional safety and security oversight support system.

Rec/ICAO/2/Post-implementation evaluation of the liaison officer mechanism

4.2.12.2 ICAO should perform periodic evaluations of the PSIDS liaison officer framework to assess its effectiveness, efficiency and need at least every three years following the establishment of the framework, with due consideration of the views of the PSIDS.

Rec/ICAO/3/Support to PIF and PASO for upcoming Regional Aviation Ministers Meeting

4.2.12.3 ICAO should support the PIFS and PASO in the preparation, conduct and follow up of the upcoming Regional Aviation Ministers Meeting which the Pacific Islands Forum will convene in 2020.

Rec/ICAO/4/ On-site visits, training and assistance to PSIDS

4.2.12.4 ICAO should:

- a) take actions to provide to the PSIDS the necessary knowledge and understanding on the State's obligations under the Chicago Convention and its Annexes;

- b) establish and implement means, including the necessary resources, to enable the conduct of more frequent on-site visits to the PSIDS and PASO (or the ERSSOO once established) and the conduct of on-site courses, workshops and assistance missions in the PSIDS;
- c) enhance communication and coordination with all relevant stakeholders, including PASO (or the ERSSOO once established) during the preparation and follow-up of on-site visits and/or assistance projects in the PSIDS; and
- d) further adjust the nature of its assistance missions to PSIDS and PASO (or the ERSSOO once established) to the specific situation and needs of each State/Organization.

Rec/ICAO/5/Pilot projects

4.2.12.5 In due time after the establishment of the ERSSOO, ICAO should launch a pilot project in one or more of the PSIDS in coordination with the ERSSOO, to enhance safety oversight and/or security oversight, in line with the recommendations contained in this report, and exploring synergies with assistance donors, training providers and/or MDBs.

**4.2.13 Recommendations for the consideration of ICAO
in relation with assistance donors**

Rec/AD/1/Assistance coordination platform

4.2.13.1 ICAO should establish a platform for coordination of assistance to the PSIDS, inviting assistance donors, along with training institutions and MDBs to enhance information sharing, avoid duplication of efforts and, whenever possible, find synergies, to supplement the existing coordination platforms including the Aviation Safety Implementation Assistance Partnership (ASIAP). This assistance coordination platform could be supported by electronic tools.

Rec/ADs/2/Systemic, long-term and risk based approach to assistance

4.2.13.2 ICAO should take actions to encourage assistance donors active in the PSIDS region to further enhance their strategies and approaches in order to:

- a) ensure that assistance projects are customized to each State's unique situation and needs, and coordinated as needed with the initiatives of PASO (or the ERSSOO once established);
- b) follow a systemic, long-term and risk-based approach, to help build safety and security oversight capacity in an effective, sustainable and resilient manner, while addressing, as much as possible, potential situations of immediate risk for safety or security;
- c) identify and use appropriate indicators to assess the outputs and outcome of assistance projects; and
- d) perform post-implementation evaluations, through an appropriate methodology and set of indicators, in order to assess to what extent the progress achieved has been sustained.

Rec/AD/3/Continuous monitoring

4.2.13.3 ICAO should take actions to encourage assistance donors active in the PSIDS region to assist in building capacity within the PSIDS, supported by the ERSSOO, for the performance and periodic review of thorough and reliable self-assessments of the PSIDS' safety and security oversight systems, using USOAP and USAP protocol questions (PQs).

Rec/AD/4/Assistance related to aviation security

4.2.13.4 ICAO should take actions to encourage assistance donors active in the PSIDS region, in coordination with the ICAO APAC RO, PSIDS, PASO (or the ERSSOO), training institutions and the industry to:

- a) support the establishment and recognition of equivalence for a centralized certification system for AVSEC Instructors within the PSIDS;
- b) certify staff performing security screening functions including provision of computer-based threat image identification testing softwares and programmes;
- c) support the establishment and recognition of equivalence for the approval process for aircraft operators security programmes providing services within the PSIDS; and
- d) assist PSIDS in the development of risk management processes for aviation security and, to the extent practicable, encourage the collection and sharing of threat information relating to civil aviation.

4.2.14 Recommendations for the consideration of ICAO in relation with training institutions*Rec/TIs/1/Enhancing effectiveness in the assessment of training needs and the provision of training*

ICAO should take actions to encourage training institutions active in the PSIDS region, in liaison with the ICAO APAC RO and PASO (or the ERSSOO once established) to:

- a) enhance their knowledge and understanding of each State's situation in order to perform a robust assessment of aviation training needs for each State and prioritize them, in coordination with the concerned State;
- b) following the competency based-methodology, identify the appropriate format (e.g. classroom/online/blended/academic/practical), target audience (prerequisites), and content of the training to address the specific needs and situation of the concerned State and optimize opportunities for on-site training;
- c) ensure the suitability/eligibility of applicants to courses before allowing them to attend, to help ensure the adequate use of the limited training opportunities and/or budget, and the effective use of the training content by trainees;
- d) perform post-training evaluations to evaluate the impact of training, in line with the ICAO post-training evaluation methodology; and
- e) enhance cooperation with existing academic and training institutions within the Pacific Region.

4.2.15 Recommendations for the consideration of ICAO in relation with MDBs*Rec/MDBs/1/Coordination with ICAO APAC RO*

4.2.15.1 ICAO should take actions to encourage MDBs active in the PSIDS region to enhance coordination, information-sharing and cooperation with the ICAO APAC Regional office in order to enhance effectiveness, sustainability and resilience in the support they provide to PSIDS in the aviation sector. Coordination, information sharing and/or cooperation, as applicable, should be enhanced in the following areas:

- a) definition of the main problems and needs in the PSIDS to be addressed under projects in these States, supported by non-confidential information which could be provided by ICAO;
- b) design and implementation of technical assistance for the civil aviation sector in the PSIDS;
- c) definition of PSIDS' priorities for the aviation sector in the next country framework or country strategies;
- d) training to be provided to MDB staff involved in the design and implementation of aviation projects, in order to enhance knowledge and understanding about States' obligations under the Convention and its Annexes;
- e) contributions to the establishment and operation of the ERSSOO; and
- f) the conduct of studies and pilot projects to assess the impact of MDBs' investments in the civil aviation sector on the State's SDGs.

Rec/MDBs/2/Mapping of strategies and activities with the Sustainable Development Goals (SDGs)

4.2.15.2 ICAO should take actions to encourage MDBs to:

- a) take action to map their strategies and activities related to aviation with the UN SDGs; and
- b) document such mapping, and the related information, in their sector strategies and project documents related to aviation.

Rec/MDBs/3/Employment of aviation experts

4.2.15.3 ICAO should take actions to encourage MDBs to recruit aviation regulatory experts to:

- a) assist in the design, implementation and evaluation of projects related to the aviation sector;
- b) ensure that the PSIDS' situation and needs are well addressed in the projects' diagnosis;
- c) review terms of references for training activities, civil aviation strategies, roadmaps and plans; and
- d) assist in the selection of appropriate indicators to assess the project's outputs and outcomes.

Rec/MDBs/4/Compliance in aerodrome-related projects

4.2.15.4 ICAO should take actions to encourage MDBs to implement means to ensure that all planned and ongoing aerodrome infrastructure projects in which they are involved in the PSIDS comply with all applicable international and national requirements. Possible exemptions may be issued, when needed, provided that aeronautical studies have been performed by the aerodrome operator and reviewed by the competent authority, and mitigating measures have been implemented to ensure an equivalent level of safety.

Rec/MDBs/5/Systemic, long-term and risk-based approach to support provisions

4.2.15.5 ICAO should take actions to encourage MDBs to implement means to ensure that their projects in the aviation sector:

- a) follow a systemic, long-term and risk based approach;

- b) include elements to build capacity at the regulator level in order to ensure continuing compliance with all international and national requirements;
- c) are supported by appropriate indicators to measure outputs and outcomes; and
- d) benefit the States in an effective, sustainable and resilient manner.

MAIN REFERENCES

- Resolution 70/1 adopted by the United Nations General Assembly on 25 September 2015: *Transforming our World: The 2030 Agenda for Sustainable Development*
- *Sendai Framework for Disaster Risk Reduction 2015-2030* (Sendai Framework)
- Small Island Developing States (SIDS) Accelerated Modalities of Action (SAMOA) Pathway
- Doc 7300 — *Convention on International Civil Aviation* and Annexes thereto
- Doc 9734 — *Safety Oversight Manual, Part A — The Establishment and Management of a State Safety Oversight System*
- Doc 9734 — *Safety Oversight Manual, Part B — The Establishment and Management of a Regional Safety Oversight Organization*
- Doc 9735 — *Universal Safety Oversight Audit Programme Continuous Monitoring Manual*
- Doc 9807 (Restricted) — *Security Audit Reference Manual*
- Doc 10047 — *Aviation Security Oversight Manual*
- Doc 9946 — *Manual on Regional Accident and Incident Investigation Organization*
- Doc 10004 — *Global Aviation Safety Plan*
- Doc 10118 — *Global Aviation Security Plan*
- ICAO 40th Assembly, — Technical Commission — *Global Aviation Safety Oversight System (GASOS) — Concept of Operations*, Issue 3, 12 September 2019
- USOAP and USAP activity reports of the PSIDS
- Pacific Islands Aviation Safety and Security Treaty (PICASST)
- Pacific Aviation Safety Office (PASO) Constitution, Strategic Plan 2018-22, Accounts 2017
- PASO Strategic Plan 2018-2022
- Aviation Benefits, 2017, Report of the Industry High Level Group (IHLG)

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- Asian Development Bank technical assistance report, Institutional Strengthening for Aviation Regulation (Kim Murray, 2014)
 - Vienna Convention on the Law of Treaties 1969
 - New Zealand Civil Aviation Rules (NZ CARs)
 - Primary aviation legislation of the PSIDS
 - National Civil Aviation Security Programme, National Civil Aviation Security Training Programme and National Quality Control Programmes of the PSIDS
 - Annual Review of Visitor Arrivals in Pacific Island Countries 2017, South Pacific Tourism Organization
 - Reports and websites of the World Bank, Asian Development Bank and Asian Infrastructure Investment Bank
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Appendix A

AIR TRANSPORT PROFILE OF EACH PSIDS

This Appendix presents aviation data and analysis provided by ATB, notably regarding traffic, connectivity, market shares, airline seat capacity, top routes and markets. The data and analysis is taken from the ICAO Statistics Programme supplemented by Big Data Market Intelligence Data Transfer (MIDT) through the Global Air Transport Outlook (GATO) tool developed jointly between ICAO and the Interdisciplinary Centre for Mathematical and Computational Modelling (ICM) of the University of Warsaw.

1. Cook Islands

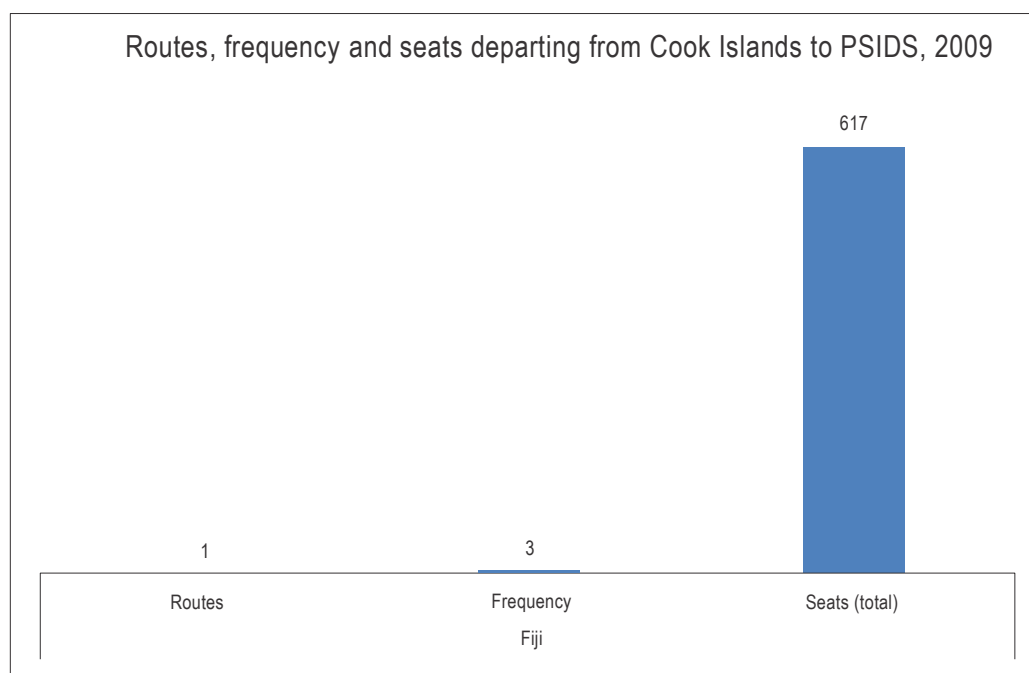


Figure A-1. Outbound one way traffic from Cook Islands

Connecting indicator means the number of passengers who reached their destination through one or more stops, while non-stop indicator means the number of passengers who reached their destination through direct flights.

Table A-1. Scheduled flights from Cook Islands, 2009 vs. 2018

<i>Scheduled flights from Cook Islands, 2009 vs. 2018</i>		
	<i>2009</i>	<i>2018</i>
Number of direct routes intra-PSIDS	1	0
<i>PSIDS served</i>	Fiji	No PSIDS served
<i>Total frequency (year)</i>	3	0
Number of direct routes to States or territories other than PSIDS served	5	6
<i>Total frequency (year)</i>	763	1 037
<i>States or territories other than PSIDS served</i>	Fiji French Polynesia US New Zealand	Australia French Polynesia New Zealand Laos US
Domestic routes	5	1
<i>Total frequency (year)</i>	3 434	3 134
Total routes	11	7

**Figure A-2. Routes, frequency and seats departing from Cook Islands to PSIDS, 2009**

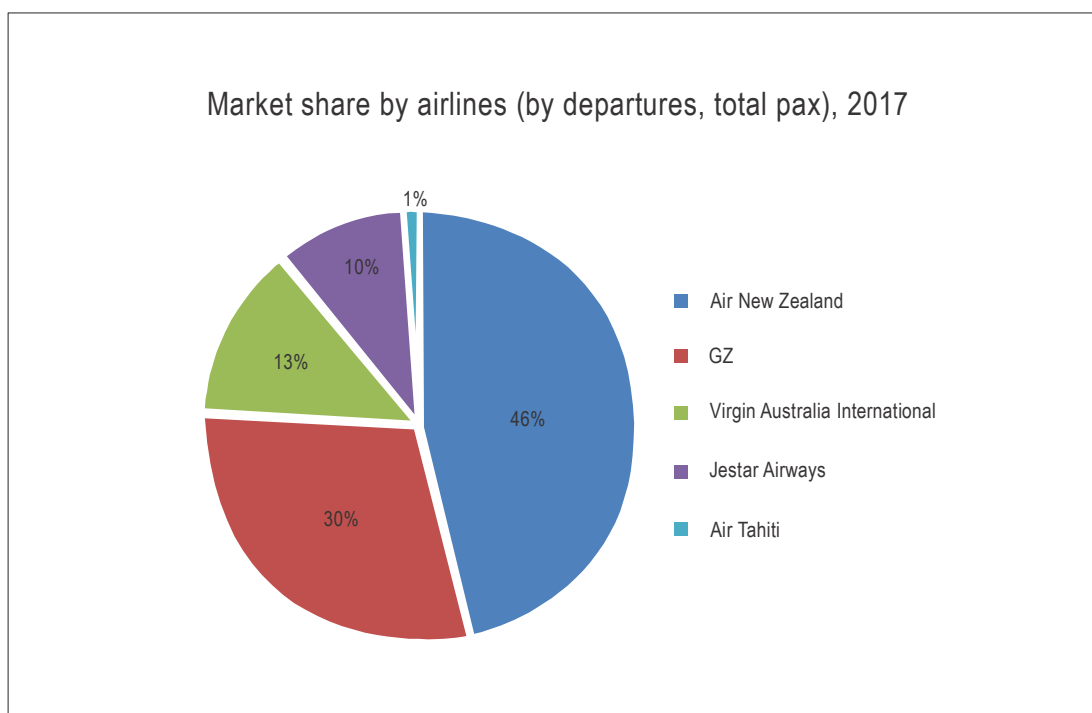


Figure A-3. Market share by airlines (by departures, total pax), 2017

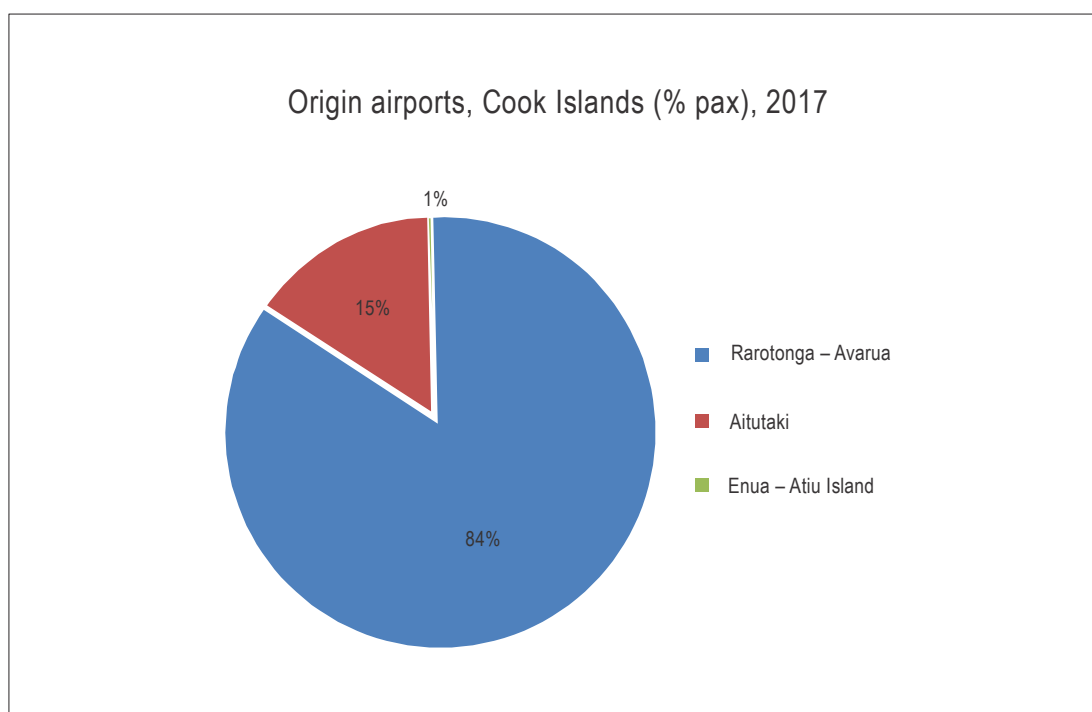


Figure A-4. Origin airports, Cook Islands (% pax), 2017



Figure A-5. Top 10 destination airports (pax), 2017

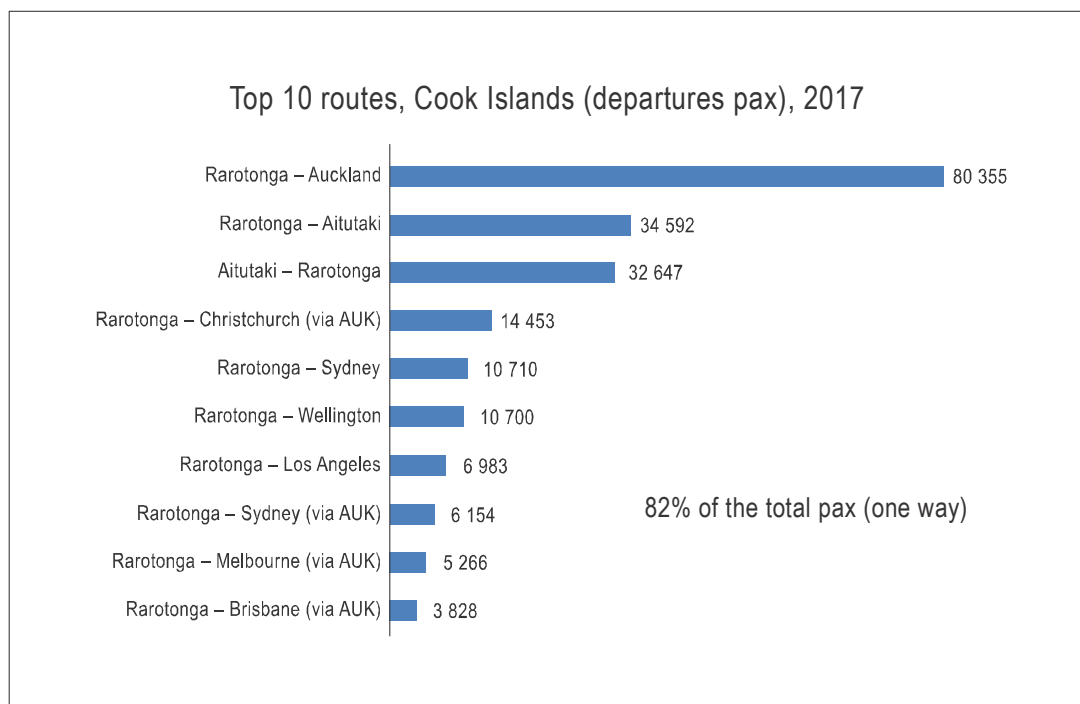


Figure A-6. Top 10 routes, Cook Islands (departures pax), 2017

2. Micronesia (Federal States of)

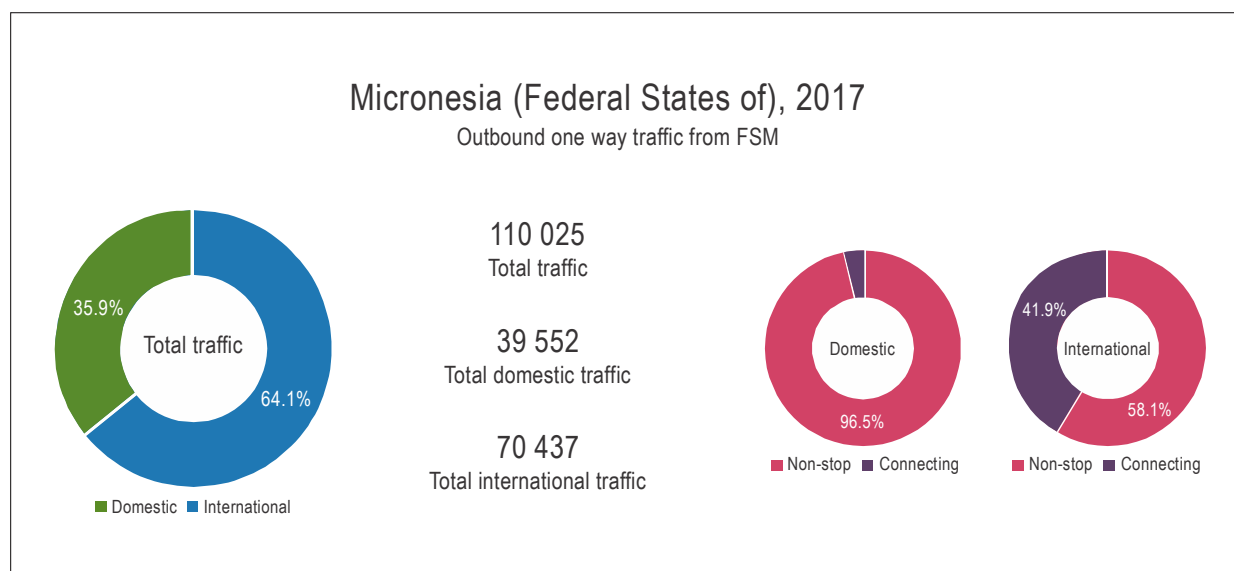


Figure A-7. Outbound one way traffic from FSM

Table A-2. Scheduled flights from FSM, 2009 vs. 2018

Scheduled flights from Micronesia (Federal States of), 2009 vs. 2018		
	2009	2018
Number of direct routes intra-PSIDS	2	7
<i>PSIDS served</i>	Palau Marshall Islands	Palau Marshall Islands Papua New Guinea
<i>Total frequency (year)</i>	313	322
Number of direct routes to States or territories other than PSIDS served	2	3
<i>Total frequency (year)</i>	364	369
<i>States or territories other than PSIDS served</i>	Guam (US)	Guam (US) Japan
Domestic routes	4	7
<i>Total frequency (year)</i>	728	877
Total routes	8	17

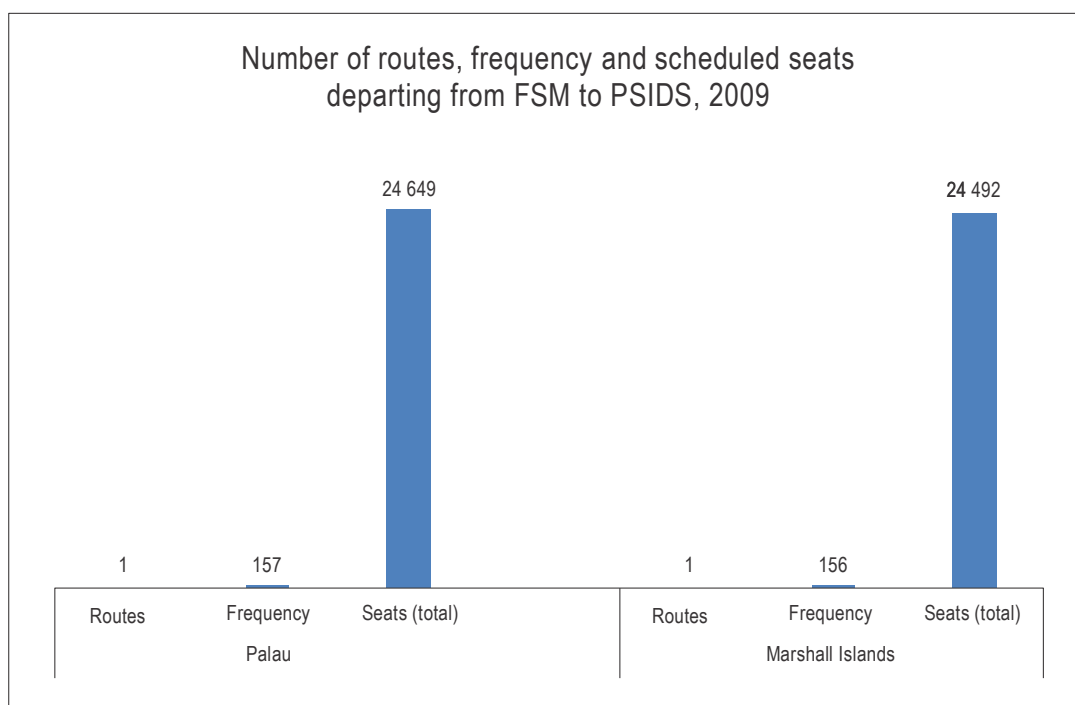


Figure A-8. Number of routes, frequency and scheduled seats departing from FSM to PSIDS, 2009

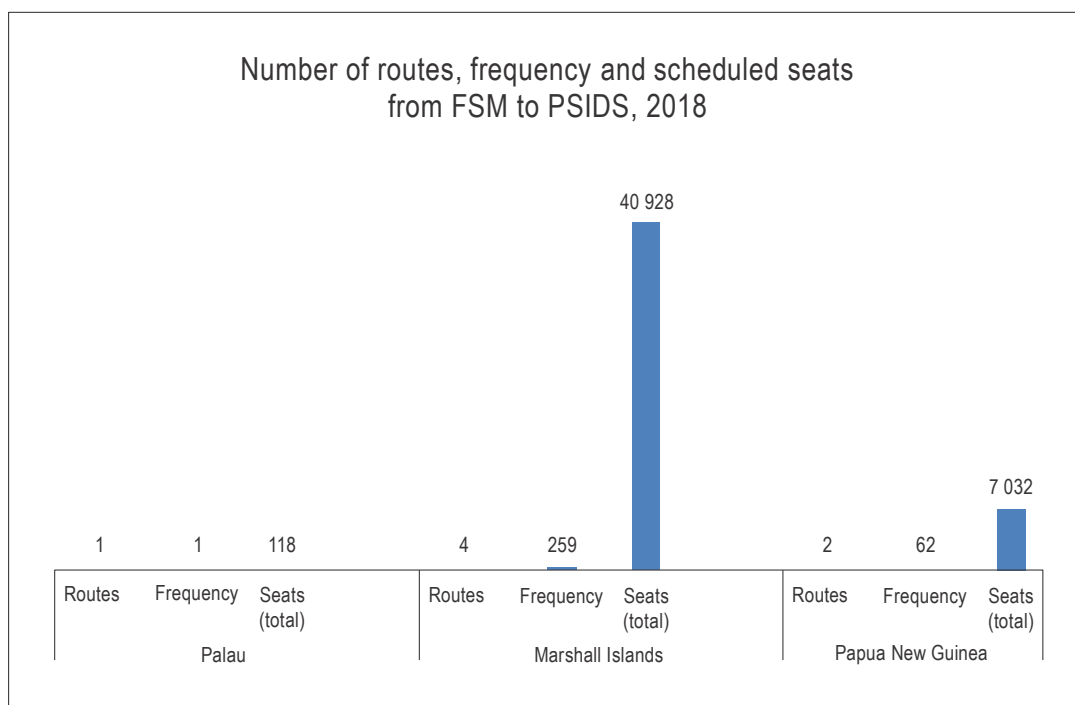
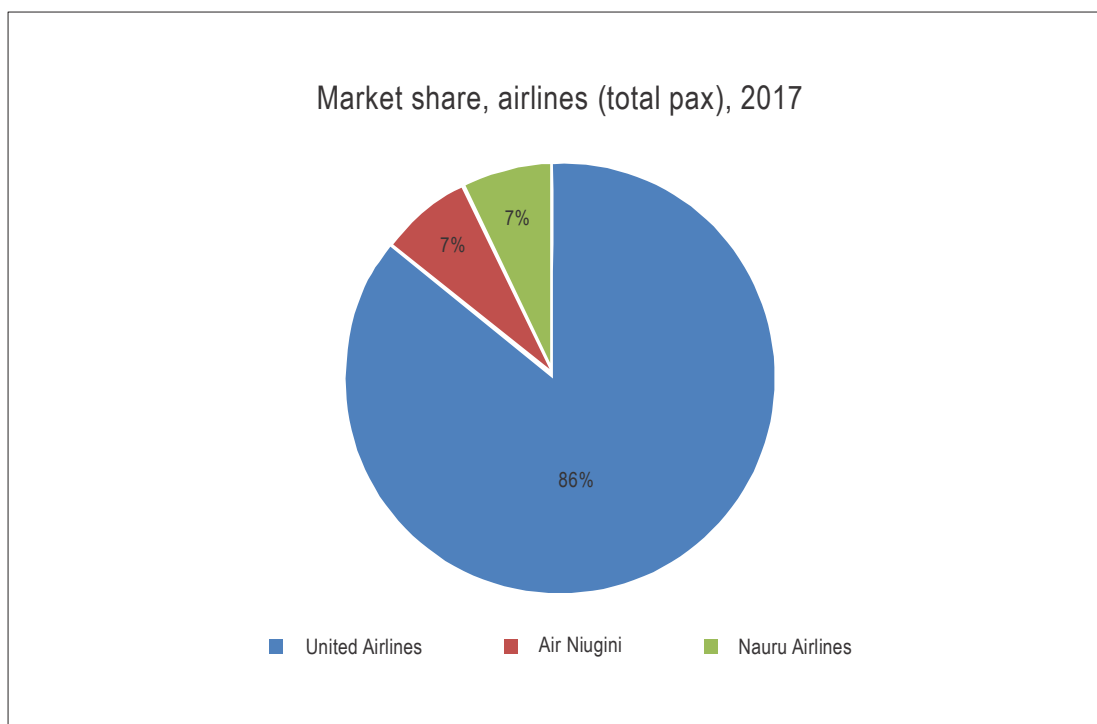
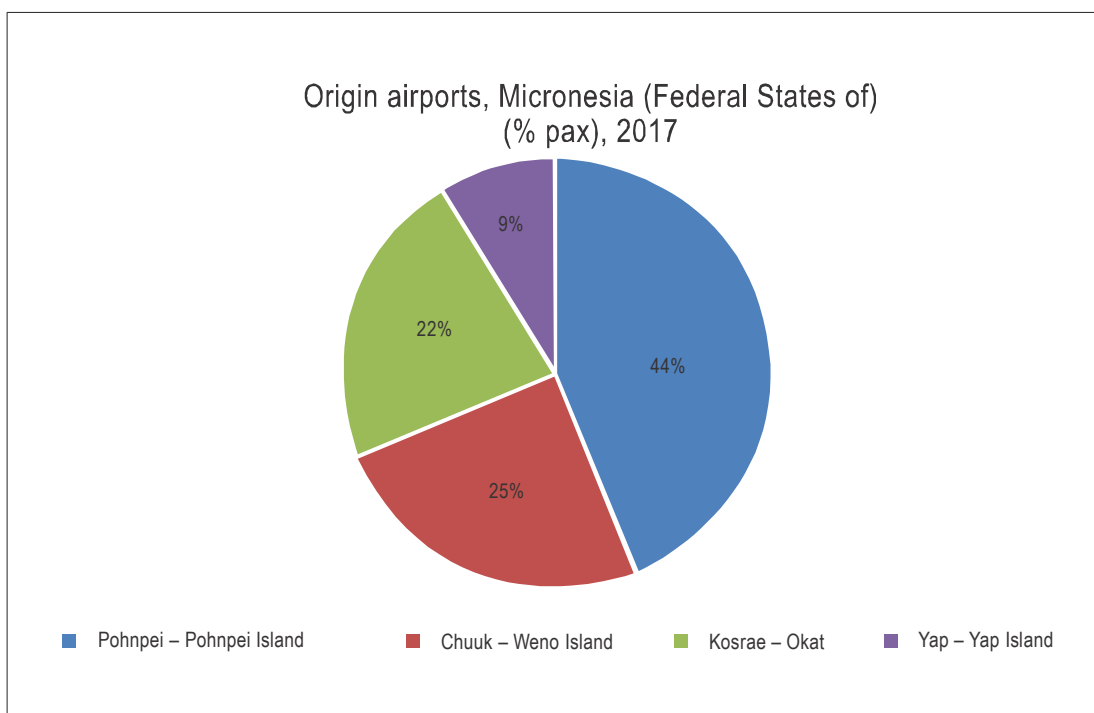


Figure A-9. Number of routes, frequency and scheduled seats from FSM to PSIDS, 2018

**Figure A-10. Market share, airlines (total pax), 2017****Figure A-11. Origin airports, FSM (% pax), 2017**

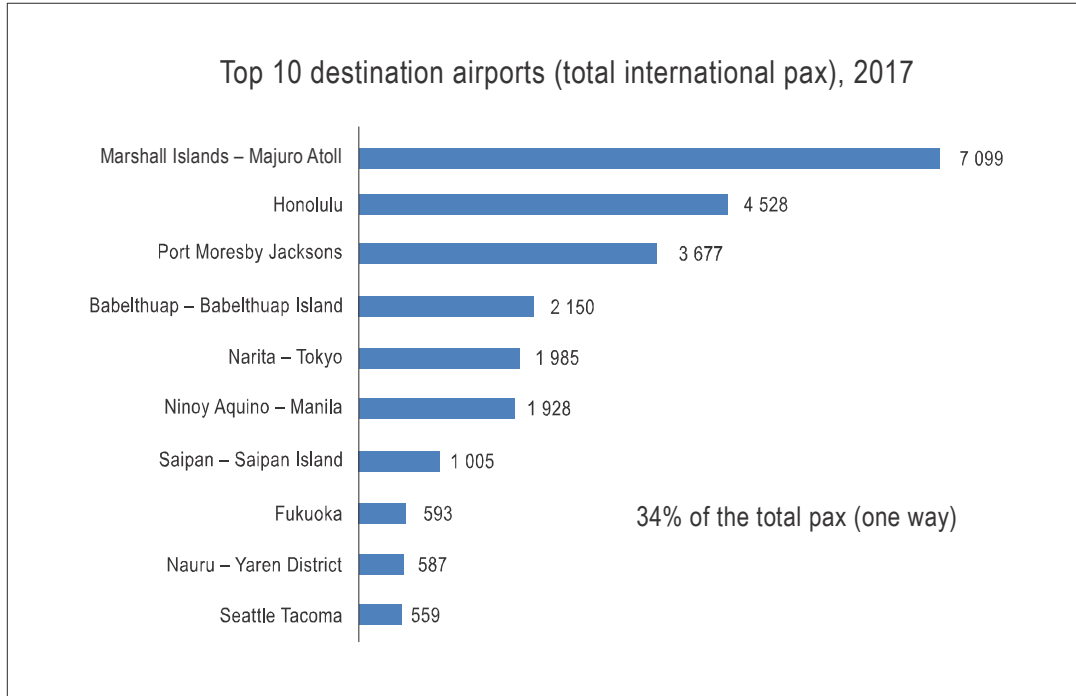


Figure A-12. Top 10 destination airports (total international pax), 2017

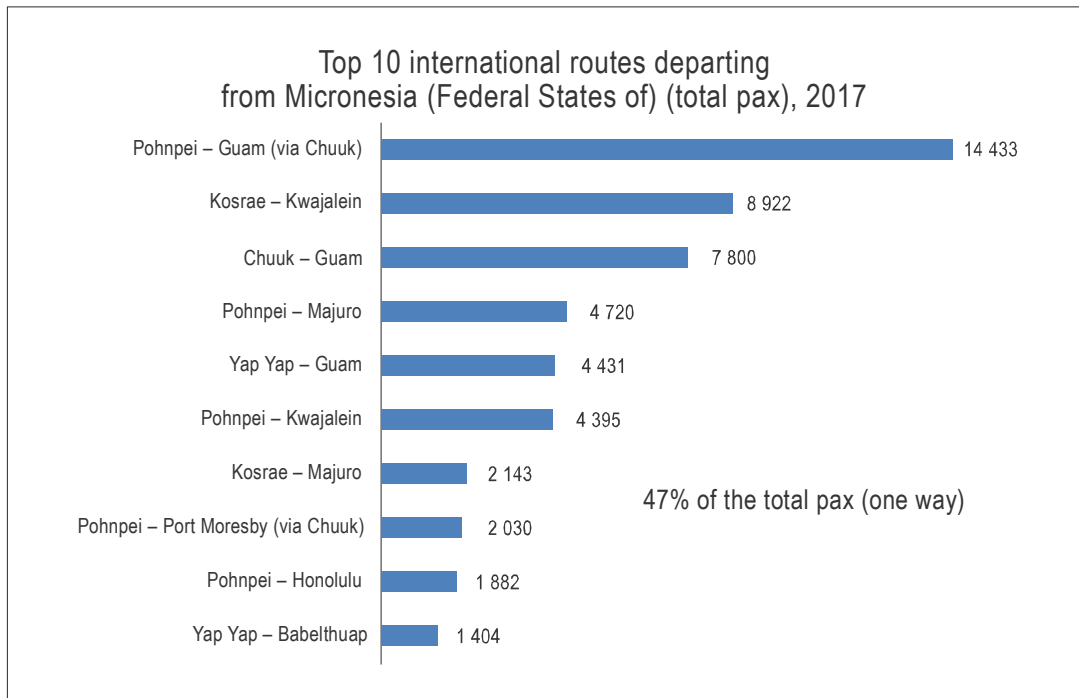


Figure A-13. Top 10 international routes departing from FSM (total pax), 2017

3. Fiji

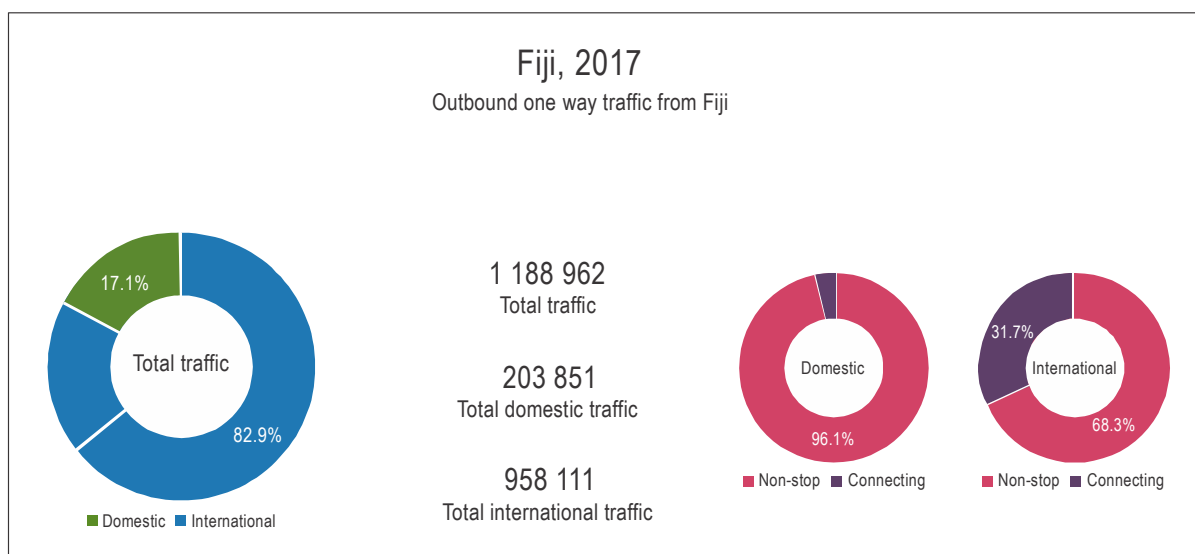


Figure A-14. Outbound one way traffic from Fiji

Table A-3. Scheduled flights from Fiji, 2009 vs. 2018

Scheduled flights from Fiji, 2009 vs. 2018		
	2009	2018
Number of direct routes intra-PSIDS	7	12
<i>PSIDS served</i>	Samoa Tuvalu Cook Islands Tonga Kiribati Vanuatu Solomon Islands	Nauru Kiribati Samoa Solomon Islands Tonga Tuvalu Vanuatu
<i>Total frequency (year)</i>	811	1 652
Number of direct routes to States or territories other than PSIDS served	16	16
<i>Total frequency (year)</i>	3 713	4 260
<i>States or territories other than PSIDS served</i>	Guam New Zealand Australia United States Wallis and Futuna Islands Japan	New Zealand Australia United States Wallis and Futuna Islands Japan New Caledonia

Scheduled flights from Fiji, 2009 vs. 2018		
	New Caledonia Republic of Korea Hong Kong	Republic of Korea Hong Kong French Polynesia China
Domestic routes	23	16
<i>Total frequency (year)</i>	29 031	14 079
Total routes	46	42

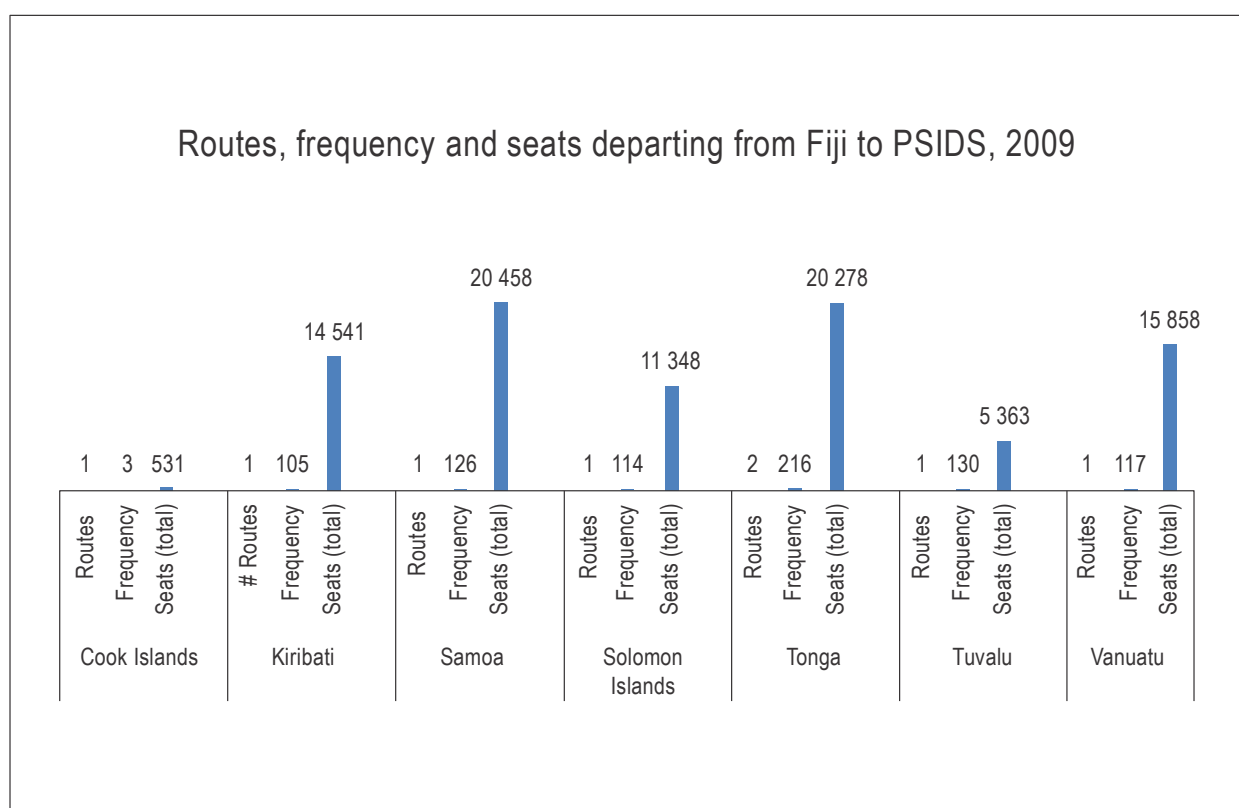


Figure A-15. Routes, frequency and seats departing from Fiji to PSIDS, 2009

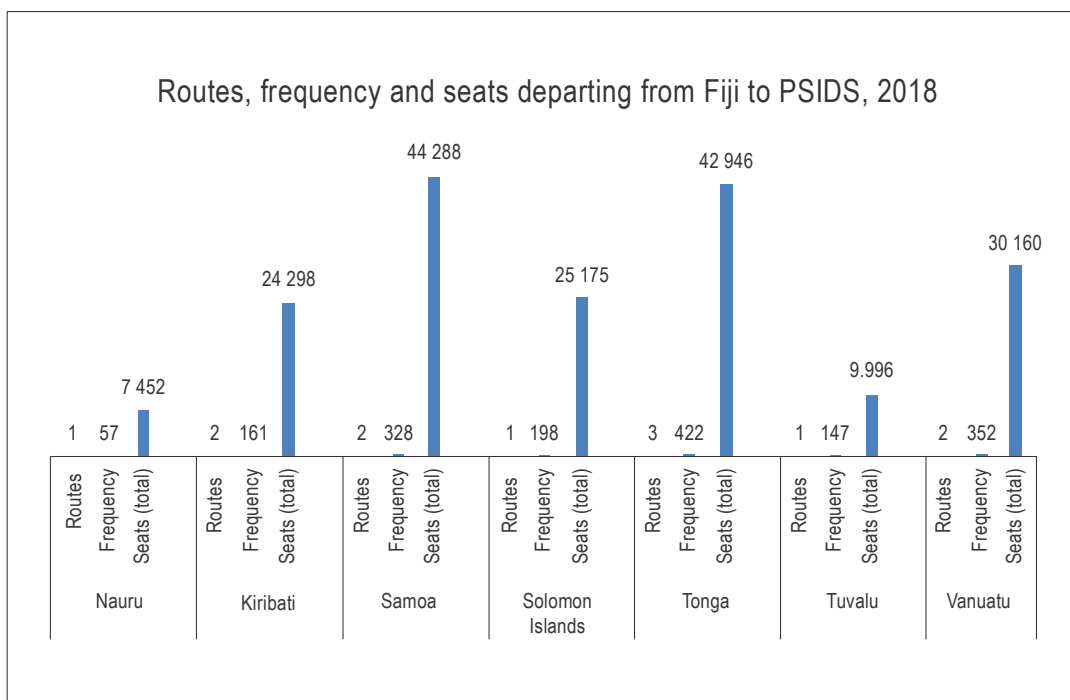


Figure A-16. Routes, frequency and seats departing from Fiji to PSIDS, 2018

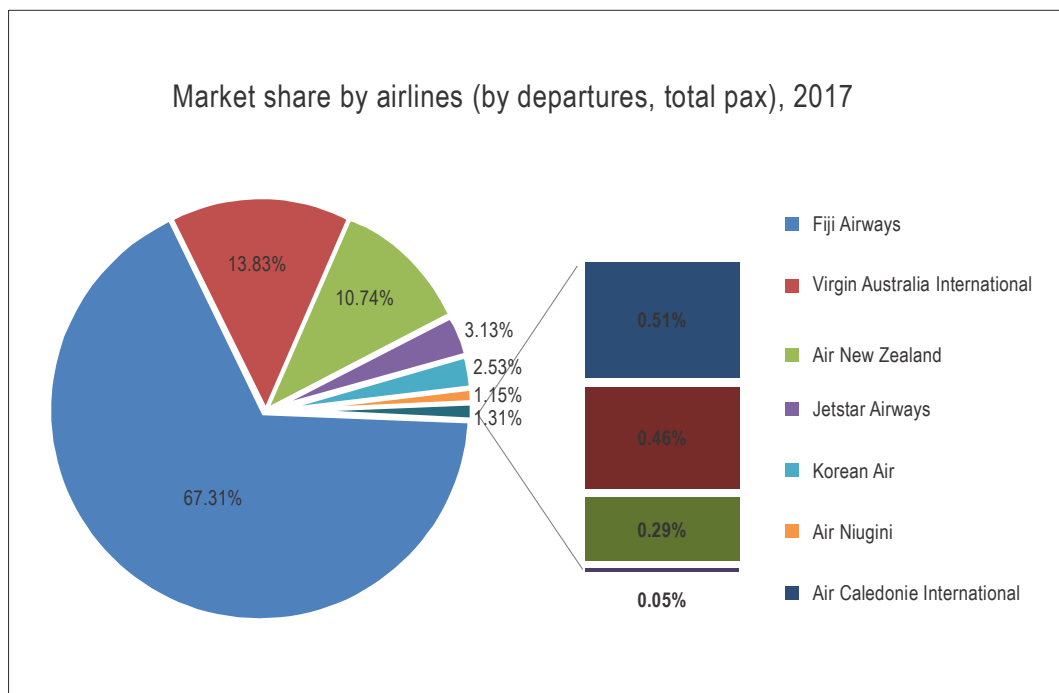


Figure A-17. Market share by airlines (by departures, total pax), 2017

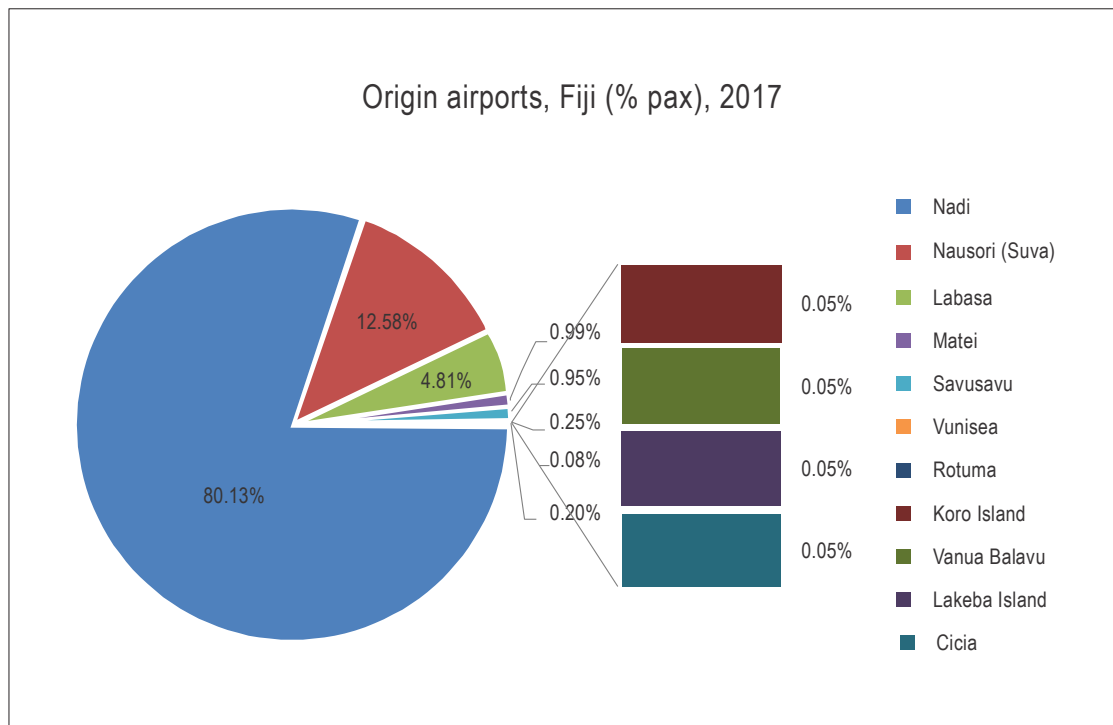


Figure A-18. Origin airports, Fiji (% pax), 2017

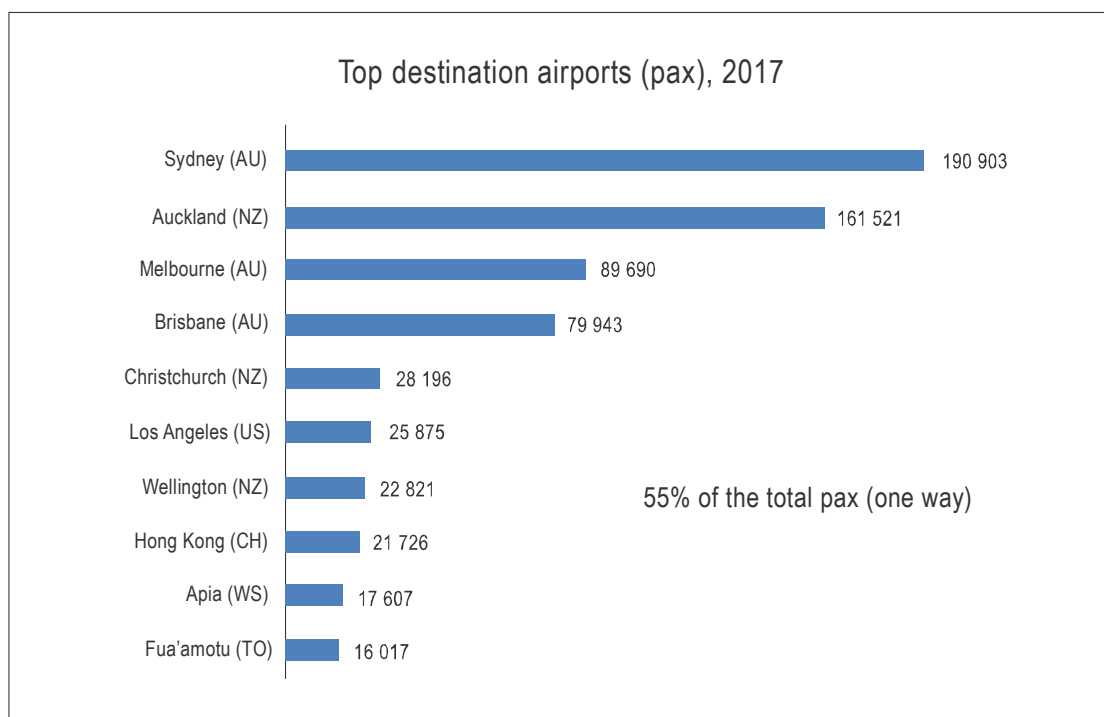


Figure A-19. Top destination airports (pax), 2017

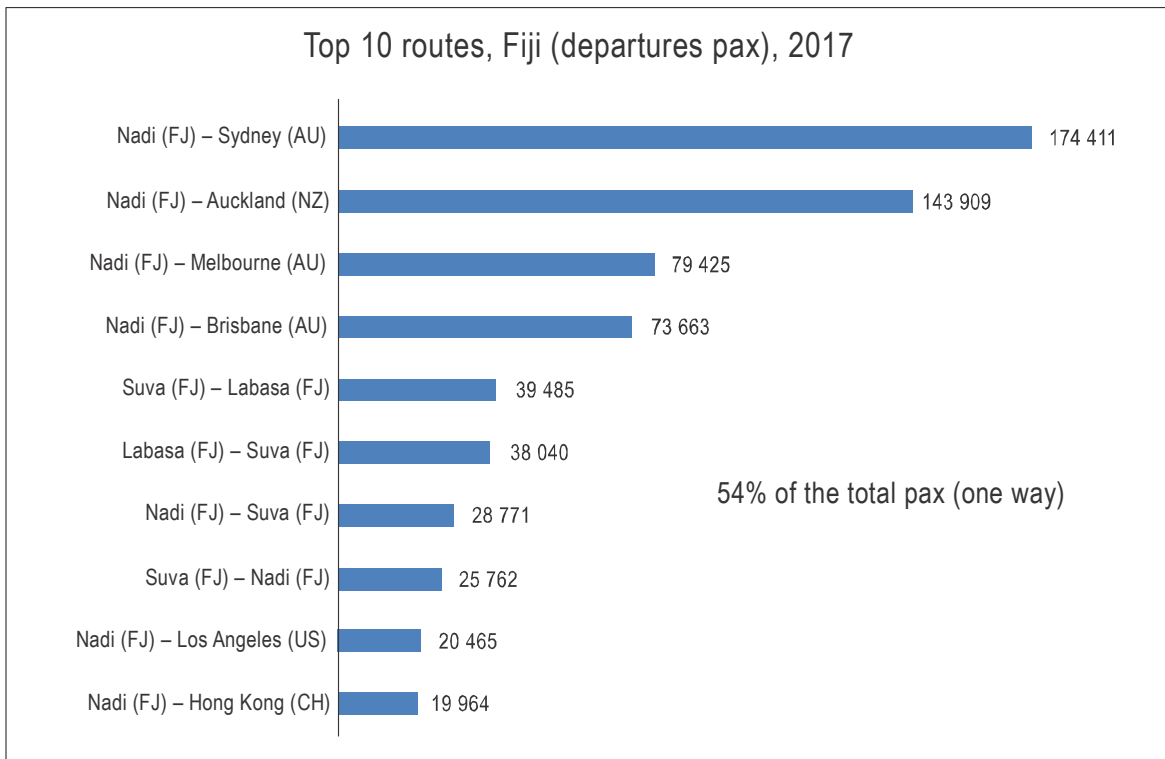


Figure A-20. Top 10 routes, Fiji (departures pax), 2017

4. Kiribati

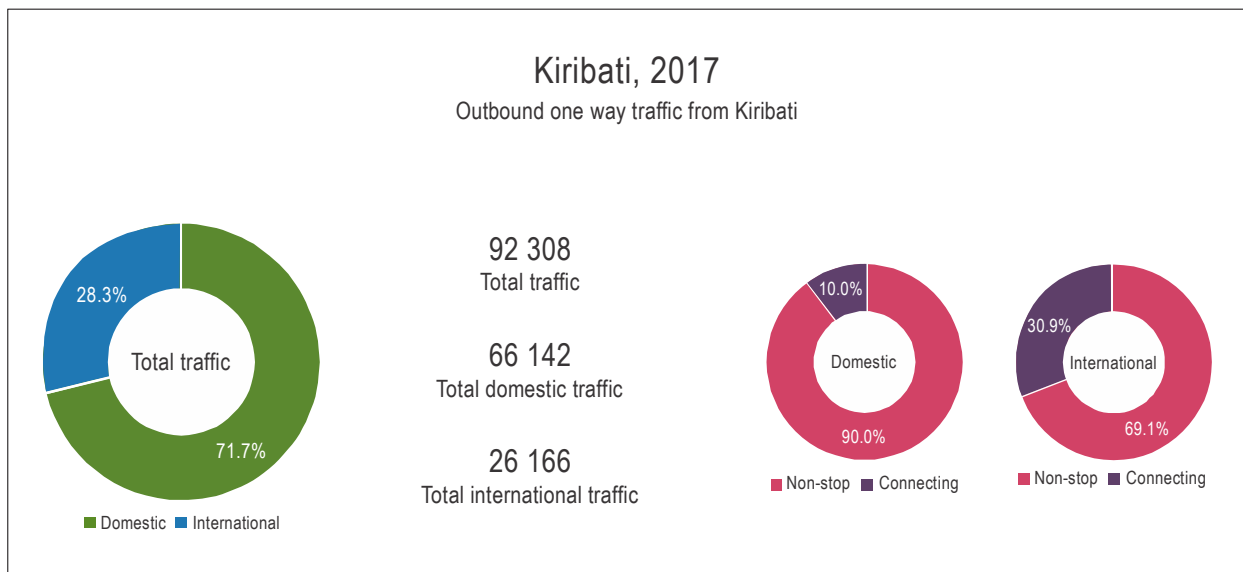
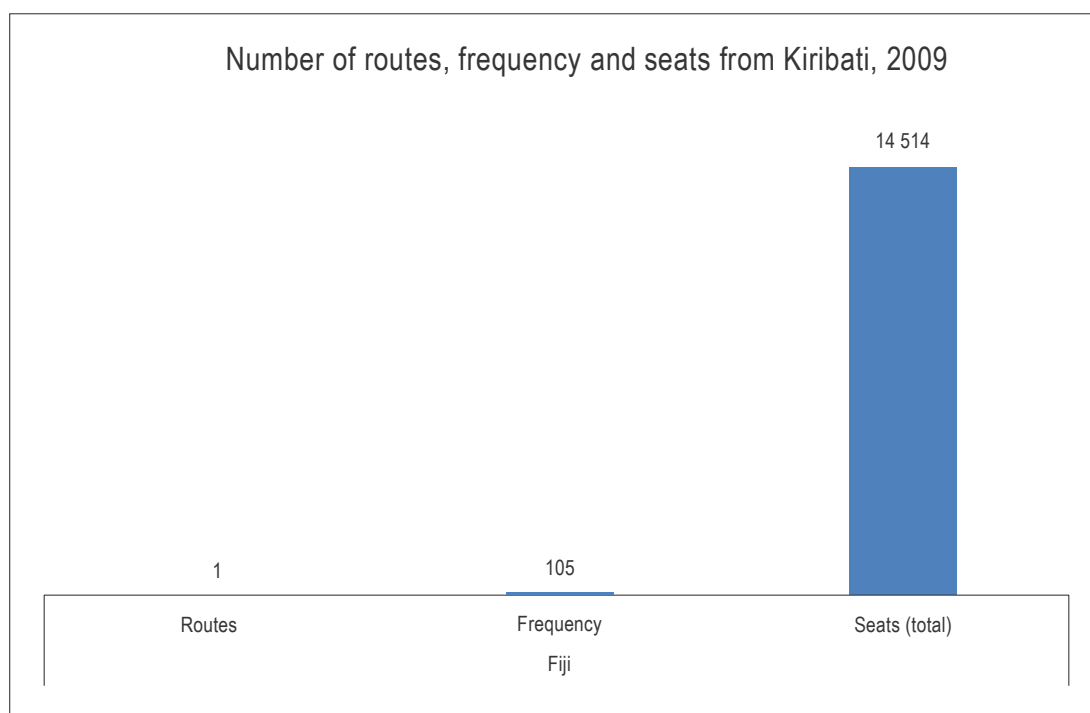


Figure A-21. Outbound one way traffic from Kiribati

Table A-4. Scheduled flights from Kiribati, 2009 vs. 2018

<i>Scheduled flights from Kiribati, 2009 vs. 2018</i>		
	2009	2018
Number of direct routes intra-PSIDS	1	6
<i>PSIDS served</i>	Fiji	Fiji Nauru Marshall Islands Solomon Islands Tuvalu
<i>Total frequency (year)</i>	105	340
Number of direct routes to States or territories other than PSIDS served	0	1
<i>Total frequency (year)</i>	0	52
<i>States or territories other than PSIDS served</i>	No Out PSIDS served	United States (Hawaii)
Domestic routes	0	26
<i>Total frequency (year)</i>	0	3 468
Total routes	1	33

**Figure A-22. Number of routes, frequency and seats from Kiribati, 2009**

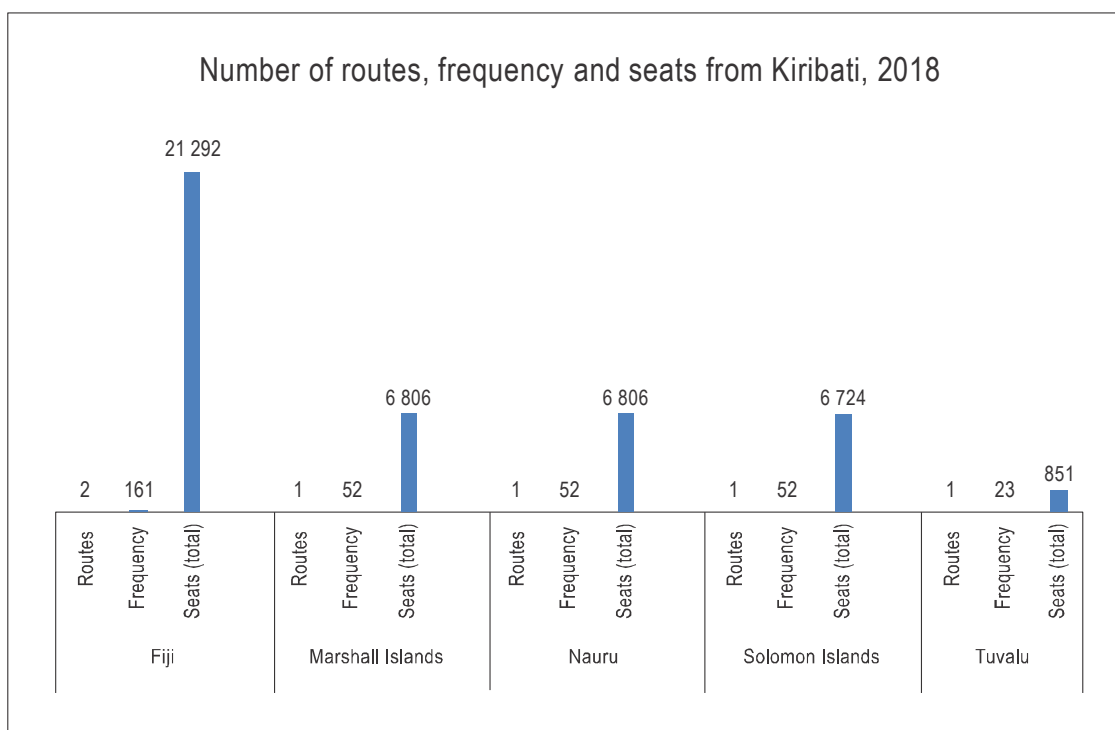


Figure A-23. Number of routes, frequency and seats from Kiribati, 2018

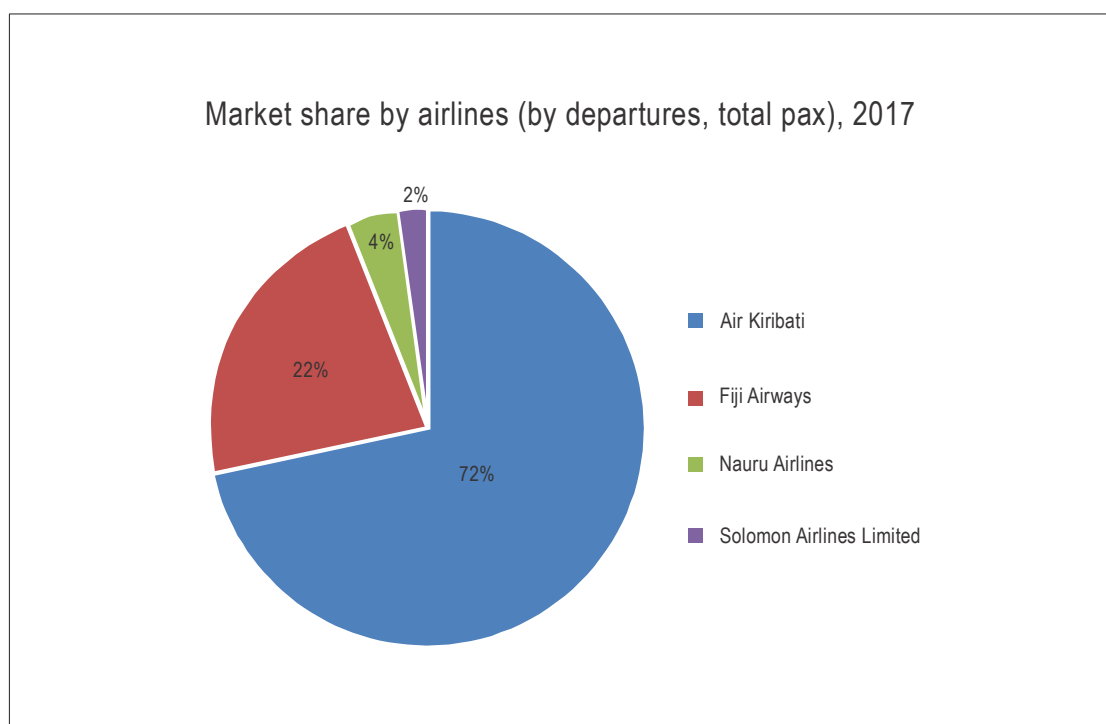


Figure A-24. Market share by airlines (by departures, total pax), 2017

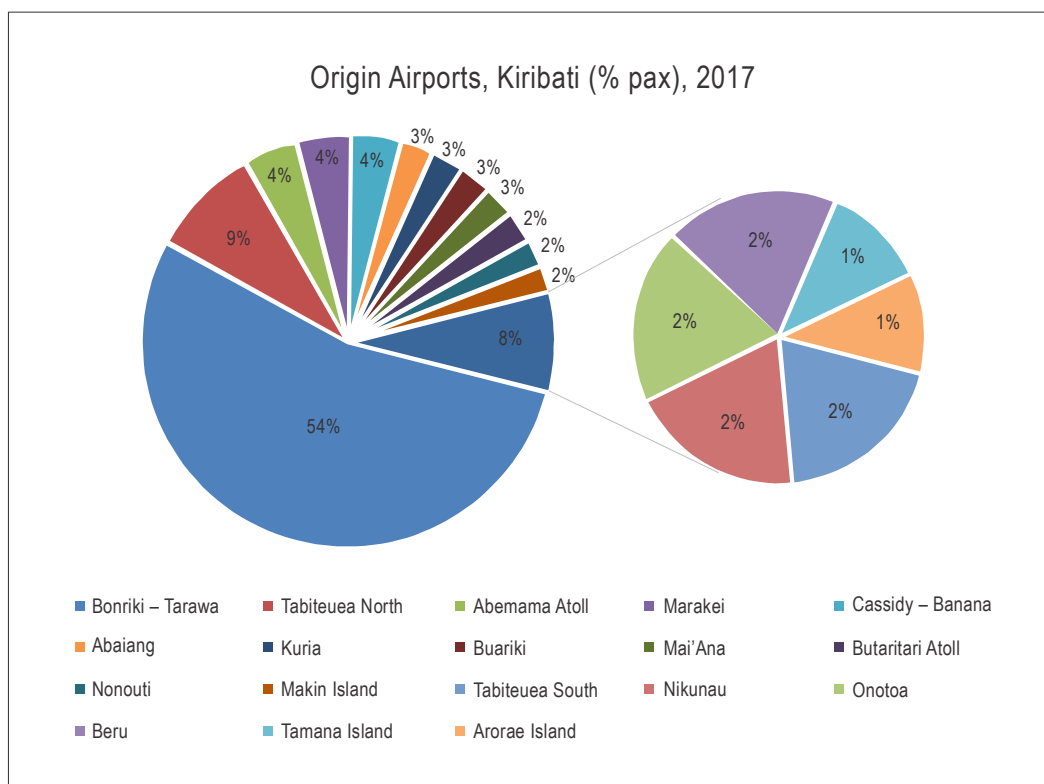


Figure A-25. Origin airports, Kiribati (% pax), 2017

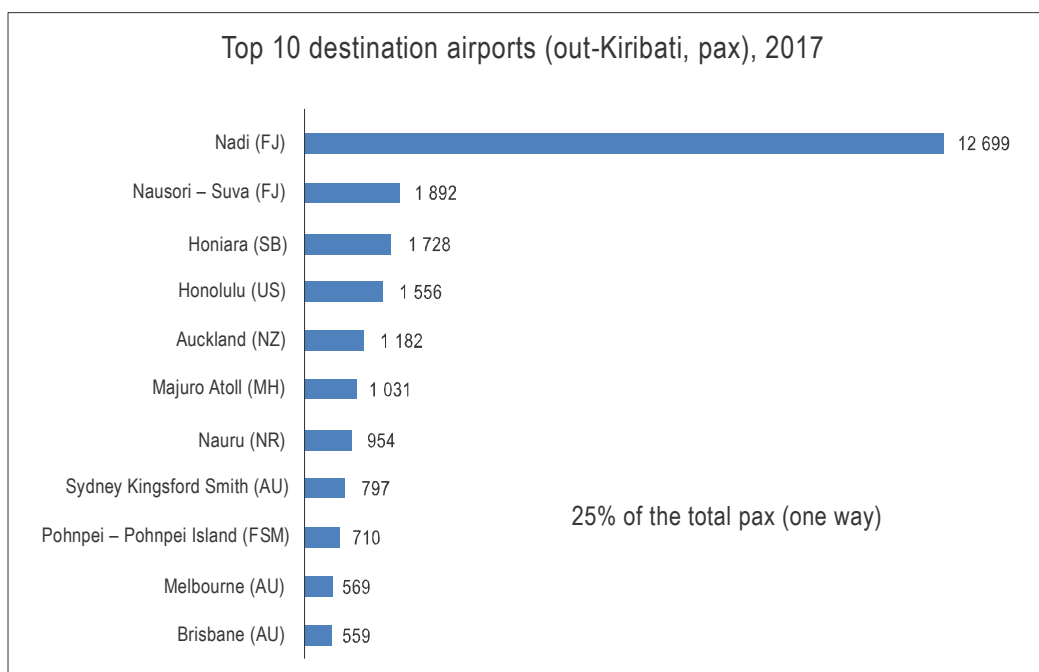


Figure A-26. Top 10 destination airports (out-Kiribati, pax), 2017

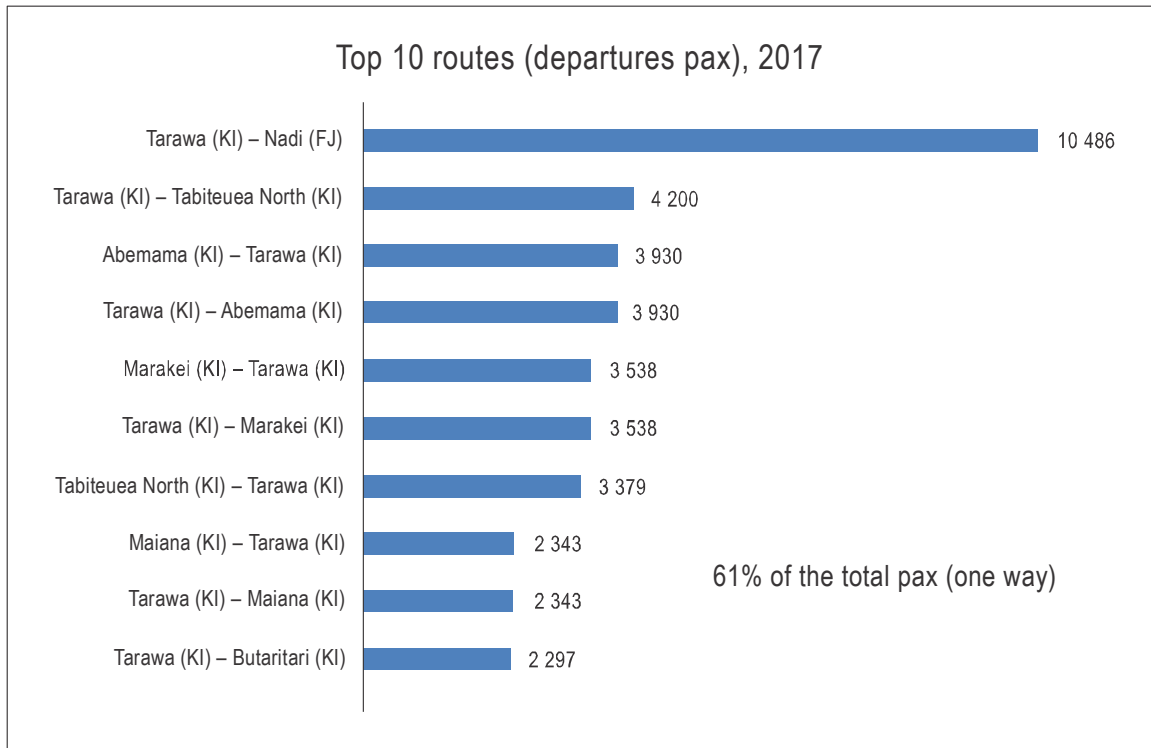


Figure A-27. Top 10 routes (departures pax), 2017

5. Marshall Islands

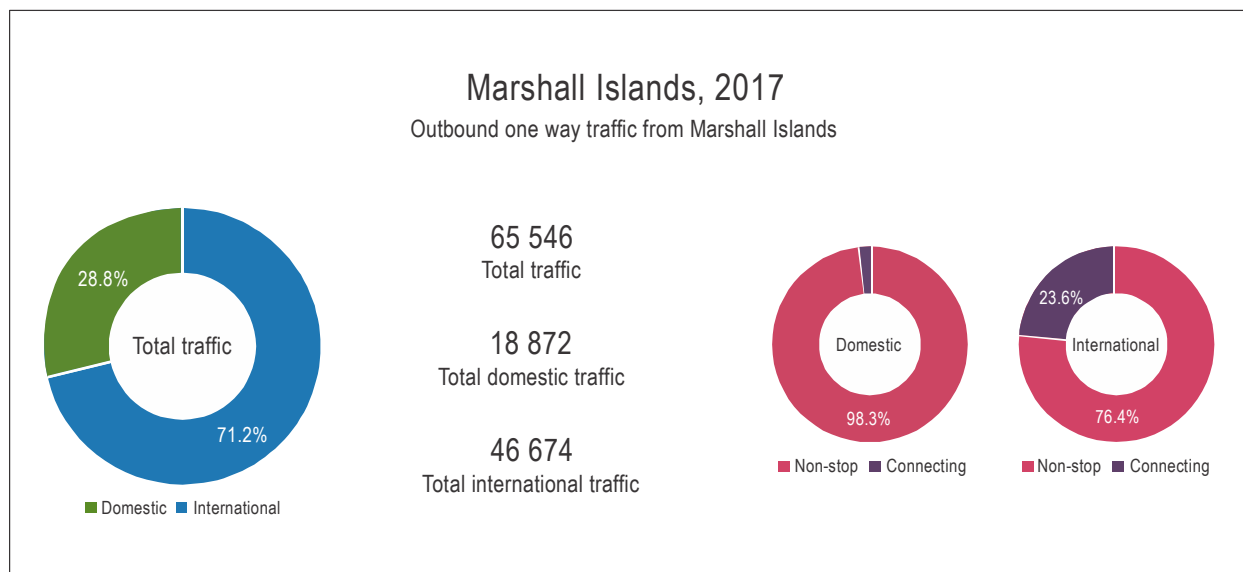
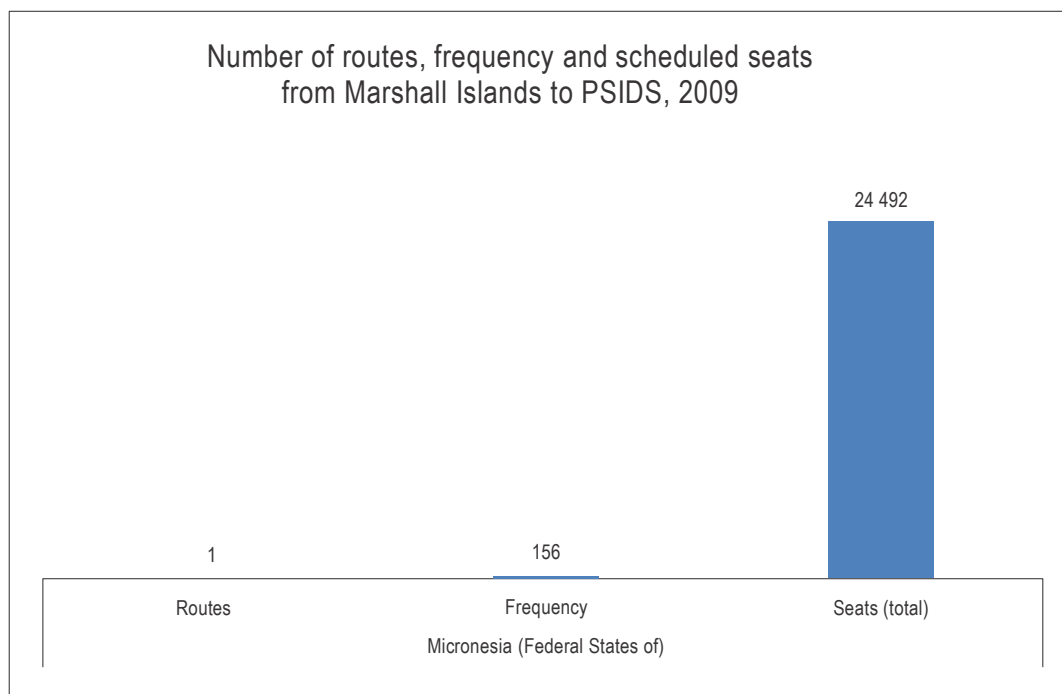


Figure A-28. Outbound one way traffic from Marshall Islands

Table A-5. Scheduled flights from Marshall Islands, 2009 vs. 2018

<i>Scheduled flights from Marshall Islands, 2009 vs. 2018</i>		
	<i>2009</i>	<i>2018</i>
Number of direct routes intra-PSIDS	1	3
<i>PSIDS served</i>	Micronesia (Federal States of)	Micronesia (Federal States of) Kiribati
<i>Total frequency (year)</i>	156	300
Number of direct routes to States or territories other than PSIDS served	2	1
<i>Total frequency (year)</i>	174	207
<i>States or territories other than PSIDS served</i>	Guam United States (Hawaii)	United States (Hawaii)
Domestic routes	5	31
<i>Total frequency (year)</i>	1 040	2 981
Total routes	8	35

**Figure A-29. Number of routes, frequency and scheduled seats from Marshall Islands to PSIDS, 2009**

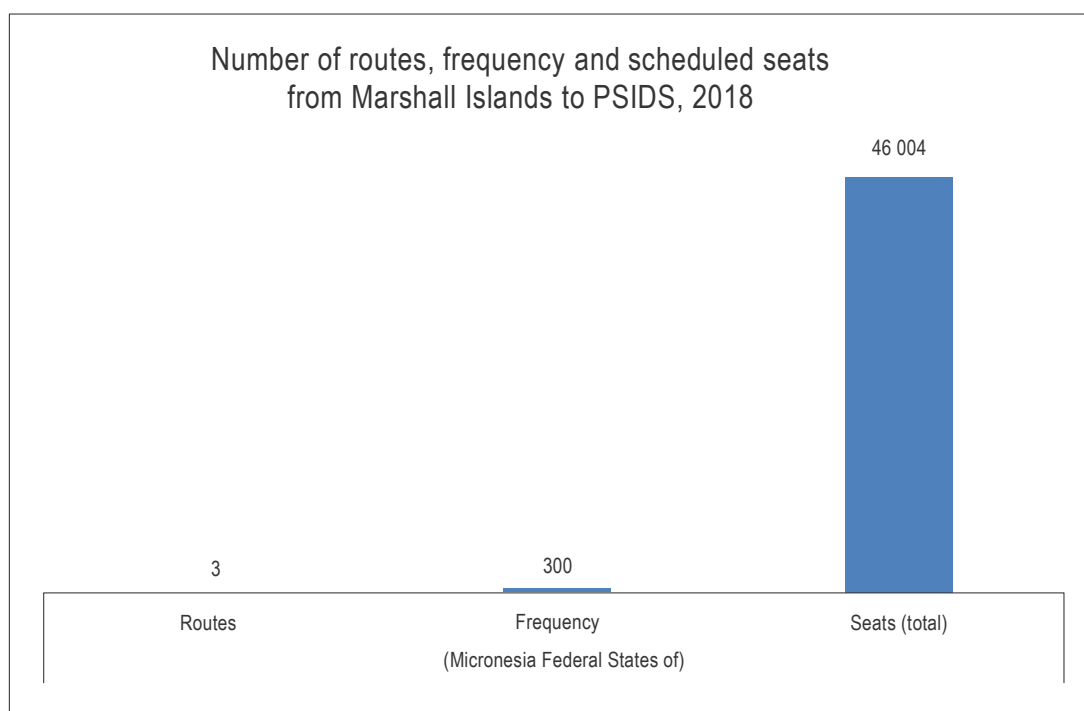


Figure A-30. Number of routes, frequency and scheduled seats from Marshall Islands to PSIDS, 2018

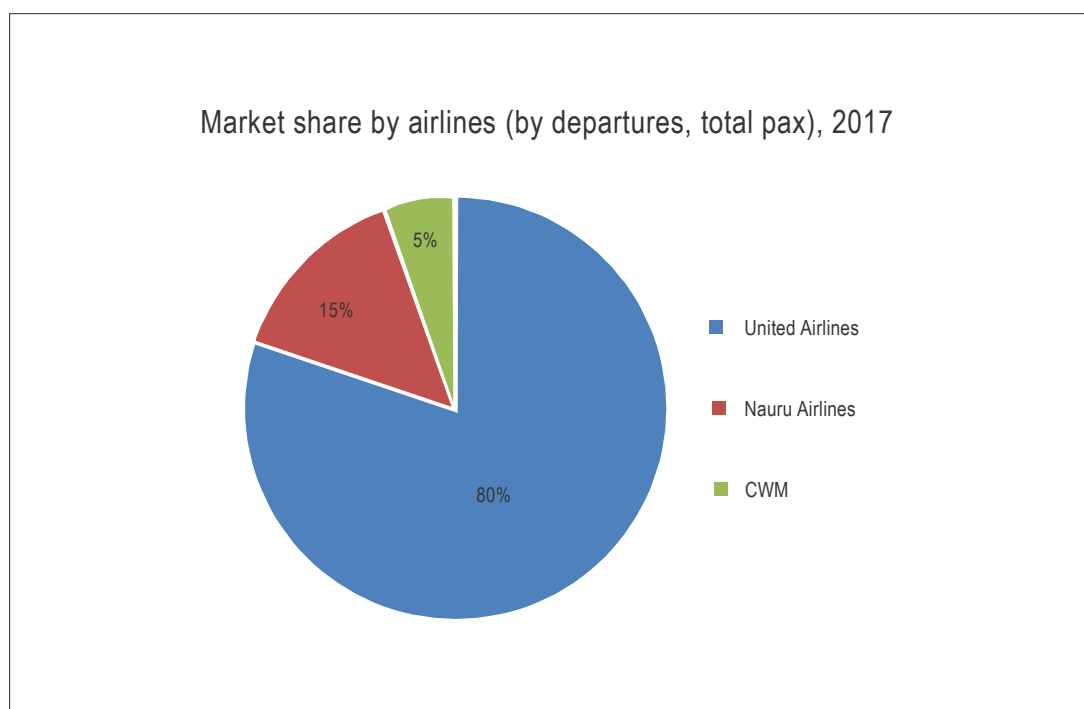


Figure A-31. Market share by airlines (by departures, total pax), 2017

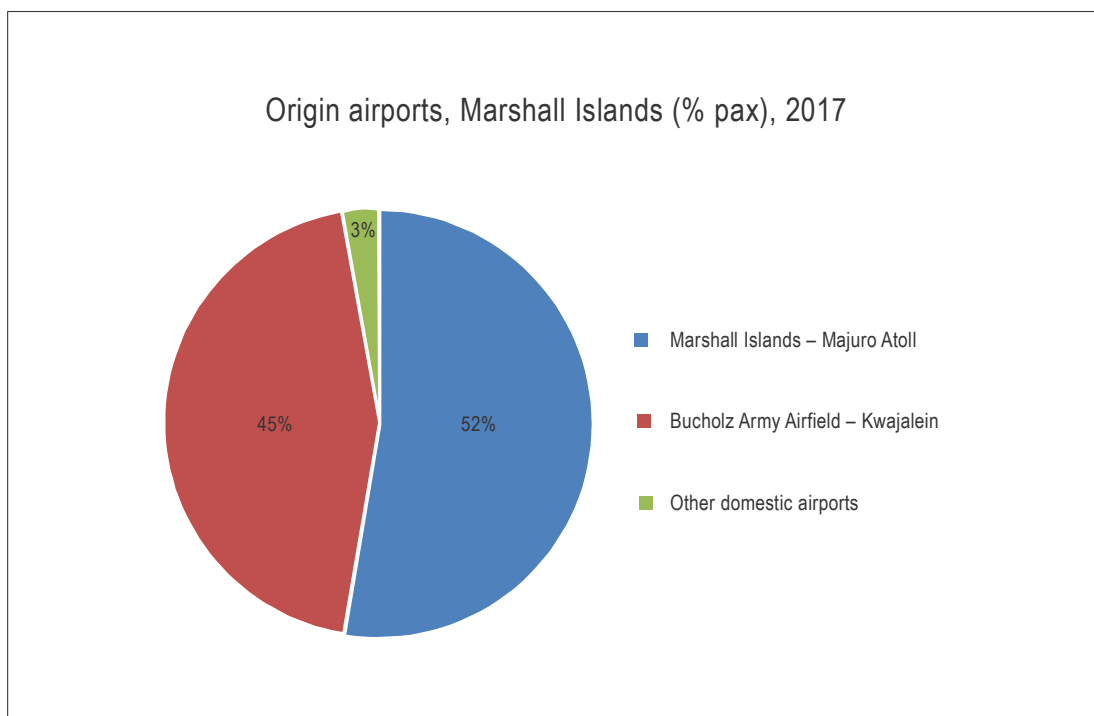


Figure A-32. Origin airports, Marshall Islands (% pax), 2017

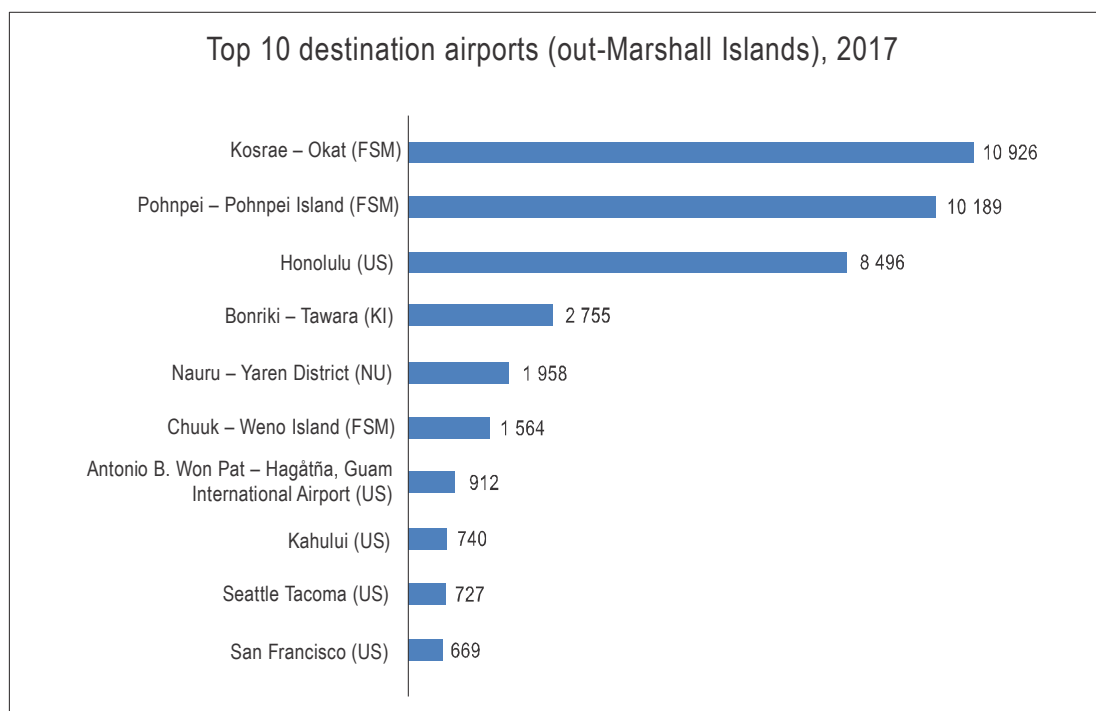


Figure A-33. Top 10 destination airports (out-Marshall Islands), 2017

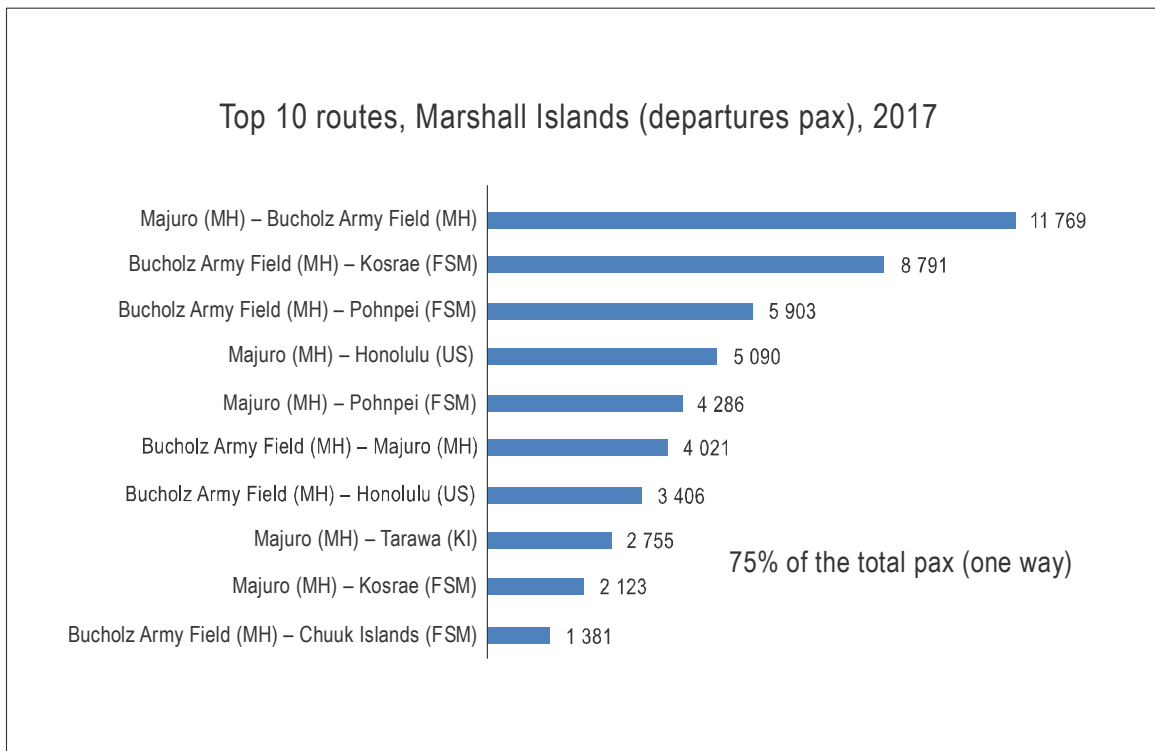


Figure A-34. Top 10 routes, Marshall Islands (departures pax), 2017

6. Nauru

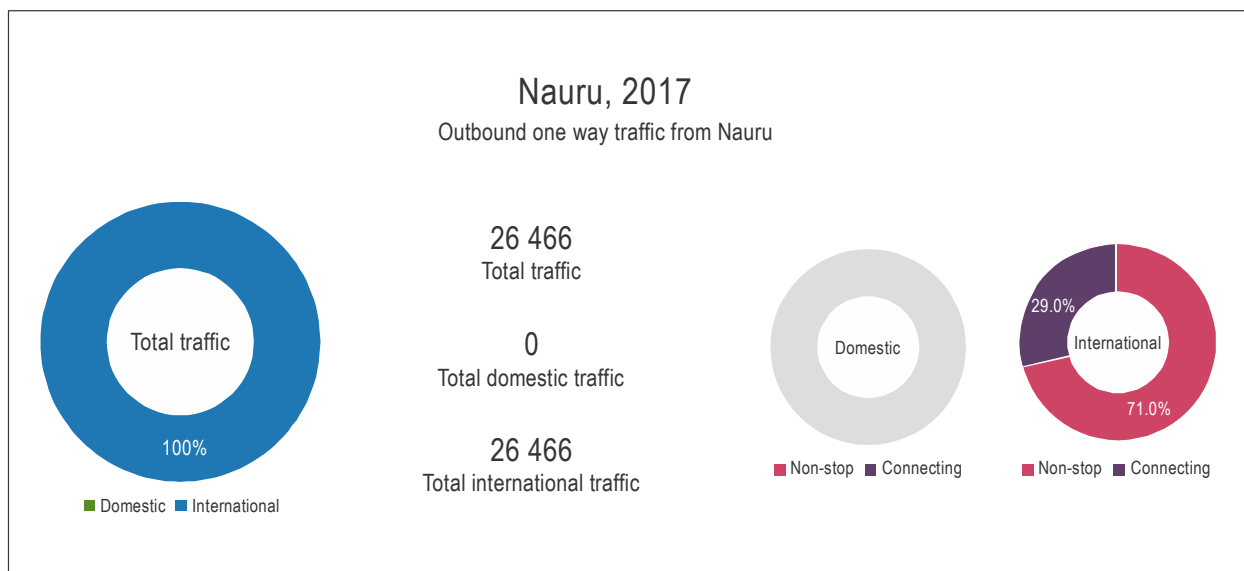
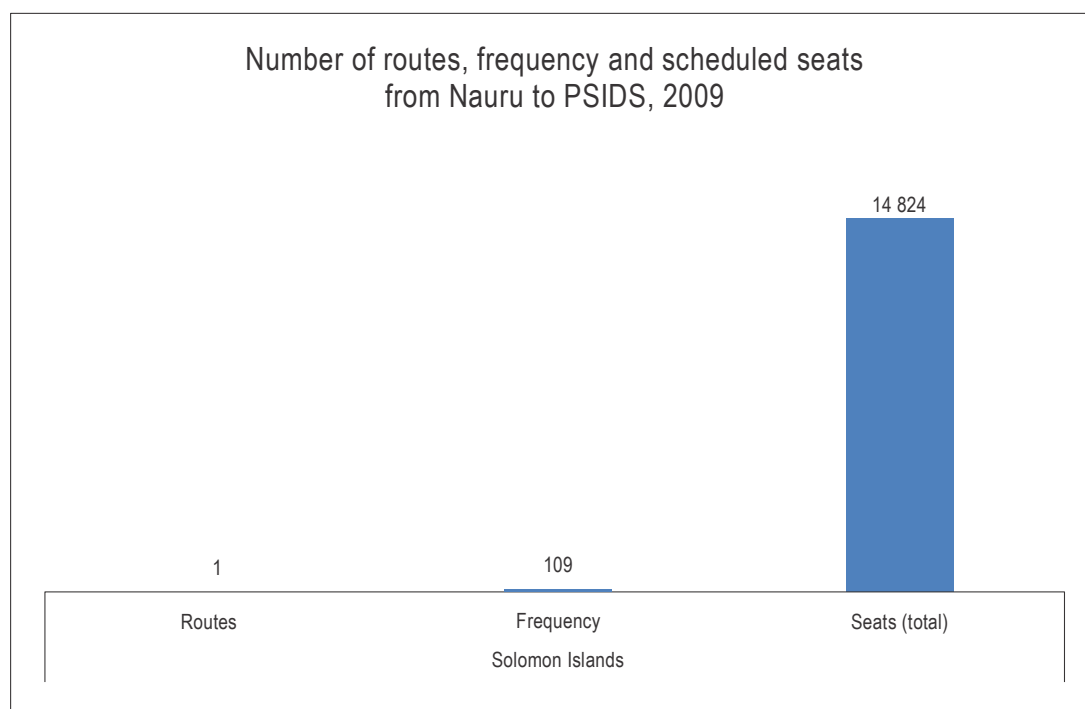


Figure A-35. Outbound one way traffic from Nauru

Table A-6. Scheduled flights from Nauru, 2009 vs. 2018

<i>Scheduled flights from Nauru, 2009 vs. 2018</i>		
	<i>2009</i>	<i>2018</i>
Number of direct routes intra-PSIDS	1	3
<i>PSIDS served</i>	Solomon Islands	Fiji Kiribati Solomon Islands
<i>Total frequency (year)</i>	109	174
Number of direct routes to States or territories other than PSIDS served	0	1
<i>Total frequency (year)</i>	0	135
<i>States or territories other than PSIDS served</i>	No states served	Australia
Domestic routes	0	0
<i>Total frequency (year)</i>	0	0
Total routes	1	4

**Figure A-36. Number of routes, frequency and scheduled seats from Nauru to PSIDS, 2009**

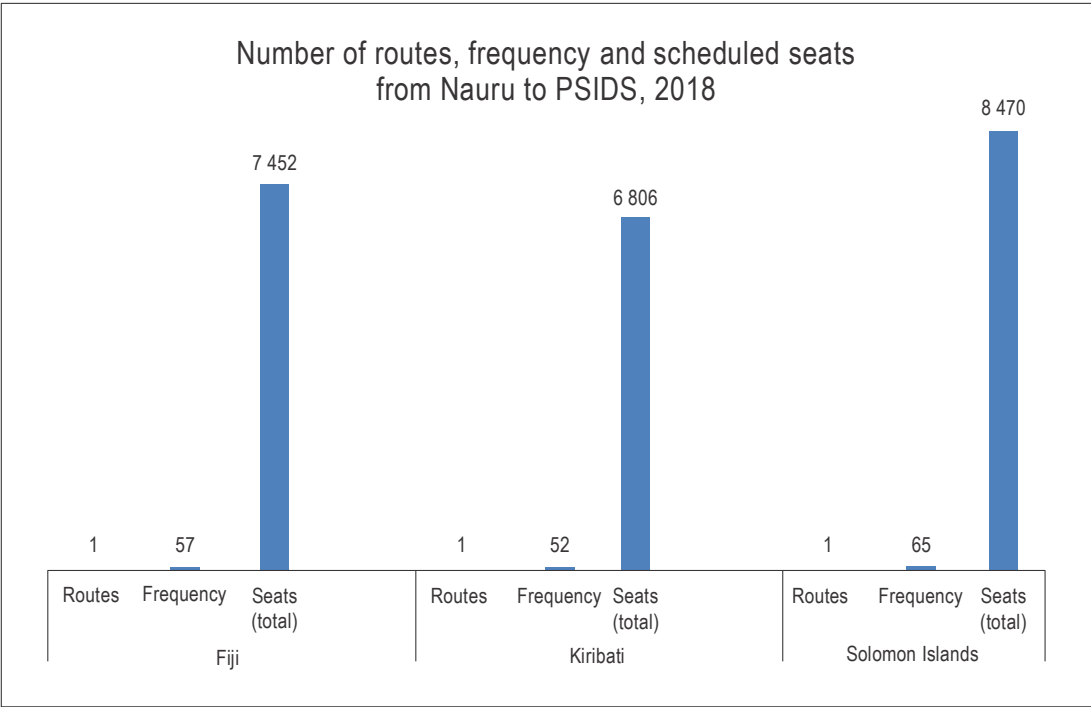


Figure A-37. Number of routes, frequency and scheduled seats from Nauru to PSIDS, 2018

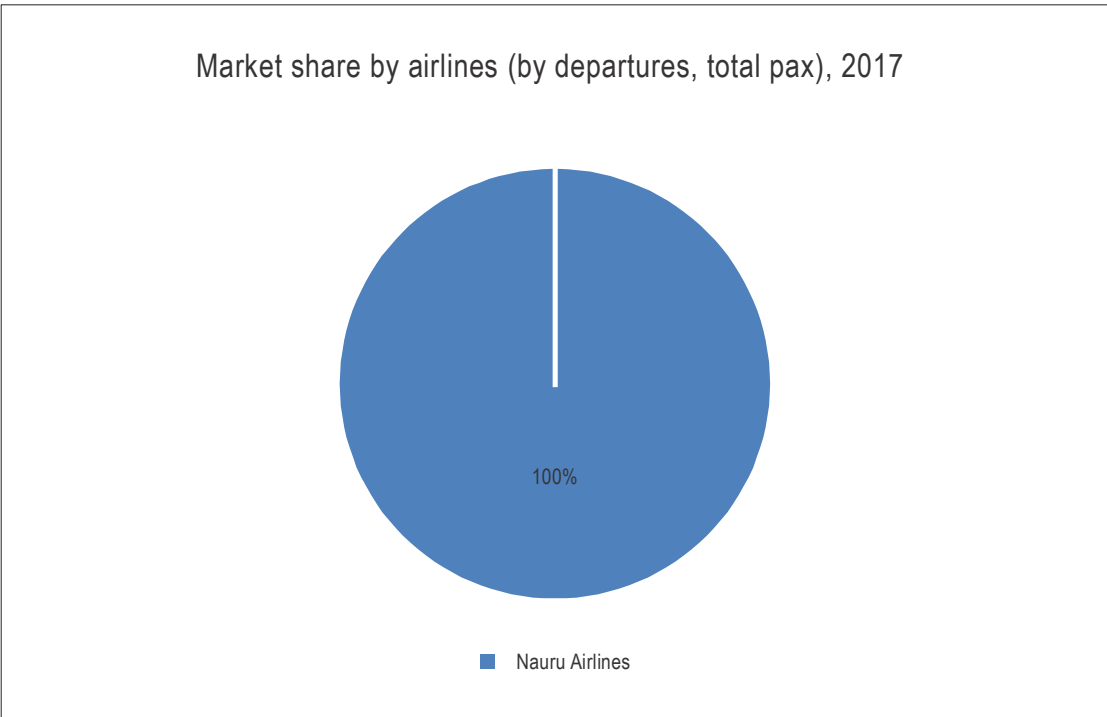


Figure A-38. Market share by airlines (by departures, total pax), 2017

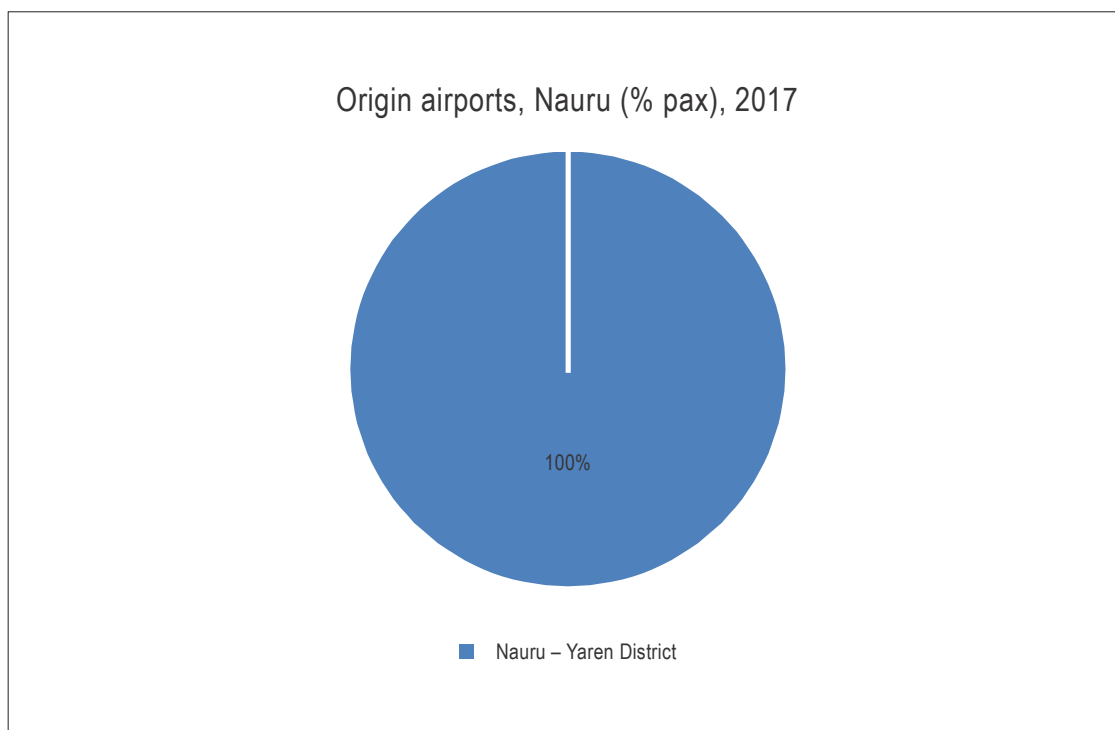


Figure A-39. Origin airports, Nauru (% pax), 2017

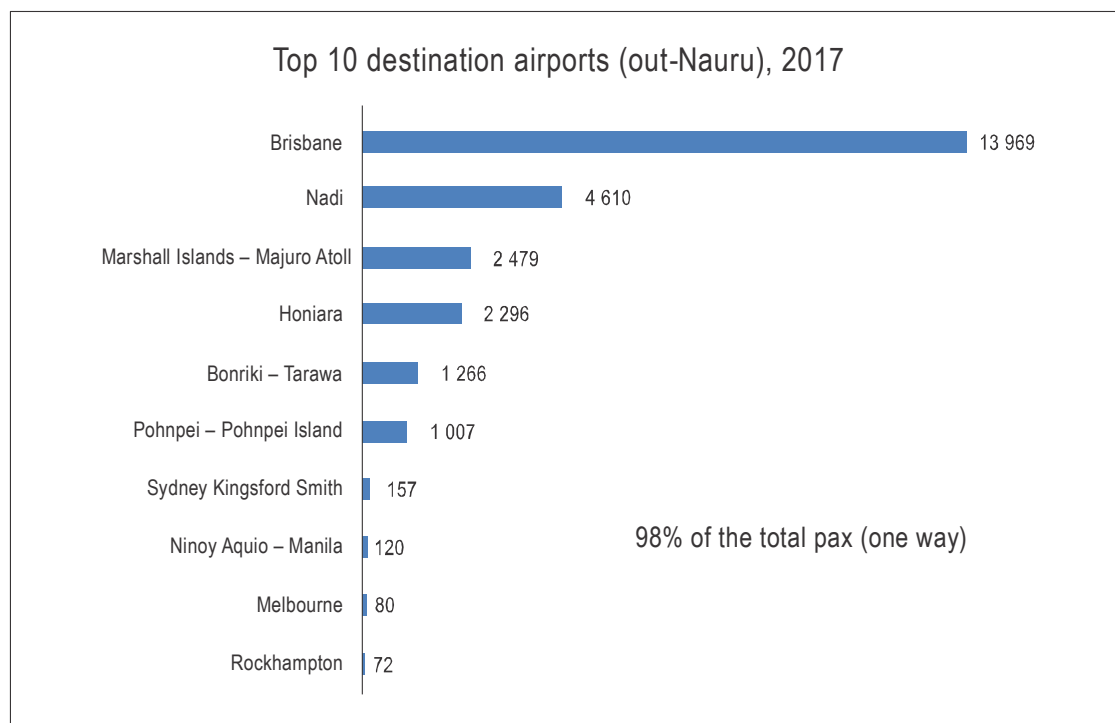


Figure A-40. Top 10 destination airports (out-Nauru), 2017

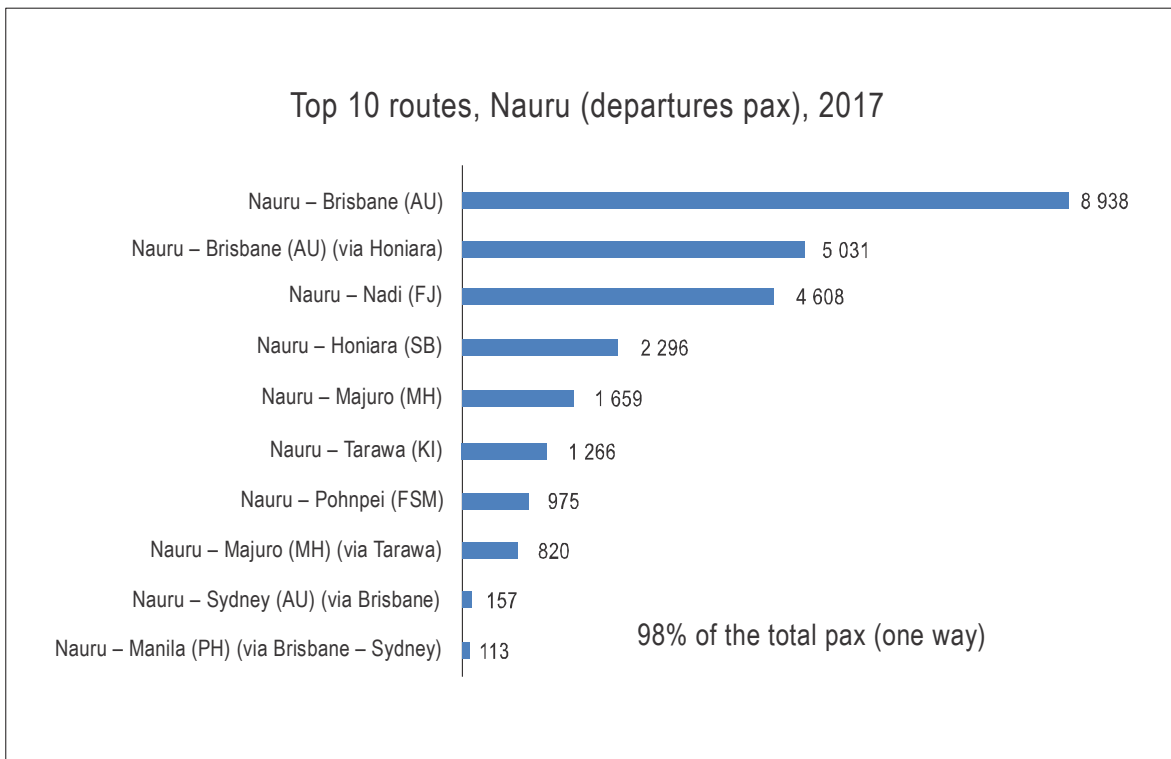


Figure A-41. Top 10 routes, Nauru (departures pax), 2017

7. Niue

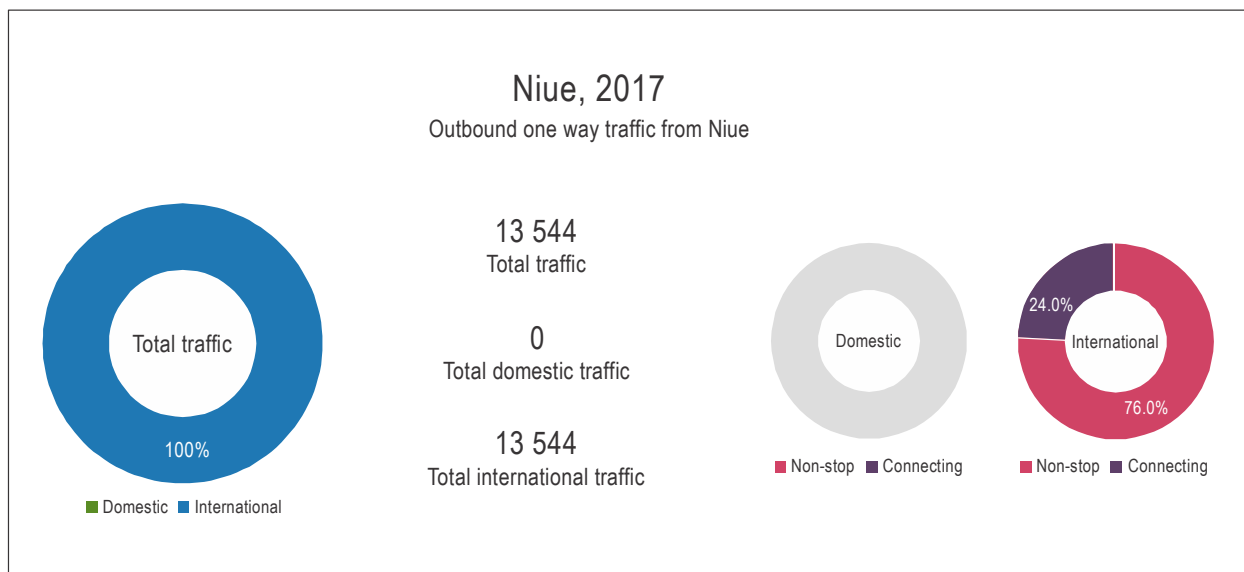
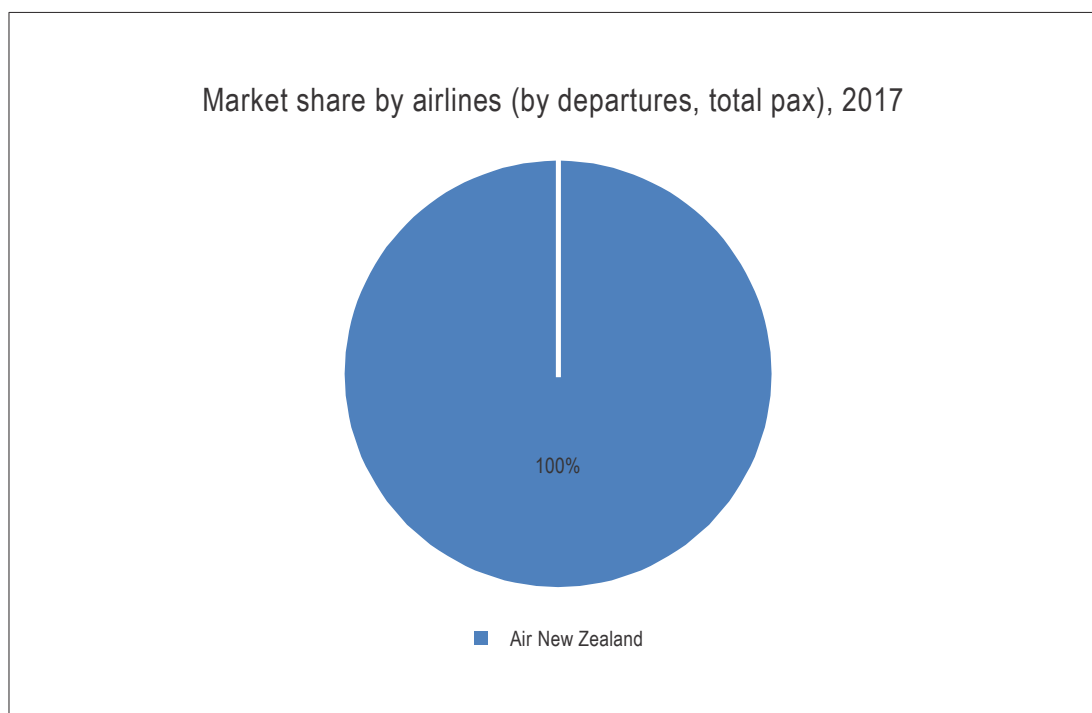
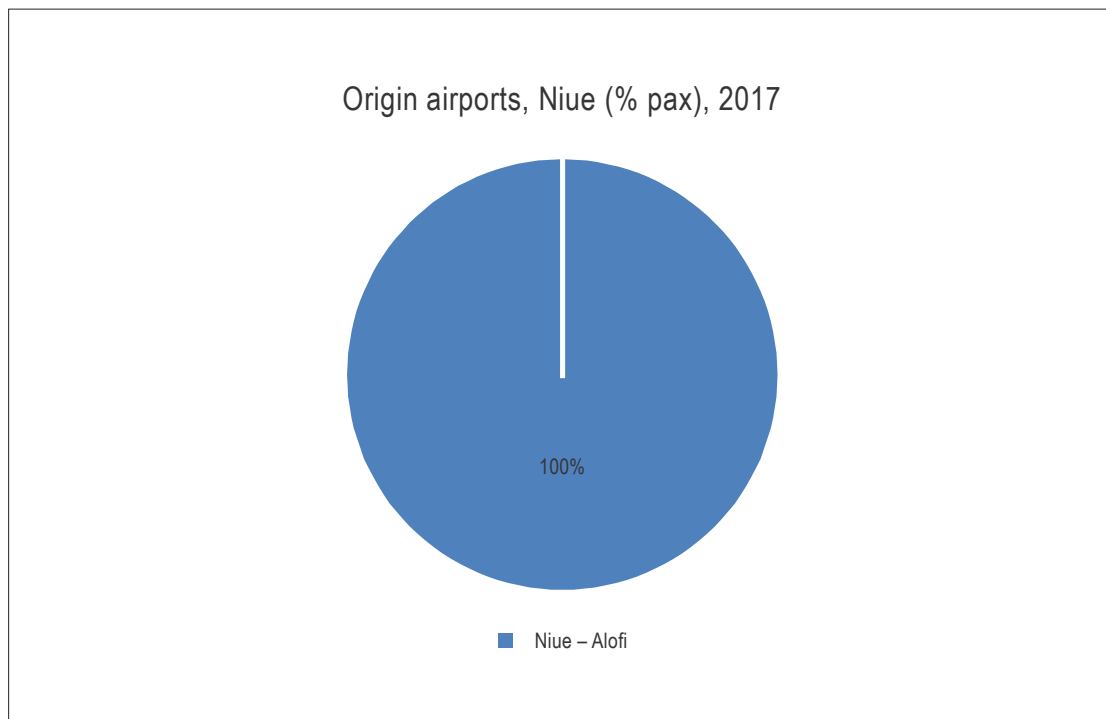
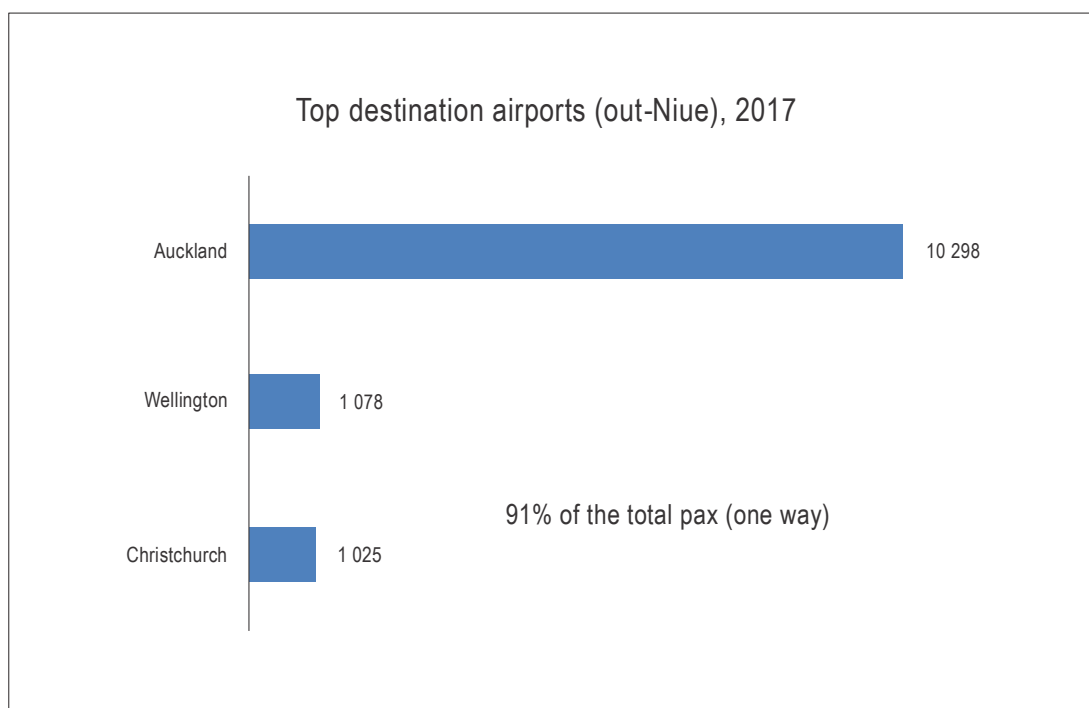


Figure A-42. Outbound one way traffic from Niue

Table A-7. Scheduled flights from Niue, 2009 vs. 2018

<i>Scheduled flights from Niue, 2009 vs. 2018</i>		
	<i>2009¹</i>	<i>2018</i>
Number of direct routes intra-PSIDS	N/A	0
<i>PSIDS served</i>	N/A	No states served
<i>Total frequency (year)</i>	N/A	0
Number of direct routes to States or territories other than PSIDS served	N/A	17 640
<i>Total frequency (year)</i>	N/A	105
<i>States or territories other than PSIDS served</i>	N/A	New Zealand
Domestic routes	N/A	0
<i>Total frequency (year)</i>	N/A	0
Total routes	N/A	1
1. OAG did not register flights from Niue in 2009.		

**Figure A-43. Market share by airlines (by departures, total pax), 2017**

**Figure A-44. Origin airports, Niue (% pax), 2017****Figure A-45. Top destination airports (out-Niue), 2017**

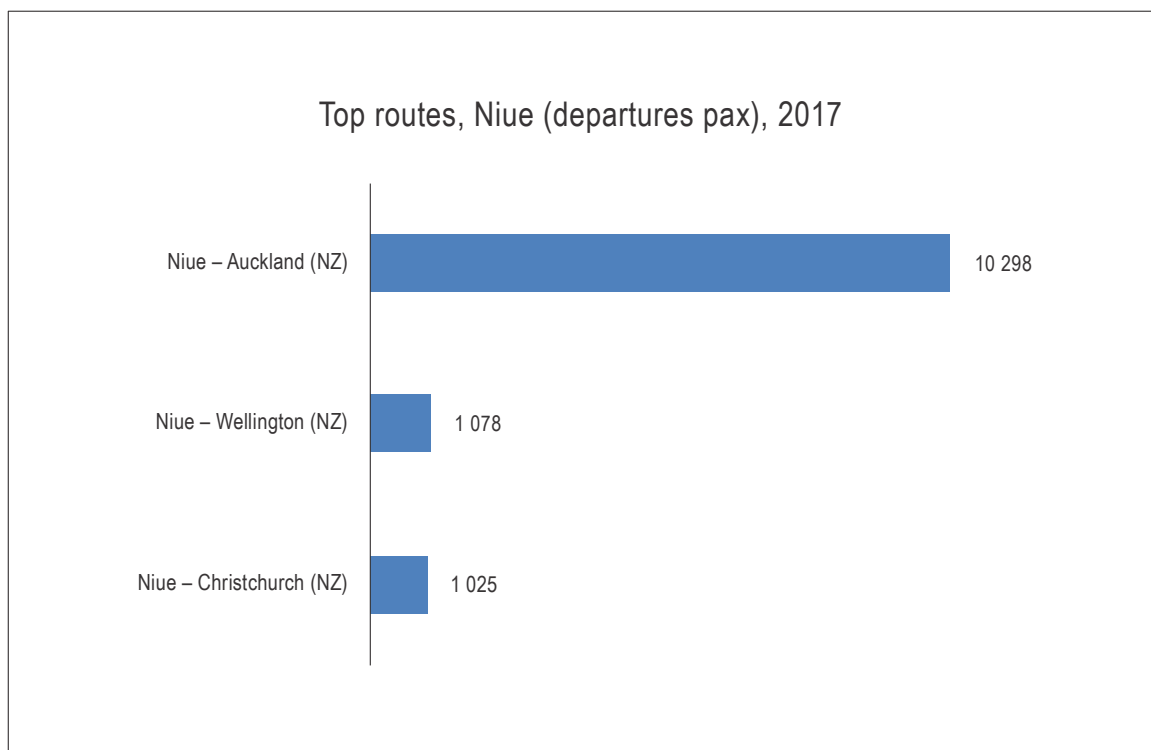


Figure A-46. Top routes, Niue (departures pax), 2017

8. Palau

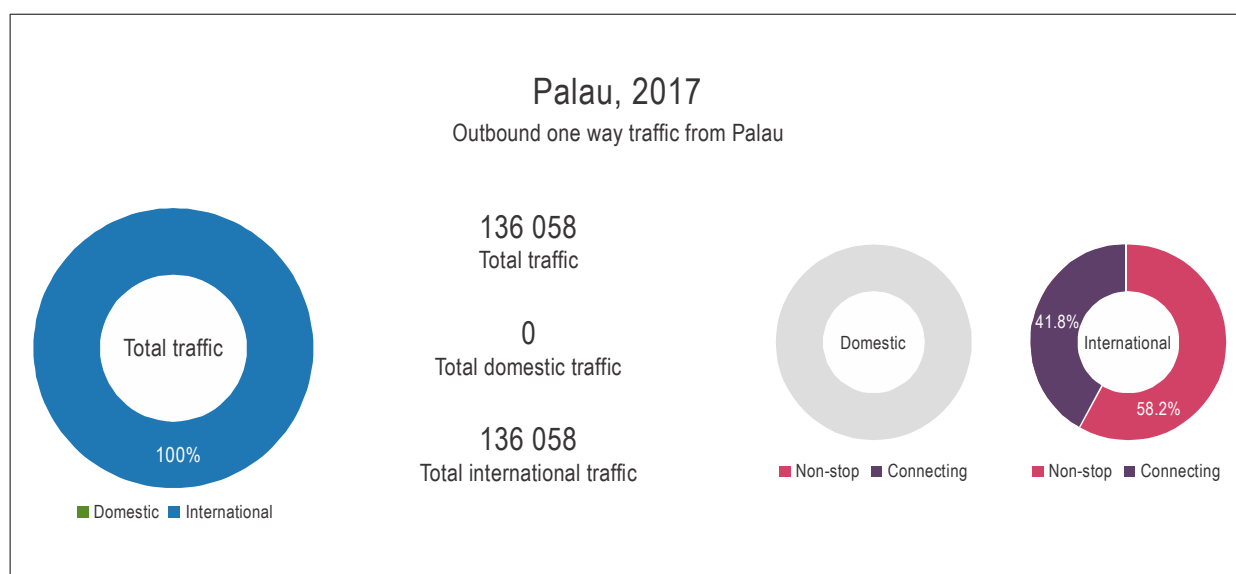


Figure A-47. Outbound one way traffic from Palau

Table A-8. Scheduled flights from Palau, 2009 vs. 2018

<i>Scheduled flights from Palau, 2009 vs. 2018</i>		
	<i>2009</i>	<i>2018</i>
Number of direct routes intra-PSIDS	1	1
<i>PSIDS served</i>	Micronesia (Federal States of)	Micronesia (Federal States of)
<i>Total frequency (year)</i>	156	1
Number of direct routes to States or territories other than PSIDS served	7	8
<i>Total frequency (year)</i>	740	1 055
<i>States or territories other than PSIDS served</i>	Taipei Hong Kong Guam Philippines Japan	Macao Guam Republic of Korea Japan Hong Kong Taipei Philippines
Domestic routes	0	0
<i>Total frequency (year)</i>	0	0
Total routes	8	8

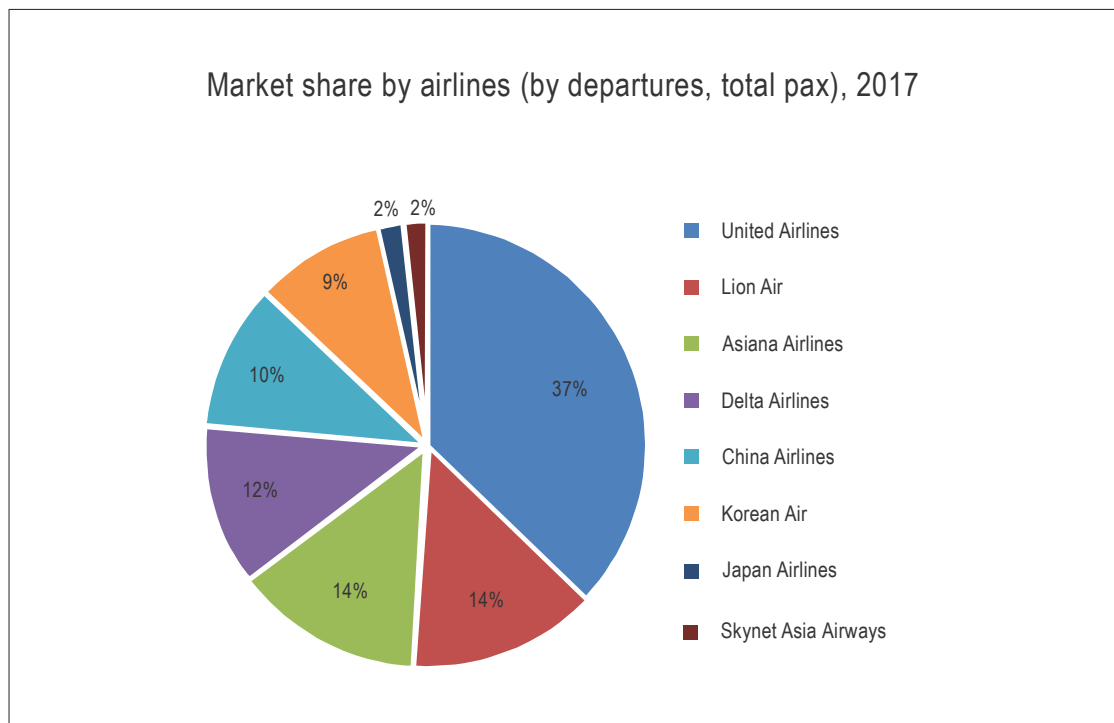


Figure A-48. Market share by airlines (by departures, total pax), 2017

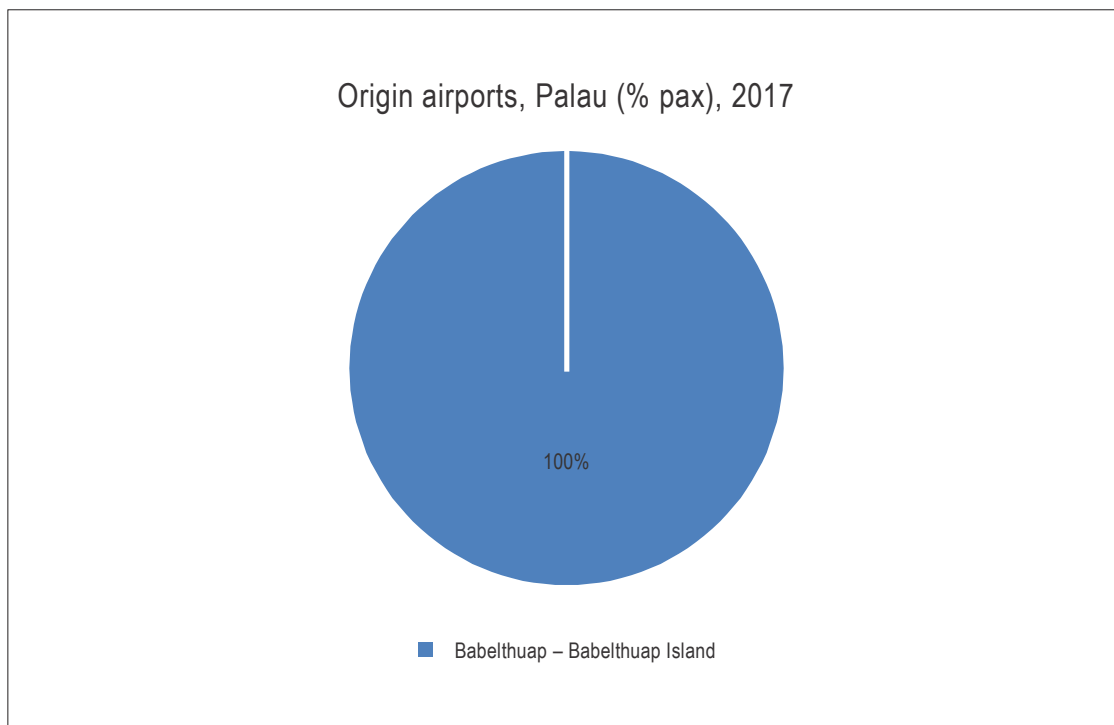


Figure A-49. Origin airports, Palau (% pax), 2017

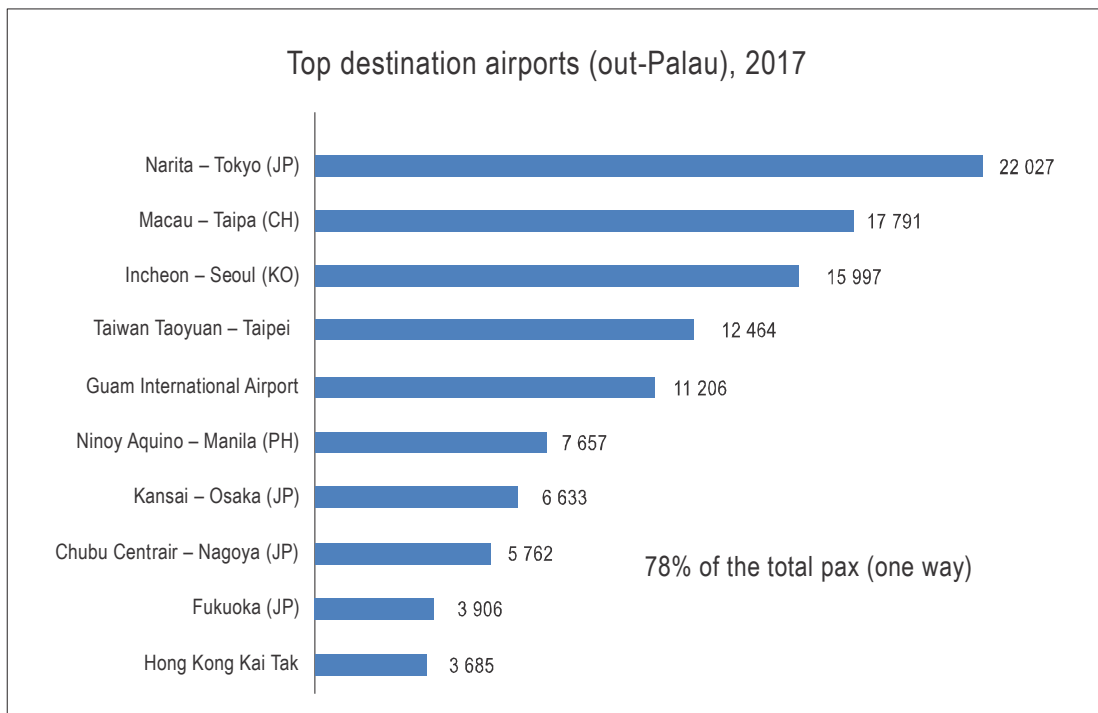


Figure A-50. Top destination airports (out-Palau), 2017

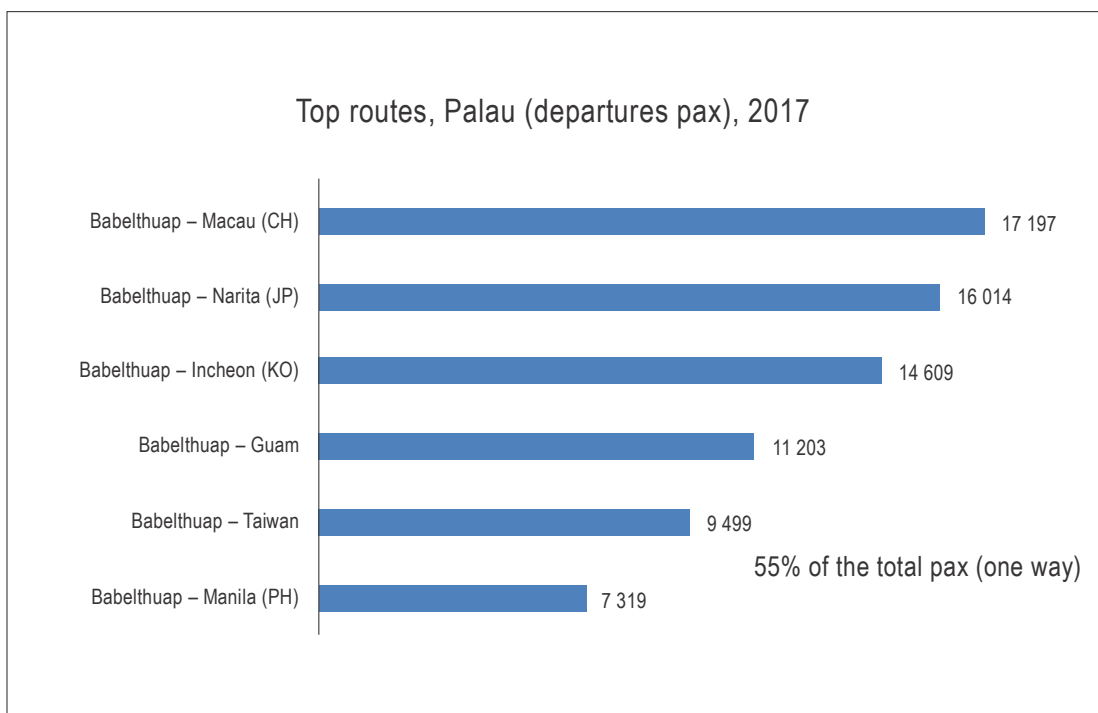


Figure A-51. Top routes, Palau (departures pax), 2017

9. Papua New Guinea

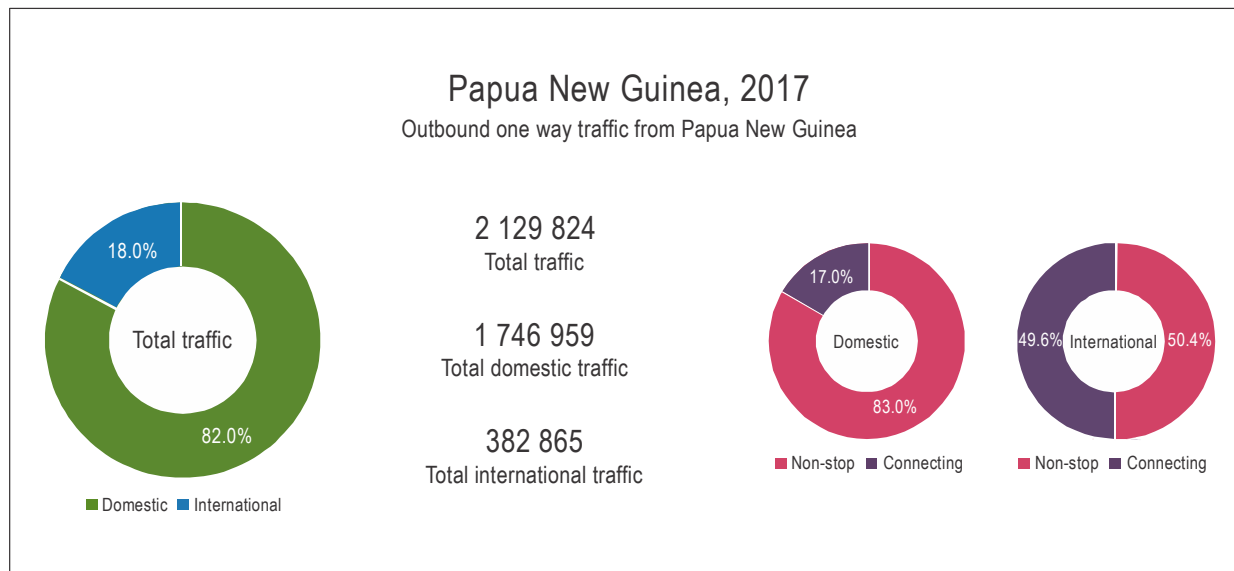


Figure A-52. Outbound one way traffic from PNG

Table A-9. Scheduled flights from PNG, 2009 vs. 2018

Scheduled flights from Papua New Guinea, 2009 vs. 2018		
	2009	2018
Number of direct routes intra-PSIDS	1	2
<i>PSIDS served</i>	Solomon Islands	Micronesia (Federal States of) Solomon Islands
<i>Total frequency (year)</i>	114	309
Number of direct routes to States or territories other than PSIDS served	8	11
<i>Total frequency (year)</i>	2 267	2 796
<i>States or territories other than PSIDS served</i>	Australia Hong Kong Malaysia Japan Singapore Philippines	Australia Hong Kong Malaysia Japan Singapore Philippines Vietnam Indonesia
Domestic routes	190	100

Scheduled flights from Papua New Guinea, 2009 vs. 2018		
Total frequency (year)	30 792	41 686
Total routes	199	113

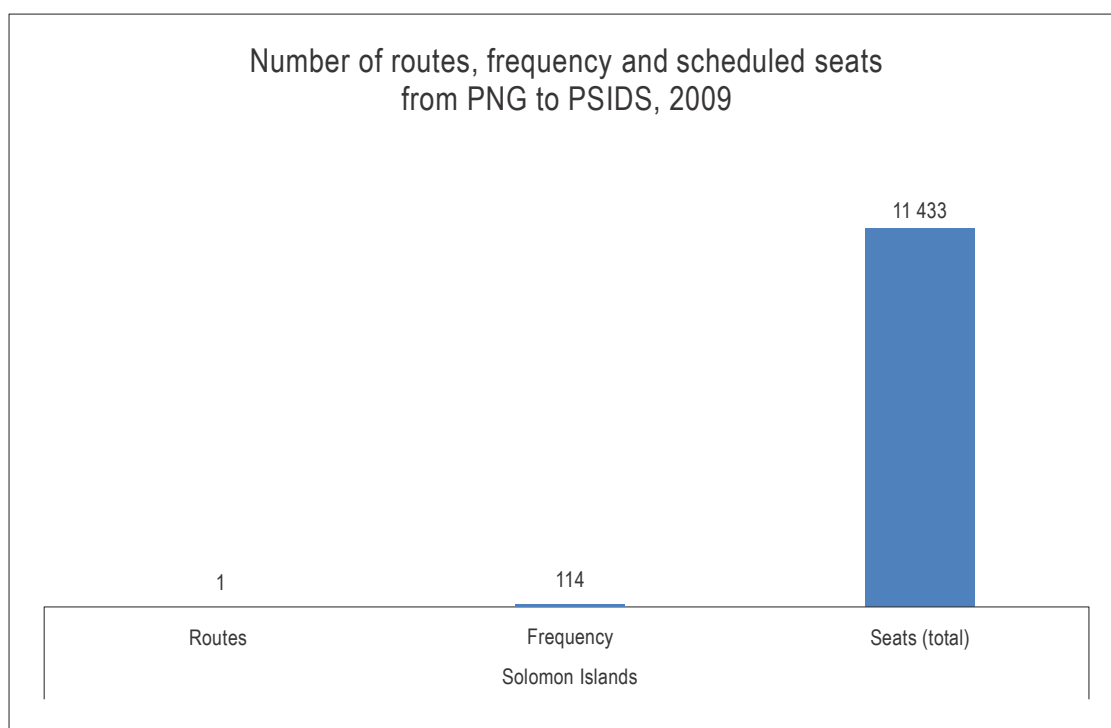


Figure A-53. Number of routes, frequency and scheduled seats from PNG to PSIDS, 2009

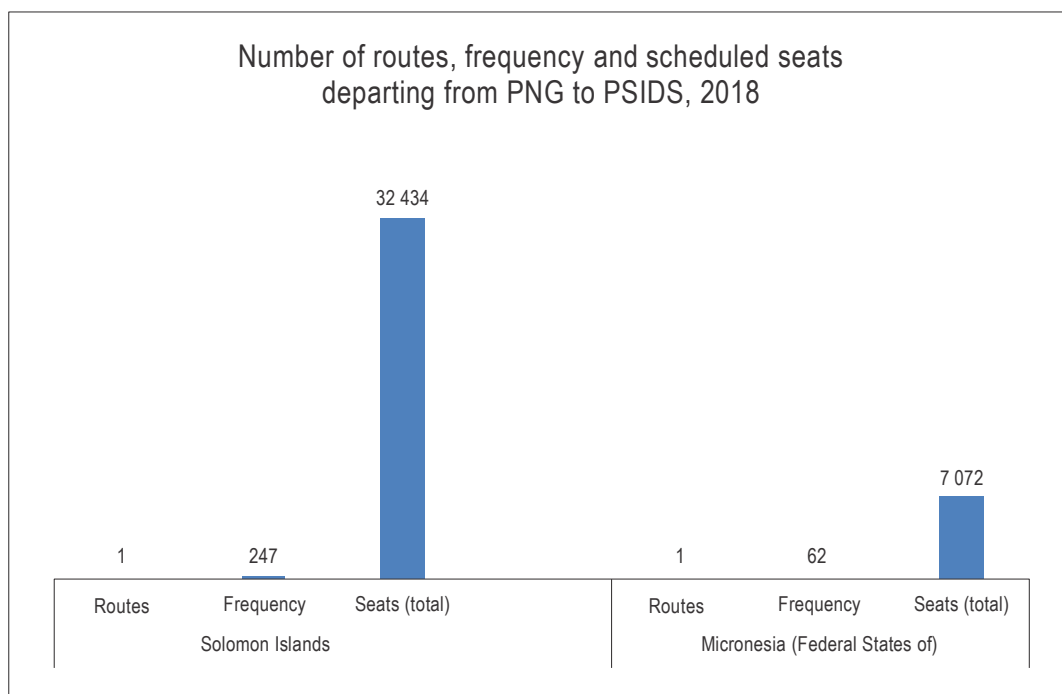


Figure A-54. Number of routes, frequency and scheduled seats departing from PNG to PSIDS, 2018

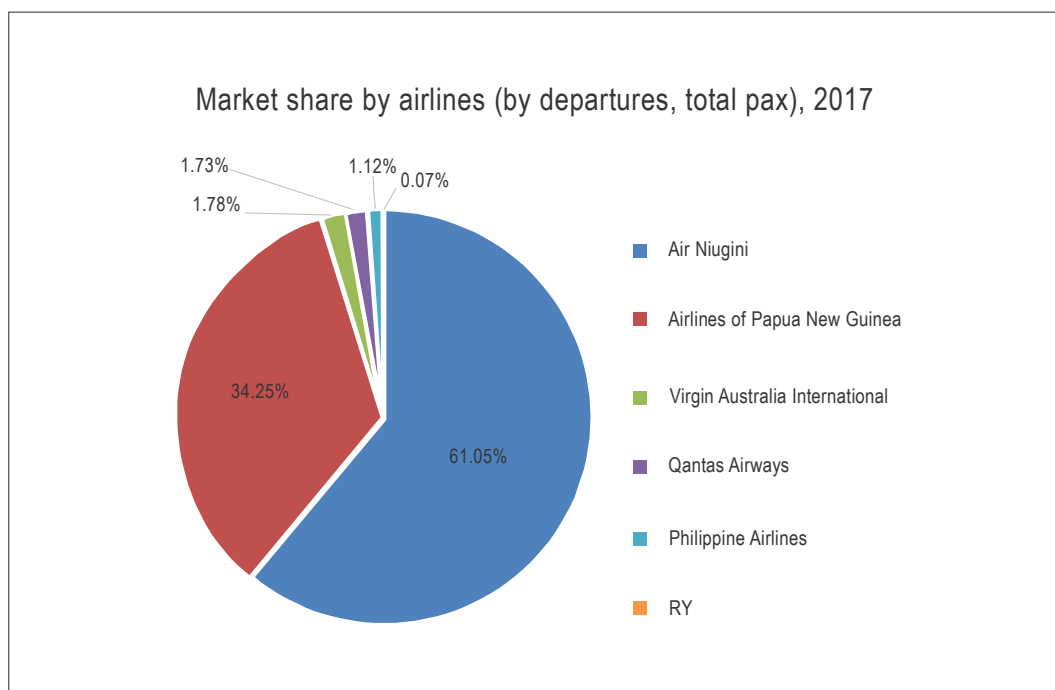


Figure A-55. Market share by airlines (by departures, total pax), 2017

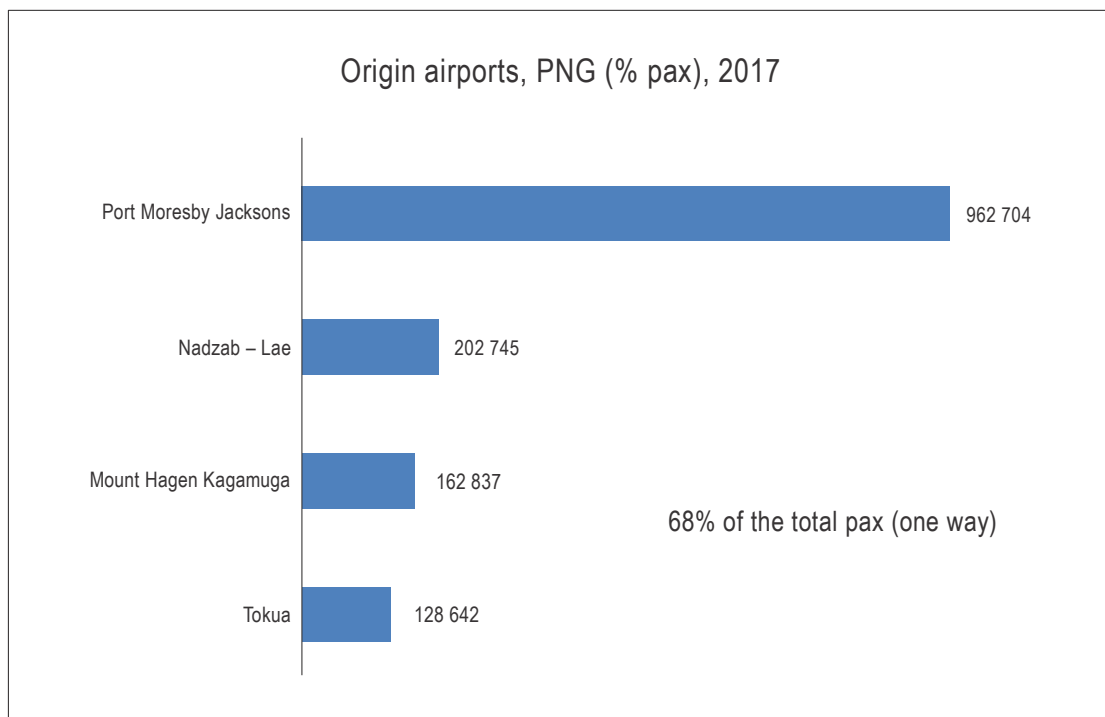


Figure A-56. Origin airports, PNG (% pax), 2017

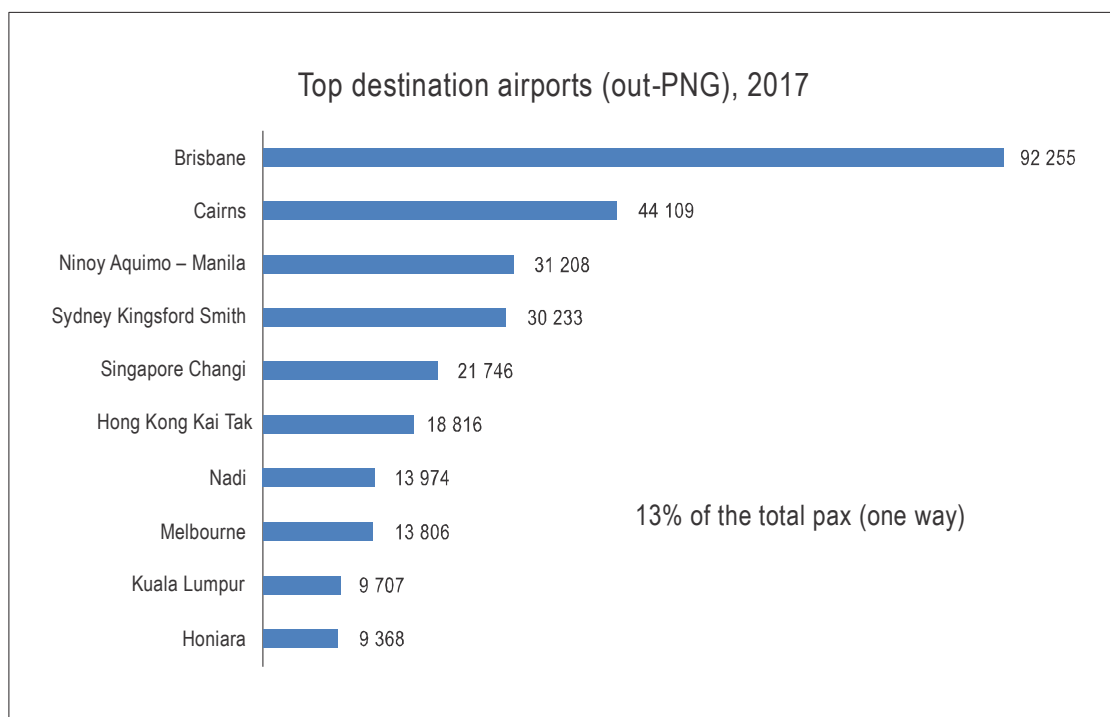


Figure A-57. Top destination airports (out-PNG), 2017

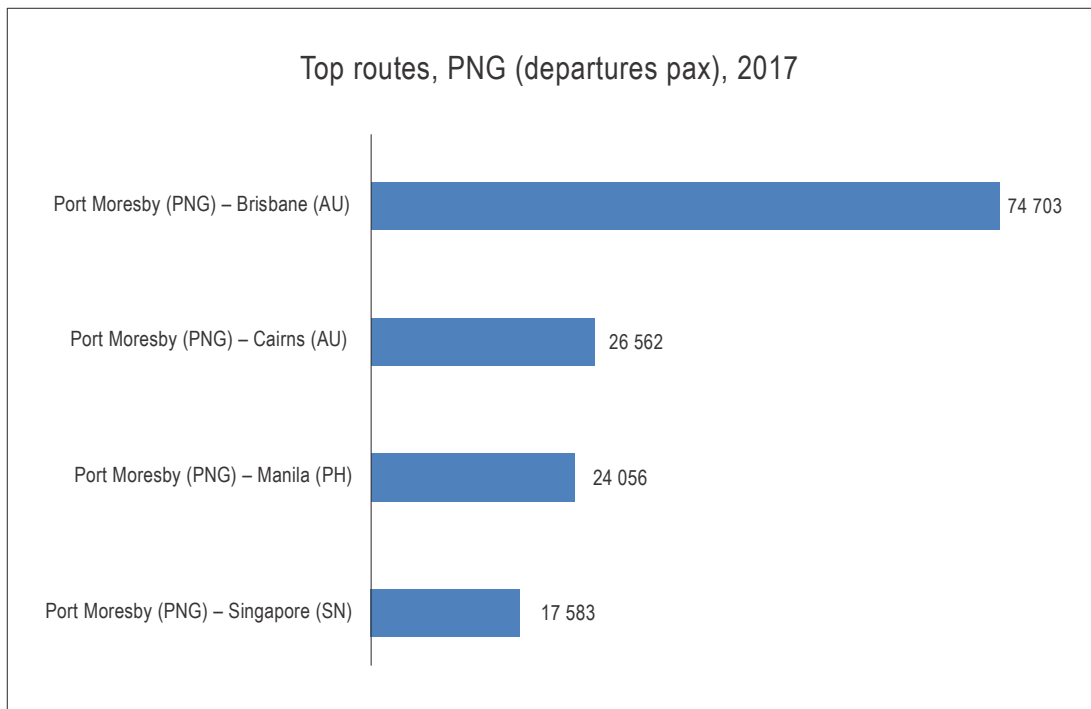


Figure A-58. Top routes, PNG (departures pax), 2017

10. Samoa

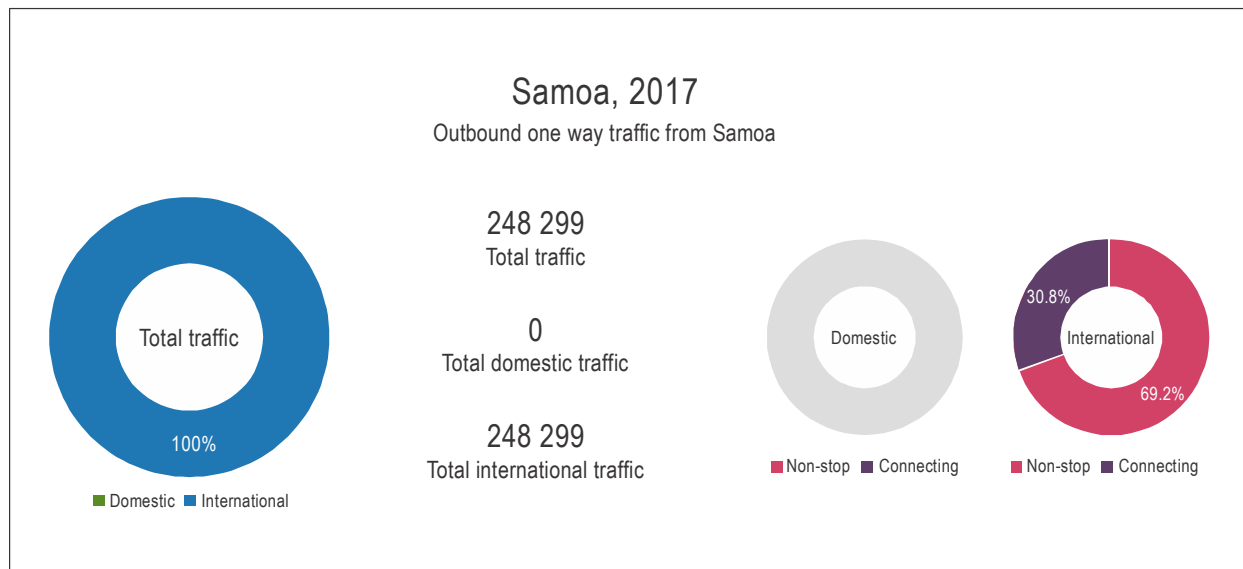


Figure A-59. Outbound one way traffic from Samoa

Table A-10. Scheduled flights from Samoa, 2009 vs. 2018

<i>Scheduled flights from Samoa, 2009 vs. 2018</i>		
	<i>2009</i>	<i>2018</i>
Number of direct routes intra-PSIDS	2	2
<i>PSIDS served</i>	Tonga Fiji	Tonga Fiji
<i>Total frequency (year)</i>	179	402
Number of direct routes to States or territories other than PSIDS served	6	6
<i>Total frequency (year)</i>	1 516	2 097
<i>States or territories other than PSIDS served</i>	American Samoa New Zealand Australia United States	American Samoa New Zealand Australia United States
Domestic routes	2	0
<i>Total frequency (year)</i>	171	0
Total routes	10	8

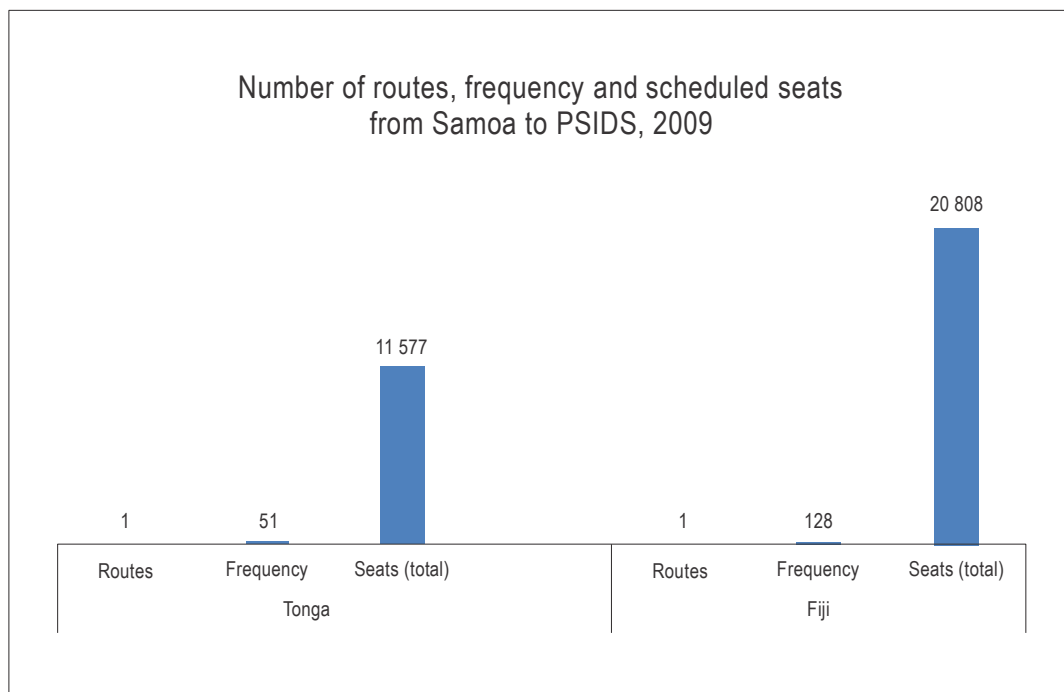


Figure A-60. Number of routes, frequency and scheduled seats from Samoa to PSIDS, 2009

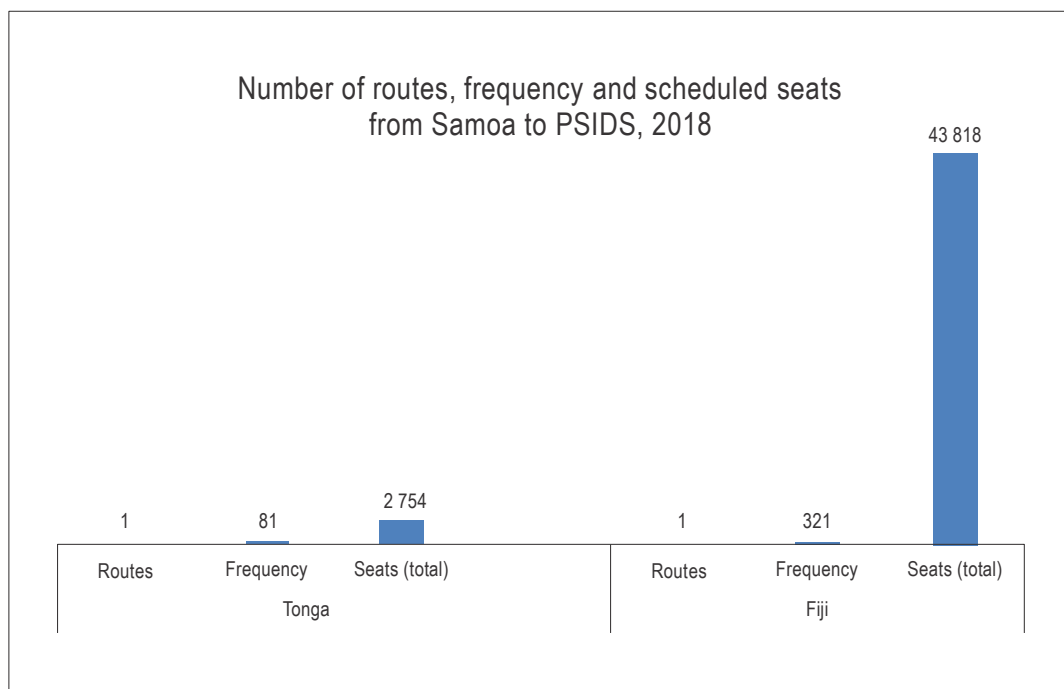


Figure A-61. Number of routes, frequency and scheduled seats from Samoa to PSIDS, 2018

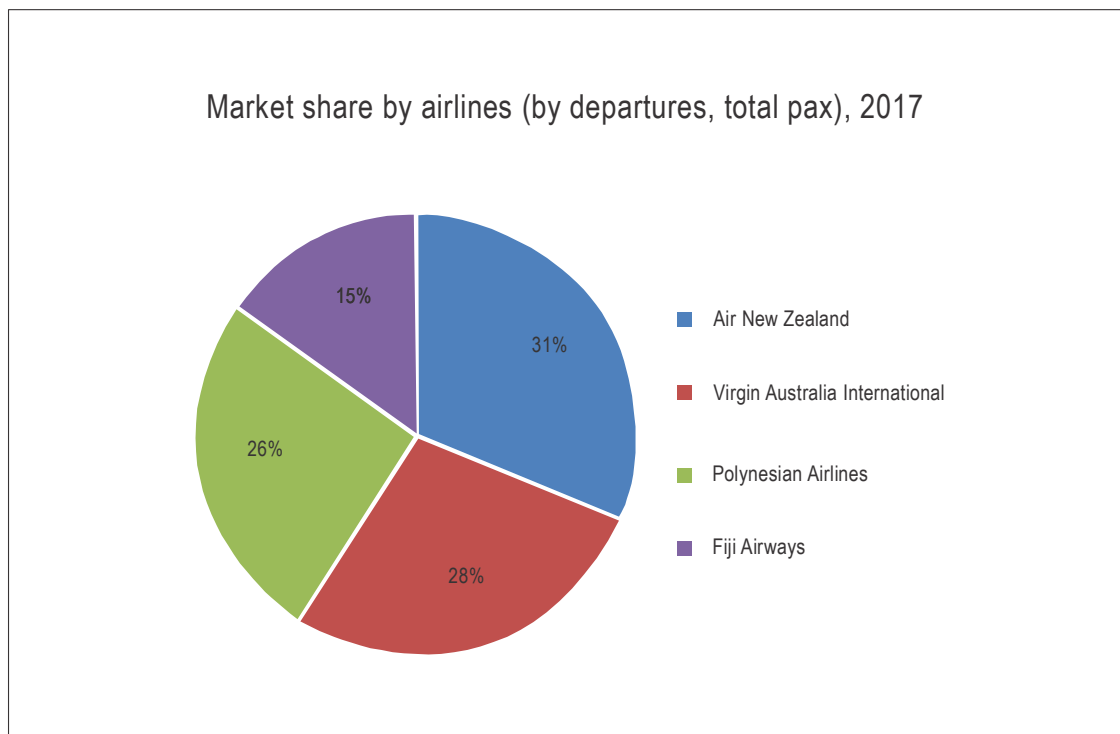


Figure A-62. Market share by airlines (by departures, total pax), 2017

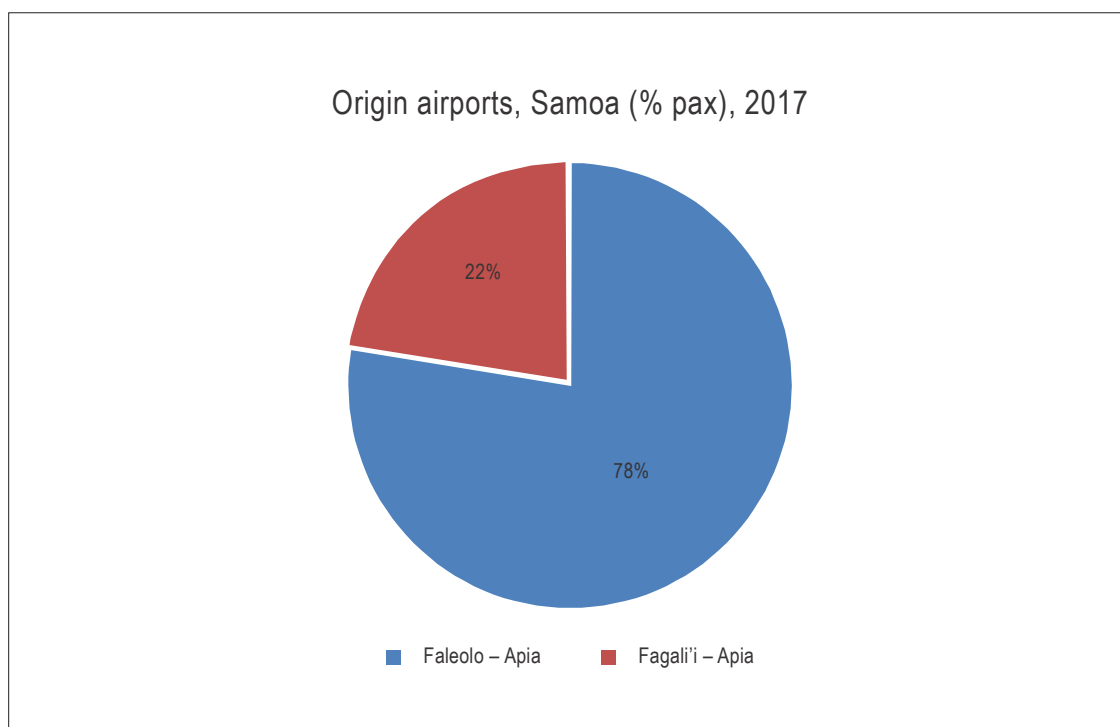


Figure A-63. Origin airports, Samoa (% pax), 2017

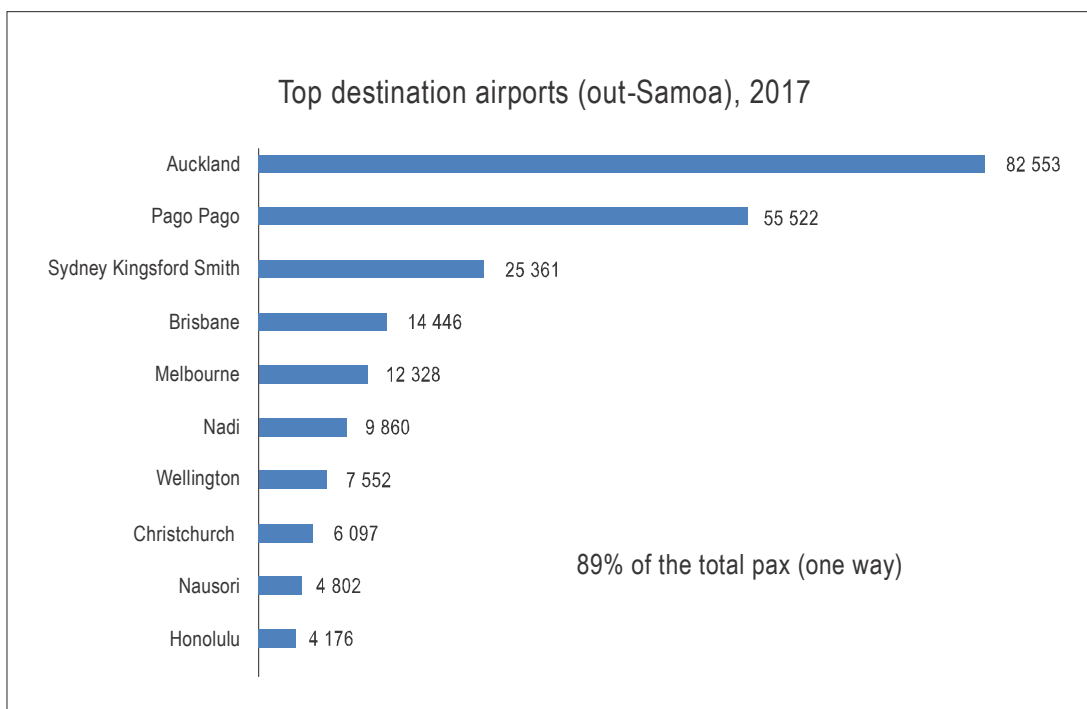


Figure A-64. Top destination airports (out-Samoa), 2017

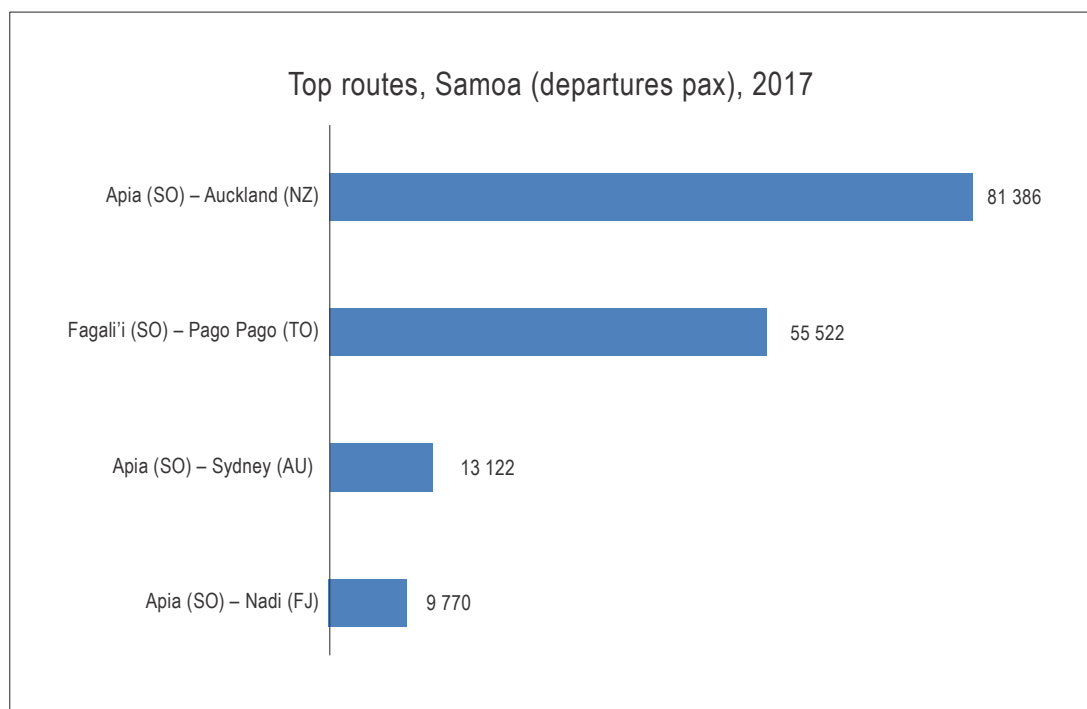


Figure A-65. Top routes, Samoa (departures pax), 2017

11. Solomon Islands

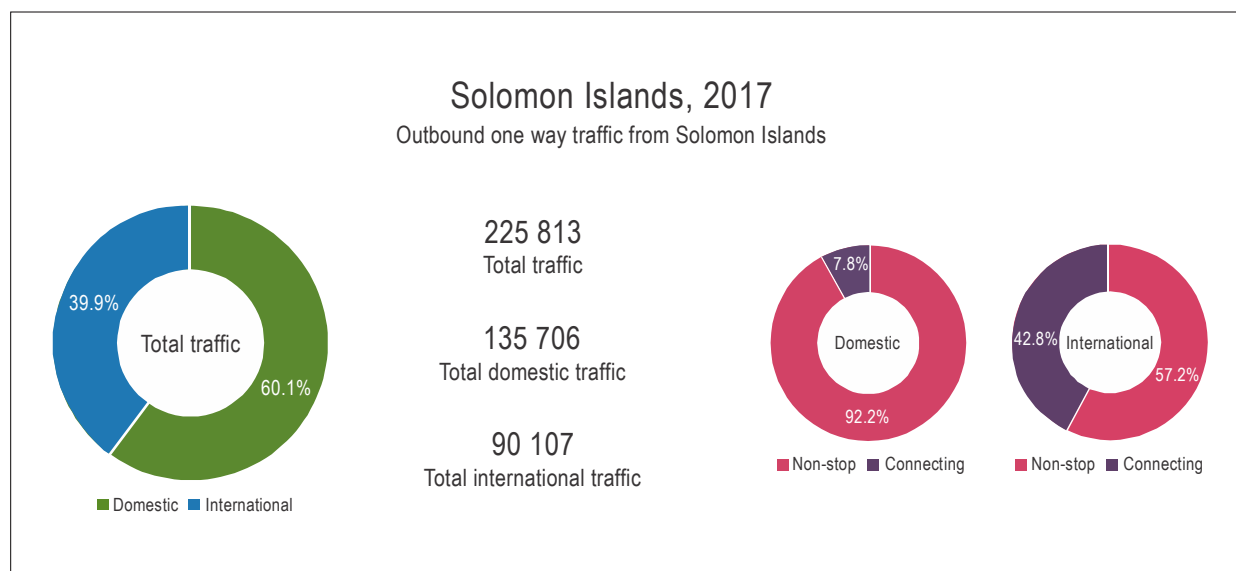


Figure A-66. Outbound one way traffic from Solomon Islands

Table A-11. Scheduled flights from Solomon Islands, 2009 vs. 2018

Scheduled flights from Solomon Islands, 2009 vs. 2018		
	2009	2018
Number of direct routes intra-PSIDS	4	5
<i>PSIDS served</i>	PNG Fiji Vanuatu Nauru	PNG Fiji Vanuatu Nauru Kiribati
<i>Total frequency (year)</i>	402	708
Number of direct routes to States or territories other than PSIDS served	1	1
<i>Total frequency (year)</i>	388	385
<i>States or territories other than PSIDS served</i>	Australia	Australia
Domestic routes	99	95
<i>Total frequency (year)</i>	7 687	9 683
Total routes	104	101

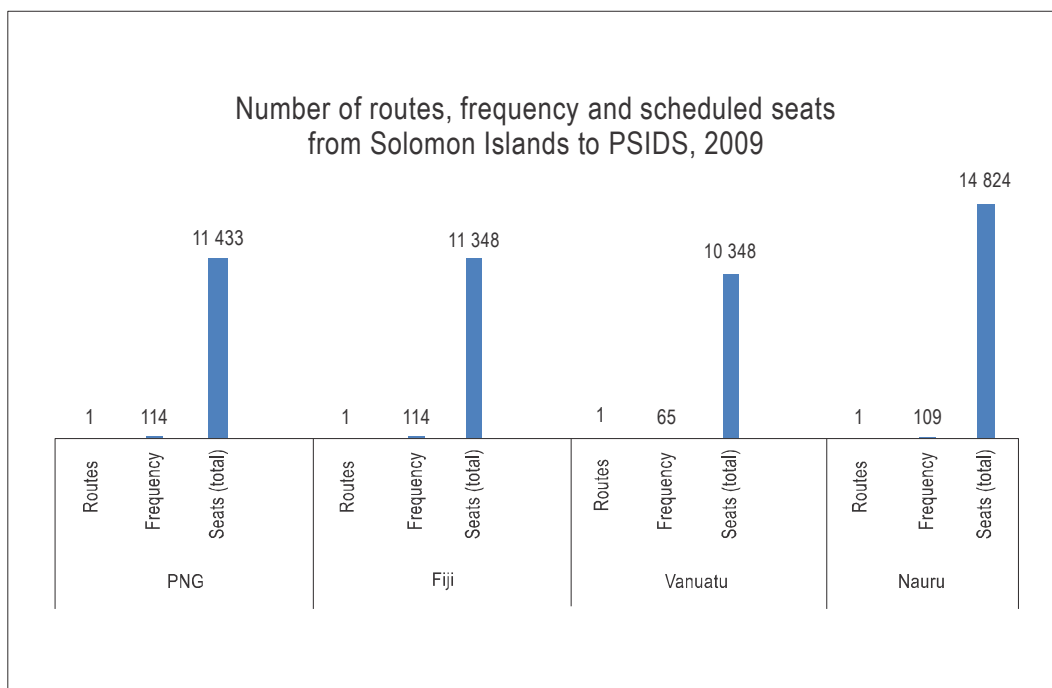


**Figure A-67. Number of routes, frequency and scheduled seats
from Solomon Islands to PSIDS, 2009**

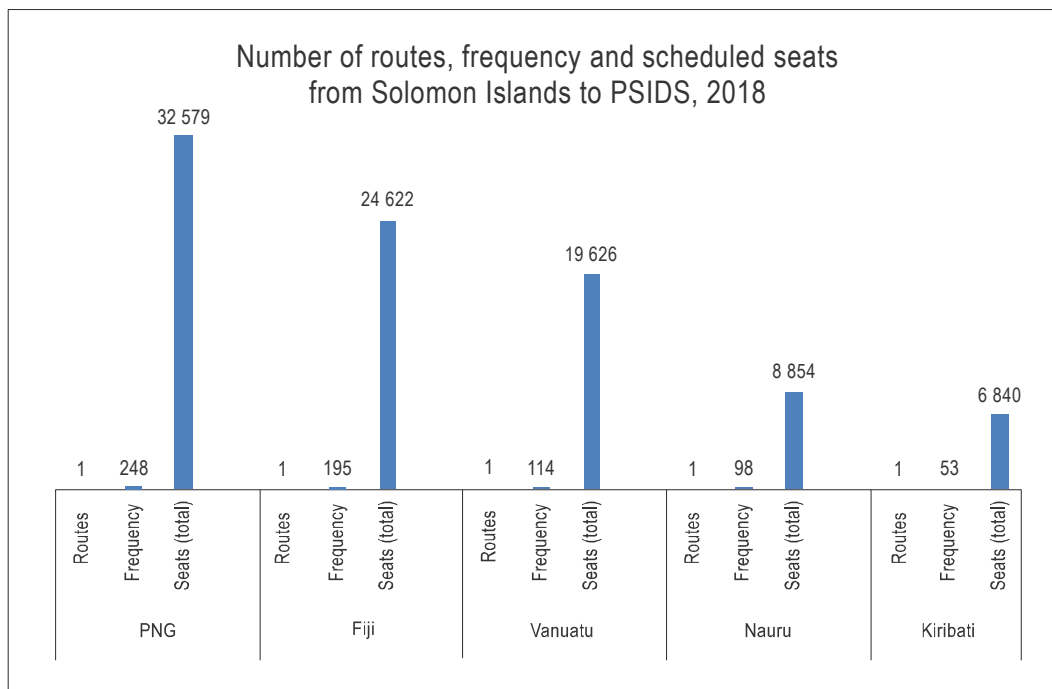


**Figure A-68. Number of routes, frequency and scheduled seats
from Solomon Islands to PSIDS, 2018**

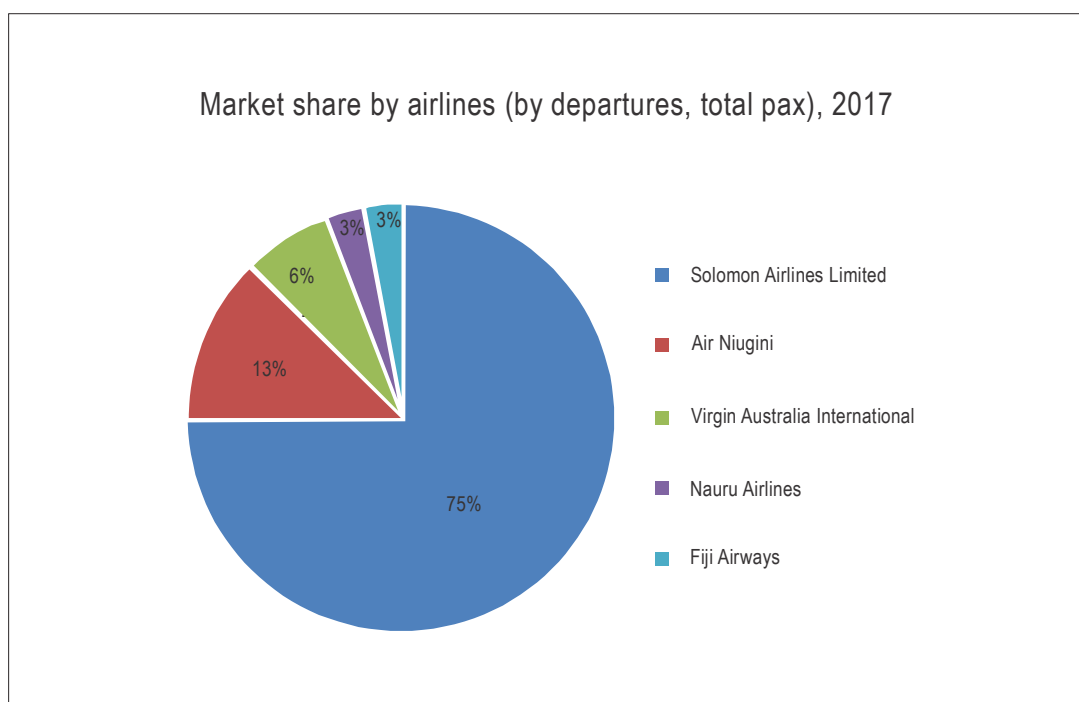


Figure A-69. Market share by airlines (by departures, total pax), 2017

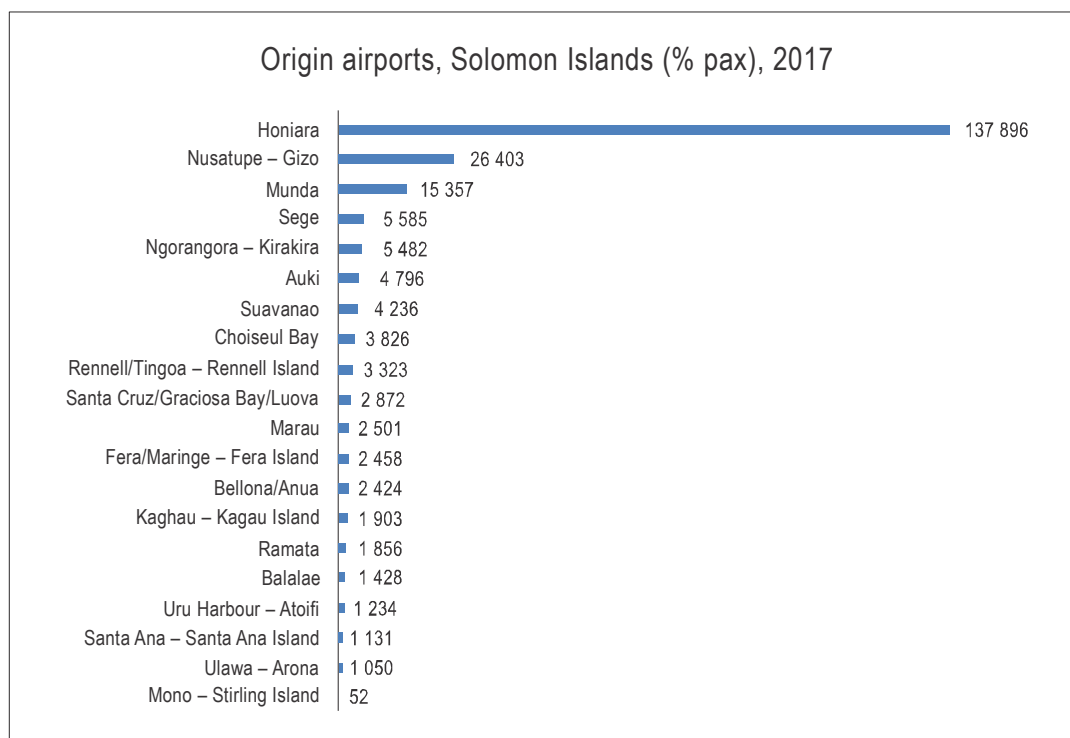


Figure A-70. Origin airports, Solomon Islands (% pax), 2017

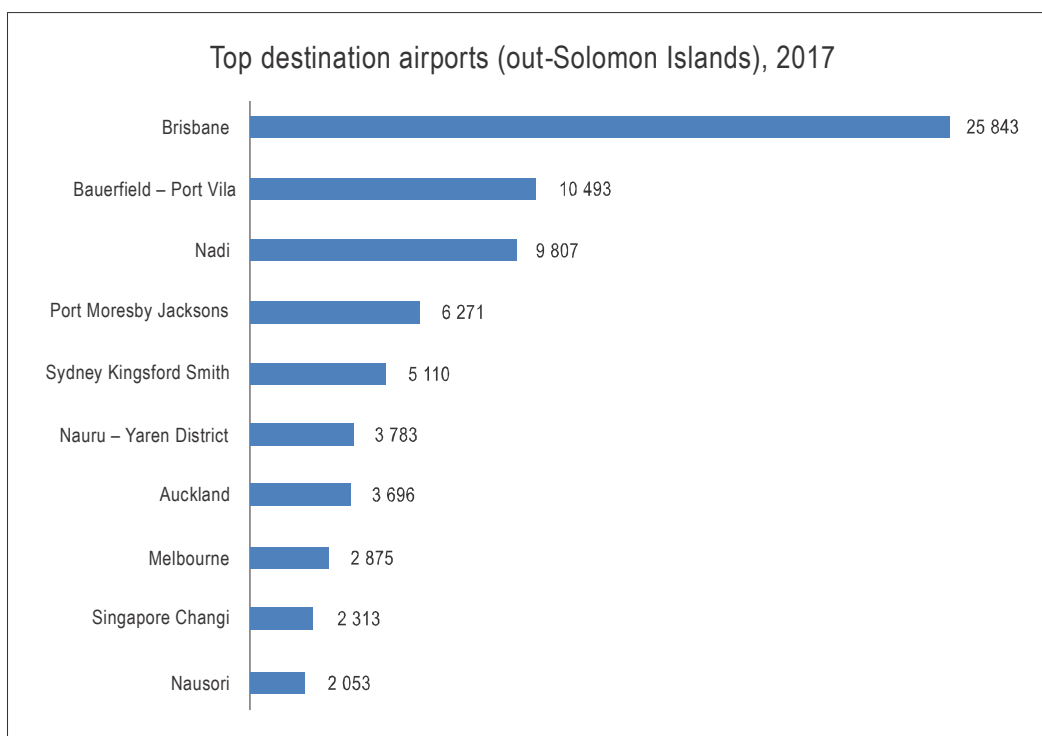


Figure A-71. Top destination airports (out-Solomon Islands), 2017

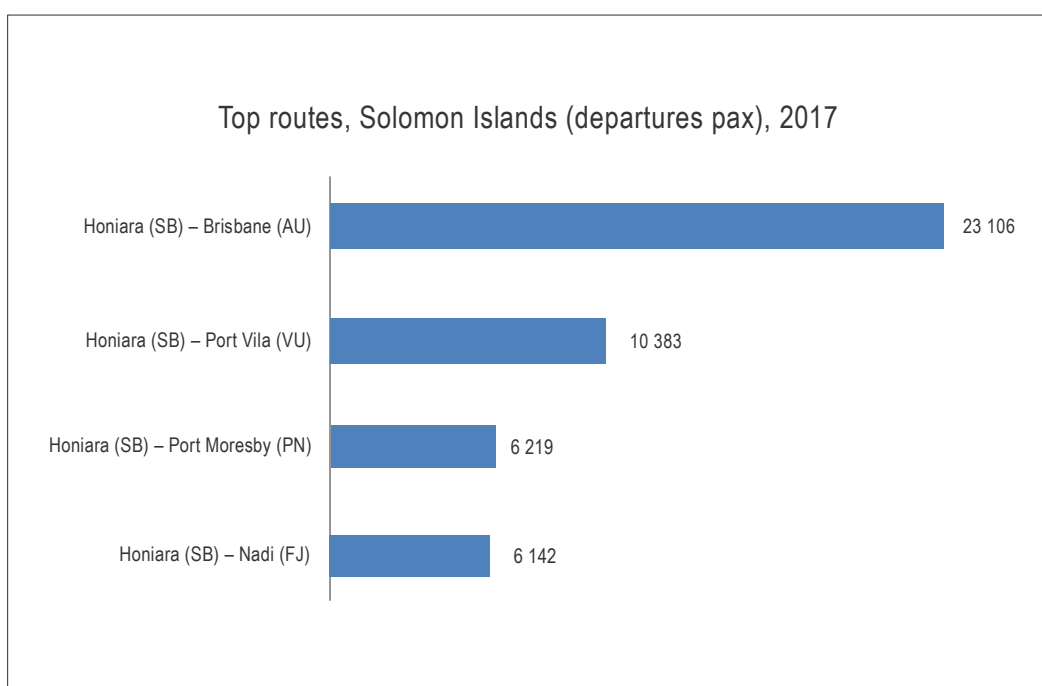


Figure A-72. Top routes, Solomon Islands (departures pax), 2017

12. Tonga

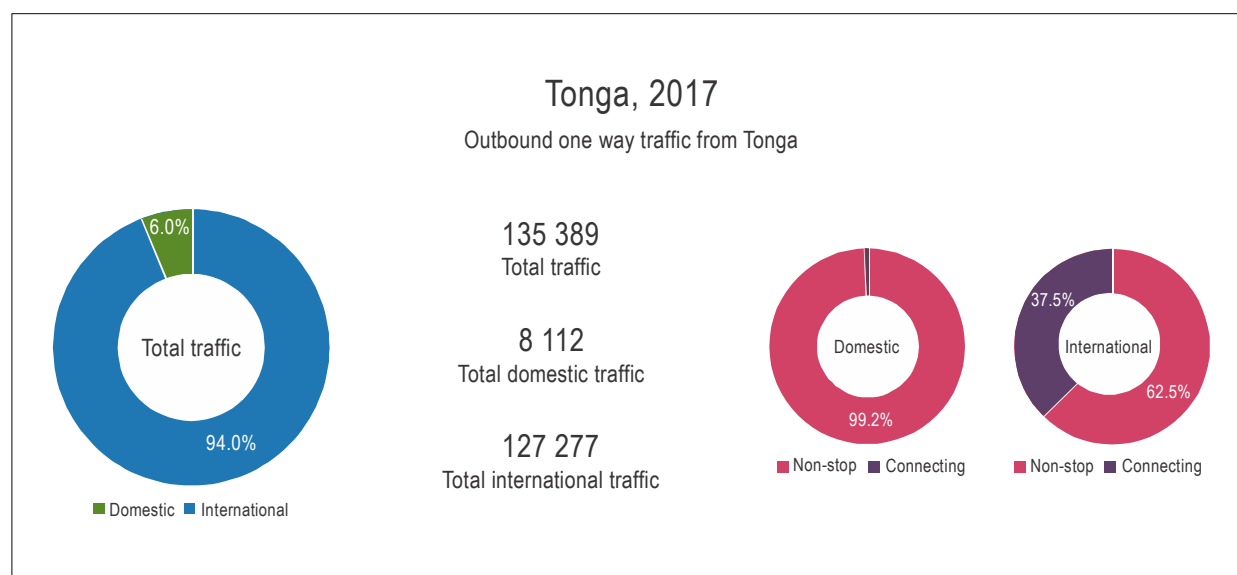


Figure A-73. Outbound one way traffic from Tonga

Table A-12. Scheduled flights from Tonga, 2009 vs. 2018

Scheduled flights from Tonga, 2009 vs. 2018		
	2009	2018
Number of direct routes intra-PSIDS	3	3
<i>PSIDS served</i>	Fiji Samoa	Fiji Samoa
<i>Total frequency (year)</i>	268	503
Number of direct routes to States or territories other than PSIDS served	2	2
<i>Total frequency (year)</i>	466	542
<i>States or territories other than PSIDS served</i>	Australia New Zealand	Australia New Zealand
Domestic routes	12	12
<i>Total frequency (year)</i>	2 371	2 496
Total routes	17	17

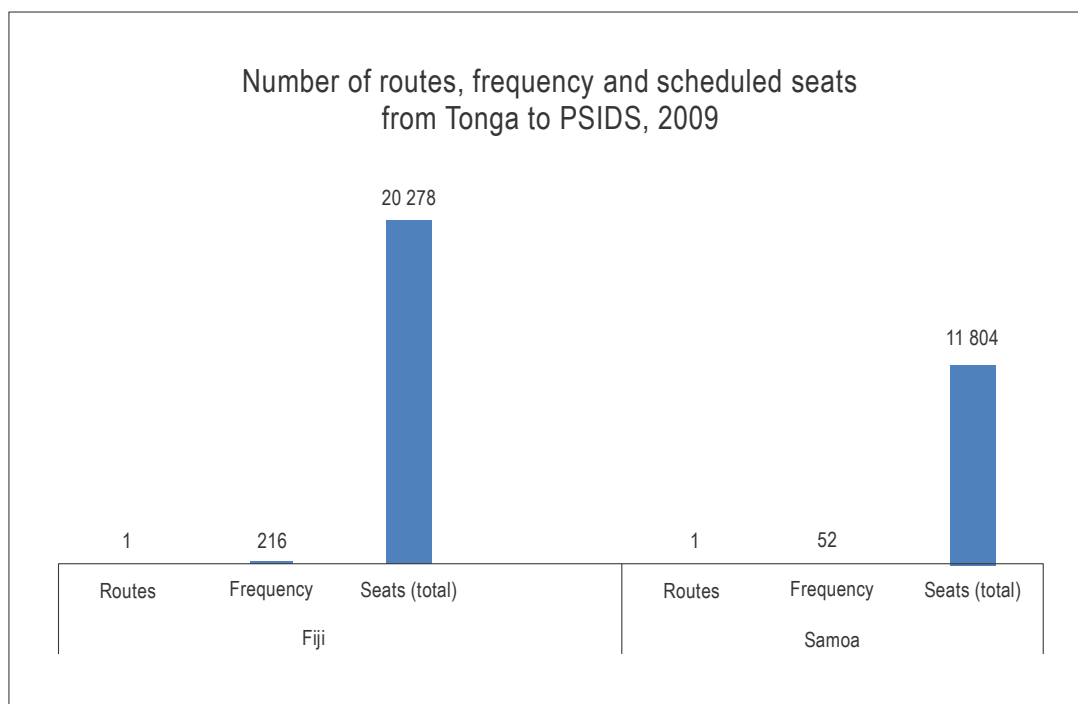


Figure A-74. Number of routes, frequency and scheduled seats from Tonga to PSIDS, 2009

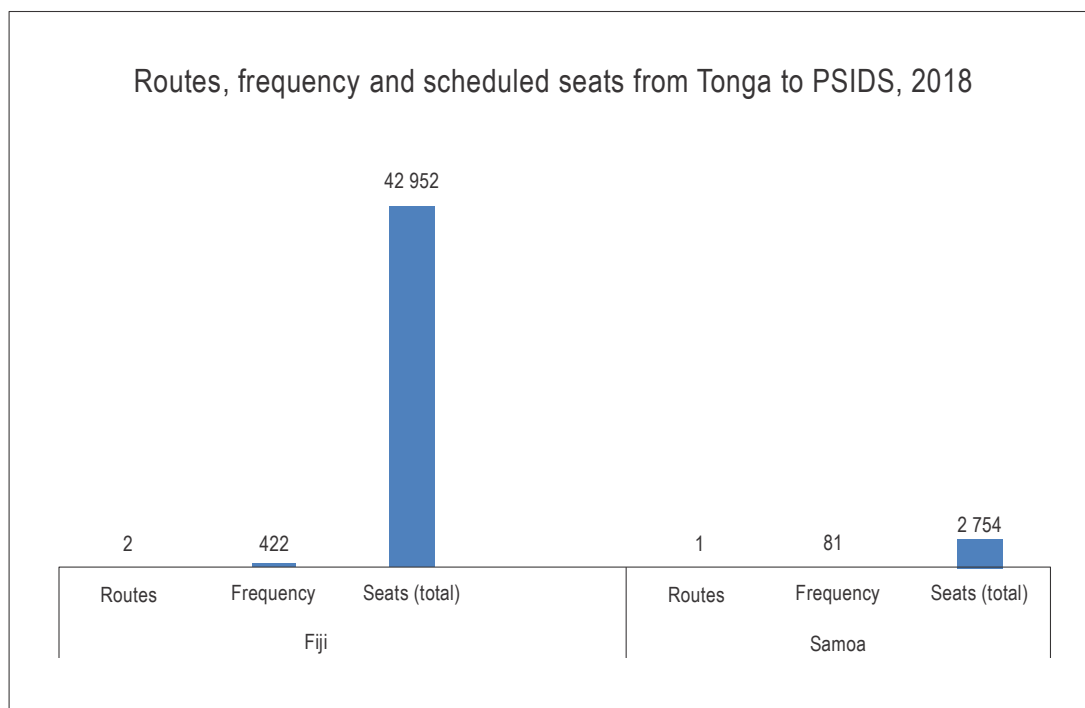


Figure A-75. Routes, frequency and scheduled seats from Tonga to PSIDS, 2018

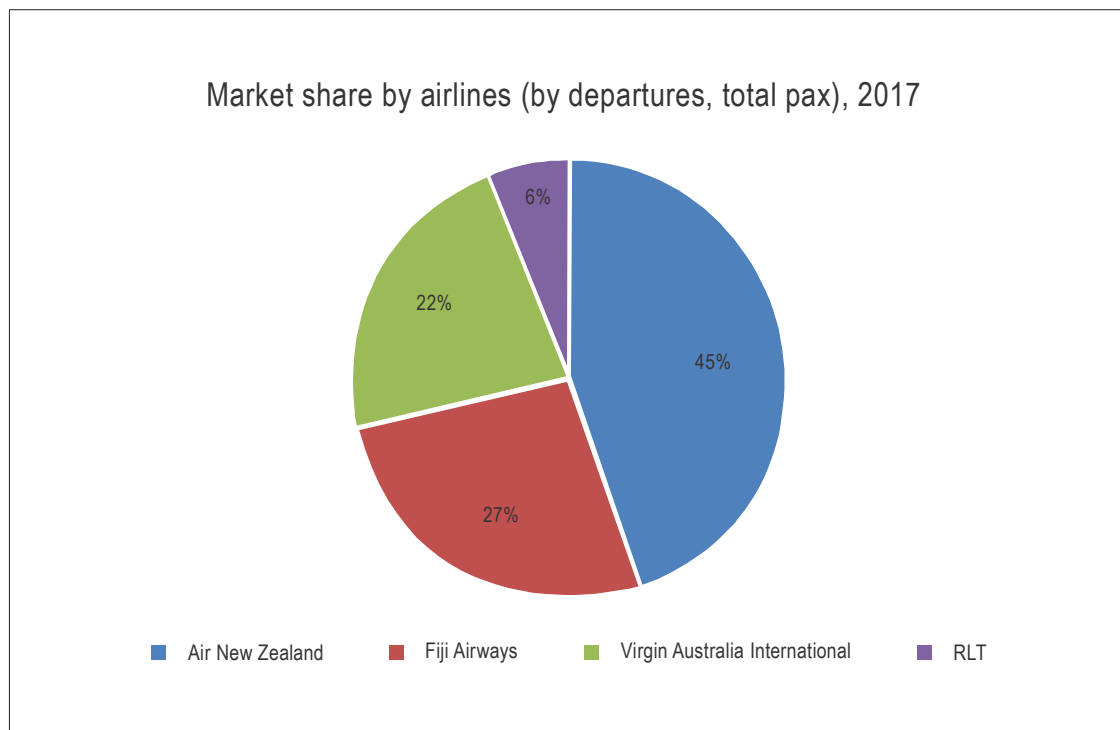


Figure A-76. Market share by airlines (by departures, total pax), 2017

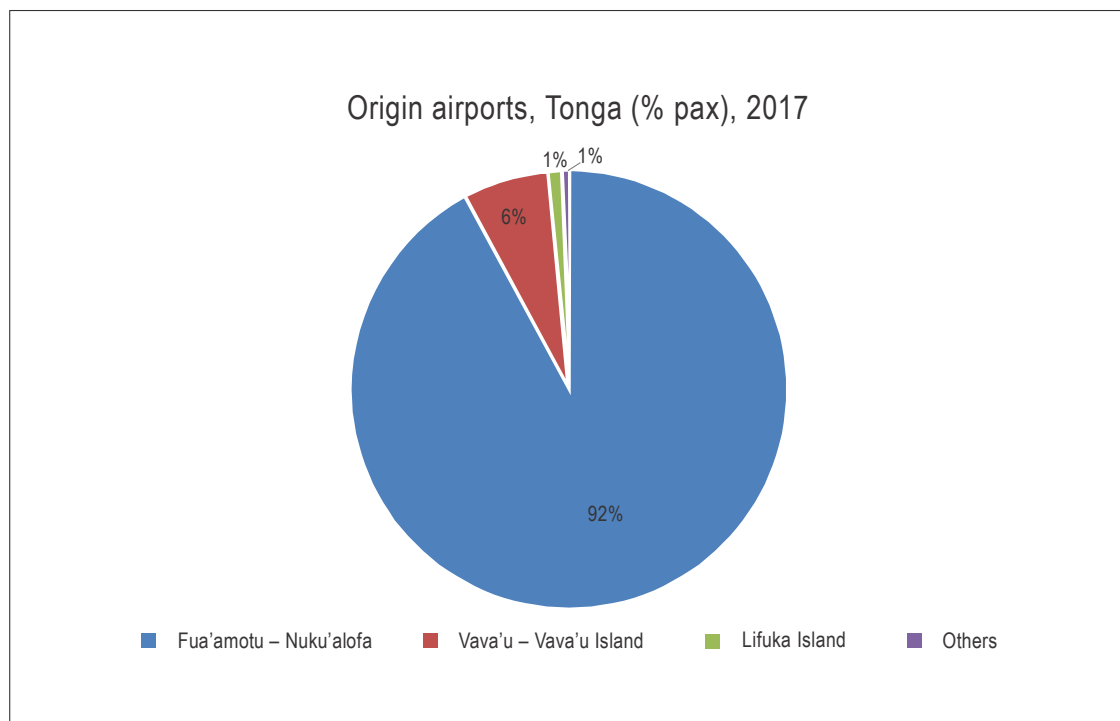


Figure A-77. Origin airports, Tonga (% pax), 2017

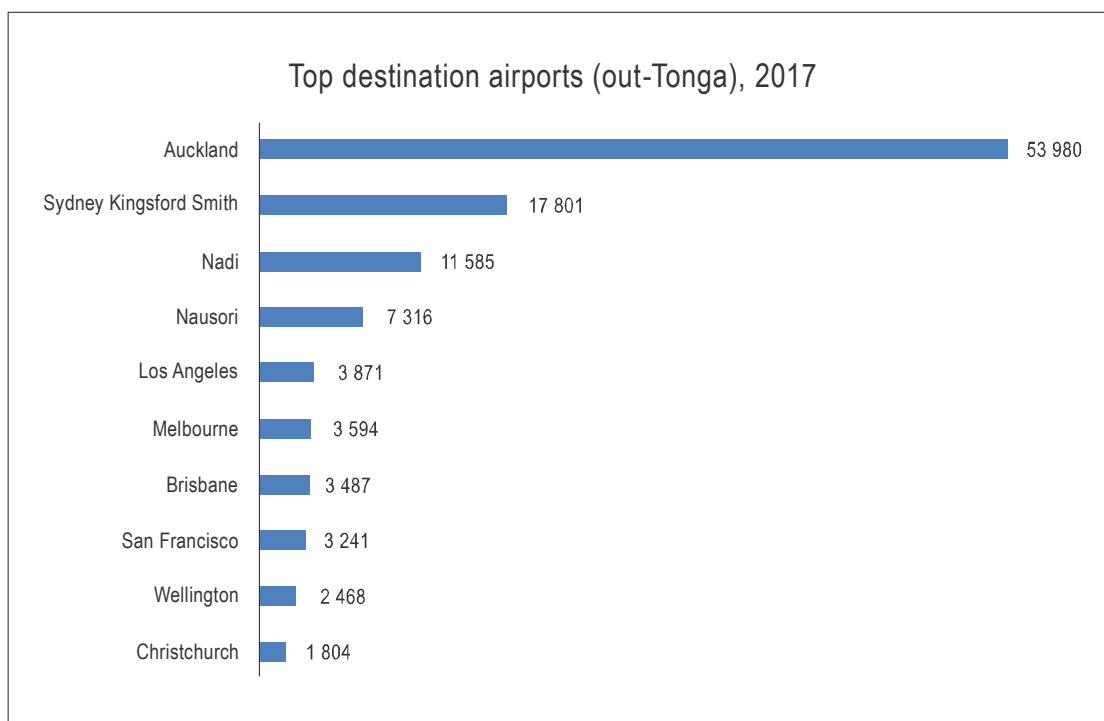


Figure A-78. Top destination airports (out-Tonga), 2017

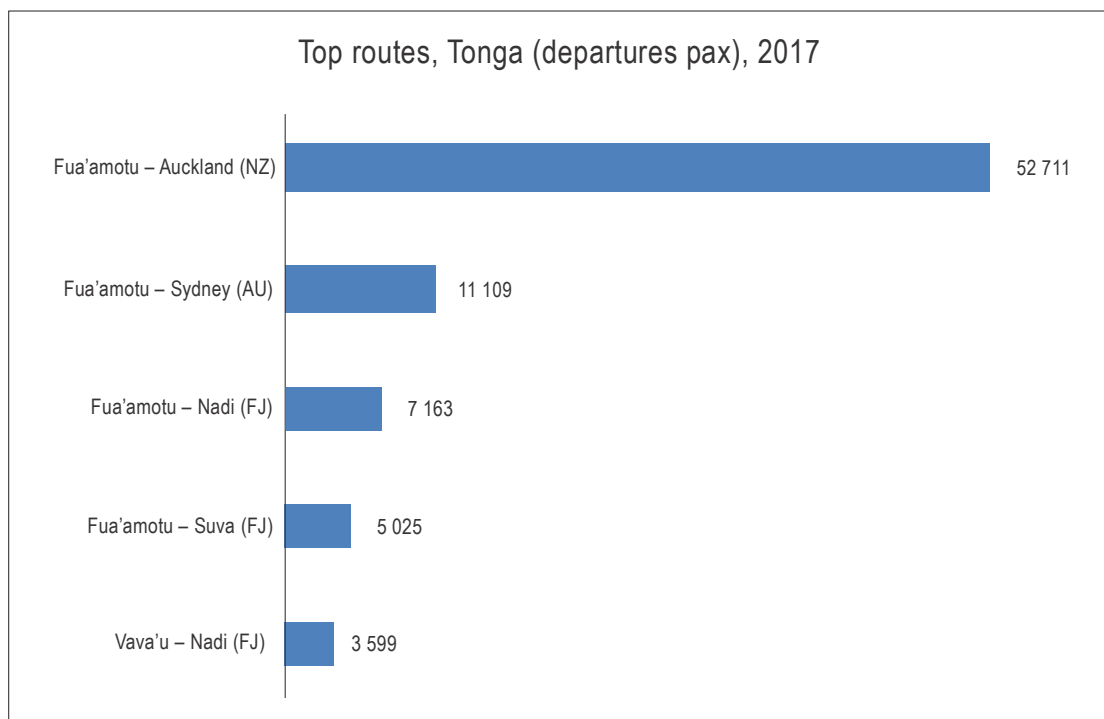


Figure A-79. Top routes, Tonga (departures pax), 2017

13. Tuvalu

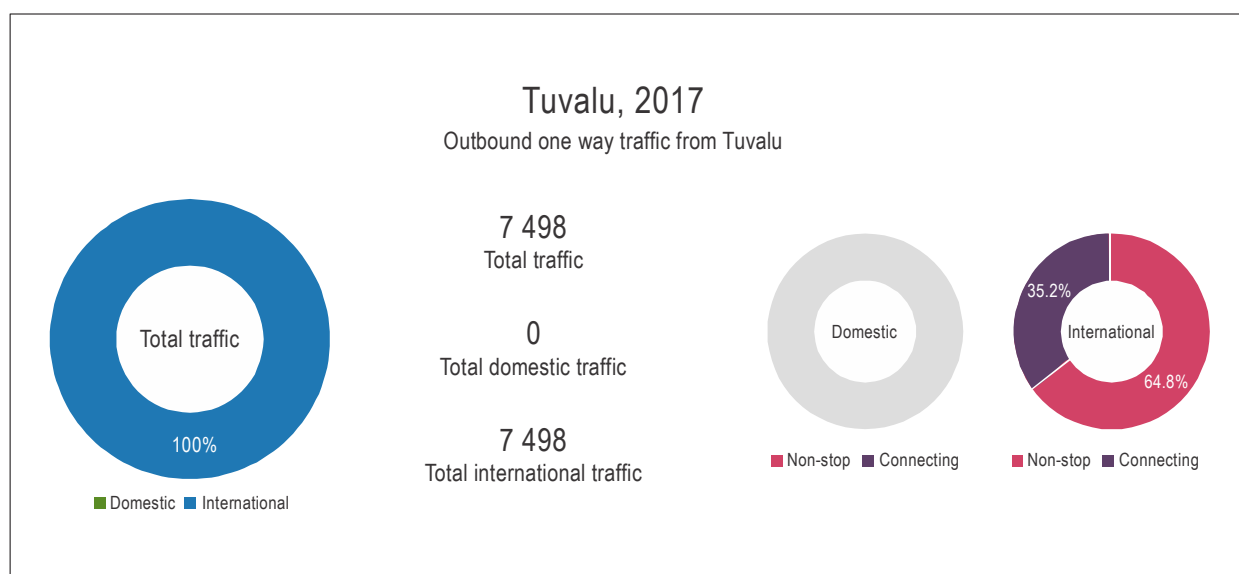


Figure A-80. Outbound one way traffic from Tuvalu

Table A-13. Scheduled flights from Tuvalu, 2009 vs. 2018

<i>Scheduled flights from Tuvalu, 2009 vs. 2018</i>		
	<i>2009</i>	<i>2018</i>
Number of direct routes intra-PSIDS	1	2
<i>PSIDS served</i>	Fiji	Fiji Kiribati
<i>Total frequency (year)</i>	130	170
Number of direct routes to States or territories other than PSIDS served	0	0
<i>Total frequency (year)</i>	0	0
<i>States or territories other than PSIDS served</i>	0	0
Domestic routes	0	0
<i>Total frequency (year)</i>	0	0
Total routes	1	2

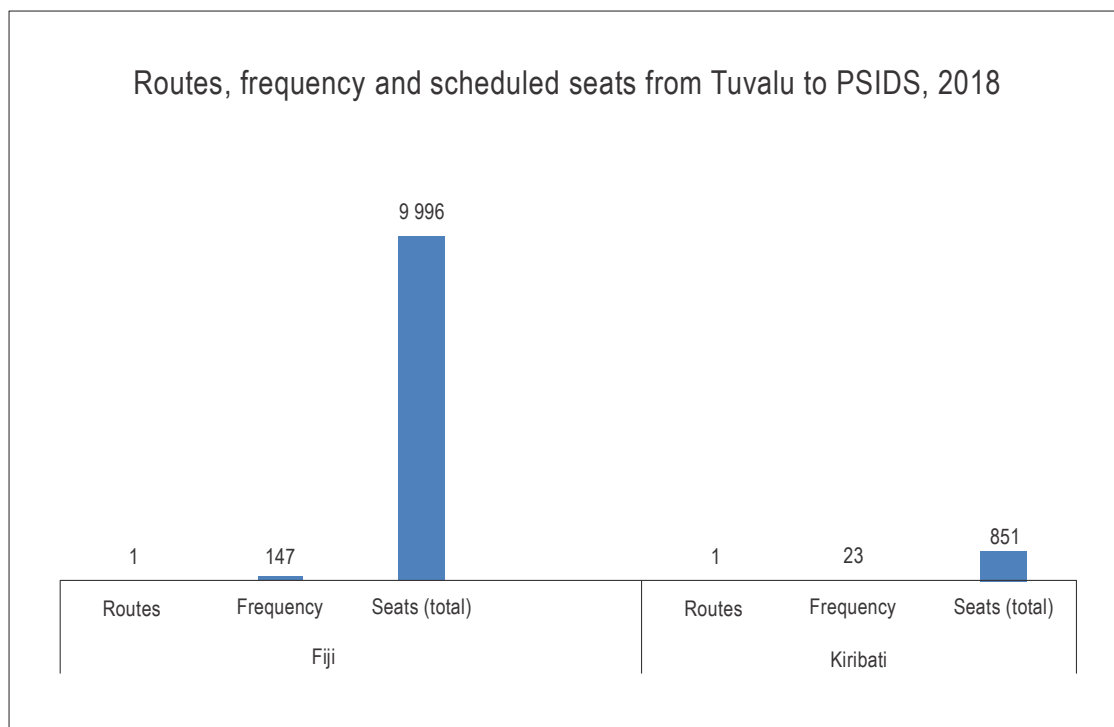


Figure A-81. Routes, frequency and scheduled seats from Tuvalu to PSIDS, 2018

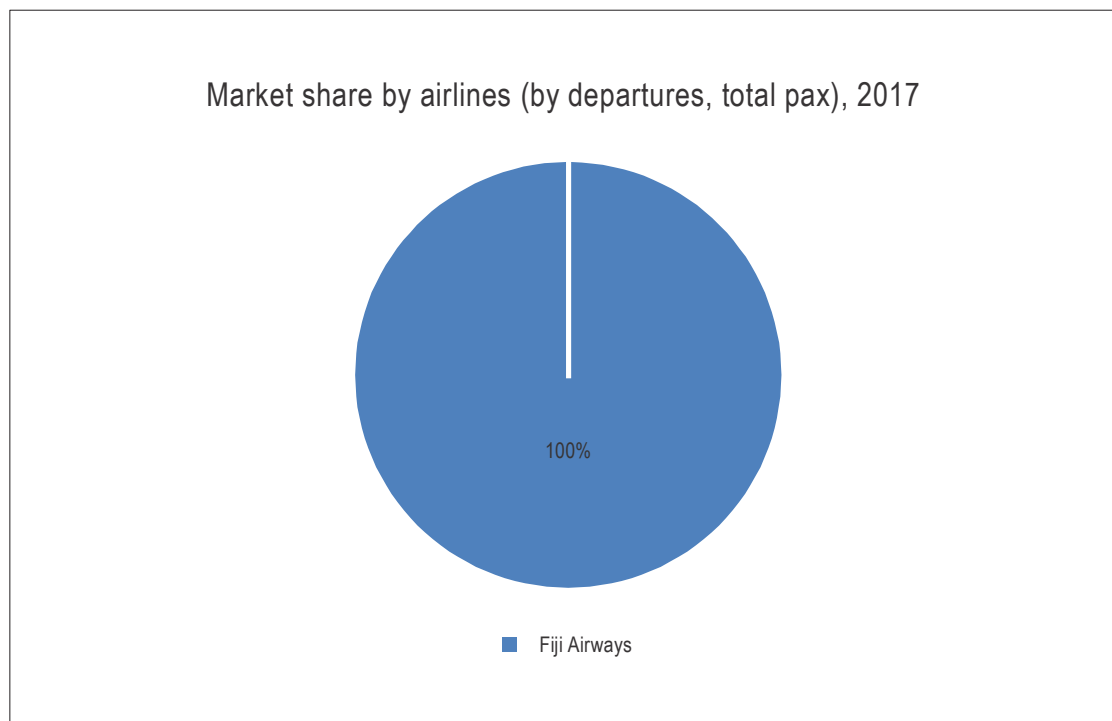
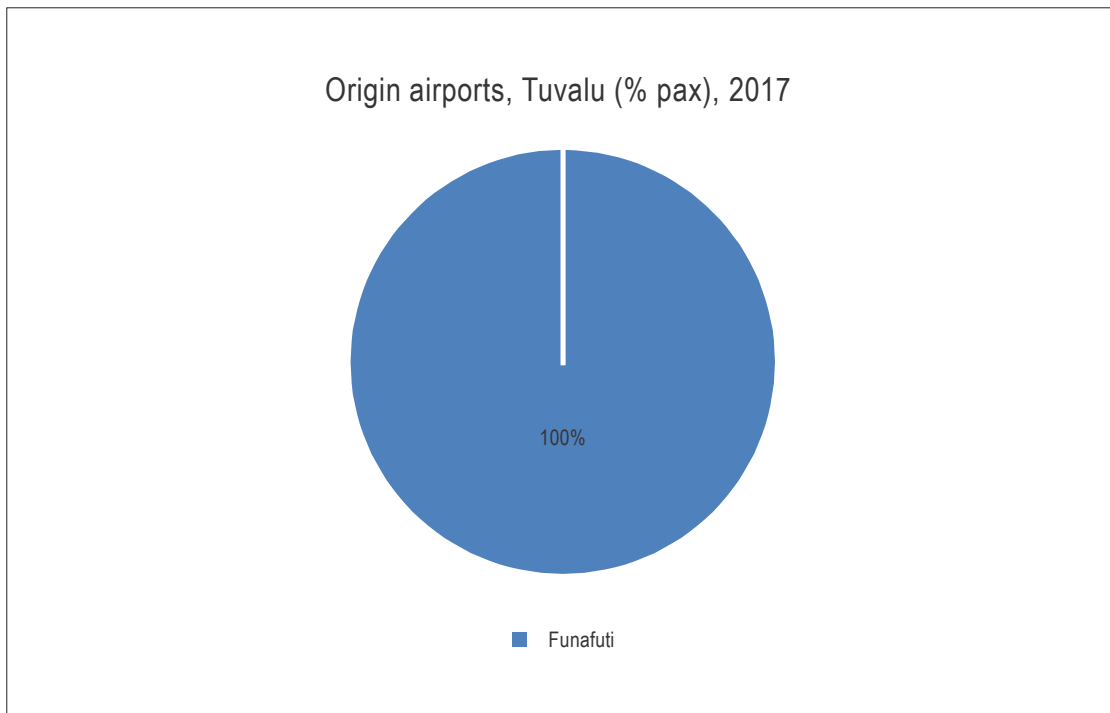
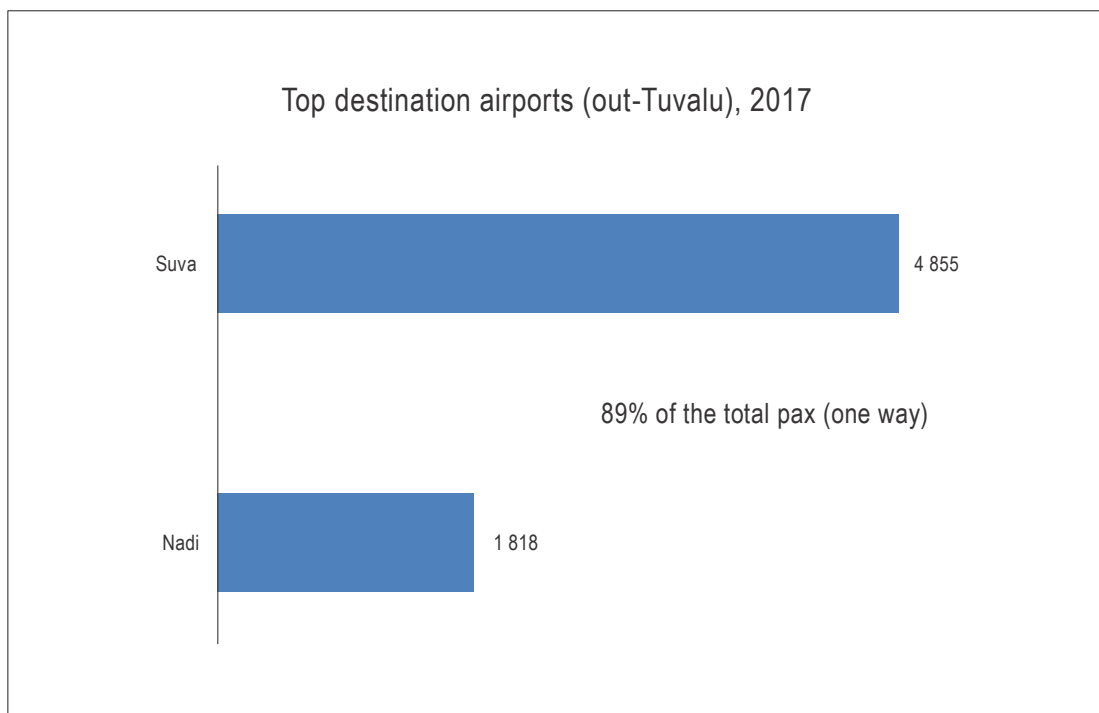


Figure A-82. Market share by airlines (by departures, total pax), 2017

**Figure A-83. Origin airports, Tuvalu (% pax), 2017****Figure A-84. Top destination airports (out-Tuvalu), 2017**

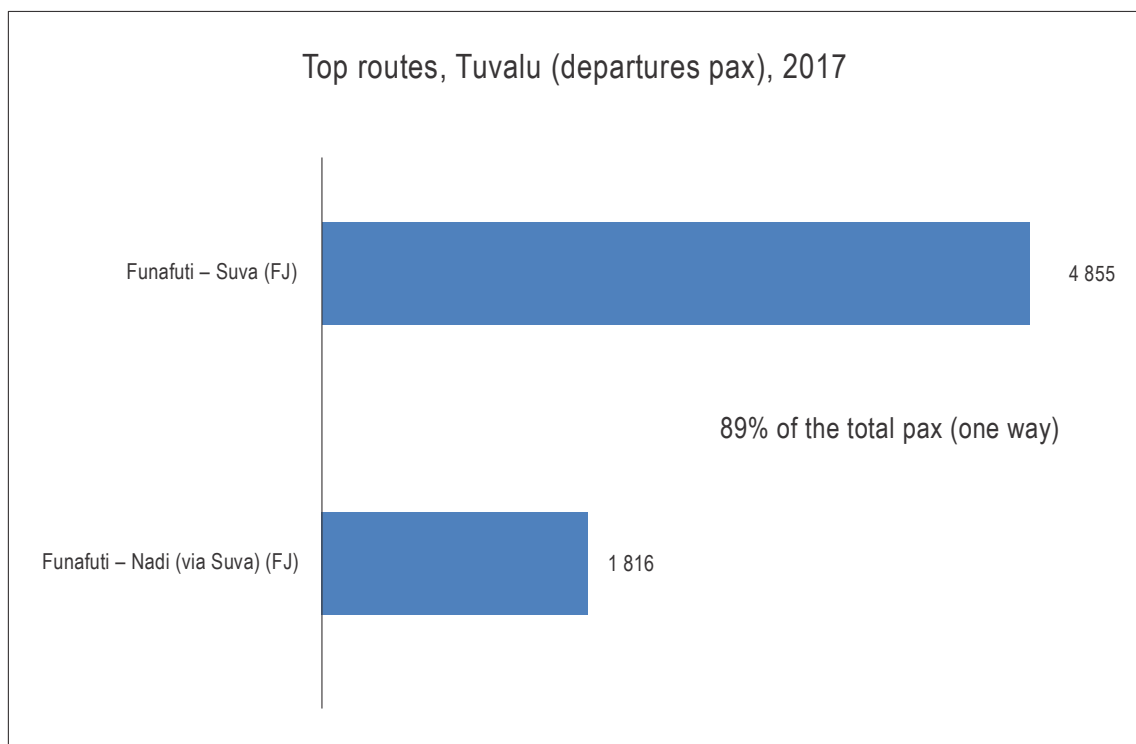


Figure A-85. Top routes, Tuvalu (departures pax), 2017

14. Vanuatu

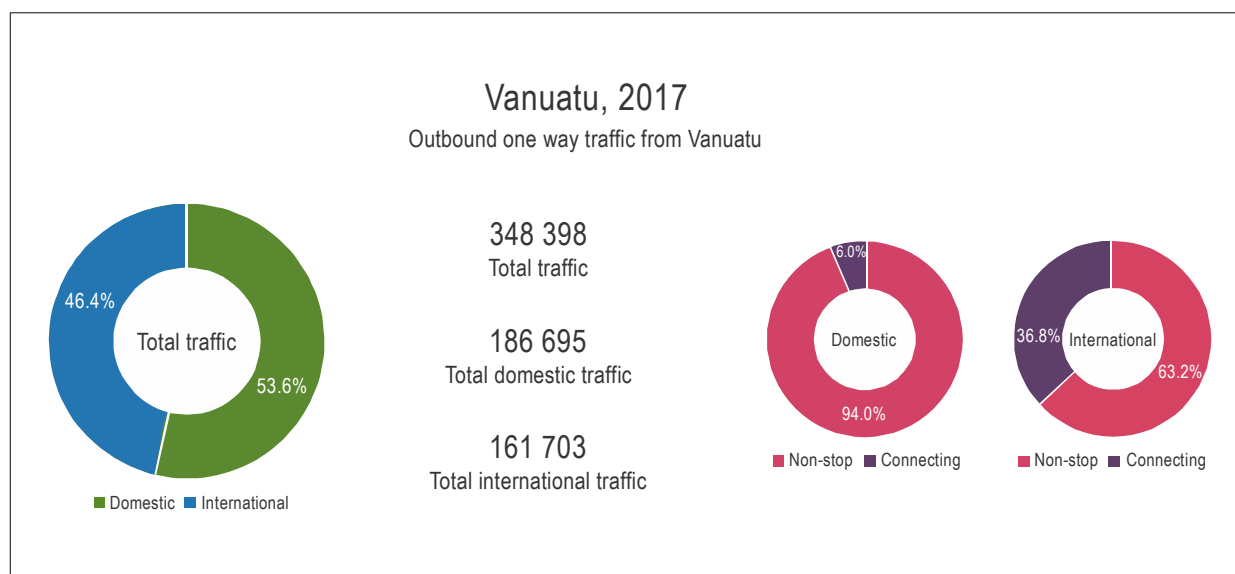


Figure A-86. Outbound one way traffic from Vanuatu

Table A-14. Scheduled flights from Vanuatu, 2009 vs. 2018

<i>Scheduled flights from Vanuatu, 2009 vs. 2018</i>		
	<i>2009</i>	<i>2018</i>
Number of direct routes intra-PSIDS	2	2
<i>PSIDS served</i>	Fiji Solomon Islands	Fiji Solomon Islands
<i>Total frequency (year)</i>	182	461
Number of direct routes to States or territories other than PSIDS served	6	6
<i>Total frequency (year)</i>	1 136	1 196
<i>States or territories other than PSIDS served</i>	Australia New Zealand New Caledonia	Australia New Zealand New Caledonia
Domestic routes	107	105
<i>Total frequency (year)</i>	11 803	10 602
Total routes	115	113

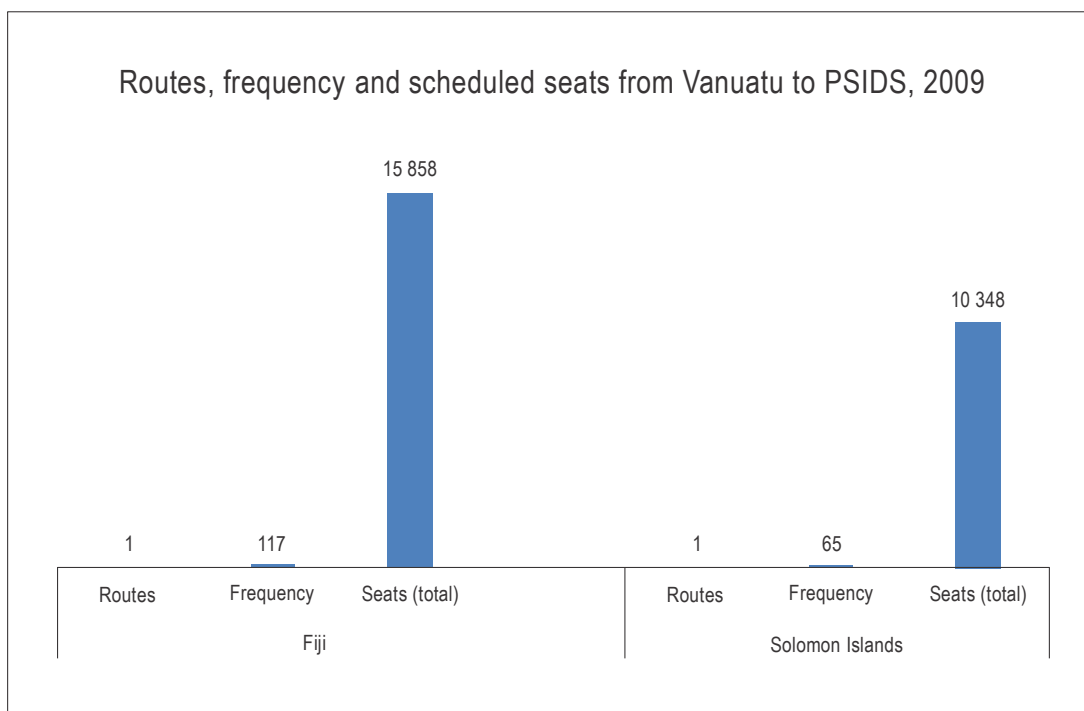


Figure A-87. Routes, frequency and scheduled seats from Vanuatu to PSIDS, 2009

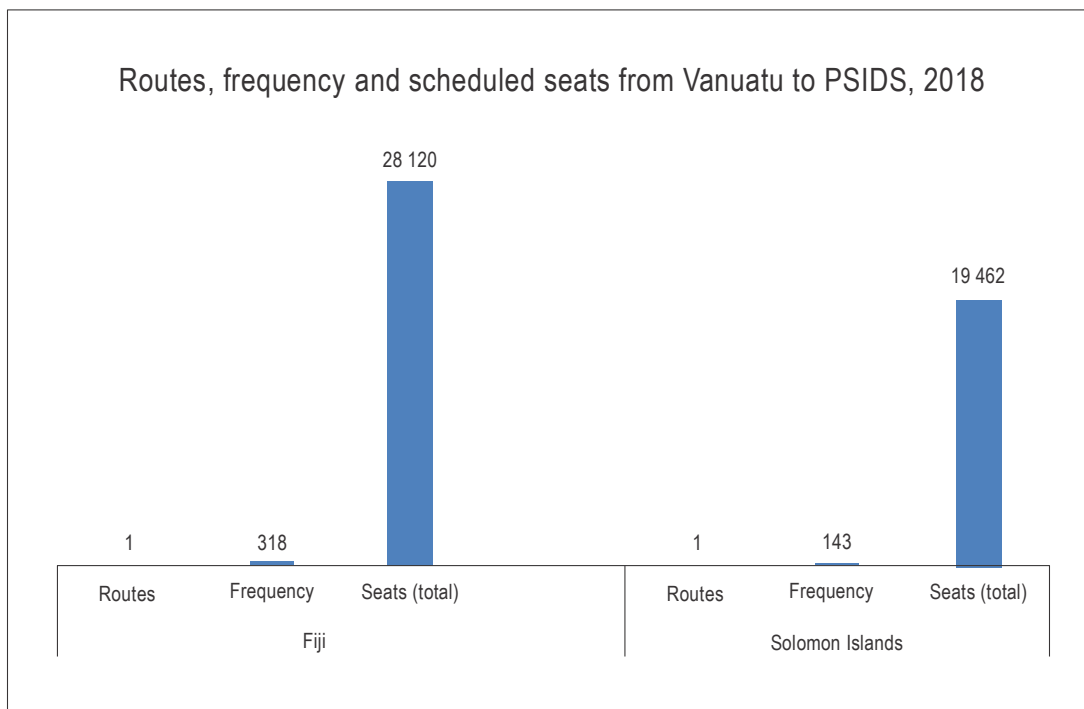


Figure A-88. Routes, frequency and scheduled seats from Vanuatu to PSIDS, 2018

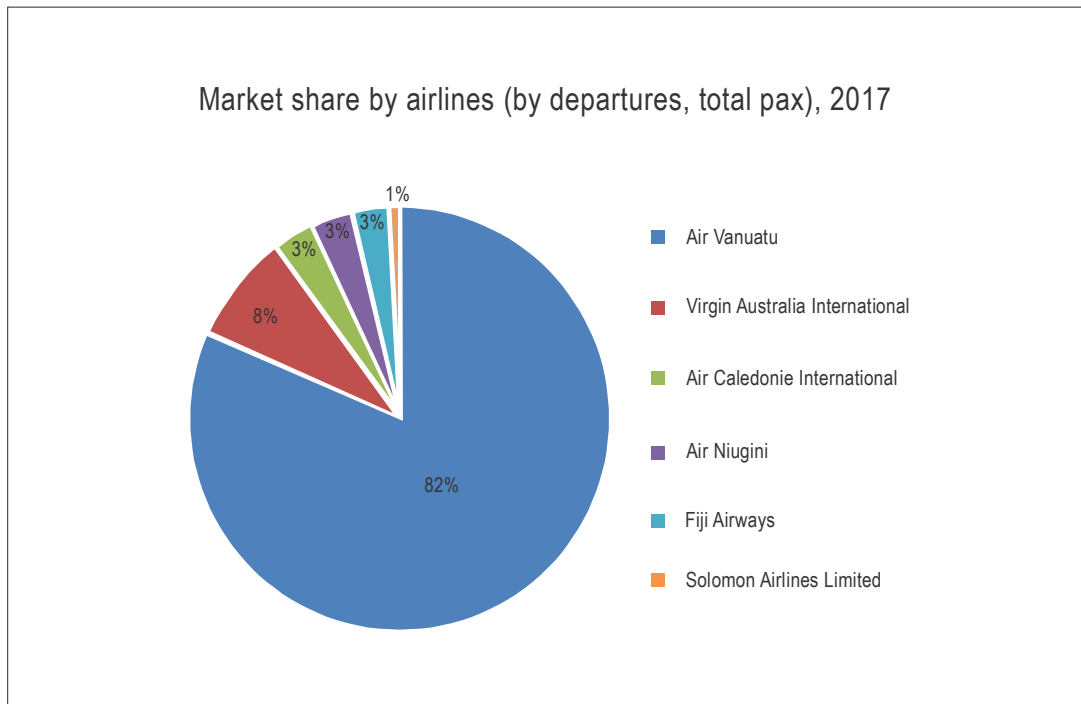


Figure A-89. Market share by airlines (by departures, total pax), 2017

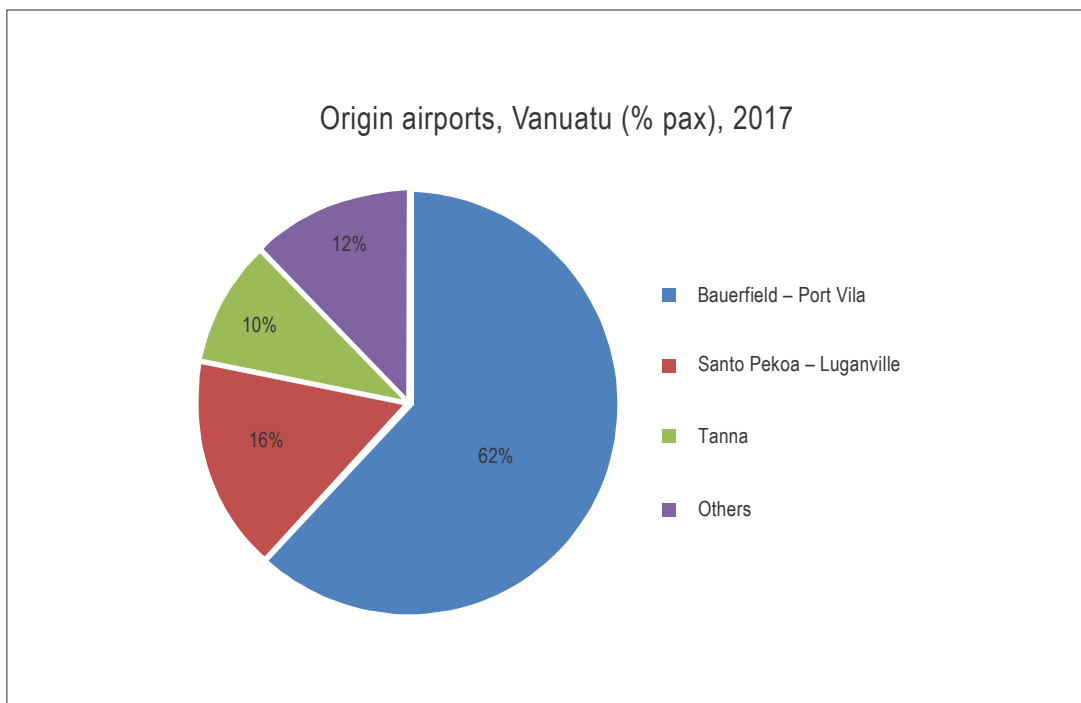


Figure A-90. Origin airports, Vanuatu (% pax), 2017

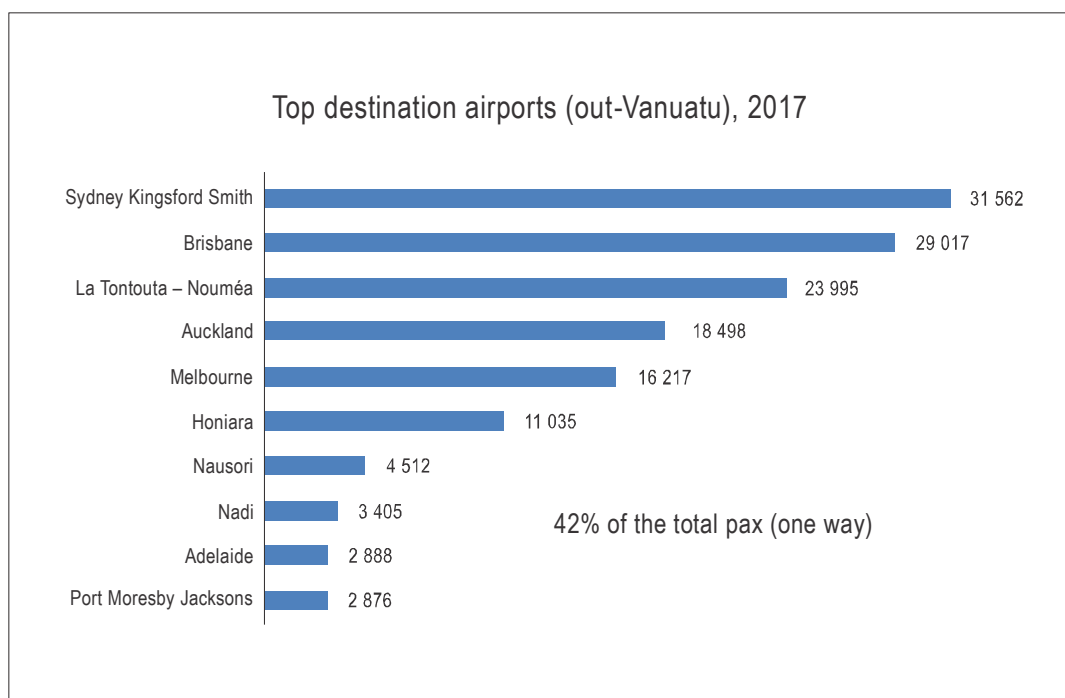


Figure A-91. Top destination airports (out-Vanuatu), 2017

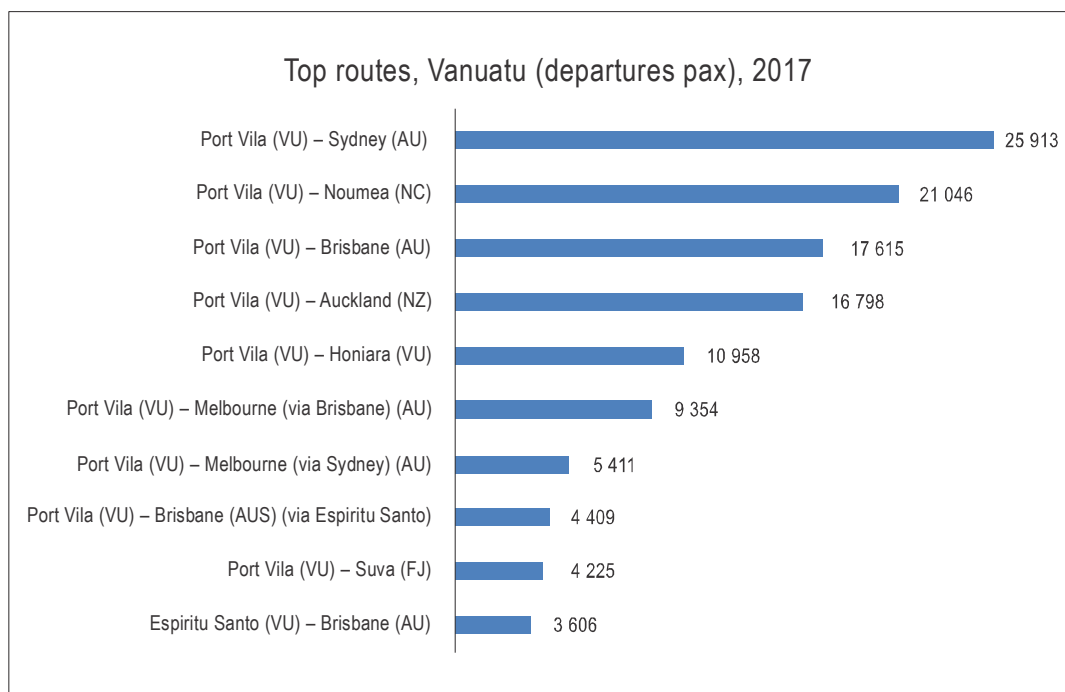


Figure A-92. Top routes, Vanuatu (departures pax), 2017

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