Post COVID-19 Pacific Short-term Aviation Strategy – A Scoping Study

Consultants' Final Report

October 2020

This report was prepared by external consultants, David Miles and Mathieu De Marchi from L&B Worldwide Australia Pty Ltd (L&B), with the support of the Pacific Region Infrastructure Facility (PRIF). PRIF is a multi-agency coordination mechanism aimed at improving the delivery of development assistance from donors and development partners to the infrastructure sector in the Pacific region. PRIF partners are the Asian Development Bank (ADB), Australian Department of Foreign Affairs and Trade (DFAT), European Investment Bank (EIB), European Union (EU), Japan International Cooperation Agency (JICA), New Zealand Ministry of Foreign Affairs and Trade (NZMFAT), United States Department of State (US) and the World Bank Group.

For more information, contact:

PRIF Coordination Office
c/o Asian Development Bank
Level 20, 45 Clarence Street
Sydney, New South Wales, 2000
Australia

Tel: +61 2 8270 9444
Email: enquiries@theprif.org
Website: www.theprif.org

Table of Contents

List of Tables

List of Figures

List of Abbreviations

ADB	Asian Development Bank
AFL	Airports Fiji Limited
AIP	Airport Improvement Program
AKA	Airport Kiribati Authority
AOC	Air Operator's Certificate
ARFF	Aircraft Rescue and Firefighting
ATC	Air Traffic Control
AVL	Airports Vanuatu Limited
CAA	Civil Aviation Authority
CAASI	Civil Aviation Authority of Solomon Islands
CAAV	Civil Aviation Authority of Vanuatu
CAD	Civil Aviation Division
CADIP	Civil Aviation Development Investment Program
CARES	Coronavirus Aid, Relief, and Economic Security
CSO	Community Service Obligation
CIAA	Cook Islands Airport Authority
DFAT	Department of Foreign Affairs and Trade
DRP	Disaster Resilience Program
EDF	European Development Fund
EEZ	Exclusive Economic Zone
EIB	European Investment Bank
EU	European Union
FAA	Federal Aviation Administration
FIFO	Fly-In-Fly-Out
FSM	The Federated States of Micronesia
FY	Financial Year
GDP	Gross Domestic Product
IAFC	International Air Freight Capacity
IATA	International Air Transport Association
ICAO	International Civil Aviation Organisation
ICAO CART	International Civil Aviation Organisation – Council Aviation Recovery Taskforce
IFC	International Finance Corporation
IOSA	IATA Operational Safety Audit
JICA	Japan International Cooperation Agency
JV	Joint Venture
MFAT	Ministry of Foreign Affairs and Trade (New Zealand)
MICA	Ministry of Communication and Aviation
MOT	Ministry of Transport
NAC	National Airports Corporation
NGO	Non-Government Organisation
NZAID	New Zealand Agency for International Development
NZGF	New Zealand Grant Funding
OCTs	Overseas Countries and Territories
ODA	Official Development Assistance
OOF	Other Official Flows
P2F	Passenger-to-Freighter
PAIP	Pacific Aviation Investment Program
PASO	Pacific Aviation Safety Office
PCR	Polymerase Chain Reaction
PHP-C	Pacific Humanitarian Pathway on COVID-19
PIASA	Pacific Islands Air Services Agreement
PIC	Pacific Island Country
PICASST	Pacific Islands Civil Aviation Safety and Security Treaty
PIF	Pacific Island Forum

PIFS	Pacific Island Forum Secretariat
PLCO	Pacific Liaison Coordination Office
PNG	Papua New Guinea
PPP	Public Private Partnership
PRIF	Pacific Region Infrastructure Facility
PRIF CO	PRIF Coordination Office
RMI	The Republic of the Marshall Islands
RMIPA	Republic of the Marshall Islands Ports Authority
SAIP	Samoa Aviation Investment Project
SARPS	Standards and Recommended Practices
SARS	Severe Acute Respiratory Syndrome
SIACL	Solomon Islands Airport Corporation Limited
SIRAP	Solomon Islands Roads and Aviation Project
SIS	Smaller Island States
SOE	State-Owned Enterprise
SPC	The South Pacific Community
SPTO	South Pacific Tourism Organisation
TAIP	Tonga Aviation Investment Project
TAL	Tonga Airports Limited
TC	Tropical Cyclone
UNICEF	United Nations Children's Fund
US	United States
USAID	United States Agency for International Development
USAPI	US-Affiliated Pacific Islands
USDOT	United States Department of Transportation
VAIP	Vanuatu Aviation Investment Project
VFR	Visiting Friends and Relatives
WB	World Bank
WFP	World Food Programme

Executive Summary

Introduction

The COVID-19 pandemic has led to border closures, quarantine requirements and other travel restrictions that has had a severe impact on Pacific Island Country (PIC) economies and the financial conditions of the airlines, airports and the industries that depend on aviation. The international development community recognises that the resurgence of the aviation industry is crucial to post COVID-19 economic recovery in the region, and that any form of sustained recovery will require long-term cooperation between governments, international development partners, and regional organisations. In response to this, the Pacific Regional Infrastructure Facility (PRIF) Transport Sector Working Group has requested an in-depth scoping study to examine the status of the aviation industry to guide PIC governments' recovery plans and the need for donor support. This document presents the findings of this study carried out over a three-month period commencing July 2020.

Figures ES-1 and **ES-2** shows that compared to September 2019, inbound international and intra-regional traffic in the region is operating on a significantly reduced route structure. Since March 2020, inbound international traffic (excluding intra-regional traffic) is operating at 8% of the seating capacity compared to the same time last year. This is equivalent to approximately 18,000 seats, 45% of those arriving from Australia and 19% from New Zealand. Many airlines only carry cargo on scheduled commercial flights due to limited demand caused by border restrictions and therefore the capacity data may not reflect the current true passenger demand within the region.

Figure ES-1: Pacific Island Countries International Route Map Sept 2019

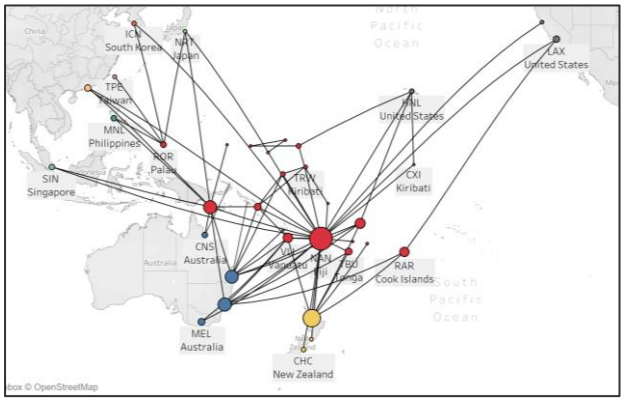
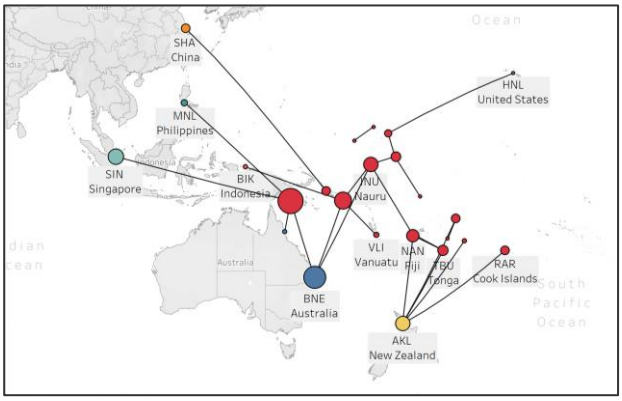


Figure ES-2: Pacific Island Countries International Route Map Sept 2020



As most PIC borders have been largely closed, the limited international services are mostly focussed on maintaining connections between the PICs and Brisbane and Auckland for freight and repatriation purposes. Notably, flights from PICs to East Asia and the US have mostly been suspended, with the exception of services originating in New Caledonia and French Polynesia. The North Pacific states have remained connected by United Airlines' limited Island Hopper service between Hawaii and Guam.

As of September 2020, several PICs retain some domestic activity, which generally stabilised at around 60% of pre COVID-19 levels across the region. Intra-regional traffic on the other hand is very limited and usually covers cargo and repatriation flights.

The Pacific COVID-19 recovery forecast developed for this study assumes that the return of aviation demand to pre-pandemic levels will greatly depend on:

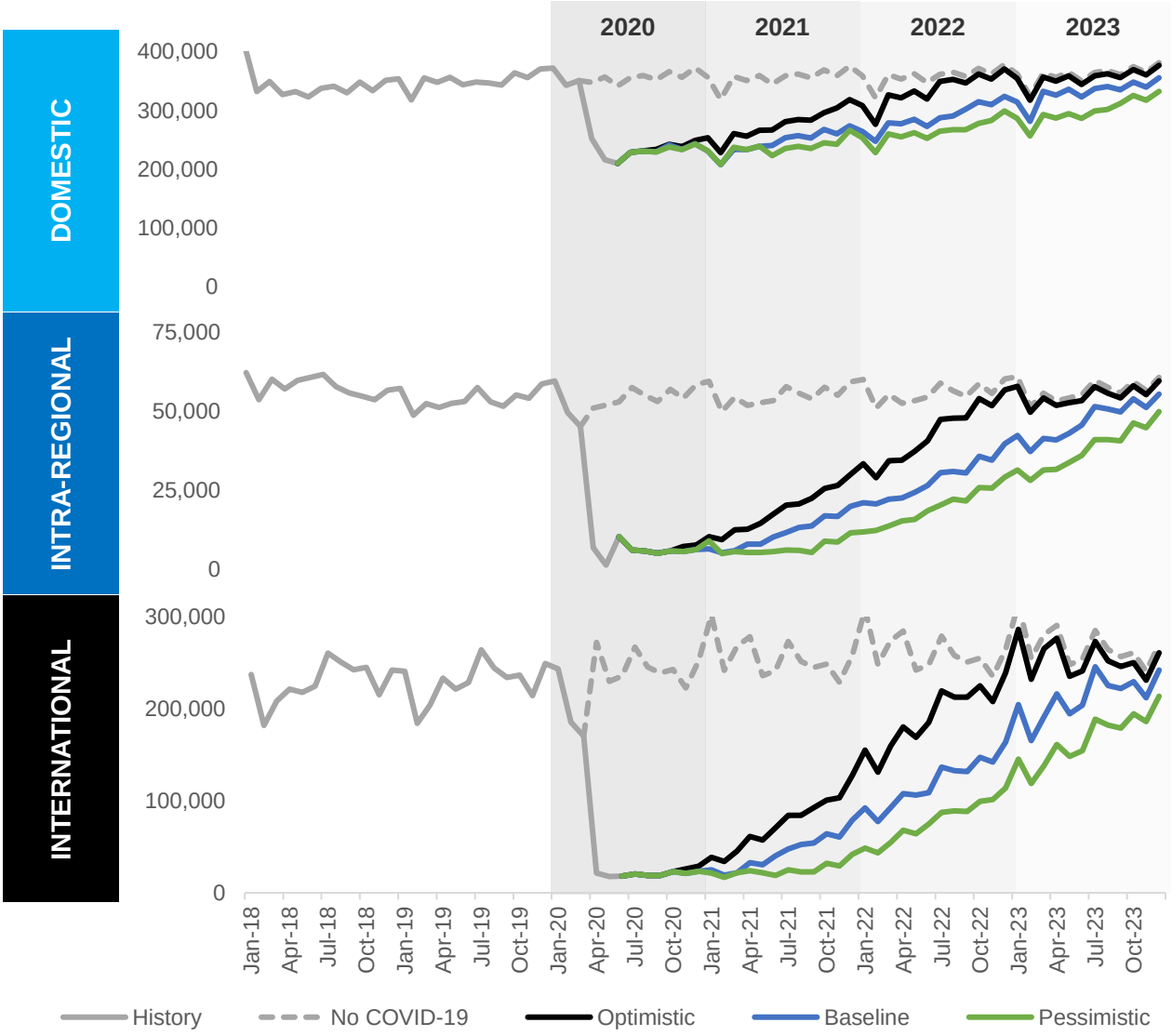
- Increasing the propensity to travel, involving boosting passenger confidence that aircraft and airports are safe and that fellow travellers will not make travellers sick. Propensity to travel has the most impact on near-term traffic recovery; and
- Restoring the economy, through successful implementation of public health measures and government intervention to maintain personal incomes and corporate cash flows. Growth in the economy has most impact on long-term traffic recovery.

The discussions with stakeholders point to a Pacific intra-regional and international traffic restart by the end of 2020 at the earliest. However, the most likely scenarios are pointing at a Q1-Q2 2021 restart for intra-regional and international travel.

On the basis of stakeholder consultation, airline advice and research of trends globally, domestic, intra-regional, and international capacity forecasts have been developed and are shown in **Figure ES-3**. These are based on the following scenarios:

- Optimistic case: Intra-regional and international traffic to start resuming in Dec 2020 with ramp-up around Feb-Mar 2021, reaching 2019 levels in Q4 2022; Domestic traffic at 60% of pre COVID-19 levels with full recovery expected in Q3 2022;
- Baseline case: Intra-regional and international traffic to start resuming in Mar-Apr 2021 with ramp-up around Jul-Aug 2021, reaching 2019 levels in Q4 2023; Domestic traffic at 60% of pre COVID-19 levels with full recovery expected in Q3 2023;
- Pessimistic case: Intra-regional and international traffic to start resuming in Sep-Oct 2021 with ramp-up around Dec 2021-Jan 2022, reaching 2019 levels in Q3 2024; Domestic traffic at 60% of pre COVID-19 levels with full recovery expected in Q2 2024.

Figure ES-3: Domestic, Intra-Regional, and International capacity recovery among the PICs from 2020 to 2023

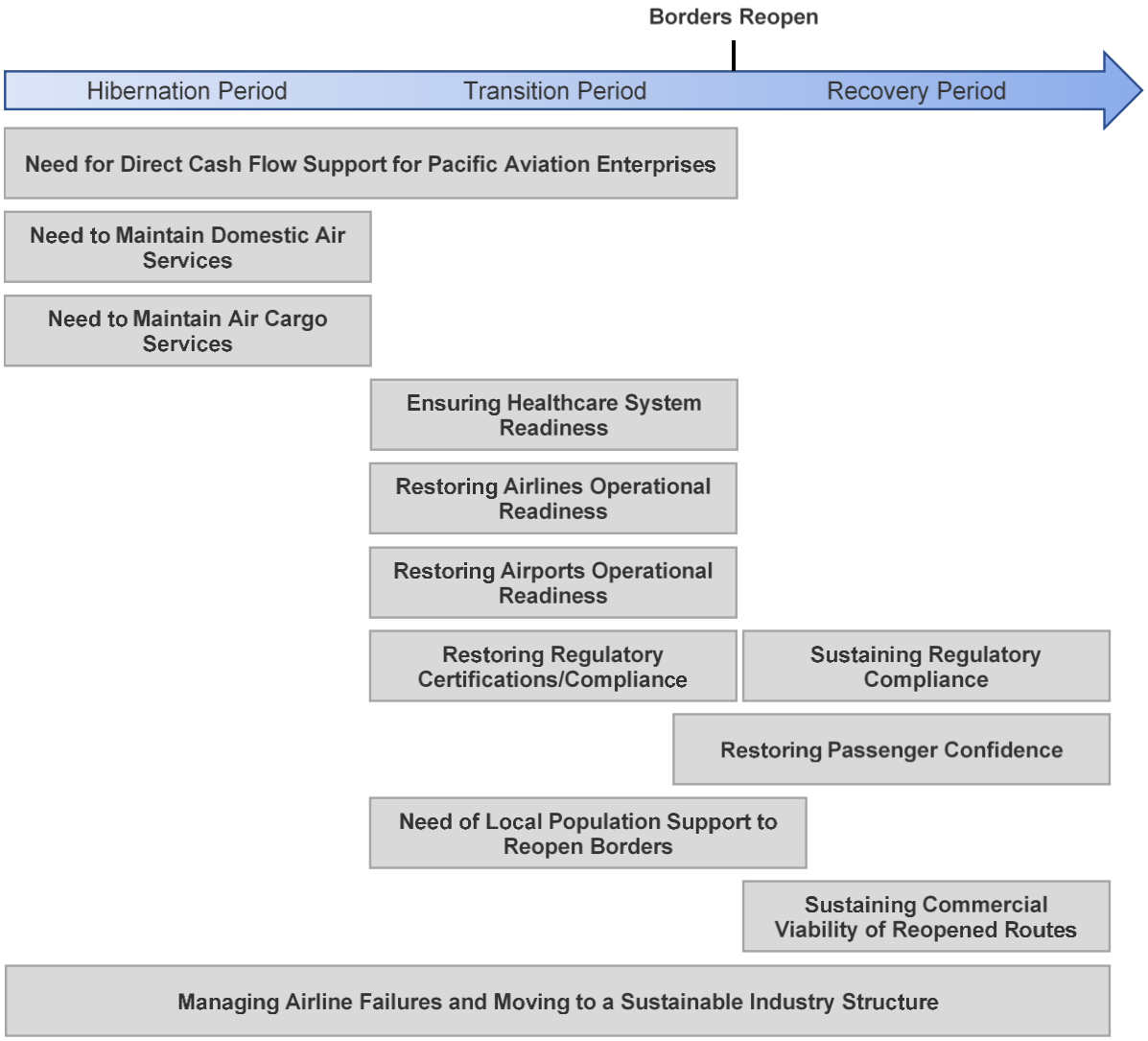


The analysis also looked at routes critical to PIC connectivity as well as routes with limited demand pre COVID-19 to assess their sustainability and the potential need for external support in the initial phases of recovery to restore air access to vulnerable PIC destinations. A list of criteria was applied to determine whether a route warranted consideration for support in the early phases of recovery.

COVID-19 Recovery – Issues and Challenges

Interviews were conducted with various stakeholders across all PICs to gather an understanding of the current COVID-19 situation, plans for recovery, and challenges or hurdles that would prevent or slow the recovery process. In order to take the uncertainty of the duration of border closures into account, the support needs derived from this research have been grouped into three specific timeframes, namely a "hibernation" period while borders remain closed, a "transition to recovery" period covering the work to be done to restore operational readiness, and a "recovery" period after border reopening as traffic and restarting services but with demand progressively growing back to pre COVID-19 levels. The results of this analysis are summarised in **Figure ES-4** which provides a summary of the various issues and challenges identified to be facing the Pacific aviation system through each of these three phases.

Figure ES-4: COVID-19 Recovery Issues and Challenges



COVID-19 Recovery – Strategies and Initiatives

The greatest and most basic need expressed by PIC airlines and airport operators is for financial support to sustain their domestic services and retain basic capability to operate internationally while borders remain closed. This need may extend beyond border opening if there are any ongoing quarantine requirements that make it impractical to fly internationally. When access is fully opened up without quarantine constraints, the industry sees that demand will start to return and that the markets will be progressively serviced on a commercial basis, lessening and ultimately eliminating the requirement for financial support.

However, it is expected that routes covered and frequency of service could grow quite slowly, and that there will be a transition period where in order to sustain supply, less-than-commercial operations will occur, and that some form of cash flow support may continue to be needed in this transition period. This suggests that primary recovery strategies need to address ways of quickly moving cash into airlines and airports, whether through Government budget support, directly through financial instruments accessible to airlines and airports, or indirectly through market intervention and stimulus, e.g. route underwriting and contract air services.

In the transition period, there is also recognition that early growth in revenue is inextricably linked to restoring operational readiness (regulatory compliance, crew currency, maintenance of airworthiness standards, infrastructure readiness, airport compliance as discussed above), and that a range of support services are needed for this, whether through technical assistance or direct funding.

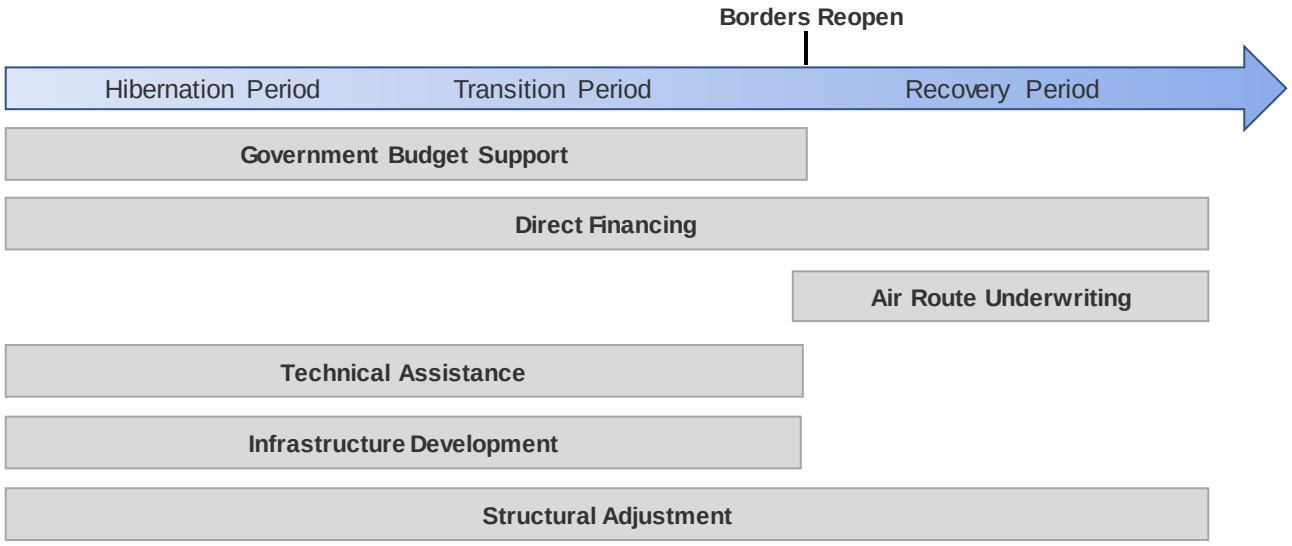
Another key factor for consideration in the support strategy is the need for confidence among consumers and the Pacific island community in the aviation systems' and national health systems' capacity to manage infection risk. PICs (including PIC airports and PIC airlines) are doing extensive work in this area but, in some PICs, there is express need for both technical assistance and financing of physical infrastructure to support both.

When contemplating financial support, there is concern that, for some airlines that have been under financial stress before COVID-19, such assistance may be counterproductive – it will simply buy short term survival for a struggling operator who will go on to require ongoing financial support in the long term. Given that the air transport sector regionally and globally may well be structured entirely differently post COVID-19, it is recognised that any funding to PIC airlines and airports should be contingent on assessment of sustainability of such funding. Consideration will need to be given for major structural adjustment (e.g. extended commercial collaboration between airlines, merger, cross-investment, privatisation of airlines and airports, exit from air services altogether and changes to the enabling environment etc). It is also noted that one PIC has lost its sole domestic air service provider (pre-pandemic) and is working rapidly to develop a replacement provider, potentially with private sector involvement. Another two airlines are committed to adding new jet aircraft to their fleet – support for these processes may need to be considered in the design of any assistance package.

Strategies and Initiatives

In the context of this discussion, **Figure ES-5** provides a summary of the various strategies and initiatives considered through the phases leading to the recovery and beyond.

Figure ES-5: COVID-19 Recovery Strategies and Initiatives



The PICs' needs and the range of financing solutions described above have been examined both on a country by country and a regional basis to produce a broad scale indicative cost by type of financial instrument as shown below in **Table ES-1**. The indicative amount is based on the baseline forecast scenario presented in **Figure ES-3**. A sensitivity scenario was considered using the optimistic and pessimistic forecasts. This impacts the duration of the financial support needed for the airlines and airports as well as the duration of the route subsidy.

Resulting estimated costs are US$45-59 million for the optimistic forecast and US$146.5-177 million for the pessimistic forecast.

Table ES-1: Indicative Cost Estimates and Instruments

Needs	Instruments	Relevant PICs	Indicative Amount
Cash Flow Support for Airlines	Government budget support (grants, loans) Direct private sector finance (grants, loans, guarantees)	Cook Islands, Kiribati, Nauru, Solomon Islands, Tonga, Vanuatu	US$30-40m
Cash Flow Support for Airports	Government budget support (grants, loans) Direct private sector finance (grants, loans, guarantees)	Cook Islands, Fiji, Solomon Islands, Tonga, Tuvalu, Vanuatu	US$9-10m
Restoring Airline Operational Readiness	Technical assistance grants to PIC governments for onforwarding to airlines	Cook Islands, Kiribati, Nauru, Samoa, Solomon Islands, Tonga, Vanuatu	US$0.5-1.0m
Restoring Airport Operational Readiness	Technical assistance grants to PIC governments for onforwarding to airports	Cook Islands, Fiji, Kiribati, Samoa, Solomon Islands, Tonga, Vanuatu	US$3-3.5m
Restoring Regulatory Certification/ Compliance	Technical assistance grant to PASO (direct or via PIC regulators)	Cook Islands, Kiribati, Nauru, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu	US$4-4.5m (near-term surge) + US$7-8m (2-year subsidy)
Sustaining Commercial Viability of Reopened Routes	Regional route subsidy grant fund	High priority routes: Kiribati, Nauru, Niue, Samoa, Solomon Islands, Tuvalu Medium priority routes: Cook Islands, Fiji, PNG, Tonga, Vanuatu	US$27-30m
Airline and airport structural reform	Technical assistance grants to governments for facilitation of structural reform or orderly exit; Direct private sector finance for qualified new ventures	All PICs with international or domestic airlines	US$1.0-2.0m
Airport Infrastructure Needs	Infrastructure loans and grants for airports and associated health facilities (or variation to existing projects)	Cook Islands, Fiji, Kiribati, Niue, PNG, Solomon Islands, Tonga, Tuvalu	US$8-10m
Ensuring Local Support for Reopening Borders and Restoring Passenger Confidence	Existing budget support programs for COVID-19 management capacity + destination marketing	Tourism dependent PICs e.g. Cook Islands, Fiji, Kiribati, Niue, Samoa, Solomon Islands, Tonga, Vanuatu	Assumed included in existing COVID-19 recovery programs
TOTAL			**US$89.5-109m**

Next Steps

This report has identified broad needs, priority areas of support, together with indicative financing instruments and costs. However, this is only a preliminary study and significant further work will be needed by PRIF Development Partners and PICs to scope the requirements in more detail, and to secure the funds against these. While donors will have their own methodologies, the following are a series of suggested steps that might address the requirements in a coordinated manner:

- Development Partners to identify, amongst their current or projected programs, what type of funding instruments are applicable and what level of funding might be available, and to specify the funding rules;
- Under PRIF facilitation, preparation and issuance of a formal invitation to PICs to submit specific funding requests based on the specifications developed by the Development Partners;
- Again, under PRIF facilitation, conducting a donor round table to review each PIC's detailed funding requests and for agencies to choose those requests best suited to their chosen priorities and arrange co-funding where applicable; and
- Detailed project preparation and implementation by each Development Partner in accordance with the Development Partner's normal processes.

1 Introduction

The COVID-19 (Coronavirus) pandemic has seen aviation suffer its worst ever decline in traffic, with countries closing their borders and most regular scheduled flights coming to a halt. As countries within and around the Pacific region declared international border closures to slow down the spread of the virus, airlines grounded almost all aircraft in their fleets. This has had severe implications on Pacific Island Country (PIC) economies and the financial conditions of the airlines, airports and the industries that depend on aviation. With the ongoing crisis, the question is, how quickly and to what extent air travel can resume and recover.

The need to resume air travel is even more important in the Pacific where the aviation market is characterized by small and widely dispersed populations spread across many islands. There is a high reliance on air services to provide connectivity for people and key trade routes as well as to support tourism. Tourism contributes on average 20% of gross domestic product (GDP) of PICs and a large share of employment.

At the onset of the pandemic, the New Zealand Ministry of Foreign Affairs and Trade (MFAT) commissioned an initial scoping study to better understand the linkages between aviation and supply chains in PICs. Many PICs were found to be highly dependent on imports for food, medicine and other basic commodities. While shipping operations are relatively normal, the required 14-day quarantine period before docking in ports hampers supply of basic goods, especially the recovery efforts after tropical cyclone (TC) Harold affected Vanuatu, Fiji, the Solomon Islands, and Tonga during country lockdowns.

The Pacific Islands region covers a widespread and diverse range of countries, from Fiji being the largest by population (excluding Papua New Guinea) with a population of over 900,000, to Tuvalu and Nauru, with populations of approximately 11,000 residents each. The remoteness of many of the PICs has provided some initial protection from COVID-19, with the majority of PICs currently considered COVID-19 free. Many countries closed their borders early in 2020 and put quarantine measures in place to deal with repatriated residents and suspected cases. However, most health systems in the region are not adequately equipped to deal with or respond to any sort of major outbreak that may occur, placing the PICs in a group considered to be some of the most vulnerable in the world to a global pandemic.

It is clear that any form of sustained development and recovery will require long-term cooperation between governments, international development partners and regional organisations. As island communities are remote from major metropolitan centres, PICs are sharing similar challenges and opportunities. The compounding effects of COVID-19 and the ongoing issues surrounding the climate and natural disasters will pose major challenges for the region in 2020 and beyond.

Recognising that the resurgence of the aviation industry is crucial to post COVID-19 economic recovery in the region, the Pacific Region Infrastructure Facility (PRIF) Transport Sector Working Group requested an in-depth scoping study to examine the status of the aviation industry to guide PIC governments' recovery plans and donor support. The PRIF is a multi-partner coordination and technical assistance facility for improved infrastructure in the Pacific. The PRIF Development Partners are the Asian Development Bank (ADB), Australian Department of Foreign Affairs and Trade (DFAT), European Investment Bank (EIB), European Union (EU), the Japan International Cooperation Agency (JICA), New Zealand Ministry of Foreign Affairs and Trade (MFAT), United States Department of State (US) and the World Bank Group. The PRIF Coordination Office (PRIF CO) is hosted by the ADB Pacific Liaison Coordination Office (PLCO) in Sydney, Australia. It has been responsible for managing this technical assistance study.

The objectives of this scoping study are to:

- Review the current Pacific aviation landscape;
- Provide a comparative view of operations before COVID-19, the current situation, as well as identify priority short-term post COVID-19 recovery scenarios;
- Identify immediate and short-term priority routes and connections and necessary actions to provide the minimum reliable scheduled services to transport people and goods, jumpstart businesses and facilitate projects/investments geared towards economic recovery; and
- Identify and assess bilateral/regional/multilateral frameworks currently in place and supporting air travel and supply chain in the region.

The results and recommendations of this scoping study are to help develop a consensus among stakeholders on the way forward for the aviation industry in the region and provide a basis to initiate support by PRIF Development Partners.

2 Definition of Study Area

This study focuses on the PRIF member countries, with the inclusion of Papua New Guinea which is an Associate Member. The list of members is provided below in **Table 2-1**. All PRIF members are also members of the Pacific Islands Forum (PIF).

Table 2-1: Focus Countries

Country Name
PRIF Member Countries
1. The Cook Islands
2. The Federated States of Micronesia (FSM)
3. Fiji
4. Kiribati
5. The Marshall Islands (RMI)
6. Nauru
7. Niue
8. Palau
9. Samoa
10. Solomon Islands
11. Tonga
12. Tuvalu
13. Vanuatu
Associate Member Country
14. Papua New Guinea (PNG)

Since this study considers air service accessibility and connectivity across the entire Pacific region, several other countries/territories are mentioned in the air route analysis in addition to the above focus countries, namely the Commonwealth of the Northern Mariana Islands, French Polynesia, Guam, New Caledonia, American Samoa, and Wallis and Futuna Islands. These additional countries are included in the pre COVID-19 and current air service assessments as they play a role in the overall air connectivity network in the Pacific region. Findings presented in **Section 7: COVID-19 Recovery – Issues and Challenges** and **Section 8: COVID-19 Recovery – Strategies and Initiatives** will concentrate on the 14 focus countries listed above.

While addresses the PRIF PICs, the term "*The Pacific*" is used to refer to all the study focus countries including the 6 additional countries mentioned above. These countries make up all the countries in the Pacific region that are involved in the air transport sector with some form of scheduled passenger service. Furthermore, while Australia and New Zealand are both members of the PIF and play a crucial role in connectivity by air, these two countries will be treated as members outside the Pacific. Australia and New Zealand are primary source markets but are also important labour markets for PICs' foreign contract worker schemes, and for health, education and global connectivity of PIC residents. This treatment is to prevent any sort of distortion in the analysis associated with the highly trafficked air routes to and from these countries.

A central platform of PICs' aviation recovery from COVID-19 is transport access between source markets and destinations. For the Pacific, the air transport sector is even more important than elsewhere as it is characterised by small and widely dispersed populations spread across many islands. There is a high reliance on air services to provide connectivity for people and key trade routes as well as to support tourism, contributing on average 20% of the GDP of PICs and a large share of employment.[1]

[1] South Pacific Tourism Organisation, "*Pacific Tourism: COVID-19 Impact & Recovery – Sector Status Report: Phase 1B*"

A short-term aviation strategy that prioritises recovery of air routes and connections and identifies bilateral/regional/multilateral frameworks needed to support air travel and supply chains in the region naturally becomes an integral part of the region's aviation strategy going forward.

For the purpose of investigating travel and trade between PICs, three route designations have been established:

1. Domestic – All flights and trade within a country's borders;
2. International:
    a. Intra-Regional: international flights and trade between PICs
    b. All other international flights serving the Pacific region.

When only the term "*International*" is used, this refers to all international flights inclusive of intra-regional.

3 Review of Scheduled Passenger and Freight Services in the Pacific

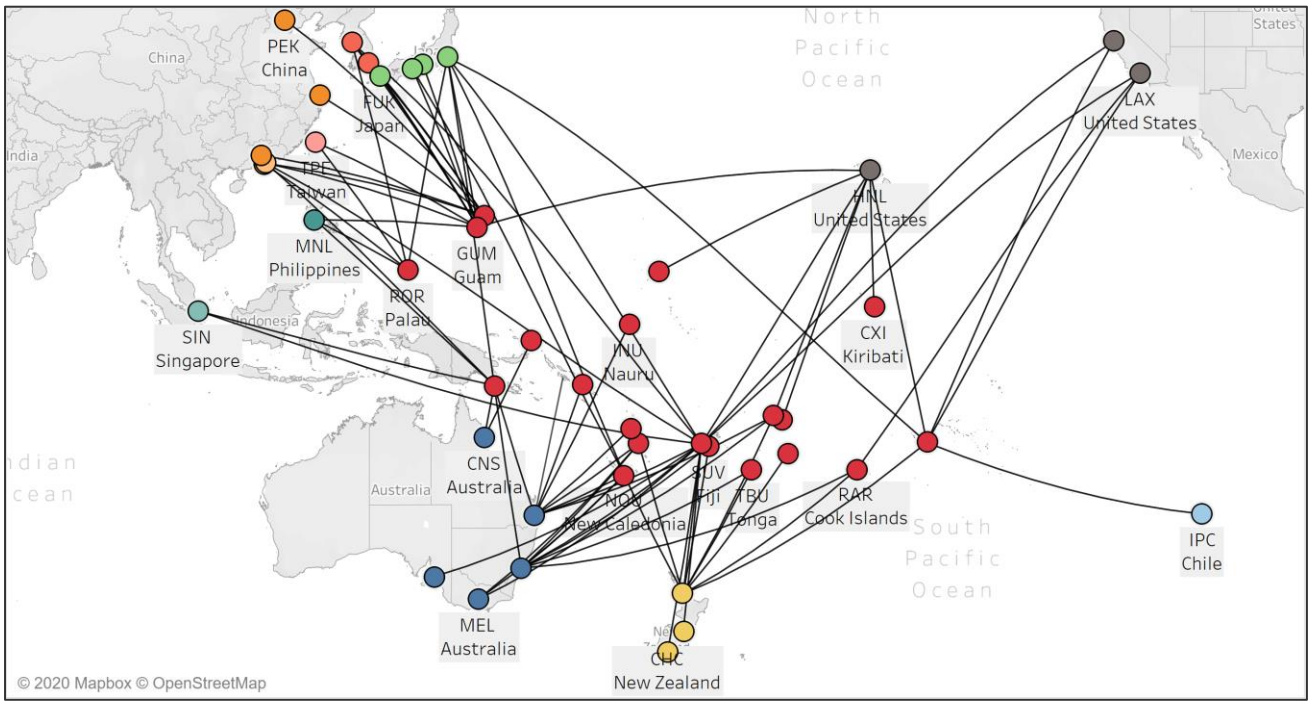
This section provides a summary of scheduled passenger and freight services in the Pacific prior to and during the COVID-19 pandemic. Detailed assessments of individual country's aviation sector are provided in **Section 5**.

3.1 Air Access Pre COVID-19 Pandemic

3.1.1 Passenger Air Access to the Pacific

The pre COVID-19 international routes into the Pacific can be seen in **Figure 3-1**, highlighting the dependence on certain countries supplying flights into the Pacific. Routes that were served less than 5 times in the year are not shown. The region has been accessible through multiple ports in Australia, New Zealand, as well as the United States, Japan and a small number of other gateways on the periphery of the Pacific, namely: South Korea, Hong Kong, China, and Singapore.

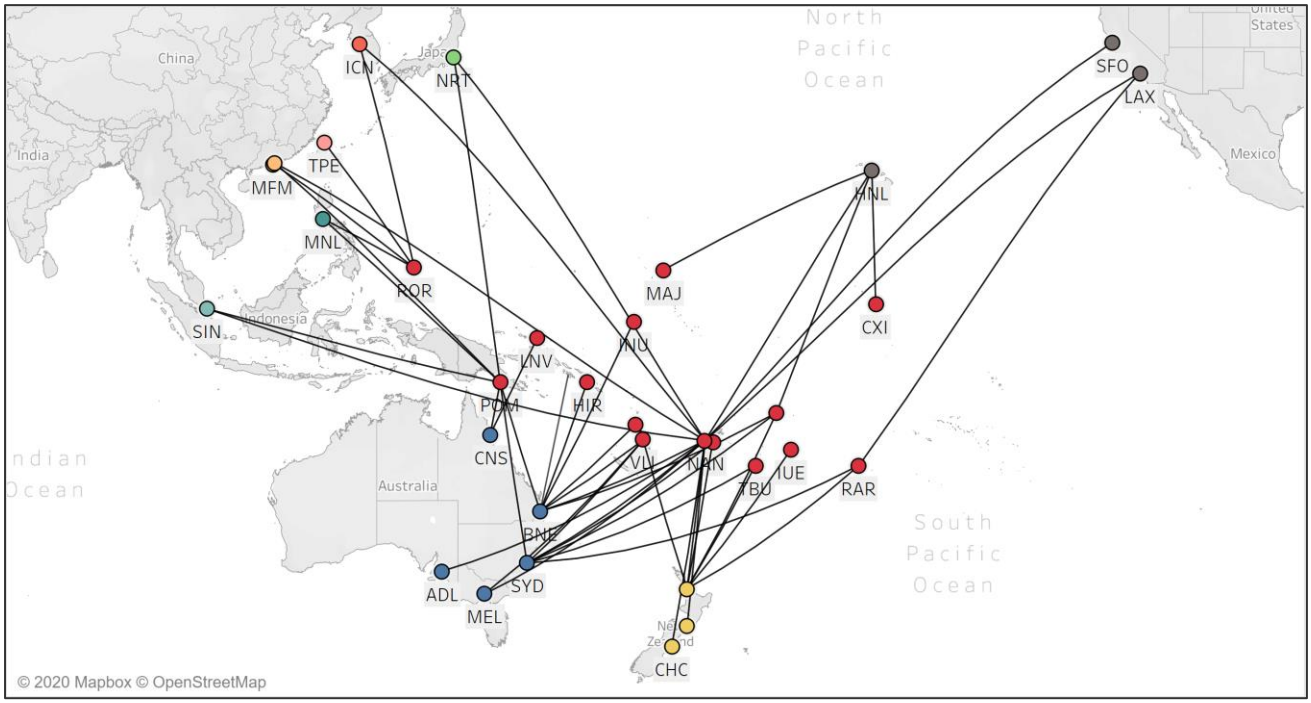
Figure 3-1: International Routes into the Pacific – 2019
(Excluding Intra-Regional Flights)



Source: Diio Mi by Cirium schedule data.

When looking only at foreign ports of entry with direct access to the study focus countries as shown in **Figure 3-2**, it becomes clear that Australia and New Zealand remain the main points of entry into the region. Fiji is accessible from multiple locations in Australia, New Zealand, and the United States, making it the most served country within the Pacific while the Japanese and Chinese ports predominately serve the northern Pacific markets.

Figure 3-2: International Routes into the Study Focus Countries – 2019
(Excluding Intra-Regional Flights)

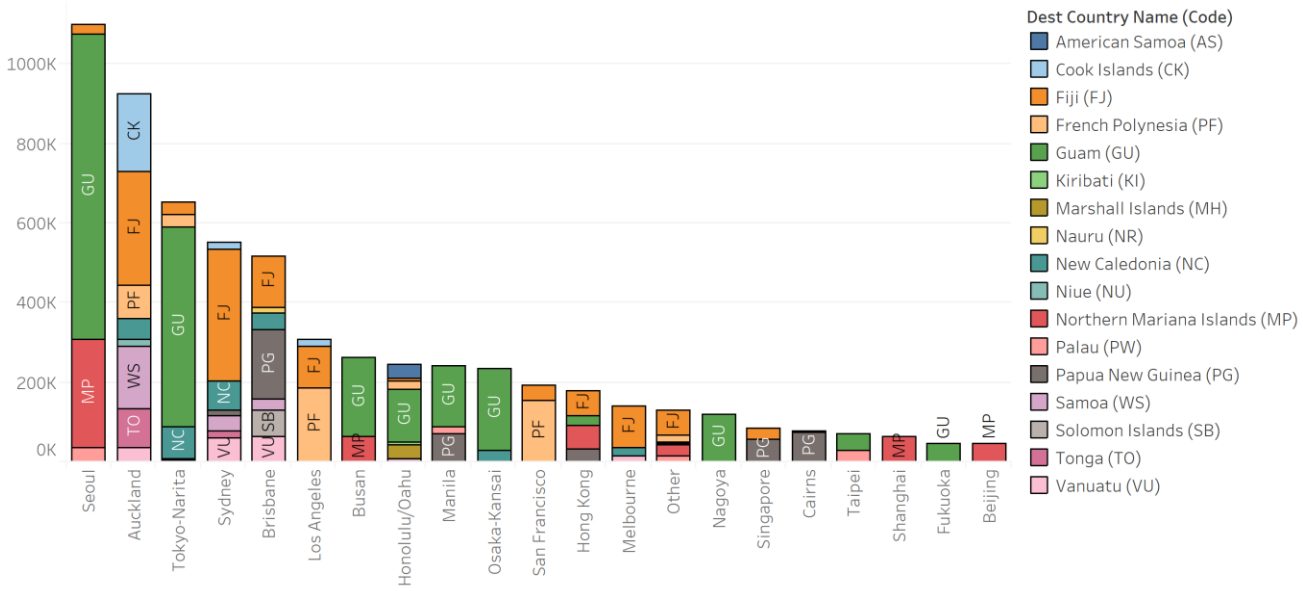


Source: Diio Mi by Cirium schedule data.

The total outbound seating capacity for the top 20 gateway ports into the Pacific is shown in **Figure 3-3**. This illustrates that the highest level of direct access by air in terms of seat capacity, frequency, and number of destinations accessible is obtainable by travelling through Seoul, Auckland, Tokyo, Sydney, and Brisbane, with Auckland being the most significant access point in terms of both seating capacity and number of destinations.

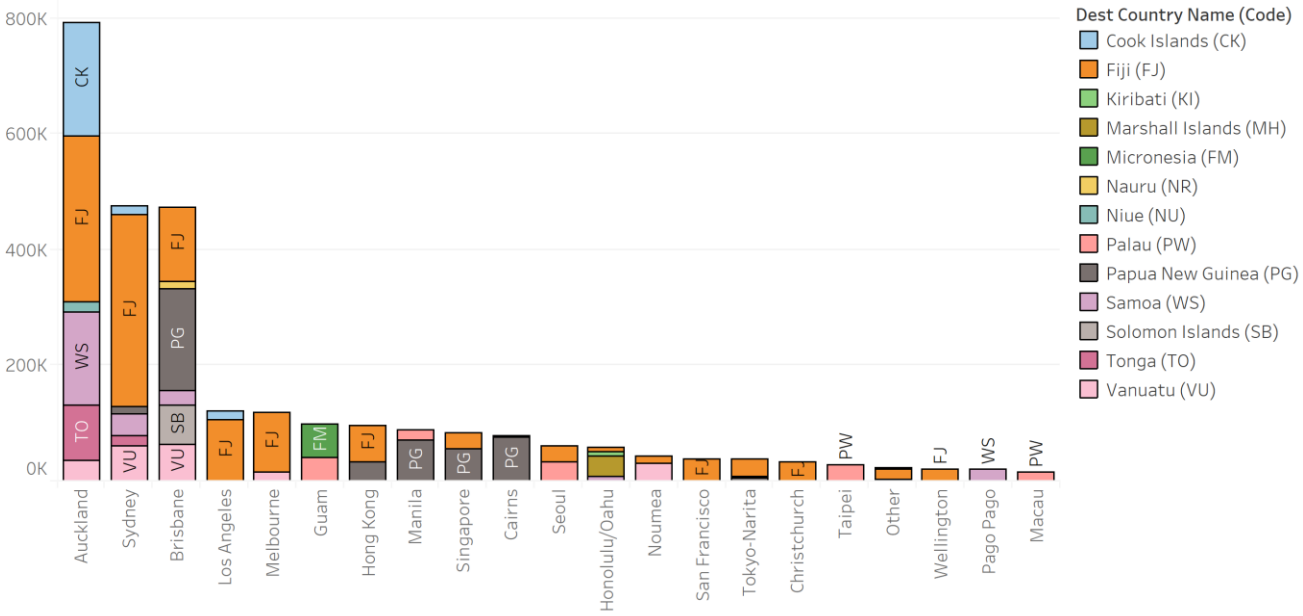
Noting that the ranking in **Figure 3-3** is dominated by the traffic in the Northern Pacific between Seoul, Guam and the Northern Mariana Islands, a clearer picture of air access emerges if only those gateways connecting with PRIF PICs are considered. **Figure 3-4** depicts the top 20 gateway ports by seating capacity into the study focus countries, with Auckland, Sydney and Brisbane being the clear major ports of entry. Nine of the top 10 of these ports offer direct services to Fiji, highlighting the role of Fiji as a major within-region hub. At the same time, a significant amount of traffic passes into Guam from international destinations, thus (together with Honolulu) serving as a Pacific Ocean hub for access to the North Pacific Island Hopper service provided by United Airlines. Because of this high level of capacity serving the North Pacific and in particular the non PRIF member territories of Guam and the Northern Mariana Islands, the remainder of this analysis will only concentrate on the connectivity and services to the study focus countries.

Figure 3-3: Top 20 Gateway Ports in the Pacific – 2019
(By Seating Capacity)



Source: Diio Mi by Cirium schedule data.

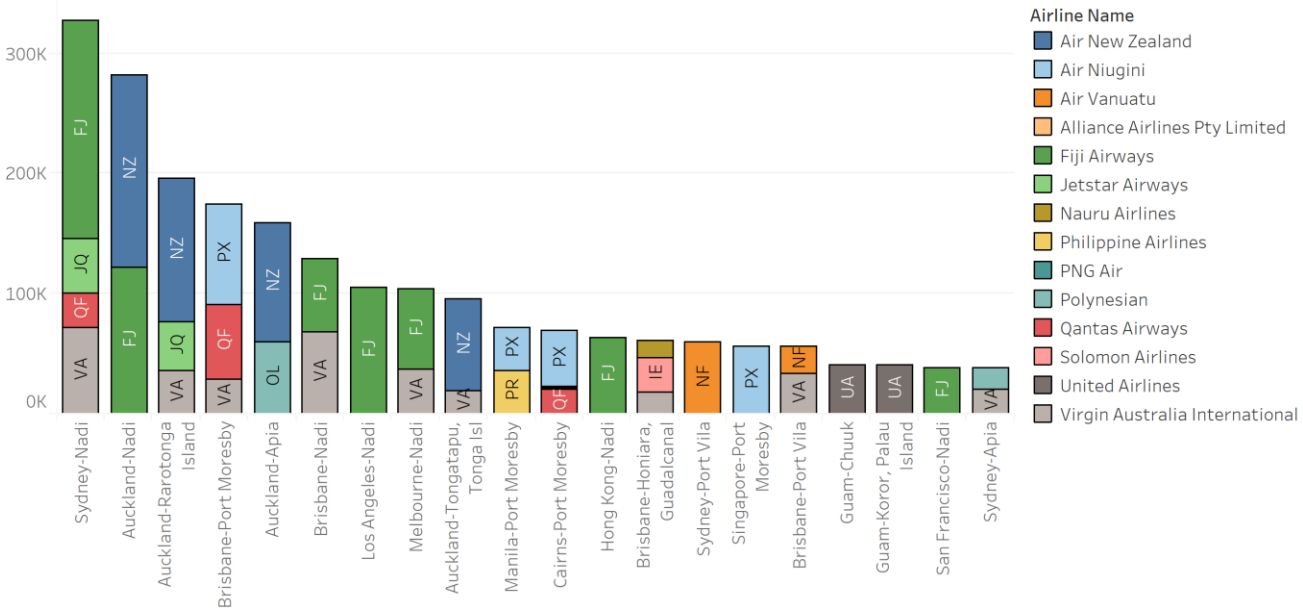
Figure 3-4: Top 20 Gateway Ports into the Study Focus Countries – 2019
(By Seating Capacity)



Source: Diio Mi by Cirium schedule data.

Travellers from these overseas gateway ports seeking non-stop access to a small number of Pacific destinations such as Fiji, Papua New Guinea (PNG), and Vanuatu have until the pandemic been reasonably serviced by significant seat capacity, involving multiple weekly services, often by more than one air carrier. This is further illustrated by the route density information presented in **Figure 3-5**, showing the top performing sectors by available seating capacity have been those to Nadi from Sydney and Auckland, with the highest capacity of over 300,000 seats annually in 2019 on the Sydney-Nadi route.

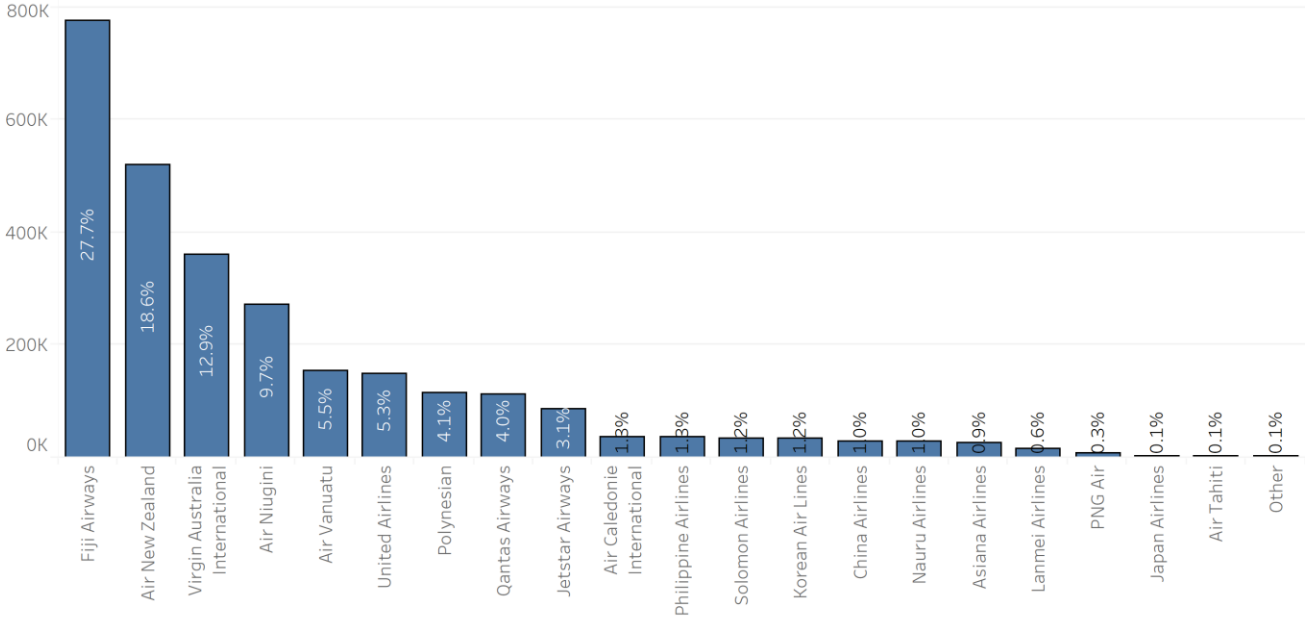
Figure 3-5: Top 20 Routes into the Study Focus Countries – 2019
(By Seating Capacity)



Source: Diio Mi by Cirium schedule data.

As seen above, not only do Australia and New Zealand make up seven of the top ten gateway ports into the study focus countries, but there also appears to be a handful of airlines that hold a majority market share of these routes. The airlines serving routes into the study focus countries are shown in **Figure 3-6**.

Figure 3-6: Top 20 Airlines Operating International Flights into the Study Focus Countries – 2019
(By Seating Capacity)



Source: Diio Mi by Cirium schedule data.

Fiji Airways holds a market share of inbound seating capacity of 28% of all flights entering the study focus countries, with over 95% of those flights operating through Nadi, demonstrating its role as a hub for transport into other PICs.

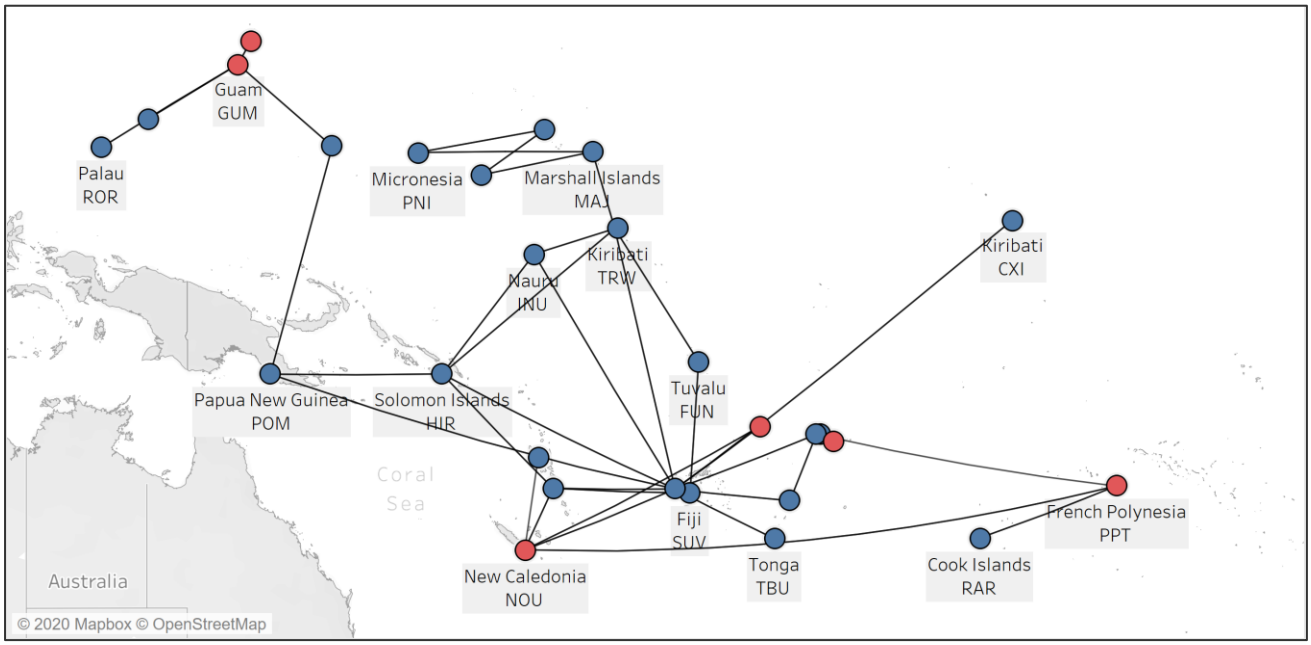
Fiji Airways is followed by Air New Zealand and Virgin Australia with historical market shares of 19% and 13%, respectively. These top 3 airlines together accounted for about 60% of all flights into the Pacific, highlighting the dependence on major carriers to serve passengers wishing to directly access these countries from outside the region. Further analysis into these airlines shows that along with Fiji Airways, both Air New Zealand and Virgin Australia's biggest market share in terms of destinations is Fiji (Nadi). The available international routes for each PIC, along with the airlines operating on those routes in 2019 are provided in **Appendix B2**.

3.1.2 Passenger Air Access Between Pacific Island Countries

While all PICs naturally desire to offer their tourists and nationals direct air services to and from overseas gateways, this is not practical for many PICs due to the limited scale of market demand and in many cases infrastructure constraints. These infrastructure constraints exist in the form of insufficient airport infrastructure such as the inability to accommodate larger aircraft, or lack of beds to support the overnight tourism market, among other factors. Consequently, access to overseas travellers in these PICs is highly dependent on smaller capacity intra-regional air services, originating out of a port with access to onwards international travel.

Figure 3-7 depicts all the intra-regional routes that were available on some form of regular passenger service in 2019. Ports in red are those that are excluded from this study but are shown for completeness.

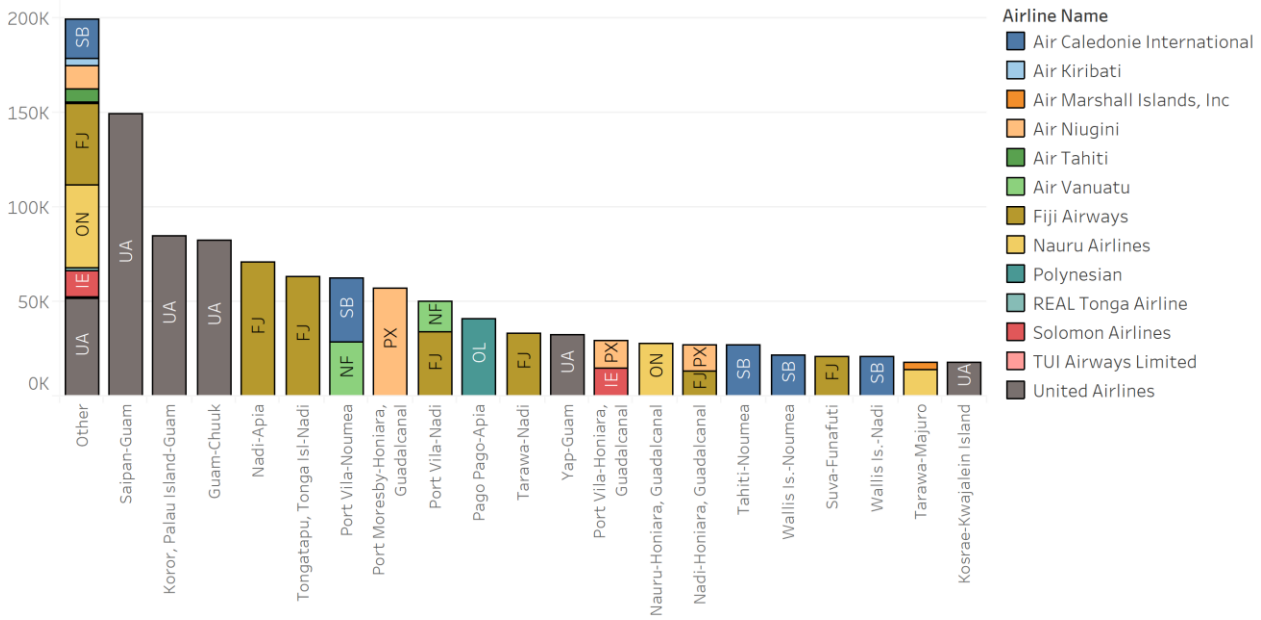
Figure 3-7: Intra-Regional Routes Between Pacific Island Countries – 2019



Source: Diio Mi by Cirium schedule data.

The intra-regional routes that were most served in terms of seating capacity in 2019 with the breakdown of airline is showed in **Figure 3-8**.

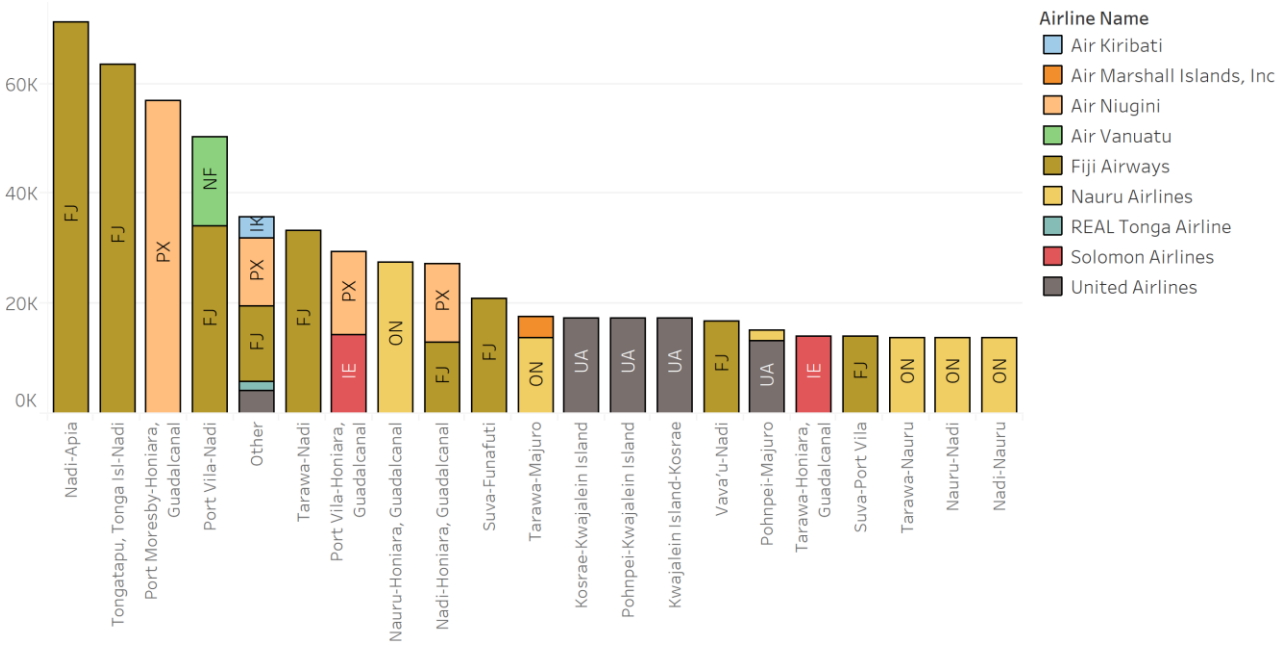
Figure 3-8: Top 20 Intra-Regional Routes Between Pacific Island Countries – 2019
(By Seating Capacity)



Source: Diio Mi by Cirium schedule data.

At a first glance, it would appear that United Airlines offers considerable capacity between destinations within the Pacific. These services in fact form part of the Island Hopper service that connects the US territories and forms part of the US domestic services. These routes are an important connection between the north Pacific PICs (RMI, FSM, and Palau) and to the outside world but there are very little services offered between the north and south Pacific. Looking only at the study focus countries gives a clearer indication of the major routes and destinations in the Pacific, as shown in **Figure 3-9**.

Figure 3-9: Top 20 Intra-Regional Routes Between the Study Focus Countries – 2019



Source: Diio Mi by Cirium schedule data.

Fiji Airways run services on six of the top ten most served routes with Nadi being part of five of these routes. This only further strengthens the position that Fiji Airways holds market share dominance over intra-regional routes and that Fiji serves as an important hub in connecting the outside world into the Pacific. This illustrates the importance of a regional port acting as a regional hub and the reliance that smaller nations place on access to such a hub for the transport of passengers and goods to foreign markets.

The Pacific destinations that are part of this study that could reasonably be described as hubs are shown in **Table 3-1**, together with the outbound seating capacity they offered in 2019. As mentioned previously, 'intra-regional' routes are considered to be any route between two PICs.

Table 3-1: Study Focus Country Ports Serving as Regional/International Hubs - 2019

City	Number of Destinations Served				Outbound Seating Capacity	
	Domestic	Intra-Regional	International	Total	Intra-Regional	International
Nadi	7	11	16	34	173,126	1,202,244
Port Moresby	25	3	7	35	34,462	420,045
Koror, Palau Island	-	1	7	8	43,878	94,991
Port Vila	14	4	5	23	78,120	165,930
Apia	-	3	5	8	56,849	232,096
Suva	9	2	3	14	17,408	11,256
Rarotonga Island	1	1	3	5	4,026	226,843
Tongatapu, Tonga Island	3	1	2	6	31,708	113,589

Source: Diio Mi by Cirium schedule data.

This again reaffirms that Nadi (Fiji), with an outbound international capacity of over 1.2 million seats from 16 ports outside of the Pacific, is the most significant hub. This is followed by Port Moresby (Papua New Guinea), and Koror (Palau) with 7 international destinations each outside of the Pacific. Both ports offer connectivity onto other Pacific destinations, yet this is limited in size compared to Nadi with Port Moresby offering 3 and Koror offering only 1 regional destination.

Other locations like Port Vila and Suva provide a hub function of sorts but are limited in the number of both inside-Pacific and outside-Pacific destinations serviced, albeit that there is potential for these to increase over time. Both ports act as a significant hub for domestic operations to numerous outer island airstrips, as do Noumea and Port Moresby. Noumea is also an effective hub for Francophone connectivity in the region. Samoa offers connections to Australia and New Zealand, as well as Hawaii and American Samoa. Tonga, Samoa and the Cook Islands either have, or previously had, direct access to the US, but these longer haul services have been infrequent, such that these ports do not presently represent the conventional idea of a hubbing function.

The number of destinations and seat capacity offered through the ports listed is only an indicator of their potential value as a hub and can be misleading, in the sense that most of the traffic into these hub locations is historically terminating at the hub. This is combined with few interconnecting schedules and many airlines not offering codeshares that allow travellers to continue to other Pacific destinations.

3.1.3 Air Freight in the Pacific

Most air freight in the Pacific is transported as belly cargo on commercial passenger flights due to thin demand and one-way nature of air freight, which generally makes dedicated freighter services commercially unviable. Notable example of a regular freighter service in the Pacific includes flights operated by Asia Pacific Airlines from Guam to the US-Affiliated Pacific Islands (USAPIs) using its Boeing 757 freighter aircraft, and Brisbane-based Pacific Air Express which operates occasional freighter services to PNG, Nauru, Vanuatu, the Solomon Islands, and New Caledonia using its Boeing 757 freighter aircraft.

3.2 Air Access During the COVID-19 Pandemic

Airlines, both foreign and national, are facing major financial crises as the future remains uncertain amid the COVID-19 pandemic. Air access into the Pacific has been reduced to only a handful of services operated by a few airlines capable of providing the capacity. Governments have closed their borders to foreigners with access to PICs by air becoming increasingly difficult as repatriation flights become the predominant source of inbound and outbound passengers for most countries, although cargo flights are on the rise. **Table 3-2** provides a summary of each PIC's border and travel restrictions. Various countries, their airlines and airports have sought assistance to prop up their finances while their operations are grounded. This section provides a high-level overview of air service status among the PICs during the COVID-19 pandemic.

Table 3-2: Current Travel Restrictions in Each Pacific Island Country

Country	Current International Restrictions	Current Domestic Restrictions
Cook Islands	Only citizens, permanent residents, work permit holders, and resident permit holders who have spent past 14 days in New Zealand before travelling are allowed to enter Cook Islands.	-
Fiji	Only residents allowed to enter with 14-day quarantine. Visitors travelling under the 'Blue Lane' scheme for yachts are allowed given they have met self-quarantine requirements.	Inter-islands transport resumed with Fiji Link providing limited services.
Kiribati	No repatriation of citizens so far. Preparation is underway. Border closure announced until the end of December 2020.	-
Marshall Islands	Complete ban on inbound travellers, with exemptions to personnel at Kwajalein. Outbound travellers also banned.	-
Federated States of Micronesia	Complete ban on all travellers.	-
Nauru	Restricted entry to specific countries with the exception of travellers who have been in 14-day quarantine	-
Niue	Only residents and essential workers approved by the Government allowed to enter.	-
Papua New Guinea	Only residents and those approved by the State of Emergency Controller allowed to enter from selected origins with 14-day quarantine.	Domestic air travel limited to essential purposes during the State of Emergency.
Palau	Palau is accepting incoming travellers. However, they must be in mandatory quarantine. Quarantine period is dependent on the port of departure.	
Solomon Islands	Only citizens and residents are permitted entry and will undergo 14 days of quarantine upon arrival. State of Public Emergency in place until 25 November 2020, and Solomon Airlines' international flights suspended until January 2021	-

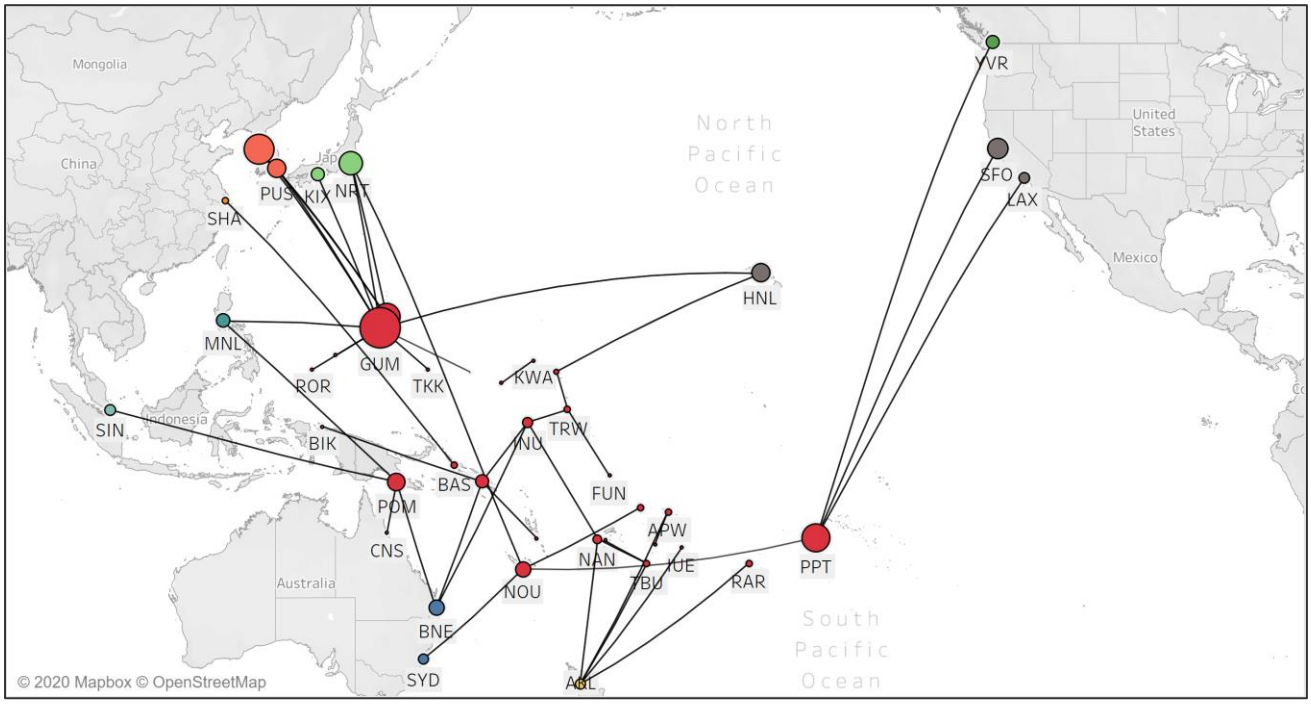
Country	Current International Restrictions	Current Domestic Restrictions
Tonga	Tongan borders are closed to all entry by foreign nationals.	-
Tuvalu	State of Emergency expires on 26 March 2021. National borders are currently closed with approved exemptions. Any person granted exemption will undergo 14 days of quarantine.	-
Vanuatu	State of Emergency extended until December 2020. All ports of entry are currently closed, except with approval of local authorities.	-
Samoa	All international arrivals to/from Samoa by plane are suspended unless approved by Cabinet. Borders are currently closed.	-

Source: Governments of the Cook Islands, Fiji, Kiribati, FSM, Nauru, RMI, Niue, Palau, Solomon Islands, PNG, Tonga, Tuvalu, Vanuatu, and Samoa.

3.2.1 Passenger Air Access in the Pacific

Figure 3-10 shows available international and intra-regional scheduled flights that were available in the month of September 2020. A full list of passenger and air cargo routes, which includes the operating airline, aircraft type, and frequency is summarised in **Table 3-3** for the study focus countries.

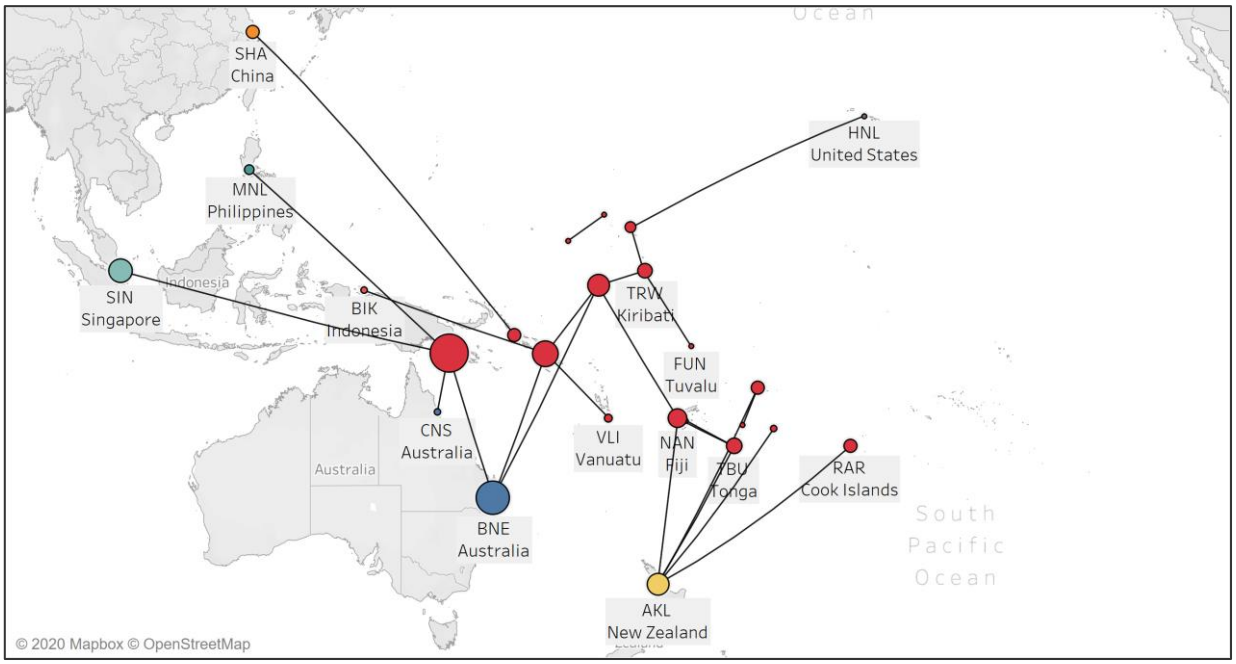
Figure 3-10: Intra-Regional and International Routes into the Pacific – September 2020



Source: Diio Mi by Cirium schedule data.

The size of the airport markers indicates a relative market share of inbound seating capacity to the PICs during the measurement period. **Figure 3-11** shows the available international and intra-regional routes limited to the study focus countries only, for September 2020.

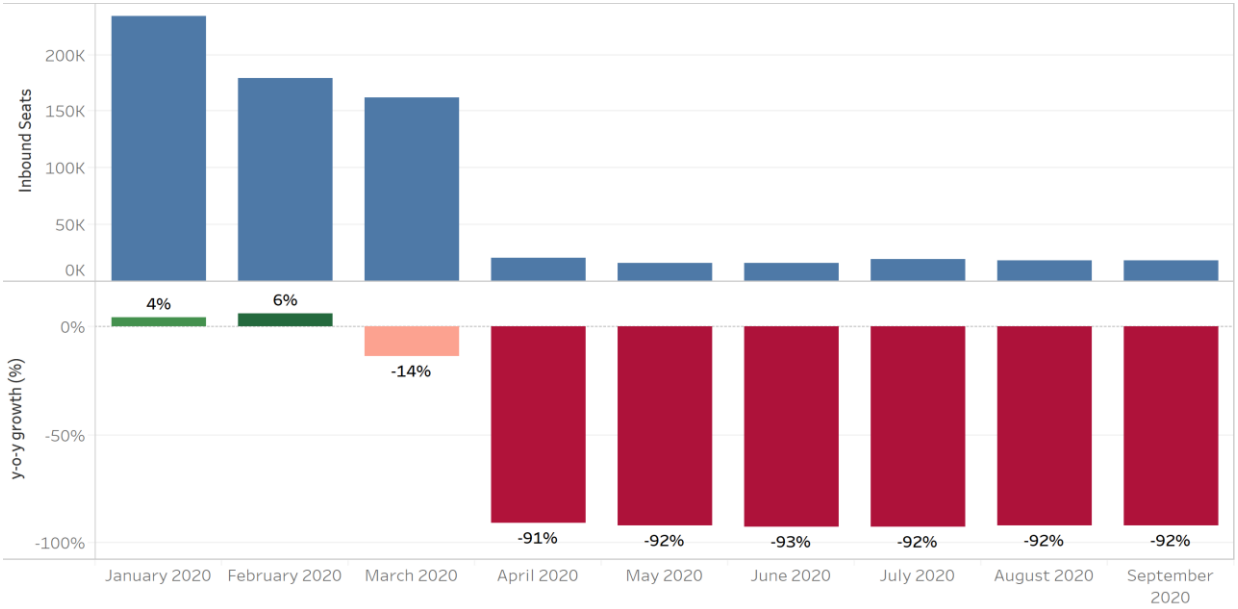
Figure 3-11: Intra-Regional and International Routes into the Study Focus Countries – September 2020



Source: Diio Mi by Cirium schedule data.

Figure 3-12 represents the monthly international seating capacity into the study focus countries along with the year-on-year growth (compared to the same month in the previous year). Note that the schedule data does not account for cancellations and changes to the schedule.

Figure 3-12: Study Focus Countries Monthly Inbound International Seating Capacity



Source: Diio Mi by Cirium schedule data.

When looking at inbound international traffic (excluding intra-regional) into the study focus countries, the region is operating at 8% of the seating capacity into the region compared to the same time last year. This is equivalent to approximately 18,000 seats, 45% of those arriving from Australia and 19% from New Zealand. It is important to note that many airlines only carry cargo on scheduled commercial flights due to limited passenger demand caused by border restrictions and therefore the capacity data will not reflect the true passenger load within the region.

Governments are constantly updating restrictions for residents and foreigners regarding entry into their nations. These range from minimal restrictions targeting 'hot spot' countries to full border closures and quarantines. The US-Affiliated Pacific Islands (USAPI) nations are still connected through a United Airlines' monthly Island Hopper roundtrip service, servicing the FSM and RMI.

Airlines with domestic networks have continued to operate these at reduced capacity. The size of these domestic networks ranges from a single domestic scheduled route (e.g. Air Rarotonga's Rarotonga-Aitutaki) to larger networks such as Fiji Airways/Fiji Link and Air Niugini/Link PNG's domestic networks.

As most PIC borders have been largely closed, many limited international services are mostly focussed on maintaining connections through Brisbane and Auckland for freight and repatriation purposes. Notably, flights from the PICs to East Asia and the US have mostly been suspended, with the exception of services originating in the French territories and the north Pacific countries.

3.2.2 Air Freight During the COVID-19 Pandemic

During the COVID-19 pandemic, the overall freight capacity in the Pacific has decreased as many routes have either been suspended or reduced in frequency. As a result, many PICs indicated that the cost of air freight per unit has significantly increased due to shortage in capacity supply. For many countries, this means an increased reliance on sea freight. Some countries imposed a quarantine period for any inbound freight due to fear of COVID-19. These factors have led to delays and disruptions in the supply chain.

Air freight is transported on domestic passenger air service networks that are still operating at reduced capacity. As borders across all PICs have effectively closed, some airlines operate cargo-only flights using passenger aircraft on a regular or on-demand basis. For many, such cargo-only flights are not financially viable due to thin demand and the one-way nature of air cargo in the Pacific, meaning one of the sectors will most likely be flying empty as, for example, some small island states may not have a large export market.

The current situation has seen some airlines, e.g. Fiji Airways and Nauru Airlines, convert some of their existing passenger aircraft to freighter aircraft as they recognise that the demand for air freight will be high for the foreseeable future. This is done through temporary refit of the passenger cabin using 'Seatpacks' (an accessory allowing cargo to be placed between seats and easily loaded/unloaded), the removal of passenger seats, or a permanent passenger-to-freighter (P2F) conversion.

Some countries that were regularly served by dedicated freighter services continue to be served at reduced frequency. The US-Affiliated Pacific Island states, in particular, are served twice a week by Asia Pacific Airlines, with connection to Guam.

International organisations and governments have stepped in to provide lifeline cargo service. For instance, the International Air Freight Capacity scheme was introduced by the New Zealand Government to ensure regular service to key export destinations across the globe by underwriting cargo routes. Among the PICs, this guarantees weekly services by Air New Zealand from New Zealand to the Cook Islands, Niue, Fiji, Tonga, and Samoa.

The Pacific Humanitarian Pathway on COVID-19 (PHP-C) was established in April 2020 by PIF member states under the Forum's Biketawa Declaration to facilitate assistance and cooperation between member states. The programme allows for assistance from key regional, international, and development partners to be facilitated in an efficient and timely manner. Through PHP-C, the United Nations' World Food Programme (WFP) has been chartering humanitarian flights carrying medical supplies to various destinations in the Pacific including PNG, Fiji, Kiribati, and Nauru. Sponsors of the programme range from government entities (e.g. Australian Government) to private entities (e.g. the Jack Ma Foundation).

Table 3-3: Regular Intra-Regional and International Passenger and Freight Services During COVID-19

Route	Operator (Aircraft)	Frequency	Comment
Auckland – Apia	Air New Zealand (A320/B787)	1x weekly	Subsidised by NZ IAFC scheme
Auckland – Nadi	Air New Zealand (B787) Fiji Airways (A350)	1x weekly 3x weekly	Air New Zealand service subsidised by NZ IAFC scheme
Auckland – Niue	Air New Zealand (A320)	1x weekly	Subsidised by NZ IAFC scheme
Auckland – Rarotonga	Air New Zealand (B787)	1x weekly	Subsidised by NZ IAFC scheme
Auckland – Tonga	Air New Zealand (B787)	1x weekly	Subsidised by NZ IAFC scheme
Brisbane – Nauru	Nauru Airlines (B737)	Fortnightly	Source: Airline Interview
Guam – Chuuk – Pohnpei – Kosrae – Kwajalein – Guam	Asia Pacific Airlines (B757 Freighter)	2x weekly	Source: 23-29 August schedule
Guam – Majuro – Honolulu – Guam	Asia Pacific Airlines (B757 Freighter)	2x weekly	Source: 23-29 August schedule
Guam – Yap – Palau – Guam	Asia Pacific Airlines (B757 Freighter)	1x weekly	Source: 23-29 August schedule
Honiara – Brisbane	Solomon Airlines (A320) Pacific Air Express (B737 Freighter)	1x weekly 2x weekly	Source: Airline Interview Source: Austrade
Nadi – Hong Kong	Fiji Airways (A330/A350)	1x weekly	Source: SPTO
Guam – Chuuk – Pohnpei – Kosrae – Kwajalein – Majuro – Honolulu	United (B737)	1x monthly	Source: Routesonline
Guam – Koror	United (B737)	1-2x monthly	Source: Routesonline
Guam – Yap	United (B737)	Fortnightly	Source: Routesonline
Guam – Pohnpei – Chuuk – Guam	United (B737)	Fortnightly	Source: Routesonline
Nadi – Los Angeles	Fiji Airways (A330/A350)	2x weekly	Source: SPTO
Nadi – Port Vila	Fiji Airways (ATR72 Freighter)	1x weekly	Source: SPTO
Nadi – Sydney	Fiji Airways (A330/A350)	2x weekly	Source: SPTO
Port Moresby – Brisbane	Air Niugini (B767) Pacific Air Express (B737 Freighter)	5x weekly 3x weekly	Source: 20-31 August schedule Source: Austrade
Port Moresby – Cairns	Air Niugini (F70)	1x weekly	Source: 20-31 August schedule
Port Moresby – Singapore	Air Niugini (B767)	4x weekly	Source: 20-31 August schedule
Port Vila – Brisbane	Pacific Air Express (B737 Freighter)	1x weekly	Source: Austrade

Information as of August 2020.
Sources: New Zealand Ministry of Transport, SPTO, Air Niugini, Nauru Airlines, Asia Pacific Airlines, Routesonline, Austrade.

4 Review of Aviation Support Programs in the Pacific

The following section provides a high-level overview of each of the regional bodies consulted as part of this study as well as the PRIF Development Partner's aviation support activities in the Pacific. This includes recent and ongoing programs, as well as any support that has been a direct result of COVID-19. The information is the result of consultations with the Partners, regional bodies, public documents, and advice from PICs. In relation to the PRIF Development Partners, this is not a comprehensive list of all support provided by the Partners, with monetary amounts not always available and some donors unavailable for consultation. It should be noted that the support programs mentioned here do not comprise all the support given to the region, only those that have an aspect that services the aviation industry.

4.1 Development Financing Organisations

4.1.1 Asian Development Bank

The transport sector accounts for 30-40% of the Asian Development Bank's (ADB) operations in the Pacific and about 27% of this is directed towards the aviation sector. The majority of the ADB's aviation efforts in the region are focused in PNG with the Civil Aviation Development Investment Program (CADIP), ongoing for 12 years and slated for completion in mid-2021. A follow-on project (CADIP II), is being finalised for an additional loan concentrating on upgrading a selected number of national airports and rural airstrips and a feasibility study for the extension of the runway at Port Moresby International Airport (POM). The ADB have also been acting as mandated advisors to the Government of PNG for the development of POM under a public private partnership (PPP). The ADB is also currently processing a project preparation technical assistance in the Cook Islands for infrastructure upgrades at Rarotonga Airport (RAR) including possible runway and terminal rehabilitation.

The ADB has approved a US$20 billion allocation to a COVID-19 assistance package for Developing Member Countries, of which the Pacific received the largest regional allocation of US$1.2 billion. Of this, US$307 million is in grants while US$750 million is in loans. The first round of support is complete with the second round to be completed in 2021. The money is to be allocated as budget support to countries on a needs basis with little conditionality attached; the governments decide how much is allocated towards aviation at their own discretion.

The ADB is willing to establish dialogue with PICs in regard to any specific urgent needs and prepare new financing as a result of these discussions, and would consider project loans and grants, program-based lending, and government budget support. Noting that traditional project preparation can often be time-consuming, the ADB is able to expedite this by utilising existing regional Technical Assistance (TA) funds, which can be mobilised on short notice. The outcomes recommended by this PRIF study may be achieved by 'piggybacking' onto existing projects/programs or may be included in future support.

Any form of direct financial support from ADB for commercial entities such as airlines and airports would come from the ADB's private sector operations, while sovereign financing is more likely to be focussed on such items as operational readiness, airport infrastructure development, and maintenance support. The type of financial support will depend on the assessed debt distress risk of the developing member countries, with the highest risk states eligible for grants only (FSM, Kiribati, RMI, Nauru, Samoa, Tonga and Tuvalu), while moderate risk states (Solomon Islands and Vanuatu) are eligible for blended grants and concessional loans, and the remainder (Fiji and Cook Islands) are only eligible for non-concessional loans.

4.1.2 World Bank

The World Bank's (WB) focus on supporting aviation in the Pacific has been most notably through the Pacific Aviation Investment Program (PAIP), a regional adaptable funding program that consists of a series of projects designed to strengthen regulatory compliance, and ensure critical infrastructure meets operational safety requirements in the region. The PAIP is funded by the WB, participating countries, and other donor partners such as DFAT and MFAT with participating countries being Kiribati, Tuvalu, Tonga, Samoa, Solomon Islands and Vanuatu. Over US$300 million has been invested between 2012 and 2022 at 12 airports with the program now closed in Tonga, Vanuatu and Kiribati, and about to close in Samoa in 2021. Tuvalu will receive additional financing for a 2-year extension to the program, to address defects associated with resurfacing of Funafuti International Airport's runway. The Solomon Islands has participated in the PAIP since 2019 through the Solomon Islands Roads and Aviation Project (SIRAP), involving the resealing of runways and other improvements and equipment at Honiara and Munda International Airports, as well as aviation sector support.

In the pipeline for project financing, the WB is examining requests for financing a sea wall and assessing the viability of a runway extension at Faleolo International Airport (APW) in Samoa and assisting Tonga in the resurfacing of the runway on the island of 'Eua. Also being discussed with Tonga is the potential for a multi-airport multi-year maintenance contract, particularly focussed on international airports, in partnership with other countries in the region, possibly with Samoa. Domestic airport terminals in Kiribati and development of domestic airports in Vanuatu are also under consideration. Fiji has raised the prospect of a greenfield international airport on Vanua Levu. WB has advised that the next project in Fiji is expected to be tourism-related but will have some aspect of funding directed towards the aviation sector. The WB is also working with the Solomon Islands counterpart to prepare a new transport project that would scale up the ongoing SIRAP.

In response to COVID-19, the WB is in the process of providing emergency support to the health sector for several PICs. Other forms of budget support are under development (e.g. for Tonga, Kiribati, and Samoa) focussed on fiscal stability. The WB believes it is best suited to financial support, mostly through grants related to economic policy and fiscal stability that provide long-term benefits.

Any form of direct support to the Pacific aviation sector as a result of COVID-19 will see two main concerns. Firstly, many national airlines were under financial pressure even before this pandemic and as a result, any financial support may be propping up an already struggling business. A reasonable business plan must be found that provides critical air services without huge losses. Secondly, minimum maintenance support for the whole range of transport assets must be met, including roads, airports, and ports. The WB also noted that project finance approval processes usually takes a minimum of six months. The WB has traditionally been involved in infrastructure projects within the aviation industry, lending its support to airports as opposed to airlines. Any intervention into enterprise financing will more likely be carried out by the IFC.

4.1.3 Japan International Cooperation Agency

The Japanese International Cooperation Agency (JICA) is the organisation responsible for the implementation of Japan's official development assistance (ODA) overseas. The ODA involves bilateral assistance in the form of technical cooperation, finance and investment, and grant aid as well as multilateral assistance in the form of funding and donations to bodies such as the United Nations and the World Bank. Assistance is also provided through other official flows (OOF) through public funding other than ODA as well as cooperation with the private sector and non-profit organisations (NGOs). Through the technical cooperation and financial assistance, JICA has helped a wide range of infrastructure development in the Pacific Islands. Part of JICA's strategy in the Pacific includes self-sufficient and sustainable development by supporting infrastructure such as airports, roads, bridges, and renewable energy.

In relation to the aviation sector, JICA gave a ¥702 million grant for the restoration of Honiara International Airport (HIR) completed in 2005 with an ongoing project that involves a ¥436.4 million grant for improvements to the airport scheduled to be completed in June 2022. There is an ongoing project for the redevelopment of Lae Nadzab Airport (LAE) in Papua New Guinea involving a loan of ¥269.4 million scheduled for completion in August 2022. JICA is also in the process of formulating a loan for the redevelopment of Tokua Airport (Rabaul Airport, RAB) in Papua New Guinea for approximately ¥160 with a loan agreement target for 2021. The Federated States of Micronesia received a grant for ¥29.1 million for upgrade works to Pohnpei International Airport (PNI), completed in August 2011. Palau is seeking ongoing project financing from JICA for the renovation, expansion and management of Palau International Airport (ROR) scheduled to be completed in November 2020. Grants are currently being formulated for the Marshall Islands and Tonga for upgrade work at Marshall Islands International Airport (MAJ) and Fua'amotu International Airport (TBU), respectively. The exact amount of the grants is yet to be determined with a grant agreement target of 2022 for both projects.

4.1.4 Australian Government

Historically, Australia has had a strong presence as a development partner among the PICs, with most of the country's international development assistance being delivered in the Asia-Pacific region. Aid is delivered through bilateral arrangements with the PICs but also through collaboration with other development partners such as the World Bank (WB). Australia also has a history as a leading donor to the major regional organisations in the Pacific. Australian support comprises both core funding and assessed member contributions as well as additional funding for specific programs delivered by organisations including the Pacific Islands Forum (PIF), the South Pacific Tourism Organisation (SPTO), and the Pacific Aviation Safety Organisation (PASO).

The aviation sector comprises a relatively small component of Australian aid to the region. From time to time, DFAT has had a dialogue with the New Zealand Ministry of Foreign Affairs and Trade (MFAT) on the funding of

PASO. Australia assisted the WB to fund the runway resurfacing project in Port Vila and has participated in various airline analyses. At a technical level, there is cooperation on aviation safety with the Civil Aviation Safety Authority (CASA), which signed a working arrangement with PASO to provide services on a cost-recovery basis for five years with an option to extend for three years.[2] This arrangement allows PASO to request technical assistance from CASA, supporting PASO to address gaps in regulatory compliance.

Australia's current role in the Pacific in response to COVID-19 has seen DFAT working in partnership with the PIF to contribute to the Pacific Humanitarian Pathway (PHP) program to redress interrupted supply chains. Australia is providing A$5.5 million to the World Food Programme, including A$4 million for the transport and logistics of delivering humanitarian and critical medical supplies to the Pacific. This support is in addition to the implementation of protocols for both air freight and passengers that aim to minimise the risk of COVID-19 transmission. This funding means that, in partnership with the PIF, Australia is able to assist in the underwriting of supply of cargo as well as the development of important safety measures. The Pacific also sees occasional support from the Australian Government in terms of airspace management under the purview of CASA.

In responding to COVID-19, DFAT has identified a need to engage more substantially in the aviation sector. Priority areas of attention include:

- Maintaining affordable connectivity on vital air routes for reopening tourism-driven PIC economies and providing access by Pacific islanders to seasonal labour opportunities and to provide essential goods;
- Maintaining safety standards; and
- Making the air transport system more sustainable.

Regarding connectivity, DFAT identified that the immediate focus of maintaining subsidised freight services, food security, and humanitarian needs should be expanded when borders open to address the need for reopening of passenger services to tourism-driven PIC economies and re-establishing access by Pacific islanders to seasonal labour opportunities.

Regarding safety, DFAT seeks assurance that air transport services are restarted safely and seeks that PASO is in a position to deliver its regulatory services role to ensure this. Accordingly, DFAT is willing to consider short- to medium-term support to PASO in partnership with MFAT. In the long term, the sustainability and source of the funding gap will need to be addressed as DFAT does not intend to be part of PASO's long term core funding model.

Regarding sustainability, DFAT has raised concern surrounding the long-term structure of the air transport sector in the Pacific region. These concerns relate to the pre COVID-19 situation with the number of small national airlines with limited economies of scale that place a significant financial burden on the national governments. DFAT would like the Pacific to take advantage of the disruption caused by the pandemic to stimulate much greater regional technical and commercial collaboration and pooling of resources on all aspects of airline operations. DFAT is willing to investigate support for the analysis of such initiatives on a case-by-case basis but this would need to be at the request of PIC governments.

4.1.5 New Zealand Government

Due to New Zealand's proximity to the PICs and a strong New Zealand traveller presence in the region, the Ministry of Foreign Affairs and Trade (MFAT) actively supports wider regional safety and security programs and initiatives including PASO, the Oceania Customs Organisation, and the Pacific Immigration Development Community. MFAT has additional responsibilities to the Cook Islands, Niue and Tokelau as they are members of the Realm of New Zealand. New Zealand's large resident Pacific Island population of persons of Samoan and Tongan descent and popularity of those PICs as holiday destinations also place these countries in MFAT's sphere of influence/interest.

The Solomon Islands has seen substantial New Zealand infrastructure investment in aviation infrastructure and governance from MFAT. MFAT's objective is to assist Solomon Islands in broadening its economic base to include non-extractive industries such as tourism.

Regarding aviation security, MFAT has in the past provided second-hand airport security screening equipment (and training) to PICs. This is continuing with an activity to replace old equipment with updated new security screening equipment at an expected cost of NZ$9.5 million in 13 airports in 11 countries, including enhanced facilities for airports with flights to the US that are required to meet FAA standards. MFAT will also fund a 3-year

[2] Australian Government, Civil Aviation Safety Authority, 2018-19 Annual Report, pg. 109

full maintenance program and hopes to find additional funds to extend this maintenance programme out to 7 years, being the expected life of the new equipment.

Regarding aviation safety, MFAT places a strong emphasis on maintaining PASO capacity. MFAT has been one of the primary donors to PASO with core funding, supporting the ICAO Universal Safety Oversight Audit Program (USOAP) and funding a range of safety and security assistance by PASO to PIC regulators. The expenditure committed to PASO is NZ$4.5 million over the period 2018-2021. MFAT will be developing a Business Case to extend this funding beyond 30 June 2021. The PASO 2020 budget references A$718K paid from the Government of New Zealand through the New Zealand Grant Funding (NZGF) scheme.

In the wake of COVID-19, New Zealand has been instrumental in starting the discussion amongst donors and regional partners regarding assistance to the PICs' aviation sector. MFAT notes that the New Zealand Ministry of Transport (MOT) has been operating the International Air Freight Capacity Scheme (IAFC). This competitively tendered NZ$330 million scheme provides financial support to international airfreight carriers guaranteeing air freight capacity on key routes under airline and carrier agreements. The scheme ensures that there are regular connections between New Zealand and the Cook Islands, Fiji, Samoa, Tonga, and Niue. The scheme runs until the end of December 2020, with an extension through to the end of March 2021 under consideration.

Regarding COVID-19 recovery strategies, MFAT recognises the need to support both airlines and airports to ensure the capability for early recovery of air access. However, the sustainability of the airlines needs to be explored, and consideration needs to be given to how best to respond to circumstances where an airline may fail as a business. Particular concern was expressed about ensuring the sustainability of domestic air services in places like Vanuatu, Solomon Islands and Tonga.

MFAT also acknowledges the need for assurance that facilities are COVID-ready when passengers return to the PICs. This includes preventive health measures, screening and quarantine facilities and the ability to adequately deal with any future outbreaks.

A key concern of MFAT is the ability of PASO to be highly effective in its role in ensuring compliance. It was identified that budget support mechanisms need to be established to help member countries pay their PASO fees and cover their annual programs. MFAT takes the view that, in the short term, core funding should come from Australia and New Zealand while long-term funding should be maintained by the PASO funding model and member countries.

4.1.6 European Union and the European Investment Bank

The European Union (EU) has a long-standing relationship with the Pacific Region, developing partnerships with Australia, New Zealand, the 15 Pacific Independent Island Countries, the four Overseas Countries and Territories (OCTs) and the PIF. The EU's relationship with the Pacific has traditionally been based on development cooperation in the framework of the partnership between the EU and the African, Caribbean and Pacific (ACP) countries. These relationships however have not seen direct support to the aviation sector, instead focusing more on the maritime industry and issues surrounding trade. More recently, EU's support has grown into sectors including good governance, energy, climate change, fisheries and human rights. The EU and its member countries provide support for the region through the 11th European Development Fund (EDF), working closely with regional institutions to work towards the goals of the EDF.

In response to the COVID-19 pandemic, the EU has secured financial support to partner countries and territories in the Pacific and Timor-Leste for a total of €119 million.[3] On the health front and in agreement with the PIFS, the EU is redirecting €24 million from existing programs and reserves in line with the Action Plan of the Pacific Joint Incident Management Team. This action will consider the PHP initiative to best benefit the countries in the region. On the socio-economic front, the response is two-fold: reorienting funds from existing programs and advancing budget support all to the amount of €95 million. The EU suggests that budget support "*allows fast reaction, country ownership, and strong policy dialogue – even in times of lockdown*".

Long-term financing of projects in the region is done through the European Investment Bank (EIB), the lending arm of the EU. The EIB's goal in the Pacific is to support policy priorities of the EU and its member states, lending to projects in the public and private sectors with strong development impact in promoting economic stability, climate action, vital infrastructure, private sector development and regional integration. In line with the support from the EU, the EIB has not been involved in the finance of the aviation sector in the region with their

[3] European Commission, "*EU global response to coronavirus in the Pacific region and in Timor-Leste"*, June 2020

focus instead to projects such as replacing rural bridges in Papua New Guinea, Vanuatu's first wind farm and small business financing in New Caledonia and the FSM.[4]

4.1.7 United States Government

The United States Department of State leads the country's foreign policy through diplomacy, advocacy, and assistance in both safety and economic development. The United States Agency for International Development (USAID) is the US Government's lead international development and humanitarian assistance agency. USAID plans its development assistance programs in coordination with the Department of State to ensure that foreign policy and development activities achieve the objectives of the National Security Strategy of the United States. Through USAID, the United States partners with 12 PICs with a focus on infrastructure, energy, and the digital economy; strengthening civil society and democratic institutions; countering transnational threats; and investing in human capital across the Indo-Pacific region. USAID's work in the Pacific has not seen any form of direct support to the aviation industry, with the exception of the US-Affiliated Pacific Islands (USAPI) which receive funding and grants from the Airport Improvement Program (AIP) as they are considered to be US domestic airports.

In response to the COVID-19 pandemic, the United States Government, through USAID, has provided more than US$27.7 million to the Pacific Islands. This funding is in addition to the AIP grant funding under the Coronavirus Aid, Relief, and Economic Security (CARES) Act, providing additional support and financial relief. The intended use of these funds has been to support "*partner counties in the region to prevent the spread and mitigate the effects of the COVID-19 pandemic*".[5] USAID programs enable risk-communications, hygiene promotion and handwashing, the prevention and control of infectious diseases in health facilities, and logistics support to move essential medical supplies and personnel. As of August 2020, the total support from the United States Government to the region in response to the pandemic is approximately US$118 million including US$90 million in support of the USAPIs from the Department of the Interior, Department of Health and Human Services, U.S Center for Disease Control and Prevention, and the Department of Labour. USAID humanitarian partners are on the ground in Fiji, Kiribati, the Marshall Islands, Micronesia, Samoa, Palau, Vanuatu, Papua New Guinea, Solomon Islands, Tonga, and Tuvalu to help prevent and respond to the virus. In addition to direct financial and humanitarian support, USAID is supporting the UN World Food Programme's region-wide logistics operation to airlift critical medical supplies and enhance telecommunications infrastructure throughout the region.

4.2 Regional Bodies

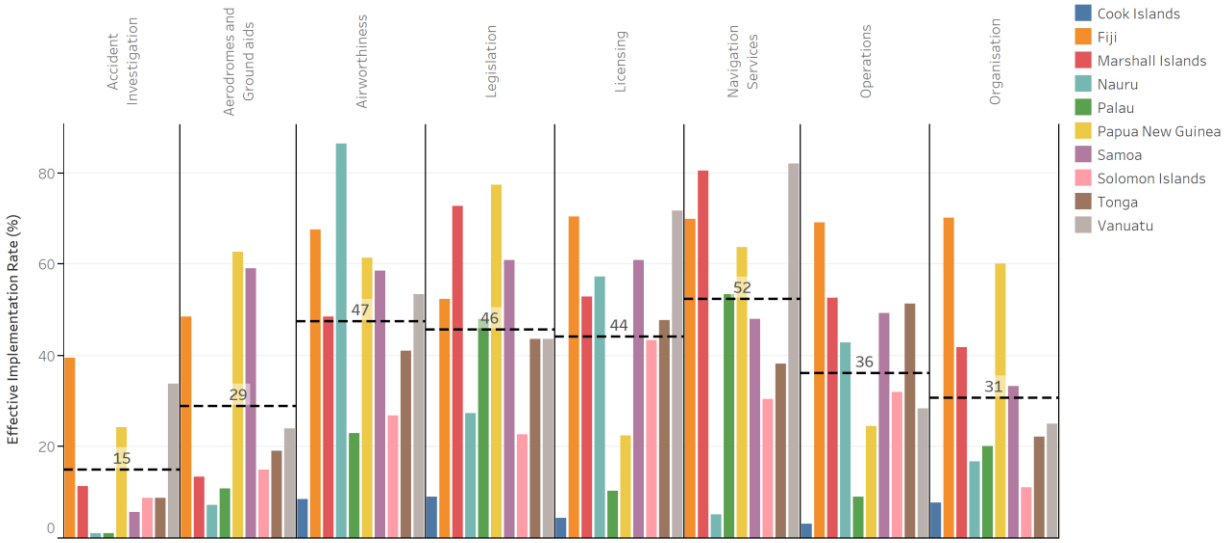
4.2.1 Pacific Aviation Safety Office

The Pacific Aviation Safety Office (PASO) is a regional organisation overseeing aviation safety and security oversight using guidelines provided by ICAO for its member states in the Pacific. PASO was formed in 2005 under the Pacific Islands Civil Aviation Safety and Security Treaty (PICASST) and is based in Port Vila. PASO serves its member states as a technical body providing the local Civil Aviation Authorities (CAA) with the ability to carry out certification to ensure compliance with the relevant local aviation regulations, ICAO standards and recommended practices (SARPS), and other oversight activities around a wide range of aviation areas. While PASO provides in depth regulatory services using licensed inspectors, the regulatory power remains with the national civil aviation regulators in the PICs. Fiji is an associate member of PASO with its own regulatory capability but is not currently party to the PICASST.

A key role of PASO is supporting a greater degree of compliance with global international aviation standards. In response to widespread concerns about the adequacy of aviation safety oversight around the world, ICAO introduced USOAP in 1999. The audit focuses on a State's capability in providing safety oversight and has highlighted the Pacific's lack of effective implementation in areas such as legislation and licensing, with PICs regularly falling below the recommended minimum requirements, as shown in **Figure 4-1**. PASO is therefore required to assist PICs in overcoming these deficits and by operating on a regional scale, provides more flexible Pacific based access to expertise while benefiting from the economies of scale.

[4] European Investment Bank, The European Investment Bank in the Pacific, pp. 6.
[5] United States Agency for International Development, "The U.S Governments COVID-19 Response in the Pacific Islands", August 2020.

Figure 4-1: ICAO USOAP Audit Results - PICs



Source: ICAO USOAP. Note: not all countries were audited in 2019, data reflects most recent audit data available

PASO, in conjunction with national regulators, has made significant inroads into these issues but has experienced difficulties discharging its mission due to funding constraints. The current PASO funding model is a user-pay system whereby member countries pay annual subscriptions plus additional work programs. Added to this is a per-passenger charging mechanism that was introduced through PAIP. It is evident that the model is not working as effectively as it should in all cases; some member countries are having difficulty funding their dues, and with a significant portion of revenue coming from donors such as MFAT. It has become clear the current model is difficult to sustain and as such, the long-term funding arrangements are under review.

In response to COVID-19, PASO has been held back from its ability to deliver regulatory services not only due to historical funding constraints, but also because travel bans are preventing inspectors from carrying out delivery of in-country regulatory services to maintain compliance and certification are unable to do so without access to the necessary staff. While some level of compliance and certification can be conducted through, a basic requirement of certification and compliance is carried out in person, requiring the service. Additionally, under current circumstances, PICs have even less fiscal headroom to pay their PASO fees and thus the immediate future of PASO's existence is

in doubt without immediate funding.

4.2.2 Pacific Islands Forum

The Pacific Islands Forum (PIF) is an inter-governmental political and economic policy organisation serving the Pacific region and comprising of 18 members. The PIF encourages cooperation and collaboration between governments while representing the interests of its members. The work of the Forum is guided by the 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. Agreed regional policies and initiatives are coordinated by the Pacific Islands Forum Secretariat (PIFS) and implemented through the Council of Regional Organisations of the Pacific (CROP).

The PIFS does not have the technical capability to drive programs of reform in the areas of safety and compliance, instead relying on PASO who is also limited in its abilities as mentioned in **Section 4.2.1**. PIFS have noted that they will continue to push the aviation reform agenda in the region, but it has not received the level of needed support from all PICs in the past. Within the PIF member countries, there is a forum of Smaller Island States (SIS) representing the most vulnerable of nations based on size, population and isolation. Air transport limitations has been identified as one of the top five issues experienced by the SIS forum with some members lacking a voice in the region on addressing this issue.

In response to the COVID-19 pandemic, PIFS has been active in supporting the Pacific Humanitarian Pathway on COVID-19 (PHP-C) in coordination with the World Health organisation (WHO). PIFS work with the PHP-C has exposed the lack of available aircraft to carry out the transport of critical supplies and the complexity of the

aviation system in the region, highlighting the disconnect between many PICs. Going forward, PIFS note that the sourcing of aircraft and the associated costs of fuel will become an issue because of this.

The Forum Economic Ministers Meeting in August 2020 was largely focussed on the region's response to the COVID-19 crisis. One of the policy paper outputs called for the Forum to "examine opportunities to reset, reform and redesign the regional aviation landscape to strengthen regional collaboration in the industry."

4.2.3 Association of South Pacific Airlines

The Association of South Pacific Airlines (ASPA) is a trade association that was established at the directive of the South Pacific Civil Aviation Council in 1978. Its main objective is to promote discussion and cooperation among member airlines in the South Pacific region. ASPA's members include various airlines from the Pacific region, airport authorities, aviation service providers, and regional bodies. ASPA is currently chaired by Brett Gebers, CEO of Solomon Airlines.

Throughout the COVID-19 pandemic, ASPA is used as a valuable forum for CEOs of member airlines to hold a weekly dialogue discussing common problems facing the industry. ASPA has also been vocal in outlining the concerns of member airlines regarding COVID-19 readiness among PICs and the importance of early planning of international travel resumption. Together with Qantas, ASPA developed risk matrices that identified areas of challenge that needs addressing in preparation for services resumption. These matrices have been used by various employee groups, including pilots and engineers.

ASPA has long been an advocate for closer relationship between airlines in the Pacific. This is due to the small markets in individual countries, and the fear that larger airlines from Australia and New Zealand, with their larger purchasing power, may dominate and eliminate competition in the Pacific aviation landscape. ASPA promotes the harmonisation of commercial, technical, planning, and administrative policies of its members, which range from the rationalisation of schedules in order to achieve optimum deployment of resources to the pooling of resources such as marketing campaigns, maintenance, ground services, and training. It is recognised that there are differing views regarding regionalism (e.g. the creation of a regional airline, PIASA). Nevertheless, a consensus on some type of restructure or closer collaboration is more palatable on a smaller scale (sub-regionalism).

5 Review of Study Countries' Aviation Sector and the Effect of COVID-19

The study countries share many similar characteristics and challenges. Their small size, location, and remoteness make them attractive holiday destinations and provide a perfect shield against a global pandemic, as evident in the status of many as some of the last countries on earth without a case of COVID-19. Nonetheless, these countries face common threats including, but not limited to, climate change, natural disasters, political instability, geopolitical involvement by larger nations, and poor public healthcare systems, making them some of the most economically and environmentally vulnerable countries in the world.

When examined closely, the study countries are highly diverse in culture, politics, demographics, economics, and tourism prospects. PNG, for instance, has the largest economy among the study countries, benefitting from the mining and energy extraction sector. On the other end of the scale, the Cook Islands and Niue both enjoy the benefits of being in free association with New Zealand as Realm countries and rely heavily on tourism, which accounts for more than 70% of their economies. Other small countries such as the FSM and RMI hardly have any substantial tourism industry and rely on funding from the Compact of Association with the US for their main source of revenue. Fiji has a more self-sustaining economy than other Pacific nations and benefits from a diverse local agricultural industry in addition to tourism.

This section provides an overview of each study country's pre COVID-19 socio-economic profile and its aviation sector. This includes each PIC's socio-economic status, dependence on tourism, reliance on foreign aid, airport ownership and management structure, local/national airline (if any), domestic and international air connectivity, and ongoing aviation infrastructure projects.

This section also discusses the impact of COVID-19 on individual countries' economy and aviation sector, and how the government and aviation industry have responded to the challenges. Key topics include:

- National stimulus packages;
- Aviation-related fiscal assistance from the government;
- Financial assistance from foreign governments and development agencies;
- Border restrictions;
- Local and national airlines' financial and operational status;
- Domestic, intra-regional, and international passenger and freight connectivity; and
- Ongoing aviation infrastructure projects.

PRIF member countries have been placed into various groups representing either associations with external countries, or the degree of vulnerability in terms of development and long-term economic sustainability.

The PIFS have recognised the needs of smaller island nations and have since adopted a forum of Smaller Island States (SIS). These states represent the most vulnerable of Forum Island Countries and its membership comprises of the Cook Islands, the Federated States of Micronesia, Kiribati, Nauru, Niue, Palau, the Marshall Islands, and Tuvalu. Within this group falls two subsets of countries that belong to an association of an external country, namely the US-Affiliated Pacific Islands (USAPI) and the Realm of New Zealand. Identifying PICs within these associations is useful in structuring the governance of funding and reviewing the aviation sectors in accordance with any policies already in place.

All other PIF member countries will be grouped together as "Larger Pacific Islands Countries", representing the more developed and economically stable nations in comparison to the SIS.

5.1 Realm of New Zealand

The Realm of New Zealand is a collection of states and territories in which the monarch of New Zealand functions as the head of state. The realm consists of one Antarctic claim, the dependent state of Tokelau (an associate member of the PIF), and two associated states: the Cook Islands and Niue, which form part of this study.

5.1.1 The Cook Islands

Country Overview

The Cook Islands is a self-governing country made up of 15 islands located in the South Pacific in free association with New Zealand. The country's Exclusive Economic Zone (EEZ) covers 1,960,027 square kilometres (km^2) of ocean. Cook Islanders are considered citizens of New Zealand while also holding the status of Cook Island nationals. The population is 17,564 with the largest population centre being Rarotonga, home to the country's only international airport.[6] The New Zealand 2013 census indicated 62,000 people identified as Cook Islanders living in New Zealand. The economy of the Cook Islands is strongly affected by its geography, being isolated from foreign markets and lacking in natural resources, relying strongly on foreign aid mainly from New Zealand. Tourism provides the biggest economic base accounting for more than 85% of GDP.[7]

Aviation Industry

Air Rarotonga is the sole carrier of the Cook Islands, operating both commercial and charter services from its hub at Rarotonga International Airport (RAR) to domestic locations throughout the country. There are two other main airports serving only domestic destinations: Aitutaki Airport and Mitiaro Airport. The outer islands are served less frequently through Rarotonga with the more distant and less populated islands through charter services. Internationally in 2019, the Cook Islands was serviced by four international airlines: Air New Zealand through Auckland, Sydney and Los Angeles; Virgin Australia through Auckland; Jetstar through Auckland; and Air Tahiti Nui through Tahiti.

Airport Overview

RAR is the Cook Islands' main international gateway, located in the district and national capital of Avarua. The airport features a 2,300 metre (m) sealed runway with night lighting, and separate cargo and passenger facilities. EIB invested €850,000 into the airport in 2014 to facilitate a Technical Assistance Programme which established safety improvements, upgraded terminal facilities and more efficient power usage at airports in the Cook Islands and Samoa. The airport is managed by the Cook Islands Airport Authority (CIAA), which also manages Aitutaki Airport. The CIAA is a state-owned commercial enterprise.

While the CIAA has some control and oversight over seven outer island airports, these airports are non-certified aerodromes with crushed coral runways and are run by Island Council (e.g. Mauke), local customary leadership or landowner trusts (e.g. Atiu, Mangaia), or are unlicensed private airstrips on private land.[8]

Airline Overview

Air Rarotonga is privately-owned and based out of RAR, serving nine domestic destinations using a mixed fleet of 2 SAAB 340s, 2 Embraer EMB-110s, a Cessna Citation, and a Cessna 172. It operates inter-island scheduled services through the Cook Islands as well as charter flights to the Southern and Northern Atolls, as well as Tahiti, Niue, Samoa and Tonga using the Embraer EMB-110. The EMB-110s and Cessna Citation are often configured for medivac flights. Air Rarotonga operates a codeshare with Air New Zealand between Rarotonga and Aitutaki daily. Furthermore, services between RAR and Tahiti (PPT) are operated by Air Tahiti and can be ticketed by Air Rarotonga.[9] In 2019, Air Rarotonga considered launching its first international charter services to Papeete and Niue using its Saab 340 aircraft.

COVID-19 Impacts

As of September 2020, the Cook Islands had no recorded case of COVID-19. However, its tourism sector is severely impacted due to its border restrictions, which only allows Cook Islanders and residence permit holders to enter. Passengers must have spent the last 14 days in New Zealand prior to entry into the Cook Islands and must present a medical clearance from the Ministry of Health within 72 hours prior to travel.

Once visitors arrive in Rarotonga, they will spend a further 14 days from arrival in supervised home quarantine. Medical personnel travelling to the Cook Islands for COVID-19 response effort are exempt from the restrictions.

[6] According to United Nations estimates for 2020 population figures.
[7] New Zealand Herald. *Auckland airport 'ready' for Cooks bubble in two weeks, if greenlit.* 7 August.
[8] Asia Development Bank. 2009. *Cook Islands: Final Report for Preparing the Infrastructure Development Project.* Manila.
[9] Air Rarotonga codeshare partners, https://www.airraro.com/en/our-company/code-share-partners

Air Rarotonga continues to operate a single regular domestic route between Aitutaki and Rarotonga at a reduced capacity, while other routes are operated on demand or as charter flights funded by the Government. It operated an emergency medevac flight to Auckland in August 2020. Internationally, Air New Zealand operates a weekly service Rarotonga from Auckland using its Airbus A320, carrying eligible travellers and essential cargo. The service is covered under New Zealand IAFC scheme.

5.1.2 Niue

Country Overview

Niue is a self-governing island state in free association with New Zealand with a population of 1,700, making it one of the smallest countries in the world. It is 2,160 km northeast of New Zealand where more than 30,000 Niue citizens reside. Like Cook Islands citizens, Niue citizens are also citizens of New Zealand.

Niue is a net importer, with New Zealand being its biggest trading partner. Excluding the re-exporting of mineral products (e.g. jet fuel), food products account for more than 70% of the country's principal exports in 2018.[10] Tourism is a growing industry which generated NZ$15 million in revenue in 2018, accounting for approximately 90% of the country's income. Niue receives approximately NZ$7 million in aid annually.

Aviation Industry

Niue is served by the nation's only airport, Niue (Hanan) International Airport (IUE). The airport has been undergoing several development projects, including the runway and hardstand resurfacing projects, upgrades to runway lighting, and airfield fencing. Ninety percent of these projects are funded by New Zealand's MFAT through NZAID and the rest is funded by the Niue Government. MFAT is also providing direct funding for two new baggage screeners and two new cargo screeners, along with the necessary infrastructure to accommodate these facilities, such as a closed-in area and air conditioning.

The island nation is dependent upon Air New Zealand for its only international air link, operating twice a week from Auckland with an Airbus A320. This service is underwritten by the Government of New Zealand through the NZAID program. The airline and Immigration New Zealand have also funded a project to modernise the immigration and ticketing process at Niue.

The Governments of Niue and New Zealand established a formal civil aviation relationship in 1986. Niue relies on New Zealand's Civil Aviation Authority for air transport services regulation, including the administration of IUE. The Government of Niue has been investigating the feasibility of regional air services to other island nations (e.g. Tonga and Cook Islands).[11] In 2019, Air Rarotonga considered launching its first international charter services to Papeete and Niue using its Saab 340 aircraft.

COVID-19 Impact

As of August 2020, Niue has not recorded any confirmed case of COVID-19. International travel is strictly banned except for residents and essential services workers (with written approval from the Niue Government). In addition, the Niue Government introduced an entry limit of 26 people per fortnight to protect the country's healthcare system. All arrivals to the country must enter a 14-day quarantine at a local hotel which has been repurposed as a quarantine facility.

Air New Zealand currently operates weekly flights using its Airbus A320 aircraft, with every flight containing essential cargo and every second flight carrying passengers. The cost of each flight covered by the Niue Government through New Zealand's MFAT and MOT's International Air Freight Capacity Scheme.

Airport projects that were planned or ongoing at Niue International Airport prior to the pandemic have all been halted. These include, but are not limited to, the carpark and walkway paving project (funded by the China Road Project), the check-in facilities upgrade (provided by Air New Zealand), the x-ray machines upgrade (provided by NZAID), the air conditioning unit installation (originally going to be provided by a Chinese company but has not materialised), the control tower equipment upgrade, the fire truck procurement, and the development of a sheltered baggage carousel.

[10] Government of Niue. 2018. *International Merchandise Trade Statistics.* Niue.
[11] PRIF. 2018. *National Transport Strategy and short-term Action Plan 2017-2026.* Sydney.

However, of all the planned works and projects, the Department of Transport identified the most pressing challenge facing Niue aviation is the inability to recruit technical staff to carry out the biannual navigational aid and runway maintenance checks due to quarantine restrictions. Once this challenge is unlocked, there is an opportunity to turn this short-term engagement into longer 6-month or 1-year engagement to explore other issues and develop national certification standards.

5.2 US-Affiliated Pacific Islands (USAPI)

The USAPI consist of three United States territories: American Samoa, the Commonwealth of the Northern Mariana Islands and Guam, and three independent countries in free association with the United States, all of which are involved in this study and part of the PIFS SIS: the Federated States of Micronesia (FSM), the Republic of the Marshall Islands (RMI), and Palau. These three island nations are located in the island group of Micronesia.

The FSM, RMI, and Palau receive US government grant aid through the Compact of Free Association (the 'Compact'). Citizens of these countries can also enter the US without any visa requirements under the Compact. Under the Compact, the US, through the Department of the Interior, provides guaranteed economic and financial assistance to FSM, RMI, and Palau in exchange for full international defence authority and responsibilities.

In 2003, the Compacts with the FSM and RMI were amended such that the grant will decrease annually until the end of the Compact in FY2023. The amount of the annual decrease is added to the joint US-FSM and US-RMI trust funds, which are set up as a source of income after FY2023. A separate Compact was established with Palau upon its independence in 1994, which provides Palau with US$2 million of financial assistance annually until FY2024. It is predicted that the trust funds are unlikely to fully replace the current arrangement. Because of the three nations' strategic importance to the US, the process for renegotiating the Compact for all three nations is underway.[12] In April 2020, the US provided US$27.5 million in COVID-19 support from various federal agencies through USAID to be shared among the three USAPIs.

Airports in these three countries are eligible for annual funding from the Airport Improvement Program (AIP) under the US Department of Transportation (USDOT). The AIP provides grants for planning and development at airports which are for public use. The amount awarded is dependent on the activity level and project needs. All eligible airports under the AIP also benefit from the Small Airport Fund – a calculation used to ensure a required level of discretion on funding small airports.[13]

All three nations are served by United Airlines, with Guam and Honolulu as regional hubs. Passengers can transfer to onward services to Asia and the US via these hubs. Passengers onboard flights in and out of USAPIs pay a fee that contributes to the AIP.

In July 2020, in addition to the usual AIP grant that can be applied for, eligible airports in the USAPI are also eligible for funding from the CARES Act. This boosts funding of the AIP grant to cover 100% of the project cost.

5.2.1 The Federated States of Micronesia, the FSM

Country Overview

The FSM comprises of more than 600 islands and islets in the Caroline Islands archipelago that covers a longitudinal distance of almost 2,700 km and is home to 105,700 residents. It consists of four states: Yap, Chuuk, Pohnpei, and Kosrae. Its capital, Palikir, is located on the island of Pohnpei and its largest city of Weno is located on Chuuk. Due to its geographical expanse, it occupies more than 2.6 million km^2 of the Pacific Ocean, giving it the 14th largest exclusive economic zone in the world.

The FSM's productive economic base is limited to fisheries, agriculture, and tourism. The public sector is the biggest contributor to the country's GDP, accounting for 40% in 2012. In 2016, the FSM welcomed 29,625 foreign visitors – 33% of which were visiting the country for tourism purposes – an industry that makes up almost 20% of the country's GDP. Because of the country's history during World War II as the base of the US operations in the Pacific, the FSM has become home to one of the world's leading wreck dive sites. The FSM is reliant on foreign aid from several countries including, but not limited to, the US (through the Compact of Free

[12] G. Wyeth. 2020. Why the Compacts of Free Association Matter to Washington. *The Diplomat.* 9 June.
[13] FAA. 2020. *AIP Handbook*. Washington D.C. https://www.faa.gov/airports/aip/aip_handbook/?Chapter=4.

Association), Japan, Australia, and China[14]. Thirty-one percent of the country's GDP comes from aid through the Compact and US Federal grants.

Aviation Overview

Although the FSM government has made considerable efforts to expand the tourism industry, the growth in this sector has been minimal. Its National Tourism Policy commented that:

> *'Air transport into the FSM continues to act as the largest constraint for increasing tourism arrivals. Unreliable, infrequent, and expensive flights are the biggest disincentive for tourists.'*[15]

The country has two domestic airlines that do not fly internationally. International routes are served by United Airlines and Air Niugini.

Airport Overview

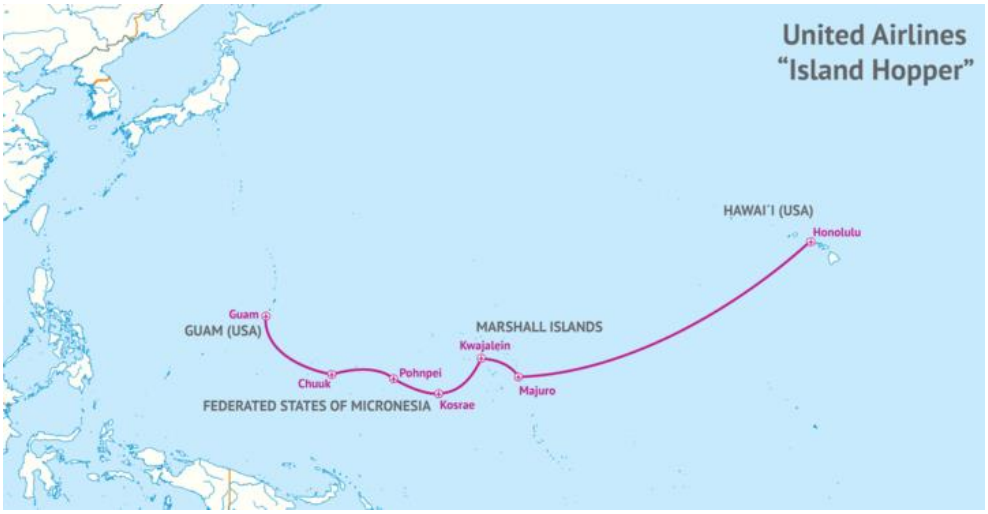
There are four international airports (Chuuk, Kosrae, Pohnpei, and Yap International Airports) and nine outer island airfields in the FSM. All airports are under the jurisdiction of the Division of Civil Aviation Authority of the USDOT.[16] In the US FY2020, all four international airports received funding from the AIP and CARES Acts of US$1,111,111 each.[17]

The US Government is not the only nation funding the development of airport infrastructure in the FSM. In 2008, Japan provided US$26 million for the runway extension and terminal facilities upgrade project at Pohnpei International Airport.

Airline Overview

For decades, several airlines, including Pan American, Air Micronesia, and Continental Airlines, had been involved in the running of the Island Hopper services to transport people and cargo between the islands. The route, nowadays operated by United Airlines using the Boeing 737-800 aircraft, originates in Guam and passes through Chuuk, Pohnpei, and Kosrae before continuing to the Marshall Islands and finishing at Honolulu, Hawaii. The Island Hopper service provides the main lifeline connection for the island nation. United Airlines also offers a separate connection from Guam to Yap.

Figure 5-1: United Airlines Island Hopper Network



Source: Image by Redgeographics

Air Niugini is the only other foreign airline that previously operated international scheduled services to the FSM islands of Pohnpei and Chuuk from Port Moresby.

---

[14] The Embassy of Japan in the FSM. 2018. *Japan's Official Development Assistance to the Federated States of Micronesia.* https://www.mofa.go.jp/files/000447552.pdf
[15] Government of the Federated States of Micronesia. 2015. *National Tourism Policy Volume I.* Palikir.
[16] World Food Programme. 2019. *Micronesia Aviation*. Rome. https://dlca.logcluster.org/display/public/DLCA/2.2+Micronesia+Aviation
[17] FAA. 2020. *Map of FY2020 AIP Grants.* Washington D.C. https://www.faa.gov/airports/aip/2020_aip_grants/map/

Caroline Islands Air is a government-owned carrier which serves most domestic routes in the FSM. In 2018, it took over the service between Yap and Palau after United Airlines decided to suspend the service.

Pacific Missionary Aviation is a Christian, non-profit airline that operates a limited number of domestic services. The airline is based in Yap.

Asia Pacific Airlines is based in Guam and provides cargo and US mail services throughout Micronesia including the FSM, using the Boeing 757-200PCF aircraft.

COVID-19 Impact

As of August 2020, the FSM has not recorded a confirmed COVID-19 case and the country has a ban on passenger disembarkations at all ports of entry until the end of September. Despite the country's limited tourism industry, the US Department of the Interior predicted that majority of the impact will be felt in the private sector. The country's GDP is expected to decline by 6.9% and 1,841 jobs will be lost in US FY2020. However, the same report predicted that the FSM's strong fiscal position at the onset of the pandemic, in combination with internal and external assistance, will 'be sufficient to offset much of the projected threat to the FSM economy and to its fiscal position going forward'.[18] The US Government has played a role in providing funding and assisting the FSM in its COVID-19 preparedness through its embassy in Pohnpei. The preparedness exercises include simulation role-plays in anticipation of welcoming stranded citizens back to the country. In addition, the ADB provided a US$6 million grant from its Disaster Resilience Program (DRP) and China contributed medical supplies and US$100,000 to help the country combat COVID-19.

In the US FY2020, all four international airports in the FSM received funding from the AIP and CARES Acts of US$1,111,111 each.[19] The funding is intended for the upgrade of airport infrastructure and Aircraft Rescue and Firefighting (ARFF) capability.

United is the only airline serving the FSM internationally through its Island Hopper service with reduced capacity. The flights are operated to maintain a lifeline connection between the Micronesian islands, providing cargo and flying outbound passengers (from the FSM). Air Niugini has indefinitely suspended its service from Chuuk and Pohnpei to Port Moresby. In May 2020, the FSM Government requested the domestic carrier Caroline Islands Air to relocate from Yap State to Pohnpei State.

Asia Pacific Airlines has maintained twice-weekly cargo service to Kosrae, Pohnpei, Chuuk, and Yap.

5.2.2 The Marshall Islands (RMI)

Country Overview

The RMI is a nation of 29 coral atolls, on which 58,413 residents are populated. More than half of the population reside in Majuro – the nation's capital.

The RMI's economy is mainly reliant on substantial US subsidies under the terms of the Compact of Free Association. It has also leased land for the US missile testing range on Kwajalein.

RMI has the potential to grow its tourism sector. However, the island nation faces the same issue as the FSM – limited air service as a result of constrained aviation infrastructure. Revenue from tourism makes up less than 10% of the country's GDP and less than 10% of the population are employed in the tourism sector.

Aviation Overview

Domestic air transport is important in the RMI since the country is made up of many small islands and atolls. International air travel is limited through the nation's only international gateway in Majuro.

Airport Overview

The RMI's international gateway is Marshall Islands (Amata Kabua) International Airport (MAJ). It is managed by the Republic of the Marshall Islands Port Authority (RMIPA), which was created in 2003. The atoll geomorphology (narrow ribbons of land around lagoons) mean the airport site is constrained and tightly fits on a strip of land on Majuro. The runway is large enough to cater a Boeing 747. A report by the Secretariat of the Pacific Community in 2003 noted that the proximity of the apron to the runway means large aircraft cannot operate on the runway if another large aircraft is on the apron. The runway was repaved in 2006 at a cost of

[18] US Department of the Interior. 2020. *Initial Economic Impact of COVID-19 Reported for Micronesia, the Marshall Islands, and Palau.* Washington D.C.
[19] FAA. 2020. *Map of FY2020 AIP Grants.* Washington D.C. https://www.faa.gov/airports/aip/2020_aip_grants/map/

US$16 million, and the apron was expanded to the FAA design standards in 2011. The projects were funded by the FAA and RMIPA.

The Authority is also responsible for any other publicly owned and operated airports in the RMI. The country has a total of 29 outer island airstrips, which are classified as (non-primary) commercial. In April 2020, it was announced that the Bucholz Army Airfield in the Kwajalein Atoll would be reconstructed to increase air traffic on the island. The airport will continue to operate during the construction. The project is funded by the US Army and is expected to complete in mid-2021.[20] The RMI is a recipient of the AIP grant, and has received more than US$35 million between 2010 and 2019.

Airline Overview

The RMI has one government-owned local airline called Air Marshall Islands. This airline flies to 24 domestic destinations with a small fleet of one Dash 8-100 and two Dornier 228.

United's Island Hopper service services MAJ and Bucholz Army Airfield (KWA) on the Kwajalein Atoll, though passengers cannot disembark or take photos at the military base.

Asia Pacific Airlines is based in Guam and provides cargo and US mail services throughout Micronesia including the RMI, using the Boeing 757-200PCF aircraft.

COVID-19 Impact

As of August 2020, the RMI has no recorded case of COVID-19. The country's hotels and restaurants only represent 2.3% of the GDP. However, revenue from the fishing industry is expected to significantly fall. The US Department of the Interior projected a 6.9% decline in GDP in US FY2020. However, it is expected that the RMI will significantly benefit from financial assistance from donors, which will assist in the recovery process. In addition to support from the US Government through USAID, US$6 million and US$2.5 million assistance packages were provided by the ADB and the World Bank, respectively.

The country has a ban on all incoming travellers but made special exemption to its nine citizens who returned from the FSM, and to American 'mission critical' workers who returned to the US Army Garrison at Kwajalein Atoll. These individuals have gone under quarantine at the Army-controlled facility in Kwajalein. In July 2020, the RMI Government extended the quarantine period for approved incoming travellers to 21 days. A large-scale repatriation mission of more than 200 Marshallese citizens in the US is under preparation and has faced opposition from the local leaders. It is likely that the repatriation will be carried out in 'small manageable batches (of people)'[21] and, once these repatriates arrive in the RMI, they will be quarantined at the state-managed facilities in the capital, Majuro.

The country is still served by United's Island Hopper service at reduced capacity. Domestically, Air Marshall Islands continues to operate at a reduced capacity. Asia Pacific Airlines operates cargo flights carrying mail and sashimi grade fish for export on two flights each week to and from MAJ and Bulcholz Army Airfield (Kwajalein).

In the US FY2020, Marshall Islands International Airport received funding from the AIP and CARES Acts of US$1,111,111. The funding is intended for runway pavement surface works.

5.2.3 Palau

Country Overview

The Republic of Palau contains 340 islands with a population of 17,907 residents. Palau was a US-governed Trust Territory of the Pacific Islands after World War II until 1994, when it gained independence and entered a Compact of Free Association with the US. In 2006, the country's capital was moved from Koror to Ngerulmud. However, Koror remains the largest city, where half of the country's population resides.

In 2019, the IMF noted that historically, the growth and decline in tourist arrivals had a clear effect on the economy[22] as tourism comprises 40% of Palau's annual GDP and 50% of total employment is in the tourism sector.[23] The same report noted that in the short-term, the tourism industry is on a positive growth trajectory as construction relating to the tourism and infrastructure projects will provide a boost to revenue. Apart from tourism, Palau's economy is dominated by subsistence agriculture and fishing.

---

[20] World Construction Network. 2020. *Sterling wins $80m to rebuild US Army airstrip in Marshall Islands.*
[21] G. Johnson. *Marshall Islands borders begin slow reopening.* RNZ. August 2020.
[22] IMF. 2019. *IMF Executive Board Concludes 2018 Article IV Consultation with the Republic of Palau.* Washington D.C.
[23] IMF. 2020. *Pacific Islands Threatened by COVID-19.* Washington D.C.

The Compact Agreement with the US provided a total of US$580 million to Palau between 1994 and 2009. The agreement was renegotiated in 2010 for another 15 years and provided a boost in revenue to the country. In addition to its ties with the US, Palau is one of the few countries to maintain diplomatic ties with the Republic of China (Taiwan), which resulted in substantial financial assistance from the country. Despite this, tourists from the People's Republic of China dominate the foreign tourist arrivals statistics.

Aviation Overview

Palau is served by more international air services than the other two USAPI nations due to its proximity to Asia. Palau International Airport, located in Koror, is the nation's international gateway.

Airport Overview

Palau has three airports across the country. Palau International Airport (ROR) is managed by Palau International Airport Corporation (PIAC) – a joint venture between Japan Airport Management Partners and the Palauan Government. ROR is the country's only international gateway. The other two small airfields on the islands of Pelelilu and Angaur are managed by their local respective states.

In 2019, PIAC announced the expansion and renovation of ROR, which includes expanding the terminal building. The project, which costs US$32 million, is funded by a loan from JICA.[24]

Airline Overview

As of January 2020, it was served by seven international airlines including China Airlines, Japan Airlines, Korean Air, Lanmei Airlines, Asiana Airlines, T'way Airlines, and United Airlines, with destinations to Guam, Osaka, Seoul, Macau, Tokyo, and Taipei.

Unlike the other two US-affiliated nations, Palau is served by a separate United Airlines Island Hopper service, routing to Guam, USA and Manila, Philippines.

It is reported that Taiwan's EVA Air is planning to commence services to Palau from Taiwan in late 2020.[25]

The Asia Pacific Airlines is based in Guam and provides cargo and US mail services throughout Micronesia including Palau, using the Boeing 757-200PCF aircraft.

COVID-19 Impacts

As of August 2020, Palau had not recorded a single confirmed case of COVID-19. In addition to the financial support provided by the US to combat COVID-19, the ADB also provided a US$15 million loan from its Disaster Resilience Program to help the Government of Palau respond to its emerging needs during the pandemic.

Palau has one of the strictest borders and quarantine requirements among the PICs. Since its border shutdown in March, no commercial flights have operated into Palau. However, United has maintained fortnightly services to Koror carrying essential cargo. Only Palauan citizens are allowed into the country on repatriation flights and, to do so, they must have completed 14 days of quarantine in Guam and be tested negative before boarding their flight to Palau. If departing from Taiwan, there is no pre-flight quarantine requirement, but passengers will be tested for COVID-19. On arrival, passengers undergo 14 days of state quarantine, during which they will be tested multiple times for COVID-19. Once they have been released from state quarantine, they must spend another 14 days in quarantine at home. Only a few repatriation flights have taken place, carrying essential cargo and enabling essential front-line medical staff to travel to Palau to establish COVID-19 protocols and assist the local team with the necessary readiness training.

Like in many PICs, the topic of citizen repatriation is a contentious issue in the country's politics, with many fearing COVID-19 cases being imported into the country. In July 2020, the Palauan Government relaxed its two-week quarantine requirement to one, but reversed the action following two positive cases of Palauan citizens in quarantine in Guam. In August 2020, the Palauan President Tommy Remengesau signed an executive order, which calls for essential 'regular and reliably scheduled' air services to be established 'on a commercial basis', beginning no later than 1 September 2020. The President indicated that the first two countries it would reopen its borders to are Taiwan and the US.[26] Under the executive order, the number of flights is subject to the capacity of quarantine facilities and services. Passengers will be required to submit a negative COVID-19 result 72 hours prior to boarding and passengers will bear the cost of quarantine and testing (except for Palauan citizens).

---

[24] JICA. 2019. *Signing of the Loan Agreement for the "Renovation, Expansion and Management of Palau International Airport"*.
[25] Focus Taiwan. 2020. *EVA Air expected to operate direct flights to Palau.* https://focustaiwan.tw/business/202006290019
[26] B. Carreon. *Palau takes a step to safely reopen borders*. RNZ. August 2020.

In the US FY2020, ROR received funding from the AIP and CARES Acts of US$1,111,111. The funding is intended for the upgrade of airport infrastructure and ARFF capability. United continues to operate a limited service between Guam and ROR. Asia Pacific Airlines has operated occasional cargo service to ROR during the pandemic.

5.3 Other Small Island States

5.3.1 Kiribati

Country Overview

The Republic of Kiribati is home to 110,000 residents and comprises of 32 atolls and one raised island. The nation spans over 2,900 kilometres of the Pacific and straddles across all four hemispheres. Kiribati claims 3.5 million km^2 of Exclusive Economic Zone. This means the country is in the most advanced time zone on Earth (UTC +14). The seats of government are located in Bairiki (executive), Ambo (legislative), and Betio (judicial) – all on the same coral atoll of Tarawa.

A former British crown colony, the island nation gained its independence in 1979.

Aviation Industry

Aviation in Kiribati is under the oversight of the Civil Aviation Authority of Kiribati, which operates under the Ministry of Information, Communications, Transport and Tourism Development. The country has one government-owned national airline – Air Kiribati.

Airport Overview

The island nation is home to two international airports: Bonriki (on Tarawa Island) and Cassidy (on Kiritimati Island). In addition, there are 22 domestic airports in Kiribati, 18 of which are served by commercial scheduled airline services. All airports in the country are owned and managed by the government through the Airport Kiribati Authority (AKA).

In 2015, the Kiribati Government received a US$20 million loan from Taiwan's International Cooperation and Development Fund to upgrade Bonriki International Airport. In 2019, the World Bank completed the Pacific Aviation Investment Project, which aimed to improve the operational safety and oversight of international air transport infrastructure. US$26.73 million were spent on the project in Kiribati to upgrade the aviation infrastructure at Kiribati's international airports, provide training and sector reform, safeguard the infrastructure from coastal erosion, and strengthen airport operations.

Airline Overview

Air Kiribati was established in 1995 after the collapse of the previous national airline, Air Tungaru. It is owned by the government. The airline mostly operates domestic services. In 2017, the airline acquired a Dash 8-100, which was used to operate internationally to Funafuti, Tuvalu. As part of the Kiribati National Tourism Action Plan, the Government purchased two Embraer 190-E2 at an estimated cost of US$37 million each. One of the two ordered has been delivered and is expected to be deployed on the Tarawa to Brisbane (via Honiara) route, previously served in partnership with Solomon Airlines. The aircraft also has the capability of flying nonstop on the domestic route between Tarawa and Cassidy without requiring an international stopover in Fiji, which had been the case with the older and smaller fleet.

Three other foreign airlines operate international services to Kiribati. Fiji Airways provide connections to Nadi and Honolulu from Cassidy and to Nadi from Tarawa. Solomon Airlines and Air Nauru operate from their hubs to Tarawa.

COVID-19 Impact

Kiribati has no recorded case of COVID-19 as of August 2020. There has been no repatriation of citizens since the start of the pandemic and the Kiribati borders have been closed. However, it has been preparing its facilities to accommodate repatriating citizens. Inbound cargo must undergo 5 days of quarantine as part of the new restrictions. Various international organisations have provided financial and technical assistance to Kiribati to aid its COVID-19 preparedness, e.g. the Japanese Government (¥250 million), the World Bank (US$2.4 million), and the EU/UNICEF (US$7 million). The Kiribati Government, which was re-elected in June 2020, has promised funding to the aviation sector as part of its A$15 million COVID-19 stimulus package.

The AKA identifies revenue from international outbound passengers as its most important revenue stream. No position has been made redundant so far during the pandemic. In the short-term, the AKA has been relying on revenue from international airlines as they pay their late invoices. However, once airlines have fulfilled their financial duties, the AKA will lean on the Government grant.

Air Kiribati only operates domestic services at present and the capacity has been adjusted to meet the reduced demand. Flights were suspended for a brief period of more than two weeks due to a lack of serviceable aircraft. The airline's new Embraer E190 aircraft is currently in storage at Toowoomba Wellcamp Airport in Australia.

5.3.2 Nauru

Country Overview

Nauru is the world's smallest island country comprised of one raised coral island with the area of 21 km^2. The country is home to 12,800 residents.

Phosphate used to be Nauru's primary export, which resulted in the country being one of the wealthiest countries in the world in terms of GDP per capita in the 1980s. Landowners received royalties from phosphate earnings, which, as a result, led many Nauruans to be unemployed by choice. By the late 20th century, the phosphate resources on the island country were almost completely exhausted. As a result of phosphate mining, agriculture is difficult on Nauru. Almost all food, water, and manufactured goods are imported, primarily from Australia. Among the PICs, Nauru is the least visited country by tourists, with only 200 tourists making the trip for leisure purposes annually.

Nauru's reliance on Australia for aid resulted in the 2006 agreement between the two Governments, where the Australian Government would provide up to A$23.4 million in development cooperation assistance to Nauru in exchange for Nauru's cooperation on the management of a detention centre for Australia-bound asylum seekers.

Aviation Industry

Nauru is served by its only airport – Nauru International Airport (INU). The airport is operated by the country's Civil Aviation Authority. The development of the airport in the 21st century is mostly funded through foreign aid. The Nauru Government's agreement with Australia in relation to the housing of asylum seekers saw upgrades to the maintenance and security infrastructure at INU.

Nauru Airlines, formerly known as Our Airline, is the country's national airline. It is wholly owned by the Government of Nauru and, as of January 2020, operates flights to Kiribati, the RMI, Fiji, and Australia using its five Boeing 737-300s, one of which has a freighter configuration. This route network is Nauru Airlines' initiative to provide north-south links within the South Pacific. Its predecessor, Air Nauru, used to have an expansive network at the height of the phosphate mining boom, serving several destinations in Australia, Asia, and the US. Flights were subsidised by the Nauru Government with incomes from the mining industry. Although government-owned, Nauru Airlines is based in Brisbane, Australia and holds an Australian Air Operator's Certificate.

Brisbane-based Pacific Air Express operates occasional freighter services to Pacific island destinations, including Nauru, using its Boeing 757 freighter aircraft.

COVID-19 Impact

Nauru has no recorded cases of COVID-19 as of August 2020. However, there was a recorded case on board a freighter plane that landed in Nauru, where one member of the crew tested positive to a rapid test while still onboard. The aircraft and its crew immediately turned back to Brisbane. The nation's fear of a potential outbreak is in line with the country's ranking on the 2019 global health security index[27] – 182 out of 195 – a reflection of Nauru's rudimentary healthcare system. The ADB and IMF estimated that the country's GDP growth in 2020 is expected to reduce to 0.0-0.6%. In April 2020, the Australian Government provided A$4.5 million to Nauru in support to address the country's health and economic impacts caused by the COVID-19 pandemic.

Nauru Airlines currently operates fortnightly passenger flights to Nauru from Brisbane, carrying approximately 20-40 passengers and essential cargo. Most passengers on the flight are government officials and personnel working for the refugee detention facility in Nauru. The ticket price of this regular service is adequate to offset

[27] A measure of health security capabilities in 195 countries, published by the Johns Hopkins Center for Health Security, the Nuclear Threat Initiative, and the Economist Intelligence Unit.

the operating costs despite the low passenger numbers. All other flights to the PICs have been suspended, except for repatriation flights, which the airline operated on behalf of the governments of Vanuatu and Kiribati. Nauru Airlines is in a special position in that it is based in Australia and holds an Australian Air Operator's Certificate (AOC), which allows it to charter its single Boeing 737-300 freighter aircraft on domestic cargo services in Australia on behalf of Qantas and Australia Post. A second Boeing 737-300 aircraft is undergoing a P2F conversion in Miami, which is expected to conclude in November 2020 and a third Boeing 737-300 aircraft is expected to undergo the same conversion in mid-January 2021. In addition, the airline has operated charter cargo flights for the World Food Programme (as part of the Pacific Humanitarian Pathway on COVID-19) using a passenger Boeing 737-300 aircraft that has been fitted with 'seat packs' to allow cargo to be accommodated in the passenger cabin, bringing essential cargo to various PICs including Kiribati, Fiji, and Nauru.

Due to the COVID-19 pandemic, Nauru Airlines has identified that it is currently operating with negative cash flow. The airline has substantially reduced staff numbers and sought and received support in the form of a Government grant. In anticipation of the restart of operations, Nauru Airlines identified Brisbane, Nadi, Tarawa, and Majuro as critical routes that may require financial underwriting to ensure recovery of supply of air access.

5.3.3 Tuvalu

Country Overview

Tuvalu, an island country comprising of nine small coral islands in Polynesia, is home to 10,500 residents. Its de facto capital is the village of Vaiaku on the Funafuti Atoll.

Most Tuvaluans are subsistence farmers, and many rely on remittances from families abroad. The country also enjoys unique revenue streams from the issuance of collectable coins (that are legal tender but not intended for circulation) through The Perth Mint, which earns the Tuvaluan Government at least A$200,000 annually in royalties, and the licencing of its '.tv' domain, which made up around one-twelfth of the country's gross national income (GNI).[28]

Tuvalu is said to be financially sound due to fiscal produce, foreign aid, remittances, and a series of unique monetary arrangements.[29] Its national currency, the Tuvaluan dollar, is pegged to the Australian dollar at parity. The island nation imports most of its food, fuel, and manufactured goods.

Unlike many Pacific Island nations, tourism is not a significant contributor to Tuvalu's GDP. The country has welcomed an average of 1,000 to 2,000 annual visitors, mainly from Japan, Australia, New Zealand, and Fiji. Majority of arrivals came to the island nation for leisure and social purposes. The income from this sector accounts for approximately 5% of the country's GDP.

Aviation Industry

The aviation industry is important in maintaining Tuvalu's link to the outside world. With commercial passenger maritime services being infrequent, up to 95% of travel to Tuvalu is by air, with the rest happening by sea. The Department of Civil Aviation, operating under the Ministry of Communication and Transport, is responsible for the whole aviation sector in Tuvalu, including both regulatory and operational matters.

Airport Overview

Funafuti International Airport (FUN) is Tuvalu's only airport. Tuvalu benefits from the Tuvalu Aviation Investment Project, which is part of the PAIP. The project provided air traffic modernisation, ICAO certification compliance, ARFF infrastructure, and upgrades to the airport terminal building, runway, and access roads to and from the airport. The project costs a total of US$22.76 million and is expected to be completed by the end of 2020.

The airport terminal building has been designed to serve multiple functions. When not being used for airport operations, the space can be used for conferences, public meetings, and any other general uses.

Airline Overview

Tuvalu has no national airline and relies on foreign carriers to provide international air connection. As of January 2020, Fiji Airways flies from Suva three times a week using the ATR-72 aircraft and Air Kiribati operates once a week from Tarawa using the Dash 8-100 aircraft. The island country has an ambition to build its domestic aviation network. The plan is to start an airline that will fly to eight domestic destinations. Airstrips will have to be built for these destinations. The Government plans to acquire one Twin Otter aircraft and build one new

[28] A. Lee. 2019. *Tuvalu is a tiny island nation of 11,000 people. It's cashing in thanks to Twitch.*
[29] The World Bank.

airstrip initially. An amphibious aircraft could be used while the airstrip is being developed. The Government estimates that A$4 million will be required to start this new airline, A$1 million of which will be provided by the Government.

COVID-19 Impact

As of August 2020, Tuvalu has no recorded case of COVID-19, however the pandemic caused the nation to declare its second State of Emergency of 2020 in March, following the declaration of one in January in the aftermath of Cyclone Tino. The IMF estimated that the country's GDP will fall by 1% in 2020. Tuvalu's borders were closed to flights from 21 March and repatriation flights only restarted in the end of August. This gave the country time to develop its COVID-19 preparedness in anticipation of repatriation flights. The Government has established a dedicated COVID-19 Taskforce, which has set up Standard Operating Procedures related to the handling of potential COVID-19 activities.

The Australian Government provided a A$3 million grant to help the country with the preparation, including GeneXpert test kits for COVID-19. To support its stranded citizens, the Tuvalu Government has provided cash handout as part of its A$10.5 million worth of COVID-19 economic relief measures. Many Tuvalu citizens were working in New Zealand under the New Zealand Recognised Seasonal Employer programme and have been stranded in the country. Repatriation flights have commenced, supported by the New Zealand Government. Apart from such flights, the Taskforce is very wary of potentially importing COVID-19 cases and have rejected requests to use Funafuti as a transit stop by other airlines. As such, regular passenger services operated by Fiji Airways and Air Kiribati have been suspended. Fiji Airways have been operating occasional demand-based cargo flights between Nadi and Funafuti but most cargo into the country is being transported by sea. The Government expects that the route between Funafuti and Suva may have to be initially subsidised when the borders reopen.

The CAA has reported that additional funding will be required towards fixing regulatory non-compliance, public awareness and confidence campaign, and medical preparedness leading up to the reopening of borders.

The Tuvalu Aviation Investment Project has been significantly delayed as contractors have been unable to enter the country to carry out the runway reseal work due to border restrictions. In addition, foreign currency exchange losses have contributed to the increasing cost of the project. The World Bank is reportedly aware of this issue and the fact that additional finance may be required. However, the delay to this project does not impede the restarting of air services.

5.4 Larger Pacific Island Countries

5.4.1 Fiji

Country Overview

The Republic of Fiji is an island country in the Melanesia region and is home to more than 800,000 residents. The country consists of an archipelago of more than 300 islands and 540 islets scattered across 3 million km^2, of which 100 islands are inhabited. The capital, Suva, is located on the largest island Viti Levu, which is also where other major Fijian towns such as Nadi (where the main international airport is), Nausori (the location of Suva's airport and the country's second international gateway), and Lautoka are located.

Located in the tropical cyclone belt, the country is hit by one cyclone a year on average. Risks from natural disasters and climate change are high in Fiji and have high impact on the country's socio-economic activities. In 2016, Cyclone Winston, a Category 5 tropical cyclone, made landfall and caused an estimated US$1 billion in damages.[30] Since its independence in 1970, the nation experienced a series of coups (in 1987, 2000, and 2006), which saw a reduction in investor confidence in the country. Both the natural disasters and political instability had a direct but relatively short-term impact on the number of visitors to the country.

Tourism is the country's largest export earner and accounts for more than a third of the national GDP, with one in nine Fijians working in the tourism industry. Approximately three out of four foreign visitors to Fiji are from Australia, New Zealand, or the United States. Fiji is also reliant on its agricultural sector, exporting sugar and garments/apparel. The country is a net importer, with petroleum accounting for more than 20% of its imports. Fiji's main trading partners include Australia, New Zealand, the US, and China.

[30] S. Koroitanoa. 2016. Estimated cost of Fiji's damage bill stands at FJD$2billion. *FijiONE.* 20 April.

Aviation Industry

Fiji serves as the main aviation hub throughout the Pacific. Fiji Airways is the national carrier that operates to various destinations across the Pacific, Australia, Asia, and the Americas. The domestic aviation market is serviced by two scheduled carriers, the Fiji Airways-owned Fiji Link and the privately-owned Northern Air.

The aviation sector in Fiji is an important industry that provides air transport for tourists and important inter-island connections. Tourism by air accounts for 25% of the nation's GDP and the industry supports 66,000 jobs out of a total workforce of 350,000.

Airport Overview

A total of 32 airports operate in Fiji – 4 of which are paved and 28 unpaved. Airports Fiji Limited (AFL) is a government-owned commercial company established in 1999 after it was separated from the Civil Aviation Authority of Fiji. AFL manages 15 airports across the country. The country's international gateway is Nadi International Airport (NAN), which handles 97% of international visitors to Fiji. In addition to the management of airports, AFL also administers air traffic management services in the region's 6.1 million km^2 of airspace, covering the upper airspace of several island nations including Fiji, Tuvalu, New Caledonia, Kiribati, and Vanuatu. It is noteworthy that AFL has been able to generate enough revenue to finance its own expansion and capital expenditure needed to facilitate the growth in tourism in and around Fiji.[31] In 2015, the Fijian Government announced a plan worth FJ$250 million to upgrade infrastructure at airports operated by AFL. NAN's Terminal Modernisation Project commenced in 2014 and finished 2016.

Airline Overview

There are two main airlines in Fiji: Fiji Airways (including a wholly-owned subsidiary Fiji Link) and Northern Air.

Fiji Airways and Fiji Link are owned by Air Pacific Group. The Fijian Government and Qantas hold major shares in the Group (at 51% and 46% respectively), while Air New Zealand and the Governments of Kiribati, Tonga, Nauru, and Samoa hold minor stakes. Sharing the common IATA code of FJ, Fiji Airways is mainly responsible for international services while Fiji Link is responsible for the domestic network. A diverse fleet of jets and turboprops operate across the two airlines, including the Airbus A330 and A350, Boeing 737 family, ATR42/72, and DHC-6 Twin Otter. Over the years, Fiji Airways has developed a niche as a stopover destination for flights between Asia/Australia and the Americas. The airline has taken delivery of two Boeing 737 MAX, but these have been grounded due to safety issues. Despite this, the airline group had a healthy pre-pandemic financial status, reporting profit for five consecutive years from FY2014 to FY2018.

Fiji Airways owns Fiji Aviation Academy, which owns the Airbus A330 and Boeing 737 MAX flight simulators. Its 737 MAX simulator is identified as one of the only 34 simulators around the world. The Academy, which cost US$45 million to build, is located at NAN, where Fiji Airways headquarter is. It aims to cater for pilot training locally and across the Pacific region, including Australia and New Zealand.

Northern Air is a privately-owned airline based in Nausori (Suva) and operates scheduled and charter domestic services using its fleet of Britten Norman Islander, Trislander, and Embraer 110 aircraft.

Smaller airlines, including Island Hoppers, Sunflower Aviation, Pacific Island Air, Kokomo Resort Fiji, and Air Kaibu operate passenger charter services across the islands.

COVID-19 Impact

As of August 2020, Fiji has 28 confirmed cases of COVID-19 with one death. Entry to the island nation is prohibited except for Fiji nationals, who must undergo 14 days of quarantine in government facilities. The Fiji Ministry of Health and Medical Services also announced the 'careFiji' mobile application for contact-tracing purposes. The country's economy is expected to be severely impacted from downturn resulting from the COVID-19 pandemic, with the GDP forecasts for 2020 expected to range from -4.3% to -21.7%. The Fiji Government first announced a COVID-19 Response Budget worth FJ$1 billion in March 2020, which was followed by massive reduction in taxes and a FJ$2 billion stimulus package – announced as part of the 2020-2021 National Budget.

The ADB has also approved a FJ$430 million policy-based loan to boost investment in Fiji's private sector. It was estimated that a third of the nation's workforce (equating to approximately 115,000 Fijians) have lost their jobs or suffered reduced hours.

[31] S. Appana, M. Abbott. 2016. Unsteady Progress: Reform of the Aviation Industry in Fiji. *Journal of Transport Economics and Policy.*

Airports across Fiji have seen reduced traffic due to the pandemic which significantly impact income for airport-related businesses. AFL have provided rental relief for airport tenants and deferred most of its future infrastructure projects, except for the Labasa Airport runway maintenance and upgrade project, which was carried out in July and August 2020.

Fiji Airways' subsidiary Fiji Link still operates domestic services at a reduced capacity. International flights are mostly suspended, apart from repatriation flights. Freighter services operate to Auckland, Sydney, and the US on a weekly basis and 80% of the outbound cargo carry agricultural produce including fresh produce, garments, kava, and seafood. The airline rotates its two Airbus A350 on these flights while most of the Airbus A330 fleet is grounded. One of the airlines' ATR 72-600 was converted to a temporary freighter configuration to enable more efficient cargo transport to regional destinations such as Port Vila (where the airline operates weekly cargo flights to). Fiji Airways has laid off more than 700 employees. The remaining staff are on reduced hours and pay. In May 2020, the Fiji Government announced a loan for Fiji Airways totalling FJ$455 million, which comprises of domestic and offshore borrowings. The airline is also in talks with the aircraft lessors to negotiate payment deferrals but was unable to return its new Airbus A350-900 aircraft.

Northern Air has been operating domestic flights on a reduced capacity. In May 2020, it operated 25% of its eight aircraft and its Chief Executive Officer predicted that it will take between 6 months to a year for domestic services to normalise. The airline has not let go of any staff so far.

Foreign airlines have largely suspended their scheduled service to Fiji. Only a few repatriation flights have been operated by foreign airlines. Air New Zealand maintains a weekly service to Nadi, carrying passengers and cargo – this service is supported by New Zealand's IAFC scheme.

5.4.2 Papua New Guinea, PNG

Country Overview

The Independent State of Papua New Guinea is a country located in the South West Pacific region. It is the largest country in the Pacific island states geographically, economically, and demographically – spanning 463,000 km^2 in terms of land area, accounting for 40% of the GDP in the region, and home to more than 8 million residents – 80% of whom live in traditional rural communities. It is the only country in the study area to have a land border – its western land mass bordering Indonesia on the island of New Guinea. PNG's capital, Port Moresby, is located on this island.

The country's economy is diverse. Agricultural production, most of it from subsistence farming, makes up a third of PNG's GDP. The discovery of mineral and fossil fuel resources in the 1970s and 80s shifted the country's dependency on crops to such resources. As a result, unlike many PICs, PNG has a positive balance of trade. PNG has a sizeable tourism sector, generating more than US$205 million in revenue and accounting for almost one tenth of the economy.[32] Despite its economic diversity, PNG suffers from 'poor law and order, lack of infrastructure, complex governance arrangements, weak public service, inequality between men and women, [and] poor health and education services'.[33]

Australia is one of PNG's biggest trading partner, with the volume of humanitarian aid and investment to PNG exceeding A$1 billion between 2018 and 2020.[34] Australians also account for over half of all visitors. The Australian Government has a long-term ongoing Aid Investment Plan in PNG. It provides approximately 68% of its total Official Development Assistance to PNG. An estimated A$607.5 million was provided to PNG in 2019-2020.

Aviation Industry

PNG has a large aviation industry compared to other PICs due to its population and geography. At one point, PNG had more regularly operative airstrips per 1,000 population than almost any other country in the world, many of which stopped operating for several reasons, including road network expansion, lack of funding, and a reduction in government staffing and official air charters.[35] Despite that, air travel remains the single most important form of transport in PNG. Two of the country's largest cities, Port Moresby and Lae, are only directly connected by air.

---

[32] Papua New Guinea Tourism. Tourism on the rise in Papua New Guinea. (accessed 6 August 2020).
[33] Australian Government. *Aid Investment Plan Papua New Guinea: 2015-16 to 2017-18 (extended to 2018-19).*
[34] V. Gulevich. Indonesia, Papua New Guinea and Australia amid the rising tide of secessionism in the region. *Modern Diplomacy.* July 2020.
[35] R.T. Jackson, W. Standish. Papua New Guinea. (accessed 6 August 2020).

Aviation is regulated by the PNG Civil Aviation Safety Authority. Air traffic services are provided by PNG Air Services Limited.

Airport Overview

PNG has 578 airports and airstrips, 27 of which have paved runways. The government-owned National Airports Corporation (NAC) was formed in 2010 and operates under the Ministry of Civil Aviation and the Ministry for Finance and Rural Development. It manages 22 large-scale airports. Provincial governments are responsible for the management of 20 secondary airports. The rest are managed by local communities, church missions, and businesses; this poses a challenge for the conditions of the airports as their owners may not have the means to maintain the facilities. The Rural Airstrip Agency run by Mission Aviation Fellowship conducts maintenance and restoration of rural airstrips to ensure the most important link to basic services and connectivity to the rest of PNG. Large-scale airports suffer from financial losses and a lack of government funding.

In 2009, the ADB provided a US$480 million multi-tranche financing facility through the Civil Aviation Development Investment Program, which aims to upgrade and rehabilitate Wewak, Hoskins, Gurney, Mt Hagen, and Jackson Airports. The aims of the upgrades are to improve the airports' infrastructures to ICAO safety and security standards and to safeguard the airports' important role as important transport hubs, providing mobility and accessibility to remote communities. The project is now moving to a second stage.

Through the bilateral aid programme between Australia and PNG, the Papua New Guinea-Australia Transport Sector Support Program is a multi-phased, 15- to 20-year program that supports the development of PNG's transport sector. In the aviation sector, the aim is to improve PNG's aviation safety standards as per ICAO standards.

Other international organisations have also provided funding to PNG's aviation sector. JICA has a long history of providing loans and funding to aviation development projects, including redevelopment projects at Port Moresby International Airport in 2001 and Nadzab Airport in 2015.

In 2018, the government commissioned ADB to advise on the redevelopment of Port Moresby's Jackson's international airport under a Public Private Partnership. A feasibility study has been completed and a transaction design prepared and awaiting government review and approval.

Airline Overview

PNG has two major carrier groups: (i) Air Niugini (including Link PNG) and (ii) PNG Air.

Air Niugini is a national carrier with a wholly-owned low-frills subsidy of Link PNG. The main carrier (Air Niugini) operates to international and mainline domestic destinations. Link PNG serves provincial and district routes – some of which on a 'community service obligation' (CSO) basis, i.e. routes that are remote and less profitable. Thirty percent of domestic passengers have transferred from international flights.

PNG Air is a privately-owned airline that mostly operates domestic services and a few international routes to Indonesia using its fleet of seven ATR 72-600s and eight Bombardier Dash 8-100s. It owns 50% of the domestic market share.

In addition to the main carriers, there are a significant number of general aviation charter operators in PNG. One of the largest, the Mission Aviation Fellowship, has been operating passenger charter services in PNG since 1951. It has provided essential air transport to isolated communities using the Cessna 208 aircraft. Many operators, such as the Ok Tedi Mining company, transport workers to and from mining sites across the country.

Asia Pacific Airlines (PNG)[36] is charter carrier based in Tabubil and operates three Dash 8-100s. It flies to domestic destinations and an international destination of Cairns, Australia. It is owned by Cobham Aviation Services Australia.

COVID-19 Impact

As of 17 August 2020, PNG has recorded a total of 323 confirmed COVID-19 cases with three deaths. The country is currently experiencing a second wave of the infectious disease which saw restrictions tightened and the State of Emergency, which ended in June, was reinstated in July, making masks mandatory and imposing a nightly curfew. According to the ADB, IMF and the PNG Treasurer, the country's GDP is expected to fall by

[36] Not to be confused with Asia Pacific Airlines – a Guam-based cargo airline which operates freighter services throughout North Pacific.

-1% to -2% in 2020. The PNG Tourism Promotion Authority announced that, as of May 2020, 1,209 employees were laid off and K65.9 million had been lost in the sector.[37]

The Government of PNG has long expressed concern that the country's medical infrastructure is inadequate for dealing with COVID-19 cases. In May 2020, the PNG Government announced a K5.7 billion stimulus package to support the economy.[38] The IMF has contributed US$364 million in emergency financing under the Rapid Credit Facility to help cover urgent balance of payments caused by the pandemic. Australia is spending a fifth of its Pacific COVID-19 response support in PNG, funding A$20 million to the country. In addition, the US Government has contributed US$2 million grant to PNG to help with the COVID-19 response.

Aviation in the country operates under the National Pandemic Act 2020, which requires all passengers to acquire a written approval from the State of Emergency Controller before they fly domestically, and flying is restricted to essential reasons only. There is a general ban of international passengers except for residents of the country. These residents must depart from one of the four destinations: Brisbane, Cairns, Manila, or Singapore; and must present a negative COVID-19 Polymerase Chain Reaction (PCR) test result issued seven days prior to departure. Passengers are subject to 14 days of quarantine on arrival. All international passengers must enter the country through Port Moresby International Airport only. The PNG Government has so far chartered flights to repatriate citizens living in Fiji, Vanuatu, the Solomon Islands, Malaysia, and the Philippines.

In the airports sector, current projects under the Civil Aviation Development Investment Program are still ongoing but are significantly disrupted by COVID-19. The NAC has reported reduced income due to the pandemic and introduced shorter operating hours at all airports to 8am to 5pm. The PNG Government approved funding of K94.7 million over 12 months for the NAC, as part of the K5.7 billion stimulus package. Negotiations are currently underway regarding the next phase of the program and could incorporate any COVID-19 related infrastructure works.

Air Niugini continues to operate flights to the four approved destinations at reduced frequency, with a limit of 30 passengers on each flight prior to the State of Emergency, and 25 passengers during the State of Emergency. Flights to Australia have benefitted from landing and enroute fee waivers, subsidised by the Australian Government. Most international passengers are those on a 2-month Fly-In-Fly-Out (FIFO) rotation in the gas and mining industry, who typically transfer to other international destinations through Brisbane or Singapore. Air Niugini and Link PNG continue to operate to nearly all domestic ports and reviews schedules on a weekly basis. The airline indefinitely parked two Boeing 737s and the airline attempts to maintain the crew's currency by rotating them through the flights. Staff and loan payments (on the Fokker aircraft) make up a significant portion of its ongoing costs. The airline has received an interest-bearing loan, repayable after three years from the PNG Government. Once the borders start to reopen, the airline identified the following routes as critical: Hong Kong, Honiara, Cairns, Port Vila, Nadi, and Manila.

PNG Air continues to operate domestic services at just over 30% of its usual operations. The airline has incurred losses over the last four years, and in May 2020, Link PNG announced that it is proposing to takeover PNG Air via a share acquisition from the superannuation fund, Nasfund. Link PNG intends to maintain the PNG Air brand and a separate corporate identity. It claims that the move will ensure job security for PNG Air staff and that the acquisition will 'drive lower fares from economies of scale'. However, PNG Air has said that the 'terrible move' is 'extremely detrimental to the travelling public' because Link PNG and Air Niugini will benefit from a monopolistic position in PNG's domestic aviation market.[39]

Ok Tedi Mining company suspended all its domestic charter operations in and out of Tabubil for two weeks following the resurgence of the second COVID-19 wave in July 2020. However, it still operates occasional cargo service to Cairns from Tabubil. As of September 2020, Port Moresby is also served by a thrice-weekly cargo service from Brisbane by Pacific Air Express.

In August 2020, an exemption was made to 175 workers who flew from China on a Philippines Airlines charter flight to Port Moresby to work on infrastructure projects funded by the ADB. The Government feared that project suspension or delay could result in the cancellation of funding.[40]

---

[37] P. Chai. Tourism takes a tumble: report finds 90 per cent of 2020 bookings wiped out in Papua New Guinea. *Business Advantage PNG.* May 2020.
[38] The original amount that passed parliament on 6 May 2020 was K5.6 billion but was later revised in the same month to K5.7 billion.
[39] Loop PNG. *Link PNG decision 'terrible'.* May 2020.
[40] Australia Pacific Security College. *COVID-19 Pacific Island Response Matrix – 18 August 2020.* Australia National University. Canberra.

5.4.3 Samoa

Country Overview

Samoa, formerly known as Western Samoa, is an island country governing the western part of the Samoan Islands. The country consists of two large islands, Savai'i and Upolu which account for 99% of the total land area, along with eight small uninhabited islets. The main island of Upolu is home to the capital city of Apia, along with the country's main international airport: Faleolo International Airport (APW). Since 2014, the United Nations has classified Samoa as an economically developing country with the country ranking 204th in GDP purchasing power parity.[41] The tourism sector accounts for 25% of GDP with services accounting for two thirds of total GDP.

Aviation Industry

Samoa Airways is the state-owned national flag carrier of Samoa operating short haul flights between Samoa and American Samoa along with international flights to Australia and New Zealand. Samoa has a total of four airports: APW, Asau Airport (AAU), Lalomalava Airport and Maota Airport (MXS). Up until the end of 2019, Samoa was served by a second international airport, Fagali'i (FGI) on the island of Upolu, formerly owned and operated by the former Polynesian Airlines and then the Samoan Airport Authority (SAA), serving flights to Pago Pago in American Samoa. The airport was shut down in December due to ongoing criticisms about its safety and environmental issues. Prior to the COVID-19 impact, Samoa was also serviced by Air New Zealand, Fiji Airways and Virgin Australia. The Ministry of Works, Transport & Infrastructure is the designated civil aviation authority for Samoa, which is responsible for regulating the country's aviation sector while also providing air navigation services. Samoa is an important transit point for passengers travelling to and from Tokelau by boat, as the New Zealand territory has no aviation infrastructure.

The Government of Samoa and the World Bank are currently implementing a project to improve international airport infrastructure in Samoa (Samoa Aviation Investment Project) as part of the regional Pacific Aviation Investment Program (PAIP) aimed primarily at improving airport safety and security across the Pacific. The ST40 million project comprises of a set of physical aerodrome improvements to APW and institutional strengthening activities. Primary beneficiaries are air travellers throughout the Pacific Islands, as well as the national and regional administrative bodies and personnel involved in air transport management, freight, and passenger air service providers.

Airport Overview

Faleolo International Airport (APW) is located 40km west of Apia. The airport has a single 3 km runway and a new terminal building completed in 2018 by the Shanghai Constructions Group. the Airport caters for international traffic arriving from New Zealand, Australia, Fiji, Tonga, Hawaii, and the United States.

Airline Overview

Samoa Airways is an international airline formed by the Government of Samoa in November 2017. The airline was established under a memorandum of understanding between the Samoan government and Fiji Airways, with the latter providing assistance during initial stages including sales, operational and maintenance support. Originally founded in 1959 as Polynesian Airlines, the airline entered into a joint venture in 2005 with Virgin Australia Holdings to form Polynesian Blue (later Virgin Samoa). The joint venture ended in 2017 when the airline was rebranded to its current form with a wet-leased Boeing 737-800 and operated scheduled services to New Zealand and Australia from Apia. The airline ordered a B737 MAX for delivery in March 2019 to replace wet-leased aircraft but was cancelled due to the global grounding of the B737 MAX. It subsequently wet-leased aircraft from Qantas and Malindo Air to continue services. Prior to the pandemic, the airline's fleet consisted of one wet-leased Boeing 737-800, since returned, and three Twin Otter aircraft.

Samoa Airways had enjoyed good financial growth between 2019 and 2020. Approximately 60% of passengers are from New Zealand and the Visiting Friends and Relatives (VFR) market accounts for high-level of the market share. Prior to the pandemic, the airline launched a new service to Brisbane in addition to its ongoing service to Sydney, which had been performing well. The airline was pursuing interlining and/or code-sharing partnerships with other carriers.

[41] According to a 2017 study by the United Nations.

COVID-19 Impact

The first case was a student repatriated from the Philippines who tested positive on arrival and is now in isolation with other close contacts. The country had a ban on all arrivals except for its citizens and residents. However, the State of Emergency Order was partially relaxed on 6 August 2020 to allow for the repatriation of American Samoa and Tokelau citizens via Samoa; these citizens will not be subject to quarantine in Samoa but must fulfil other conditions such as a negative COVID-19 test prior to boarding. Passengers travelling from American Samoa to Samoa must have resided in American Samoa for more than 14 days and are not subject to quarantine on arrival.

Samoa Airways have been operating limited flights between Fitiuta and Ofu in American Samoa, which returned limited revenue. International flights are limited to repatriation flights to Pago Pago, American Samoa. Air New Zealand operates a weekly service to Auckland under the IAFC scheme, with every third flight carrying returning residents. Fiji Airways operates occasional demand-based cargo service between Apia and Nadi.

Samoa Airways' monthly revenue has dropped significantly due to the pandemic and the Samoan Government has provided financial support. The airline has made significant reductions in staff costs. Samoa Airways' single wet-leased Boeing 737-800 has been returned to the lessor and the airline is in the process of finalising an agreement on a dry-lease Boeing 737-800, which will be put on the Samoan Air Operators Certificate (AOC). The airline has expressed concerns and is exploring options over the logistics of the delivery and certification process of the new aircraft. While the dry-lease aircraft will replace the same type of aircraft, crew currency training remains a challenge, as the simulator normally used for training is based in Sydney.

The airline has been actively planning all aspects of operational restart and has collaborated with PASO and CAA on any paperwork that can be completed remotely. Samoa Airways plans to operate to Auckland as its first international destination in the first week of December, which aligns with the peak season.

5.4.4 Solomon Islands

Country Overview

The Solomon Islands is a sovereign state consisting of six main islands and over 900 smaller islands. The country's population is 653,000 with the capital city being Honiara located on the island of Guadalcanal. Solomon Islands' per-capita GDP of US$2,200 ranks it as a lesser developed nation, and more than 75% of its labour force is engaged in subsistence agriculture and fishing. Tourism accounts for 12.5% of GDP and although historically unstable, has been steadily increasing towards its current figure, showing positive signs for the future of the industry. The Solomon Islands is ranked 7th in the world in being at risk of disasters caused by extreme natural events such as earthquakes, cyclones, and storms.[42]

Aviation Industry

The aviation industry in the Solomon Islands is very limited due to low passenger movements and poor economic development. However, due to the country's widespread archipelago, it relies heavily on multimodal transport systems with transport connectivity being crucial as 85% of the population is scattered in rural and often remote areas. Air services are also seen as essential for medical emergency and the delivery of relief aid, for businesspeople and tourists, and for the transport of high value goods.

Under the Pacific Aviation Investment Program, funded by the World Bank, the Solomon Islands Roads and Aviation Project (SIRAP) has been established to improve operational safety and oversight of air transport and strengthen the climate resilience of the road and aviation sectors in the Solomon Islands.

The responsibility of regulating civil aviation operations is held by the Civil Aviation Authority of Solomon Islands (CAASI), a statutory body established in 2008 under the Civil Aviation Act 2008. The management of airports in the Solomon Islands is the purview of the Ministry of Communication and Aviation's (MCA) Airport Management Division. With the support of the New Zealand Government in 2016, the Solomon Islands Government established the Solomon Islands Airport Corporation Limited (SIACL), a state-owned enterprise (SOE) that will take ownership of all domestic and international airports from the MCA. It was planned that Honiara, Munda and Gizo Airports be transferred from MCA into SIACL's management sometime in 2019 but this is yet to happen. This will see a dedicated operator responsible for the delivery of airport services in a compliant manner.

[42] World Risk Index, 2016 World Risk Report, Alliance Development Works.

Subject to budget approval, the Solomon Islands Government was proposing an initial capital injection which would have seen SIACL operational by the end of 2019. CAASI has also identified a need to adapt the New Zealand Civil Aviation Rules to better meet the specific requirements of the Solomon Islands —something which will be supported by SIRAP.[43]

Airport Overview

Honiara International Airport (HIR), formerly known as Henderson Field, is the main international airport serving the Solomon Islands and is located just east of the capital city of Honiara. From HIR, passengers have access to six countries serviced by five international airlines. The airport serves as a domestic and international base for the national carrier, Solomon Airlines. In November 2019, a Japanese corporation was awarded the US$33.8 million contract for the upgrade of HIR, including construction of a new departure terminal, taxiway, and apron as well as refurbishments of existing infrastructure. Japan is funding the project through JICA with the completion date set before 2023 in time for the South Pacific Games in Honiara.

The country is also served by a second international airport, Munda Airport (MUA), which was significantly upgraded in 2015 by a project funded and run by New Zealand Government Aid. Although its primary technical purpose is to serve as an alternate field for international services, the first scheduled international flights only started in 2019 when Solomon Airlines introduced direct flights from Brisbane (BNE-MUA-HIR-BNE). Prior to the Munda upgrade, Brisbane was the nearest viable alternate. However, the main economic significance of access to Munda is the development of the fledgling outer island tourism industry.

In addition to the two main airports, four provincial airfields are being upgraded through a jointly funded aviation infrastructure project by Australia's DFAT and New Zealand's MFAT.

Airline Overview

Solomon Airlines is a full service, wholly government-owned national airline comprising a fleet of a single A320-200, four DHC-6 Twin Otters, and a single Dash 8-100. The airline has an ongoing plan to acquire new high gross weight Twin Otter aircraft and has been seeking the means to finance the aircraft.

The airline is the only airline which operates the country's domestic network. Most domestic routes operate under a Community Service Obligation contract with the Ministry of Finance and Treasury and only two domestic routes – Honiara-Munda and Honiara-Auki – are profitable.

Solomon Airlines operates international flights to Brisbane (BNE) and Nadi (NAN) via Port Vila (VLI) from HIR. Typical passengers on these flights are business travellers, medical professionals, diplomatic staff, NGO staff, and consultants. The demand for tourism is not substantial. The airline also offers a range of codeshare arrangements with international carriers including Qantas, Fiji Airways, Air Kiribati, Air Vanuatu, and Air Niugini.

In terms of cargo operations, Pacific Air Express operates occasional cargo service to HIR using the Boeing 757-200F aircraft.

COVID-19 Impact

The Solomon Islands confirmed its first case of COVID-19 in October 2020. The borders remain closed, with the exception for its citizens, residents, and those with authorisation from the Prime Minister. Arriving passengers must provide their 14-day travel history and undergo 14 days of quarantine. In May 2020, the Government carried out a 36-hour lockdown test in Honiara to trial the country's response to potential COVID-19 cases. The Government has been extra vigilant since the first reported case of COVID-19 in Bougainville (a PNG Autonomous Region), which is in close proximity to the Solomon Islands' western border. An economic stimulus package worth US$37.5 million was announced by the Solomon Islands Government.

The economy is expected to decline by 5-6% in 2020 according to the Government and the ADB, who pledged US$20 million for the Solomon Islands in June 2020. Australia's DFAT supported the construction of quarantine facilities, and the provision of medical and laboratory equipment to assist with the country's COVID-19 response.

Construction works at HIR on a new terminal funded by JICA was suspended on 23 March 2020 due to the COVID-19 pandemic and travel restrictions. From the SIRAP point of view, there are no plans to reconfigure terminal works at Munda to accommodate social distancing or passenger segregation once air travel resumes. The new SIACL organisation is still on hold due to the pandemic, and the new CEO's inability to travel to the Solomon Islands from New Zealand due to border restrictions.

[43] The World Bank, Solomon Islands Roads and Aviation Project Appraisal Document, 2019.

Solomon Airlines has halted scheduled international passenger flights and only operates limited repatriation flights to Auckland and Brisbane. Most of the international passengers are repatriating citizens/residents, essential workers, or high commission staff. The domestic flights are operating at 50% of the usual activity level with load factors of 60%. A weekly cargo service is operated to and from Brisbane, with passengers being carried every fortnight. The airline has been gaining some revenue from intermittent charter services, which include one to China to bring engineers who are involved in the planning of the 2023 Pacific Games to the country. As of September 2020, HIR is served by a twice-weekly cargo service from Brisbane by Pacific Air Express.

As a result of reduced activity, monthly revenue has dropped substantially while the Solomon Islands Government has provided assistance through grants and loans, as part of the economic stimulus package. The grant component came from an Australian Government contribution to the Solomon Islands Government and was made available to the airline. Cost cutting measures have been introduced, which halved the airline's fixed costs. However, expenses related to insurance, building and aircraft lease, time-based aircraft maintenance have not been reduced. Half of the workforce are currently on leave without pay, with the rest on reduced pay. The upcoming plan to acquire 're-lifed' high gross weight Twin Otter aircraft has been delayed as talks surrounding aircraft financing came to a standstill. In addition, the airline has been exploring opportunities to carry more cargo in lieu of the fallen passenger demand, including the installation of cargo seat packs or the removal of passenger seats.

Solomon Airlines require simulator training for Dash 8 crew. However, the simulator is based in Melbourne, Australia, which is an issue due to border restrictions.

5.4.5 Tonga

Country Overview

Tonga, officially named the Kingdom of Tonga, is a sovereign state and archipelago made up of 169 islands, of which, 36 are inhabited. The country's population is 107,000 with 70% of these residing on the main island of Tongatapu. Tonga stretches across nearly 800km in a north-south direction, making Tonga one of the world's most geographically remote nations from major economic activity centres in the world.

Tonga's small size, geographic location and limited natural resources have resulted in the country having a limited economic base, making it particularly susceptible to economic fluctuations. The country relies heavily on both remittances from the nearly half of the country's population that lives abroad and foreign aid. Tourism continues to be a critical industry sector, providing the largest single source of export earnings with an approximate 15% of employment.[44] Much of the monetary sector is dominated and owned by the royal family and nobles with much of the small business being owned by recent Chinese immigrants who arrived under the cash-for-passport scheme in 1998.

Aviation Industry

Air transport plays a key role in the economic and social fabric of the country, providing vital national, regional, and international connectivity. Air services were essential for the import and export of goods, and a pre-requisite for tourism development. Should natural disasters strike, airports capable of servicing international flights are indispensable to any humanitarian relief campaign, as was seen prior to appraisal such as the 2001/2002 Cyclone Waka which caused US$51 million in damages, or the 2004 Cyclone Heta which caused an estimated US$150 million in damages across Tonga, Niue and American Samoa.[45]

Tonga has seen 12 airlines operate domestic services since air services began with varying success. Real Tonga ("REALtonga") was the domestic service provider up to the pandemic, with Tonga relying on foreign carriers to provide international services. A new domestic airline is currently being developed to replace REALtonga. In 2019, Tonga had air access to 4 countries: Australia, New Zealand, Fiji, and Samoa, being serviced by 3 international airlines: Virgin Australia (Sydney), Air New Zealand (Auckland), and Fiji Airways (Nadi). The Tonga Civil Aviation Division (CAD) is responsible for administrating and regulating the aviation industry in Tonga. Tonga Airports Limited (TAL) operates and manages the country's airports, as well as the country's navigational services. Aviation in Tonga operates under New Zealand Civil Aviation Law.

[44] South Pacific Tourism Organisation, Pacific Tourism: COVID 19 impact and recovery, Sector Status Report: Phase 1B, 2020.
[45] World Bank, Tonga Pacific Aviation Investment Program, Implementation Completion and Results Report, 2020.

Under the PAIP, the Tonga Aviation Investment Project (TAIP) was formed as one of the original three projects implemented by TAL, to provide safe and secure air transport operations and environmentally sustainable and efficient airports. This program saw new aviation infrastructure investments, sector reform and training along with the strengthening of operations and management capacity. The role of PAIP in Tonga however, closed in December of 2019 with the outcomes of the program considered successful.

Airport Overview

The two major airports in Tonga are Fua'amotu International Airport on Tongatapu (TBU) and Vava'u International Airport in Vava'u (VAV). TBU, the main international airport, accommodates regular scheduled international services with independent facilities for international and domestic passengers. Other airports in Tonga, all under the management of TAL, are Kaufana Airport in 'Eua, Lifuka Island Airport, Niuafo'ou Airport, and Niuatoputapu Airport.

COVID-19 Impact

As of August 2020, Tonga has no recorded case of COVID-19. The country's border has been closed to arrivals except for citizens, residents, and travellers approved by the Ministry of Health. All arrivals must be tested for COVID-19 prior to departure, go through Fua'amotu International Airport, and undergo 14 days of quarantine. The country has the capacity to handle 246 repatriated passengers at one time. As of September 2020, over 3,000 people are registered on the government's repatriation list.

As of August 2020, two repatriation flights had taken place, one from New Zealand and one from Fiji. The country's domestic airline, REALtonga, collapsed in May 2020, leaving millions of dollars of debt and a number of staff unemployed. The airline's air operator's certificate was suspended in June 2020. At this stage, there are no regular air links to the outer islands of 'Eua, Ha'apai, Vava'u, and the Niuas. The Government operates occasional charter flights based on demand using aircraft from the REALtonga fleet.

The Government of Tonga is in the process of obtaining the air operator's certificate for a new airline, Lulutai Airlines. The airline is being created through a partnership between the Tongan Government and Digicel Tonga, a local telecommunication provider. In the long-term, the Government wants the airline to be owned by a foreign partner who will be responsible for the management of the airline. The new airline is expected to commence domestic operations using the government's Y-12 aircraft and SAAB 340 (dry-leased from Montrose Global). The government's MA-60 aircraft will join the fleet once the borders reopen and foreign technicians can visit the country to inspect and repair the aircraft.

Due to the pandemic, TAL reported that planned projects have been stalled, including the replacement of fire trucks and upgrade of air navigation equipment. All staff have been retained but are working on reduced hours. In preparation for the reopening of borders, TAL expects to require additional funding for passenger segregation area, cargo quarantine area, and healthcare facilities.

Air New Zealand currently operates weekly cargo to Tonga using its Airbus A320 under the IAFC scheme. Any inbound cargo must remain in quarantine for 14 days upon arrival. In September 2020, Virgin Australia announced that it is exiting the Tonga market as it restructures its network and will not return to Tonga when international travel from Australia resumes.

5.4.6 Vanuatu

Country Overview

Vanuatu is a small island country comprising of 83 islands with an almost entirely Melanesian population of 281,000 people, making it the fourth largest country in the Pacific by population.[46] Vanuatu's GDP per capita in 2017 was US$3,159, which sits at the lower end for countries in the region. It is one of the most vulnerable countries in the world to climate change and natural disaster risks, with an average of 7% annual losses of its GDP due to climatic and natural hazards.

The economy is supported by four main industries: agriculture, tourism, offshore financial services, and cattle raising. Vanuatu also sells citizenships for approximately US$150,000 with demand from the Chinese market

[46] Australian Government, Department of Foreign Affairs and Trade, Vanuatu Country Brief.

at all-time highs, with estimates that revenue from these sales may account for more than 30% of the country's revenue.[47]

Aviation Industry

Aviation is vital to the socio-economic development of Vanuatu, providing critical domestic, regional, and intra-regional connectivity along with significant international connections with Australia, New Zealand, Fiji, New Caledonia, and the Solomon Islands. International carriers serving the destination in 2019 include Air Vanuatu, Virgin Australia, Fiji Airways, and Solomon Airlines. Air services carry more than half of the arriving international visitors into the country, with the remainder being cruise ship visitors. Air access is fundamental to Vanuatu's travel and tourism sector, which accounts for more than 45% of its GDP and accounting for approximately 20% of total employment. International air services are also essential for Vanuatu's migrant workers access to employment opportunities in New Zealand and Australia, and the associated inflow of remittances they bring in, account for 3.8% of GDP in 2019.[48] Domestic air services provide essential access to communities accessible through 26 airports throughout the archipelago. Majority of domestic services are provided by Air Vanuatu, but there are a number of smaller mostly charter operators serving domestic destinations. Tourists typically comprise up to 20% of domestic passengers. In the event of natural disasters, an occurrence common to Vanuatu, air transport acts as an indispensable lifeline for international humanitarian relief and the transport of high value goods.

Air Vanuatu is a state-owned enterprise providing domestic and international air services. State owned Airports Vanuatu Limited (AVL) is the owner and operator of the three international airports in the country: Bauerfield International Airport (VLI), Santo-Pekoa International Airport (SON) and Whitegrass Airport (TAH). The remaining 23 airports are owned by the government. Technical (safety) regulation of the sector is provided by the Civil Aviation Authority of Vanuatu (CAAV), a statutory body reporting to the Ministry of Infrastructure and Public Utilities. CAAV also regulates international air services agreements. The Pacific Aviation Safety Office (PASO), is also headquartered in Vanuatu and supports the work of CAAV in its aviation surveillance function.

Airports Overview

Bauerfield International Airport is the main gateway into Vanuatu, serving nine international destinations from six countries and 26 domestic destinations with capacity to serve aircraft up to an Airbus A330. The airport also serves as the home base for Air Vanuatu. Santo-Pekoa Airport services domestic and international flights ex Brisbane accommodating the B737-800. The airport has recently undergone major runway rehabilitation work under the World Bank Pacific Aviation Improvement Program.

Airline Overview

Air Vanuatu is the national carrier operating direct flights to Australia, New Zealand, New Caledonia, and Fiji. Air Vanuatu also makes use of several codeshare agreements offering additional services with Qantas, Air New Zealand, Fiji Airways and Air Calin, along with the ability to codeshare on services with Air Niugini and Solomon Airlines to Papua New Guinea and the Solomon Islands respectively. Currently, the Air Vanuatu fleet consists of a single Boeing 737-800 on lease until 2025 and a single ATR-72-600 also on lease. The airline was making use of an additional B737-300 on lease from Air Nauru, which was returned in 2019. Air Vanuatu has two firm orders and two options for Airbus A220-300 and -100 models, the first expected for delivery in Q4 2020.

COVID-19 Impact

As of August 2020, Vanuatu has no recorded case of COVID-19. The country's borders have been closed since 26 March, with the exception of humanitarian and repatriation flights. Passengers and airline crew are subject to medical screening and 14 days of quarantine. In August 2020, two States of Emergency are in effect in parallel, with the one for Cyclone Harold ending on 9 August 2020, and the one for COVID-19 remaining in place until the end of 2020. The Vanuatu Government promised a stimulus package of Vt4.2 billion to support the economy, which is considered one of the largest stimulus packages per capita in the Pacific region. Separately, the government has provided Vt400 million in financial support to Air Vanuatu and Airports Vanuatu.

The airline recommenced domestic flying in April, which had recovered to about 44% in August 2020 compared to August 2019. Its ATR-72 aircraft was stranded overseas during maintenance, constraining Air Vanuatu's

[47] How selling citizenship is now big business Sarah Treanor and Vivienne Nunis, business reporters, BBC News, Vanuatu. 10 October 2019. https://www.bbc.co.uk/news/business-49958628.
[48] World Bank staff estimates based on IMF balance of payments data, and World Bank and OECD GDP estimates.

available fleet but the airline continued to operate domestic flights at reduced frequency, with some use of the B737 on the VLI-SON route.

International operations have been limited to outbound repatriation flights to Noumea, New Caledonia (for onward connection with Air Calin) and inbound repatriation flights from New Zealand, Australia, Fiji, and New Caledonia from August 2020 onwards under the direction of the National Disaster Management Office. In the first phase of inbound repatriation flights (prior to August 2020), Nauru Airlines operated a repatriation flight to Vanuatu from Australia and Royal New Zealand Air Force used its C130 Hercules aircraft to repatriate citizens from New Zealand to Vanuatu. Air Vanuatu operated regular cargo flights to and from Noumea, using its Boeing 737-800 and offers options to charter 'cargo only' flights to other destinations in the region. The first cargo only flight to Noumea contained seven tonnes of kava and the return flight carried half a tonne of medical supplies. Fiji Airways also maintain a weekly Nadi-Port Vila freighter service. Air Vanuatu has deferred the delivery of its new A220 aircraft. In June 2020, following a change of Government, Air Vanuatu replaced its Board, CEO and CFO. As of September 2020, VLI is also served by a twice-weekly cargo service from Brisbane by Pacific Air Express.

With regards to infrastructure, Airports Vanuatu has continued to function within its cash reserves by reducing staff hours and thus salary costs by 40% and through receipt of Government support. While there has been some revenue, AVL's biggest issue is recovery from debtors. In present circumstances, the firm is able to sustain operations until January 2021. In terms of infrastructure support, AVL has introduced COVID-19 operation procedures in accordance with ICAO guidelines but is seeking funds to modify the terminal to accommodate all equipment and processes for full post-COVID risk management framework. At the onset of the lockdown caused by the pandemic, Vanuatu has upgraded its customs and biosecurity processes online using its Electronic Single Window system. This improvement significantly reduced the paperwork and border clearance times for traded goods, while allowing staff to continue to process permits from home to comply with physical distancing requirements.

6 COVID-19 Recovery Scenarios

6.1 Travel Bubble Discussions

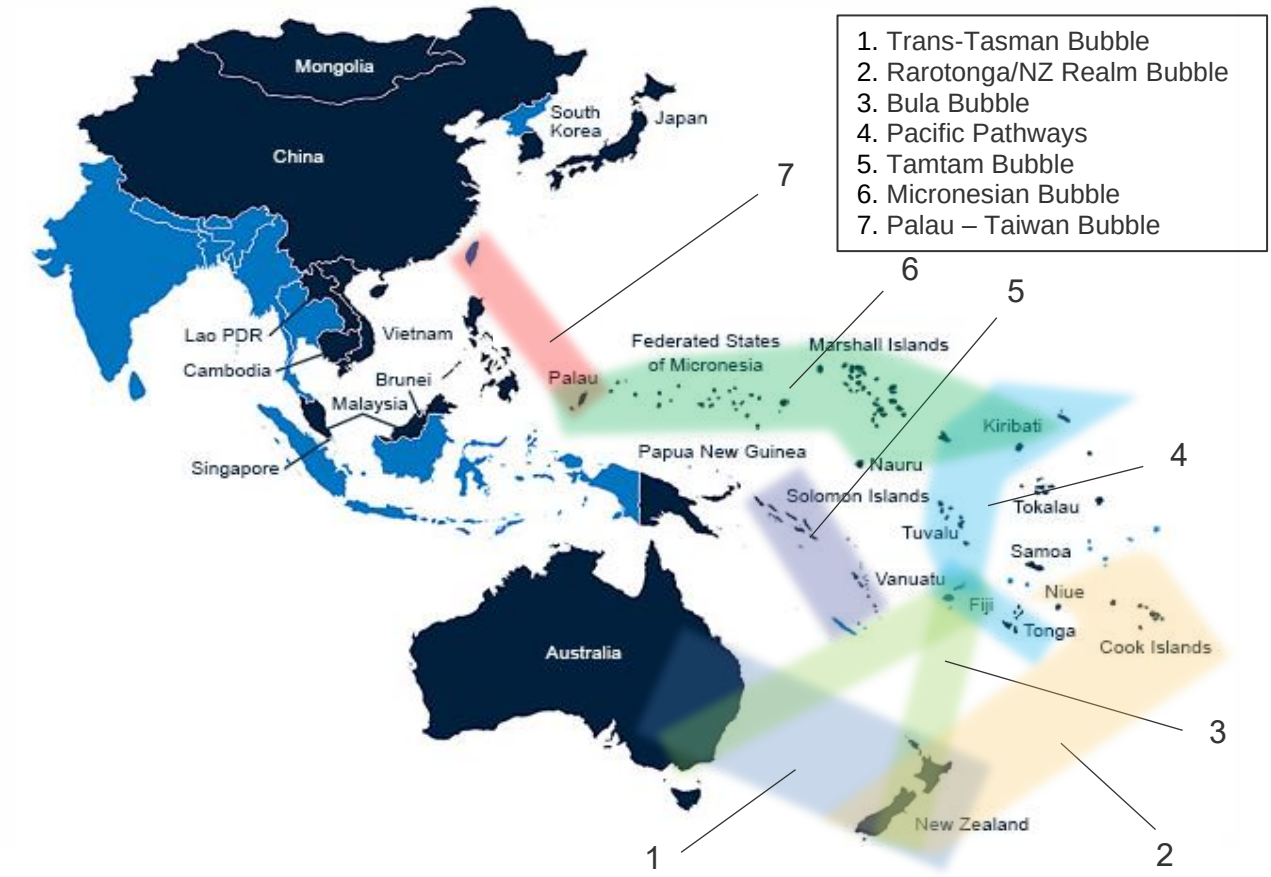
Multiple countries around the world have proposed the idea of 'travel bubbles' as a way of reopening international travel between countries that are proved to have low or no COVID-19 transmission. This means travellers can travel between countries in the bubble without having to undergo the mandatory quarantine period. While the general idea of such arrangements is to allow for travel between the participating countries to return to normality, many conditions for travel within the bubble have been suggested to protect the countries in the bubble from a resurgence in transmission. Some of these conditions include:

- the provision of a negative COVID-19 result prior to boarding;
- the mandatory wearing of face masks on board;
- the residency requirement of travellers (for example the traveller must have been in the participating country for more than certain number of days before being able to travel).

Within the Pacific, the PICs are following the developments in Australia and New Zealand very closely, as these countries are the biggest source of tourists in the region and are likely to become some of the first major countries to establish travel bubble agreements with them. **Figure 6-1** shows the proposed travel bubbles among the PICs. As of August 2020, no travel bubble involving the PICs has been ratified.

French Polynesia is a noteworthy exception to this, having abolished its quarantine requirements and reopened their border to tourists on 15 July 2020. Most arrivals after this date have been from the US. Following this, the country recorded a rise in the number of COVID-19 cases despite requiring travellers to present a proof of negative COVID-19 test. This shows the complexity of border reopening while ensuring that the country and its population remain safe from an outbreak. The SPTO suggested that scenario planning could be done sub-regionally as different regions in the Pacific cater for different markets, and that a stepped approach to establishing travel bubbles is the best approach.

Figure 6-1: Proposed Travel Bubbles among the PICs



6.1.1 The Trans-Tasman Bubble

The Trans-Tasman travel bubble was first suggested in May 2020 as a way to reopen travel between Australia and New Zealand. The two countries were committed to discuss the idea due to their close ties and their relatively low or no transmission at the time. The talks saw New Zealand's Prime Minister Jacinda Ardern participating in Australia's cabinet meeting. The Trans-Tasman bubble was proclaimed as a travel arrangement model that many countries around the world can follow. Many PIC governments have expressed interest in being included in the extended Trans-Tasman bubble.

However, due to the rise in cases in Australia in July and August 2020, particularly in the states of New South Wales and Victoria, the prospect of establishing a safe travel bubble between the two countries has been pushed back as of August 2020. The New Zealand Government's position is that for there to be a travel agreement, there needs to be no community transmission in Australia. Because of this, there have been talks of establishing travel bubbles between individual Australian states and New Zealand. Nevertheless, the preference for both national governments is for any potential agreement to stay on a national level.

On 3 October 2020, the Australian and New Zealand Governments agreed to establish a one-way travel bubble from New Zealand to New South Wales and the Northern Territory, with passengers from New Zealand avoiding the mandatory quarantine in Australia. However, passengers from Australia travelling to New Zealand, including those who travelled from New Zealand through the bubble, will still be required to undergo mandatory quarantine in New Zealand. The arrangement is set to commence from 16 October 2020 onwards.

6.1.2 The Rarotonga/Realm Countries Bubble

The Cook Islands have strongly advocated for a travel bubble between the Cook Islands and New Zealand as the smaller island nation's economy relies heavily on tourism. However, the New Zealand government has been cautious about committing to any certain dates, saying the travel arrangement will only happen 'with absolute caution' for the safety of both nations, with zero community transmission being the main condition.

As of October 2020, this arrangement still has a strong potential to become one of the earliest travel bubbles in the region. Airports across New Zealand have prepared their infrastructure to separate passengers arriving from bubble nations and those arriving from other destinations. The most notable example is the zoning of Auckland Airport's international terminal into 'safe travel area', for passengers from the travel bubble (e.g. Rarotonga), and 'health management area', for passengers arriving from destinations with no bubble arrangement (e.g. Singapore and the Middle East). Retail, food, and beverage is intended to be offered in the 'safe travel area', providing an experience that is close to the pre-pandemic days.

Niue has also participated in the discussion with the other two nations. The country's Premier, Dalton Tagelagi, said Niue will be observing how the arrangement between the Cook Islands and New Zealand work out before joining the proposed bubble between the Realm countries.

In August 2020, when New Zealand encountered its first cases of COVID-19 in more than 100 days, the nation's capital, Auckland, was moved to Alert Level 3 and the rest of the nation was put under Alert Level 2. This shows that any agreement may be conditional upon the 'COVID-safe' status of the countries involved and that any rise in COVID-19 case may bring an abrupt halt to the travel arrangement. In September 2020, New Zealand indicated that the travel bubble plans with the Cook Islands has been pushed to December 2020.

6.1.3 The Bula Bubble

The Bula bubble is one of the two travel bubbles proposed by Fiji to facilitate travel between the Pacific nations. The idea was proposed under the Fijian government's Phase Two of the COVID-SAFE Economic Recovery Framework and involves Australia and New Zealand. In July 2020, the country also proposed and implemented the Blue Lane initiative – a similar tourism pathway for the maritime sector which saw success in welcoming tourists to Port Denerau.

Passengers arriving from countries within the Bula bubble will go through an 'open stream', where they will be tested on arrival and, if tested negative, will be allowed to explore the country freely. A 'closed stream' is also proposed for travellers from 'non COVID-19 controlled countries' (outside the Bula bubble), in which passengers will be tested on arrival for COVID-19 and remain in quarantine for the whole trip at approved resorts. Areas within the said resorts will be segregated to ensure minimal contact with the locals and other guests from the open stream.

6.1.4 The Pacific Pathways

The Pacific Pathways is Fiji's proposed travel bubble among certain PICs. The aim of this travel arrangement is for Fiji to leverage its position as the only nation in the region with a WHO-certified testing lab to position the country as a regional hub, reconnecting nations in the Pacific. Countries included in the initial stage of the proposal include Tuvalu, Kiribati, and Tonga. Upon arrival in Fiji, travellers must spend 14 days in quarantine and pass a COVID-19 test at their own cost before being allowed to enter the country or travel to another international destination. Fiji Airways will be at the centre of this proposal, practicing its 'Travel Ready' protocols, which includes a set of health regimes, at every stage of the flight. If successful, the arrangement will be expanded to other PICs including Samoa, the Solomon Islands, and Vanuatu.

6.1.5 The Tamtam Bubble

In July 2020, the Solomon Islands' tourism authority, Tourism Solomons, and Solomon Airlines announced that both are pushing for a 'travel bubble of intra-regional Pacific nation groupings'[49] and proposes that a travel bubble between the country and Vanuatu could pave the way before opening borders to larger leisure destinations.

On 16 July 2020, Vanuatu's Council of Ministers endorsed a plan to support the nation's economic recovery through the 'Tamtam' travel bubble, which will link Vanuatu with other countries that are free from COVID-19. Countries that are likely to be part of this bubble initially include the Solomon Islands and New Caledonia. Vanuatu's AVL has been working with other agencies including the National Disaster Management Office and Air Vanuatu and is committed to contributing to the Tamtam Bubble.

6.1.6 The Palau and Taiwan Bubble

In May 2020, the Palauan Government commented that both Taiwan and Palau should establish a bubble arrangement as Taiwan has 'done a good job in its handling of the COVID-19 pandemic'.[50] The arrangement would provide a mutual benefit for tourists to visit both countries and for Palauans to travel to Taiwan for necessary medical treatments. As of August 2020, talks between the two countries are still ongoing.

6.1.7 The Micronesian Bubble

In May 2020, the Palauan President, as chair of the 19th Micronesian President's Summit, announced that the Micronesian countries (Palau, the RMI, Nauru, Kiribati, and the FSM) are coordinating the 2020 summit later in the year, which will be attended in-person by the leaders. These five countries have not recorded a single case of COVID-19 in their countries. As part of the talks, it was suggested that the leaders could take advantage of their countries' COVID-19 free status to jumpstart the discussion on a regional travel bubble. Three months later, Nauru was chosen as the 20th chair of the Summit.

6.2 Potential recovery scenarios

6.2.1 COVID-19 Situation and Projected Impact on the Aviation Industry

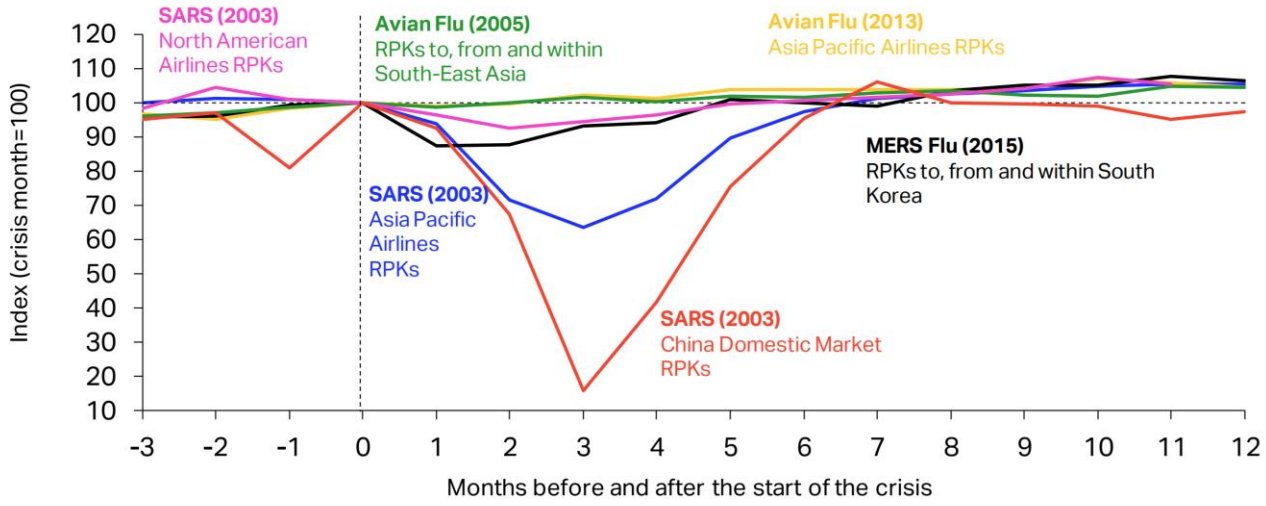
Every major worldwide incident, pandemic, or recession we have experienced has had immediate and significant impacts to aviation. However, once the event has passed, the system has consistently recovered. In order to model the effect of COVID-19 on aviation traffic, the effects of previous outbreaks on passenger throughput were assessed. The 2003 Severe Acute Respiratory Syndrome (SARS) had the largest impact on aviation traffic:

- 3 months after the outbreak (May 2003), domestic traffic in China was down 35%
- Traffic returned to pre-outbreak levels in 7 months.

Other outbreaks had short, less significant impacts on aviation traffic, as shown in **Figure 6-2**. It is anticipated that the effect of COVID-19 will be more long-lasting and that the recovery period will also take longer than any previous outbreaks.

[49] The Blue Swan Daily. *Tourism Solomons outlines 'merit in forming a travel bubble' of intra regional Pacific nations.* 8 July 2020.
[50] E. Chang. *Palau considers establishing safe travel bubble with Taiwan.* Taiwan News. May 2020.

Figure 6-2: Impact of Previous Pandemics on Air Traffic Levels



Source: IATA.

In its *Effects of Novel Coronavirus (COVID-19) on Civil Aviation: Economic Impact Analysis* published on 22 June 2020, ICAO estimates the COVID-19 impact to result in 42-52% reduction in seating capacity worldwide for 2020, amounting to annual losses of 2,344-2,978 million passengers and translating into US$308-391 billion in revenue losses for the airlines. The impact of the pandemic is expected to be more pronounced for international traffic:

- International passenger losses of 1,196-1,456 million, equivalent to US$208-256 billion in lost revenues;
- Domestic passenger losses of 1,148-1,522 million, equivalent to US$101-135 billion in lost revenues.

In Asia-Pacific specifically, ICAO predicts losses of:

- 323-397 million passengers and US$67-82 billion in revenues for international traffic in 2020;
- 475-631 million passengers and US$32-44 billion in revenues for domestic traffic in 2020.

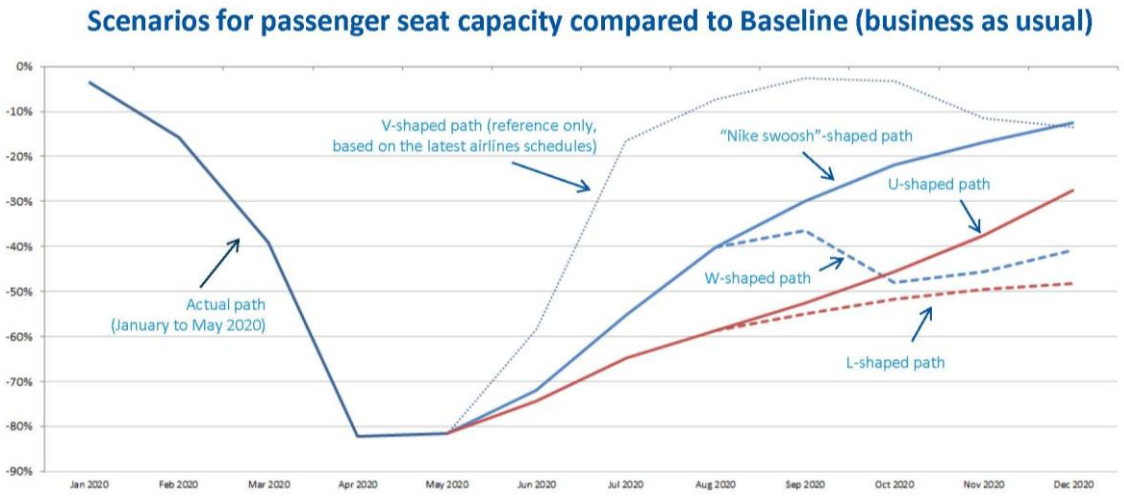
The impact on the tourism industry is estimated at a reduction of US$910-1,170 billion in tourism receipts for 2020 compared to US$1.5 trillion generated in 2019 according to the UN World Tourism Organisation (WTO).

Worldwide trade volumes are expected to decline by 13% up to 32% in 2020 compared to 2019 levels according to the WTO.

ICAO considered several potential recovery scenarios as shown in **Figure 6-3**. These scenarios acknowledge the high level of uncertainty regarding traffic recovery worldwide. IATA also developed their projections for traffic recovery in its *COVID-19 Outlook for Air Travel in the Next 5 Years* dated 13 May 2020. Domestic traffic is expected to recover faster than international as shown in

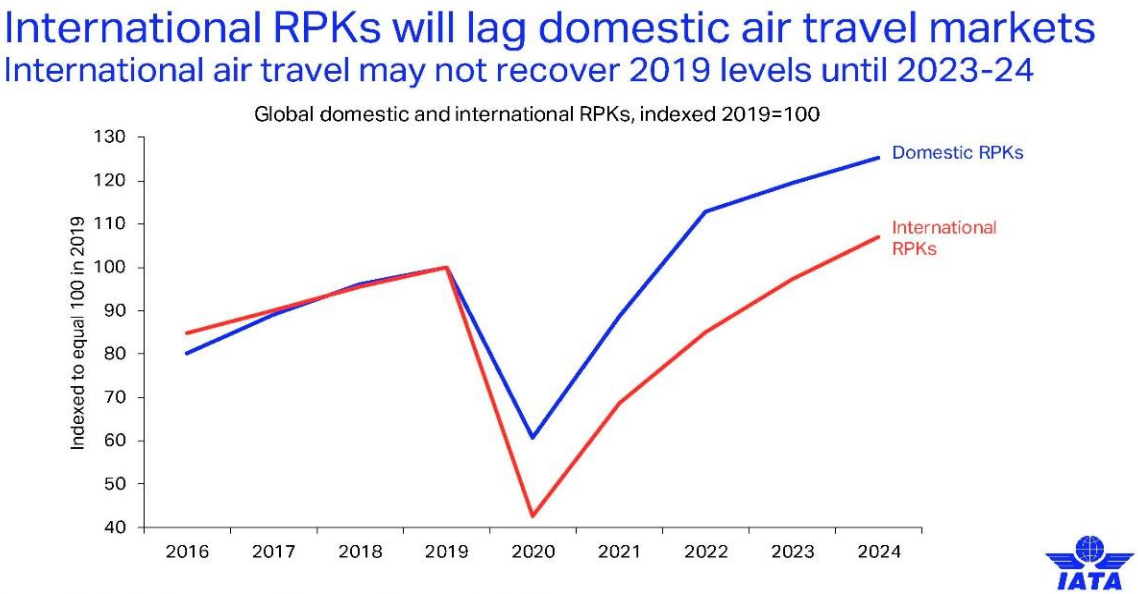
Figure 6-4.

Figure 6-3: ICAO COVID-19 Recovery Scenarios



Source: Effects of Novel Coronavirus (COVID-19) on Civil Aviation: Economic Impact Analysis

Figure 6-4: IATA Domestic and International Revenue Passenger Kilometre (RPK) Projections



Source: IATA/Tourism Economics, Air Passenger Forecast, April 2020

6.2.2 COVID-19 Recovery Scenarios for the Pacific

A detailed month by month near-term forecast model was developed by Landrum & Brown to assess the impact of the COVID-19 outbreak on domestic and international traffic in various world regions. This model was tailored by the authors and applied to the Pacific air traffic. Various scenarios were considered to test the potential, duration, and intensity of the outbreak on traffic and potential recovery scenarios once the virus is under control. The COVID-19 recovery analysis relies on inputs from stakeholders as well as assumptions regarding GDP trends and propensity to travel among other parameters.

The Pacific COVID-19 recovery forecast assumes that the return of aviation demand to pre-pandemic levels will greatly depend on:

- Increasing the propensity to travel, as this involved boosting passenger confidence that aircraft and airports are safe and that fellow travellers will not make travellers sick. Propensity to travel has a larger impact on near-term traffic recovery.
- Restoring the economy: through successful implementation of public health measures and government intervention to maintain personal incomes and corporate balance sheets. Growth in the economy has a larger impact on long-term traffic recovery.

According to surveys conducted by IATA in April 2020, passengers are likely to wait about three months between the time airlines start flying again and the time when passengers are ready/feel safe to travel. This lag is taken into account in the Pacific air traffic forecasting COVID-19 recovery model prepared for this study to account for a slow initial starting period followed by a traffic ramp up thereafter.

The high level of uncertainty, as depicted in the ICAO recovery curves, dictates that several recovery scenarios be considered for the near term in the Pacific. As discussed in **Section 6.1**, multiple travel bubble cases have been considered over the past several months. However, such travel arrangements are difficult to implement:

- Travel bubbles are heavily reliant on restoring confidence in air travel;
- There are still health and safety issues to be addressed in several countries to ensure the travel bubble and recovery can take place safely;
- 14-day quarantines are unattractive from a tourism perspective and present a hurdle to the recovery;
- Social pressures linked to local population fears of the virus are also a concern in some countries; and
- Finally, the resurgence of COVID-19 cases, in Australia and New Zealand in particular, have delayed the implementation process.

As of August 2020, several countries in the Pacific still have domestic activity. Overall, domestic air traffic has stabilised at about 60% of pre COVID-19 levels across the region. Intra-regional and international traffic on the other hand is very limited and usually covers cargo and repatriation flights as most borders in the Pacific region remain closed. Discussions with stakeholders regarding the Pacific point to an intra-regional and international traffic restart by the end of 2020 at the earliest. However, the most likely scenarios are pointing at a Q1-Q2 2021 restart for intra-regional and international travel in the Pacific. Therefore, the following scenarios were considered for the near-term forecast:

- Initial plans called for the Australia-New Zealand bubble to come first before expanding to the Pacific region. The latest resurgence in COVID-19 cases in Australia and in New Zealand has triggered new lockdown measures in the state of Victoria and in Auckland. Stakeholders shared, a Trans-Tasman bubble would probably take place after mid October 2020.
- Optimistic case:
    - Intra-regional and international traffic to start resuming in Dec 2020 with ramp-up around Feb-Mar 2021, reaching 2019 levels in Q4 2022;
    - Assumes that a travel bubble with the Pacific region would be implemented by the end of 2020 in parallel with the Trans-Tasman bubble, and also provides for consumer propensity to wait 3 months to build confidence;
    - Domestic traffic at 60% of pre COVID-19 levels with full recovery expected in Q3 2022.
- Baseline case:
    - Intra-regional and international traffic to start resuming in Mar-Apr 2021 with ramp-up around Jul-Aug 2021, reaching 2019 levels in Q4 2023;
    - Assumes the Trans-Tasman travel bubble would be implemented first by end of 2020 and extended to the Pacific region in early 2021 and is based on consumers waiting 3 months to build confidence to travel;
    - Domestic traffic at 60% of pre COVID-19 levels with full recovery expected in Q3 2023.
- Pessimistic case:
    - Intra-regional and international traffic to start resuming in Sep-Oct 2021 with ramp-up around Dec 2021-Jan 2022, reaching 2019 levels in Q3 2024.
    - Assumes border shutdown for another 6 months beyond the base case due to unsuccessful trials of the travel bubble and subsequent wait for a vaccine;
    - Domestic traffic at 60% of pre COVID-19 levels with full recovery expected in Q2 2024.

Figure 6-5: Domestic capacity recovery among the PICs from 2020 to 2023

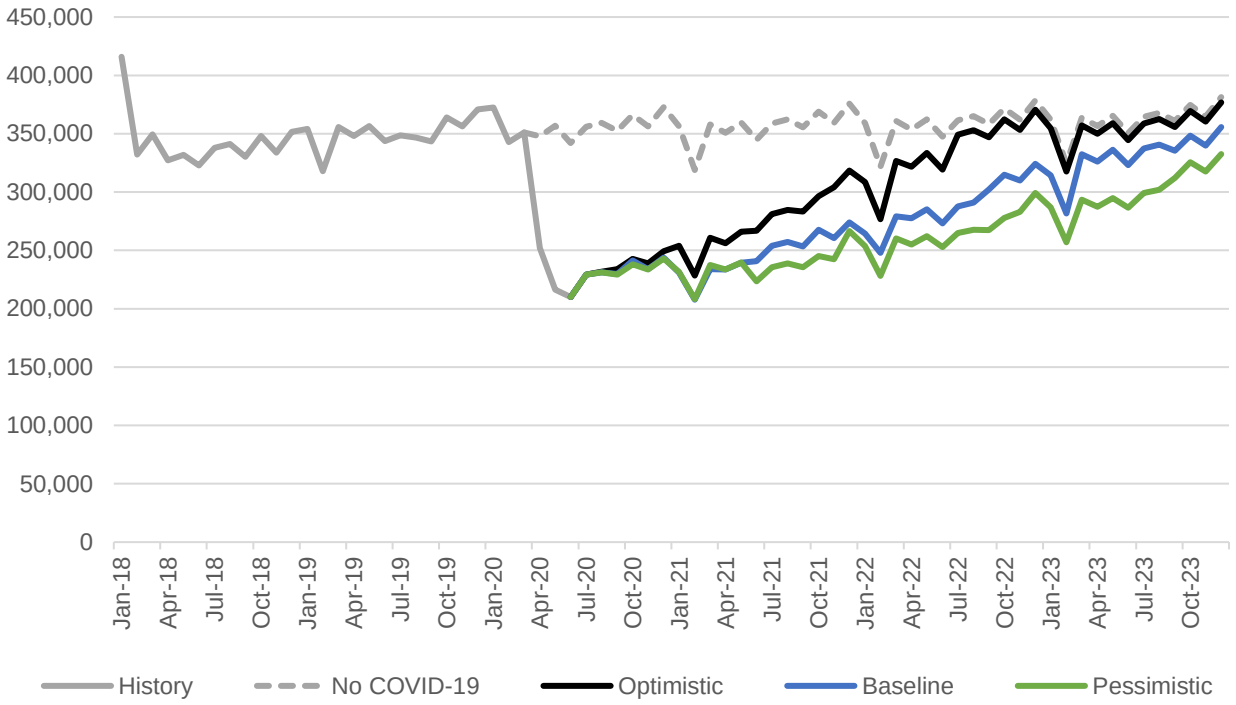


Figure 6-6: Intra-Regional capacity recovery among the PICs from 2020 to 2023

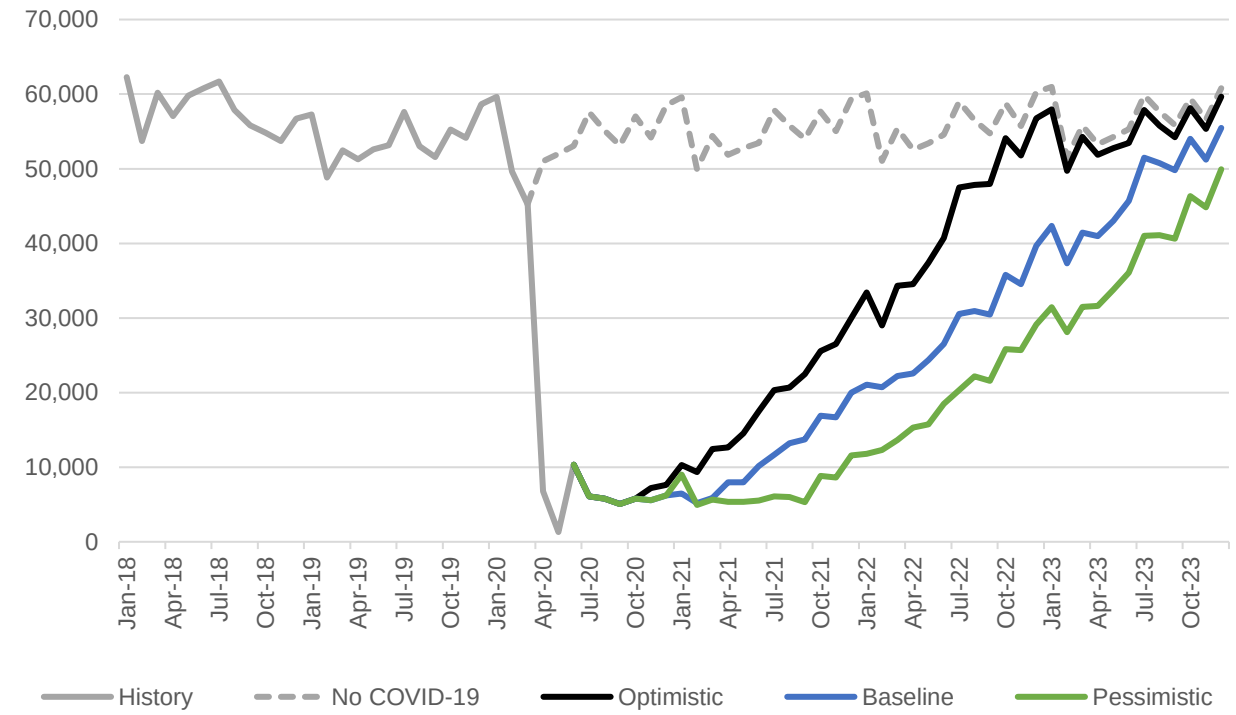
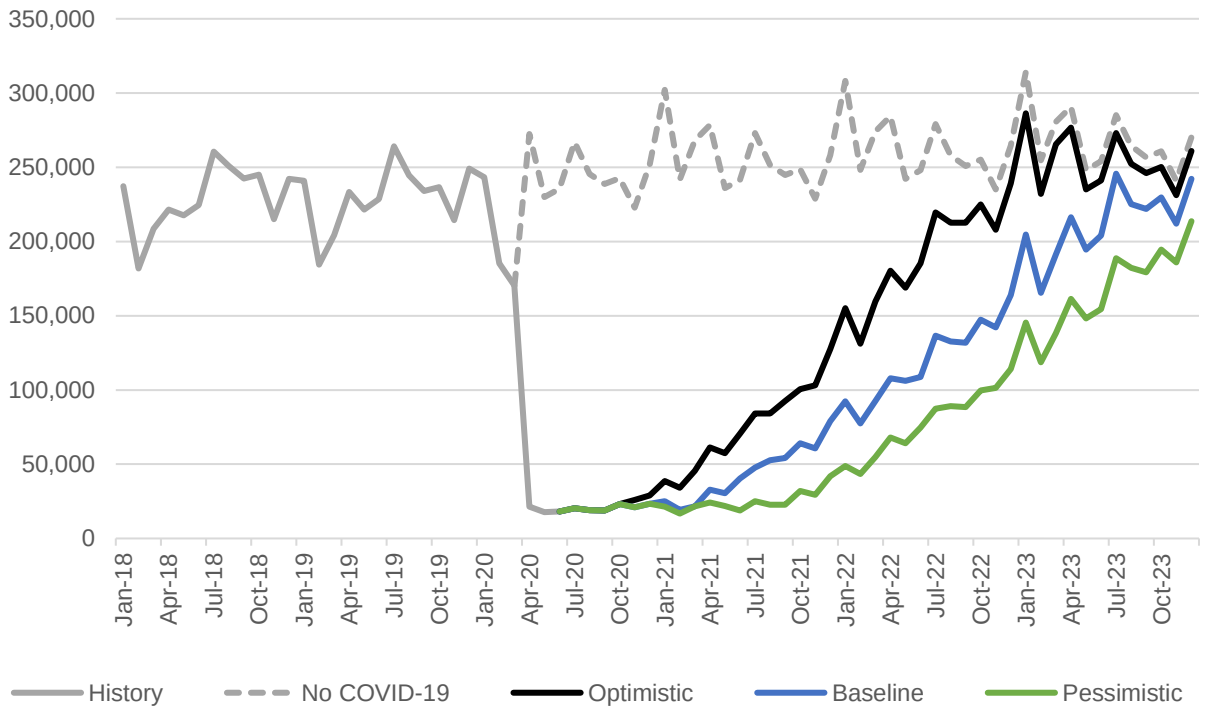


Figure 6-7: International capacity recovery among the PICs from 2020 to 2023



6.2.3 Pacific Critical Routes and Routes Potentially at Risk in the Immediate COVID-19 Recovery

As shown in **Figures 6-5**, **6-6**, and **6-7**, the recovery is expected to take place in stages with a slow initial restart followed by a ramp up in demand over time as borders progressively reopen and passenger confidence is restored. As a result, not all routes will reopen at the same time. It is expected that the most popular and historically more profitable routes will be the first to reopen.

Major intra-regional routes in the Pacific are expected to continue being served once the recovery takes place, albeit at reduced frequency and capacity during the restart phase. In particular, routes between Fiji and various Pacific countries will most likely be retained. Fiji Airways pointed out that the airline does not plan to phase out any of the routes served prior to the pandemic. They did state, however, that route reinstatement or the increase in frequency and capacity on the routes will be dictated by demand. It is therefore reasonable to assume that some of the low frequency or low capacity routes such as NAN-CXI-(HNL), NAN-POM, NAN-VAV and SUV-VLI, may not be served as soon as the recovery process starts.

The same process is expected at the international level for routes into the Pacific region. It is understood that the reopening of these routes will greatly depend on the COVID-19 situation in each country as well as the speed of border reopenings. Similar to the intra-regional traffic, airlines pointed out during the interview process that they intend to reopen air service to all routes served prior to the COVID-19 pandemic. However, demand would dictate that the most popular routes open first while the reopening of routes with low capacity/frequency will take place later in the recovery timeline.

As part of the study, all the historical intra-regional and international routes in the Pacific were analysed to assess their sustainability and the potential need for external support in the initial phases of recovery to restore air access to vulnerable PIC destinations. The results of this analysis are shown in **Table 6-1**. The analysis focussed particularly on routes critical to PIC connectivity as well as routes with limited demand pre COVID-19. The following list of criteria was applied to determine whether a route warranted consideration for support in the early phases of recovery.

- Primary air access: routes from PICs to the major ports in and into the Pacific region such as Australia, New Zealand, Fiji, Guam, Honolulu, etc. should be maintained to provide essential passenger and freight connectivity;
- Routes previously served by a single carrier: this type of route would be susceptible to be lost if the carrier serving this route is unable to financially sustain it, particularly if demand pre COVID-19 was thin;
- Single access to the PIC: if the PIC is served by a single route or a very limited number of routes, then losing air services on these routes would result in the PIC losing air access; and
- Fundamental social connectivity: routes linking the North Pacific and South Pacific regions or routes that serve markets critical to PIC recovery (such as Munda in Solomon Islands or Santo in Vanuatu) might require support in the near term.

Routes that showed significant demand pre COVID-19 or that were served by multiple carriers are assumed to be more viable and should not require any support in the near term. On the other end of the spectrum, routes with low demand levels pre COVID-19 but that do not constitute critical air access to the PIC would not necessarily warrant consideration for support or might only be considered for support once more critical routes are maintained or supported.

It should be noted that while these criteria were applied to determine the need for support on the various historical routes, this is a very simplistic analysis, aimed at determining the overall scale of support that might be needed. Significantly more detailed analysis would be required in the design of a route support scheme, using a more comprehensive set of evaluation criteria. For example, some of the more viable routes may be candidates for support to stimulate faster regrowth of tourism-dependent economies, whereas other routes may evolve which could change the mode of air access (e.g. TRW-CXI in lieu of TRW-NAN-CXI). This more detailed analysis is seen to be part of the project preparation work that would follow on from this study.

Table 6-1: Critical and Low Demand Routes across the Pacific Region

Destination	Route	Criteria	Potential Need for Support
Cook Islands			
To New Zealand	RAR-AKL	Primary Air Access/High Demand/Multiple Airlines pre COVID-19	No
To Australia	RAR-SYD	Low Demand Route/Secondary Air Access	Yes – Medium Priority
To the US	RAR-LAX	Low Demand Route/Non-Critical Air Access	No
To French Polynesia	RAR-PPT	Low Demand Route/Non-Critical Air Access	No
Fiji			
To Australia	NAN-SYD/NAN-BNE/NAN-MEL	Primary Air Access/High Demand/Multiple Airlines pre COVID-19	No
To New Zealand	NAN-AKL	Primary Air Access/High Demand/Multiple Airlines pre COVID-19	No
To New Zealand (secondary routes)	NAN-CHC/NAN-WLG	Low Demand Route/Non-Critical Air Access	No
To the US	NAN-LAX/NAN-SFO	Secondary Air Access/High Demand pre COVID-19	No
To Singapore	NAN-SIN	Low Demand Route/Non-Critical Air Access	No
To Hong Kong	NAN-HKG	Secondary Air Access/Single Airline	Yes – Medium Priority
To Japan	NAN-NRT	Low Demand Route/Non-Critical Air Access	No
To Wallis and Futuna Islands	NAN-WLS	Low Demand Route/Non-Critical Air Access	No
Federated States of Micronesia			
To the US	TKK-GUM	Primary Air Access/Single Airline/Low Demand pre COVID-19	Insufficient Information (need United Airlines input)

Destination	Route	Criteria	Potential Need for Support
To the US (secondary route)	YAP-GUM	Low Demand Route/Non-Critical Air Access	No
To PNG	TKK-POM	Low Demand Route/Non-Critical Air Access	No
To RMI	KSA-KWA	Low Demand Route/Non-Critical Air Access	No
To RMI (secondary route)	PNI-MAJ	Low Demand Route/Non-Critical Air Access	No
To RMI (secondary route)	PNI-KWA	Low Demand Route/Non-Critical Air Access	No
Kiribati			
To Fiji	TRW-NAN	Primary Air Access/Single Airline/Low Demand pre COVID-19	Yes – High Priority
To Fiji/the US (via CXI)	HNL-CXI-NAN (or future TRW-CXI)	Fundamental Social Connectivity/Single Airline/Low Demand pre COVID-19	Yes – High Priority
To Nauru	TRW-INU	Low Demand Route/Non-Critical Air Access	No or Low Priority
To RMI	TRW-MAJ	Fundamental Social Connectivity/Single Airline/Low Demand pre COVID-19	Yes – High Priority
To Solomon Islands	TRW-HIR	Low Demand Route/Non-Critical Air Access	No or Low Priority
Nauru			
To Australia	INU-BNE	Primary Air Access/Single Airline/Low Demand pre COVID-19	Yes – High Priority
To Fiji	INU-NAN	Secondary Air Access/Single Airline/Low Demand pre COVID-19	Yes – Medium Priority
To Solomon Islands	INU-HIR	Low Demand Route/Non-Critical Air Access	No or Low Priority
Niue			
To New Zealand	IUE-AKL	Primary and Single Air Access/Single Airline/Low Demand pre COVID-19	Yes – High Priority
Palau			
To South Korea	ROR-ICN	Primary Air Access/Multiple Airlines pre COVID-19	No
To the US	ROR-GUM	Primary Air Access/Single Airline/Low Demand pre COVID-19	Insufficient Information (need United Airlines input)
To Taiwan	ROR-TPE	Fundamental Social Connectivity/Single Airline/Low Demand pre COVID-19	Yes – Medium Priority
To Special Administrative Region of Macau	ROR-MFM	Low Demand Route/Non-Critical Air Access	No
To the Philippines	ROR-MNL	Low Demand Route/Non-Critical Air Access	No
Papua New Guinea			
To Australia	POM-BNE	Primary Air Access/High Demand/Multiple Airlines pre COVID-19	No
To Australia	POM-CNS	Primary Air Access/High Demand/Multiple Airlines pre COVID-19	No
To Australia (secondary route)	POM-SYD	Low Demand Route/Non-Critical Air Access	No
To Fiji	POM-NAN	Fundamental Social Connectivity/Single Airline/Low Demand pre COVID-19	Yes – Medium Priority
To Singapore	POM-SIN	Secondary Air Access/Single Airline/Low Demand pre COVID-19	Yes – Medium Priority
To Hong Kong	POM-HKG	Secondary Air Access/Single Airline/Low Demand pre COVID-19	Yes – Medium Priority
To the Philippines	POM-MNL	Secondary Air Access/ Multiple Airlines pre COVID-19	No

Destination	Route	Criteria	Potential Need for Support
To Japan	POM-NRT	Low Demand Route/Non-Critical Air Access	No
Republic of the Marshall Islands			
To the US	MAJ-HNL	Primary Air Access/Single Airline/Low Demand pre COVID-19	Insufficient Information (need United Airlines input)
Samoa			
To New Zealand	APW-AKL	Primary Air Access/High Demand/Multiple Airlines pre COVID-19	No
To Fiji	APW-NAN	Secondary Air Access/Single Airline/Low Demand pre COVID-19	Yes – High Priority
To Australia	APW-SYD	Secondary Air Access/Single Airline/Low Demand pre COVID-19	Yes – Medium Priority
To Australia	APW-BNE	Low Demand Route/Non-Critical Air Access	No
To the US	APW-HNL	Low Demand Route/Non-Critical Air Access	No
Solomon Islands			
To Australia	HIR-BNE	Primary Air Access/High Demand/Multiple Airlines pre COVID-19	No
To Australia	Munda-BNE	Fundamental Social Connectivity/Single Airline/Low Demand pre COVID-19	Yes – High Priority
To PNG	HIR-POM	Secondary Air Access/Single Airline/Low Demand pre COVID-19	Yes – Medium Priority
To Fiji	HIR-NAN	Fundamental Social Connectivity/ Low Demand pre COVID-19	Yes – Medium Priority
To Vanuatu	HIR-VLI	Low Demand Route/Non-Critical Air Access	No
Tonga			
To New Zealand	TBU-AKL	Primary Air Access/High Demand/Multiple Airlines pre COVID-19	No
To Fiji	TBU-NAN	Low Demand Route/Secondary Air Access	Yes – Medium Priority
To Fiji (secondary route)	VAV-NAN	Low Demand Route/Non-Critical Air Access	No
To Australia	TBU-SYD	Low Demand Route/Non-Critical Air Access	No
Tuvalu			
To Fiji	FUN-SUV	Primary Air Access/Single Airline/Low Demand pre COVID-19	Yes – High Priority
To Kiribati	FUN-TRW	Low Demand Route/Non-Critical Air Access	No
Vanuatu			
To Australia	VLI-SYD/VLI-BNE	Primary Air Access/High Demand/Multiple Airlines pre COVID-19	No
To Australia (secondary route)	SON-BNE	Fundamental Social Connectivity/Single Airline/Low Demand pre COVID-19	Yes – Medium Priority
To Australia (secondary route)	VLI-MEL	Low Demand Route/Non-Critical Air Access	No
To New Zealand	VLI-AKL	Secondary Air Access/Single Airline/Low Demand pre COVID-19	Yes – Medium Priority
To Fiji	VLI-NAN	Secondary Air Access/ Multiple Airlines pre COVID-19	No
To Fiji (secondary route)	VLI-SUV	Fundamental Social Connectivity/Single Airline/Low Demand pre COVID-19	Yes – Medium Priority
To New Caledonia	VLI-NOU	Secondary Air Access/ Multiple Airlines pre COVID-19	No

7 COVID-19 Recovery – Issues and Challenges

7.1 Introduction

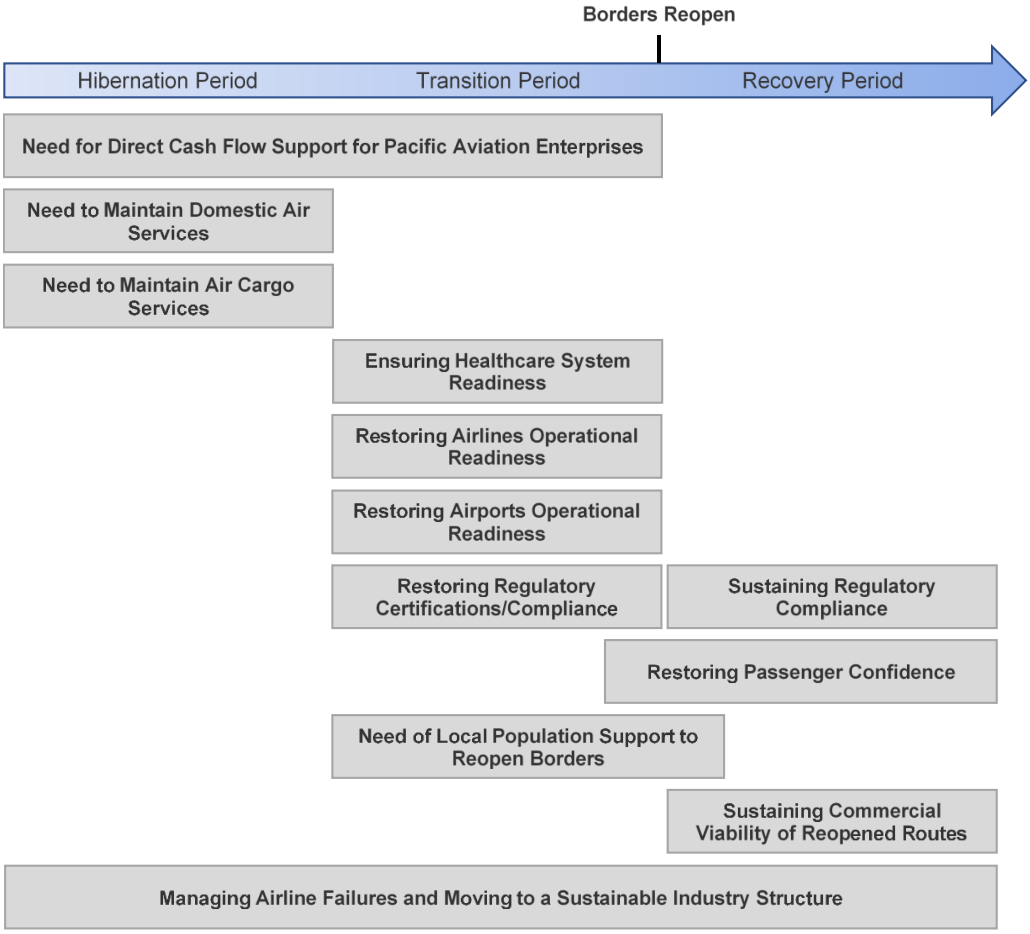
As part of the study, interviews were conducted with various stakeholders across all PICs to gather an understanding of the current COVID-19 situation and plans for recovery. In particular, the consultation sought to address specific challenges or hurdles that would prevent or slow the recovery process, before going on to sound out possible strategies to overcome these.

The most fundamental issue identified is the unknown duration of the pandemic. While governments have been quick to announce financial assistance to aviation, the possibility of border closures lasting well into 2021 poses a challenge in terms of identifying how much financial support is needed and available for the Pacific aviation system. This is compounded by the risk of airline and airport business failures increasing with time. In order to take this uncertainty into account, the analysis of this section has been grouped into three specific time frames:

- Hibernation: defined as the period during which borders are essentially closed and international air traffic stopped, or significantly reduced, and coupled with quarantine requirements;
- Transition to Recovery: defined as the period that immediately precedes the reopening of borders and removal of quarantine restrictions, and during which a range of actions have to be taken to ensure that recovery can take place safely, effectively and efficiently; and
- Recovery: defined as the period from which borders reopen, quarantine requirements are withdrawn, and air services are reinstated with demand progressively growing back to pre COVID-19 levels.

Figure 7-1 provides a summary of the various issues and challenges facing the Pacific aviation system through each of these phases leading to recovery. These issues and challenges are further developed in the following sections.

Figure 7-1: COVID-19 Recovery Issues and Challenges



7.2 Stage 1 – Hibernation: Immediate Need for Financial Support

7.2.1 Need for Direct Cash Flow Support to PIC Aviation Enterprises

Like many airlines around the world, airlines in the Pacific are suffering financial stress as a direct result of COVID-19. With revenue having dropped dramatically, airlines are still bearing heavy fixed costs such as aircraft leases, insurance, and some wages. Despite some savings from standing down staff, there is a clear need for immediate cash support to keep a basic functionality of their businesses while borders remain closed. In PICs with domestic networks, airlines have been able to maintain some level of domestic capacity, keeping the community connected while providing some cash flow. Internationally, freight and charter (repatriation and other) services have also been used to generate supplementary income further reducing cash drain. However, this is extremely limited in scale due to border closure rules and quarantine requirements on both passengers and crew. There have been various levels of government funding provided or promised for aviation SOEs, but government fiscal headroom has largely disappeared in many PICs. The industry also reports that the government support is slow in coming and, in some cases, not all promised funds are reaching the airlines or airports. This financial support has mostly been in the form of government loans rather than grants, but equity injection or sovereign guarantees have been used in some cases. A major concern of governments is the unknown length of time that hibernation is required and thus the level of funds needed to retain basic capability.

Like airlines, airports have similarly lost a large part of their revenues, and with very high fixed costs, are similarly burning cash. The higher trafficked airports would appear to be in a better position than PIC airlines in that they have some reserves, but these are depleting rapidly as the pandemic continues. The research shows that governments have tended to provide direct support to their state-owned airlines first before assisting airports, although airports have been benefiting from various government economy-wide fiscal stimulation measures. Overall, PIC airport operators are experiencing strong negative cash flows, many staff are stood down, and the mostly commercial enterprises have drastically reduced capacity to pay for or carry out maintenance or sustain necessary infrastructure projects and are seeking ongoing financial support to remain solvent and functional.

Aviation regulators are a third institution that have cash pressures that have a knock-on effect to air access. As central budget entities, constrained government budgets have meant that various PIC Civil Aviation Authorities (CAAs) have not always been able to fund all of the regulatory services necessary to ensure that the industry is compliant with the safety regulations, a situation that has been exacerbated by changed fiscal position during the pandemic. The primary manifestation of this problem is the inability of governments to pay annual subscriptions or work program fees to PASO, upon whom most CAAs are dependent for regulatory surveillance specialists. This in turn creates a financing crisis for PASO as its funding model is entirely dependent on these annual member fees. There is a need for governments to find ways to fund their CAAs and their PASO commitments, and similarly there is a need for additional direct financial support to PASO, lest airlines and airports cannot maintain their regulatory certification.

7.2.2 Need to Maintain Domestic Air Services

Domestic air services are an essential community service for island states and one of the consequences of the cessation of international traffic is the impact that this had on domestic air access. Domestic operations also generate some revenue during the hibernation period for those airlines that provide both domestic and international services.

International visitors account for an important portion of domestic traffic in tourism-dependent PICs and the absence of this traffic puts pressure on the already fragile domestic airlines. Most PICs with domestic networks have maintained domestic activity, experiencing somewhere between 20-60% of pre COVID-19 traffic levels. Threats to continuity come from: loss of access to internal cross subsidies from international services; loss of access to any CSO route subsidies where governments can no longer support them; lack of funds for airport operators to maintain domestic airports; the difficulty of maintaining airworthiness of the domestic fleet with constraints on regulatory inspection; difficulties in air freighting spare parts; and the ability of retaining pilot currency and medical certification.

7.2.3 Need to Maintain Air Cargo Services

Prior to the pandemic, freight services across the PICs relied heavily on hold capacity on passenger flights, which provided the bulk of the freight in and out of the Pacific and amongst the PICs. The drastic reduction in the number of international passenger flights has posed a threat to the importing and exporting of time critical

or perishable goods which are fundamentally important for PIC economies. PIC governments and private freight operators have been funding small numbers of freight operations to many of the PIC carriers.

This has been important during hibernation as it has not only kept up supply, but at the same time provided some small revenue to PIC airlines and allowed the airlines to retain crew proficiency and basic international operational capability, better readying the airline for the transition and recovery stages.

The freight subsidy scheme put in place by New Zealand (NZ IAFC scheme, awarded to Air New Zealand) has ensured that some PICs continue to receive essential freight services during the pandemic.

As shown in **Table 3-3**, the large majority of ongoing international air services across the Pacific are air cargo flights. Continued supply of such cargo services is expected to be important during the transition stage as well, as even after borders reopen, traffic recovery is expected to be gradual, limiting the amount of freight that can be transported to/from the PICs in passenger aircraft. Maintaining air cargo services throughout the region is critical to ensure that the PICs continue to receive food, medical supplies, and other essential goods.

7.3 Stage 2 – Transition to Recovery: Immediate Actions before Restart

7.3.1 Need to Ensure Healthcare System Readiness

As the industry moves toward a restart of air services, there are also issues regarding the requirement of airports and airlines to possess the means to deal with the processing of passengers in a post COVID-19 world. This involves developing or modifying terminal building infrastructure, acquiring equipment and introduction of processes that coincide with a national COVID-19 health scheme so as to give confidence to citizens and potential visitors alike that the airport itself and the PIC in general is vigorous in preventing, detecting, and containing any future outbreak, and in the worst case caring for infected persons. Many Pacific airports and airlines are implementing measures (assisted by PRIF Development Partners in some cases) to address these issues, typically implementing ICAO Council's Aviation Recovery Task Force (CART)[51] guidelines. Some PICs are facing difficulties in this area, for example lack of dedicated quarantine facilities, outdated screening equipment and lack of real estate in or around the terminal buildings for isolation and dedicated health screening areas.

7.3.2 Need for Local Population to be Supportive of Reopening Borders

The above issue regarding healthcare system readiness goes hand in hand with a need for parallel processes of community education on the risks associated with opening borders, creation of public awareness of PIC's capacity to prevent community exposure to COVID-19, and gauging of community willingness to support the reopening up of borders. A number of PICs advised that community opinion was strongly divided between those that desire to reopen the economy as soon as possible to protect livelihoods, and those that are concerned that premature reopening of air access will act as a vector for the virus to enter the community with potentially devastating effect. While these are issues for PIC governments to address, it was identified that any air access recovery strategies should be synchronised with community sentiment on border reopening.

7.3.3 Need to Restore Airlines' Operational Readiness

During the hibernation stage, PIC airlines have reduced their operational capacity to a minimum level to reduce cash burn while retaining basic operational capability to support domestic operations and limited international operations. This situation has led to a number of impediments to a rapid recovery when borders reopen.

Retaining Regulatory Certification

The rules-based aviation system requires that airlines hold a current AOC issued by national civil aviation regulators. This carries obligations under the regulations for airlines to maintain airworthiness and flight operations standards and submit to periodic renewal of the AOC which involves inspection by aviation regulators. Inspection by the regulator is also required for various maintenance and modification tasks and for introduction of new aircraft types[52]. Apart from Fiji and PNG, PIC civil aviation regulators do not have the required range of suitably qualified in-country inspectors, and instead source these through PASO, a regional body established under the Pacific Islands Civil Aviation Safety and Security Treaty (PICASST).

[51] ICAO Council Aviation Recovery Task Force.
[52] Government of New Zealand, Civil Aviation Administration, Aircraft Airworthiness: https://www.aviation.govt.nz/aircraft/airworthiness

As border closures are extended, some PIC airlines will come up for re-certification, others are seeking an initial issue of an AOC, and others are introducing new aircraft types into their fleet. These tasks cannot be achieved under the present framework because of travel restrictions limiting movement of PASO inspectors, and also because PASO does not have adequate funding to support this work. The funding issue arises because PICs have been unable to sustain annual PASO membership subscriptions nor annual work program fees that are prescribed in the PICASST funding model. PASO is developing work-around inspection strategies involving desktop analysis supported by in-country aviation regulatory staff, which will mostly overcome the travel constraints, but the funding issue remains a barrier. Despite dispensations from ICAO extending validity dates, there is a risk that regulatory compliance may not be maintained and airlines could be grounded.

Restoring Crew Currency

Crew currency refers to the ability of pilots to comply with requirements relating to recent supervised flight proficiency checks[53] as well as keeping medical checks up to date. Flight proficiency checks are done in-flight and in designated flight simulators. With the reduction of international flying and standing down of many pilots, there is limited opportunity for in-flight check and training, and so the transition stage will require intensive simulator training as crews are brought back online. Apart from Fiji and PNG, PICs do not have simulator facilities, and accordingly would need to access overseas facilities (depending on aircraft type, this could be in Fiji, Australia, New Zealand, PNG, or further afield). Prior to border reopening, this becomes problematic as even if approvals are obtained, quarantine costs and delays will add considerably to the cost of recovery. Obtaining access to simulators may also present difficulties given that the rest of the world's aviation industry may be in similar recovery mode at the same time.

The issue with medical currency is similar, in that many PICs do not have local aviation accredited medical examiners. This requires flight crews (as well as air traffic controllers) to travel to another country, usually Australia or New Zealand, for the examinations – a difficult and/or costly process during shut down.

Other Factors

The weak financial position of airlines will also directly limit the ability to jump start recovery. Some PIC airlines have grounded aircraft as they defer the completion of maintenance due to lack of funds. Others report the inability to obtain supplies, or to access international ports due to arrears to suppliers or airport or air navigation authorities. These issues link back to the cash flow needs mentioned in **Section 7.2.1**.

7.3.4 Need to Restore Airports' Operational Readiness

Restore Regulatory Certifications and Compliance

Like airlines, airports face the challenge of maintaining compliance while operations are halted, staff are stood down, and cash is scarce. Pacific Island airports are required to maintain continued compliance of their aerodromes under *Part 139: Aerodromes – Certification, Operation and Use* in order to maintain their aerodrome operators' certificate. A number of PIC international airports are coming due for re-certification, involving the same issues as identified for airlines - regarding the national aviation regulator's inability to field PASO inspectors. Some PICs have used ICAO approved extensions to their certificates although these are time limited. Failure to meet these certification requirements places constraints on airlines' ability to utilise those airports in terms of their own regulatory approvals and in terms of independent participation in global audit programs such as the IATA Operational Safety Audit (IOSA) Program. Successful IOSA audits are a prerequisite for participation in codeshare and interline agreements that will facilitate revenue growth upon recovery. It should be noted that international airport regulatory non-compliance affects both designated carriers of the individual PIC and other international carriers that might otherwise contribute to the growth of air access.

In addition to the retention of airport certification, air traffic control/air navigation system certification is required under individual PIC regulations, and this service faces the same issues described above with regards to access to inspectors for timely recertification. Also, air traffic controllers face similar issues to pilots in renewing medical certificates. Not only does a failure in the ability to maintain safety compliance prevent future growth and provide a barrier to an operational restart, it also has wider reaching effects on airport safety and social connectivity.

[53] Government of New Zealand, Civil Aviation Administration, Civil Aviation Rules Part 61 section 257 – currency requirements.

Domestic Airport Maintenance

While domestic services are maintained during the pandemic, albeit at a reduced rate, the scarcity of cash and standing down of staff is resulting in governments or airport authorities struggling to maintain these domestic and outer island airports. If these airports cannot be maintained and services continued, a fundamental pillar of social connectivity will be lost. Although in most cases with low traffic, there may not be a business case to fund the maintenance of these airports, they are nonetheless fundamental to preserving domestic air access in order to provide access to health, education, community connections, and domestic tourism. The continued presence of domestic services also generate cash to ease the burden of a stalled international market.

Completion of Infrastructure Works Halted during the Pandemic

Before the pandemic, many PIC international airports and some domestic airports were implementing fully funded capital works programs (in some cases with PRIF Development Partner funding) with projects generally being critical to the continued safe operation of the airport, e.g. runway repairs/resurfacing, terminal upgrades and control tower refits. Evidence suggests that although many of these projects may have been already funded, they are currently not progressing due to the departure of expatriate contractors and closure of borders. While most of these projects are not classified as urgent repairs, their non-completion will be factored in airlines' decisions on whether and when to resume flights to the destination. In some PICs, these projects are in the process of being recommenced by allowing contractors into the country subject to health checks and undergoing a period of quarantine. This adds to the cost, extends construction time, and decreases flexibility in the work program.

Delivery of Airport Facility Improvements Critical to Recovery

Developments in terminal facilities are required to manage risk of COVID-19 infection during recovery and beyond. For small PICs with relatively infrequent international flights, this can involve simple changes of procedures sufficient to meet ICAO CART guidelines, by optimising social distancing and the introduction of disinfection procedures. For larger PICs with sizeable international operations, these modifications may involve comprehensive terminal rearrangement to segregate passenger flows, installation of health screening equipment, modification to a touchless terminal, and construction of quarantine facilities. For example, in Fiji and Auckland, changes to terminal flows are contemplated to accommodate different processing of passengers depending on their COVID-19 free status e.g.:

- 'Open Stream': passengers from countries that are considered to be COVID-19 free and whose citizens and residents are considered to be COVID-19 free. These passengers would enter the country and be able to move around freely; and
- 'Closed Stream': passengers arriving from countries which are not considered to be COVID-19 free. The present assumption is that these passengers could enter the country and be quarantined for a period at a hotel or isolated place where only quarantined passengers would be housed in this location.

One PIC expressed the need for a quarantine facility to be constructed at the airport to accommodate repatriated citizens, due to the lack of availability of suitable accommodation for this purpose in the rest of the PIC.

Provision and Quarantine of Freight

Although the vast majority of trade in and out of the Pacific Islands is carried by international shipping, the ability of airports to handle time-critical freight is more important than ever during and after a pandemic. As discussed in **Section 7.2.3** in the absence of tourist passenger flights carrying belly cargo, there has been a distinct drop in cargo capacity which is being attempted to be covered by government and private purchased freight charters from PICs and from countries outside the region. However, PICs report that there are backlogs and the air cargo rates have significantly increased due to lack of supply, making air cargo shipment more challenging.

In response to the pandemic, some PICs have introduced quarantine measures on all imported cargo into their countries. The type of cargo ranges from cargo containers to passengers' belongings and involves storage in a dedicated quarantine facility/area from 5 to 14 days. The ability of airports to store this freight in a dedicated quarantine facility is becoming a challenge and larger facilities are expected to be required in the transition period with anticipated increase of scheduled air services producing more cargo capacity while quarantine restrictions will be slow to be lifted. These facilities must be able to deal with varying types of cargo including perishable goods requiring refrigeration and hazardous goods handling and storage procedures.

7.4 Stage 3 – Recovery Period

Once air travel has restarted and borders have reopened, the Pacific aviation industry will be faced with a set of issues and challenges surrounding the economic viability of routes and long-term sustainability of air services given a potential risk of COVID-19 returning. Secondary to this, the ability of nations to continue to maintain safety compliance will be directly linked to the sustainability of PASO, its funding, and place within the Pacific aviation community.

7.4.1 Restoring Passenger Confidence

It is widely accepted that as international air travel starts to return, it will take a significant amount of time until load factors and frequency return to pre COVID-19 levels. As shown in **Section 6.2**, potential recovery scenarios conceive that pre COVID-19 levels could be reached sometime between the end of 2022 and 2024. Governments as well as airlines, airports, tourism authorities, and other relevant stakeholders will face the tremendous task of restoring passenger confidence to travel. Propensity to travel is a key factor and major driver in the recovery process. Fear of the virus or contamination as well as social pressures from the local population in the PICs will also be a major deterrent to air traffic recovery.

7.4.2 Sustaining Commercial Viability of Reopened Routes

The duration of the recovery process also poses a challenge surrounding the economic viability of international routes, particularly in the initial phases of the recovery, along with a question of who gets to serve them. Pacific, Australian, and New Zealand airlines all indicate an interest in returning to pre COVID-19 route schedules as soon as possible, concentrating on the most commercially viable routes. This suggests that routes between Australia/New Zealand and Fiji, Vanuatu, Cook Islands, Samoa and Tonga will be served when demand grows back. Based on the analysis of **Section 6.2**, growth in demand may be slow initially leading to low frequency of service and/or low profitability. Conversely, the existence of a travel bubble in the Pacific may drive growth harder if Australian and New Zealand tourists have no other choices for international travel.

Outside of those routes, restoring air access is likely to be more challenging, especially on the routes listed in **Section 6.2.3** are at risk, which is mainly the small island states. PIC airlines indicate that they would be slow to re-enter the market for those services and would expect frequency to grow slowly and that some PICs may be without a service. Overall, there is a need to ensure access between PICs and Fiji, Auckland and Sydney or Brisbane, either direct or via intermediary ports for the attraction of tourists, access to education and health services, for government and business, for foreign contract work and to restore freight capacity. Sustainable connections between north and south Pacific were also flagged as important. It is identified that some of the more vulnerable or regionally important routes will need some external support post opening up of borders to retain sustainable air access.

7.4.3 Sustaining Regulatory Compliance

Sections 7.3.3 and 7.3.4 identified that a key issue for early recovery of air access is the need for some form of support to both the PIC aviation regulators and PASO to allow a surge in PASO regulatory services to be committed during the transition-to-recovery stage. The regulatory task does not just stop at recovery, any surge capacity would not be sustainable unless there is a long-term framework in place to continue the services.

7.5 Managing Airline Failures and Moving to a Sustainable Industry Structure

A number of smaller Pacific airlines have been in a chronically precarious financial position before the pandemic and most PIC carriers are now technically insolvent. Most governments have limited to no financial capacity to continue funding these airlines indefinitely. It is possible that one or more airlines will need to be placed into receivership although explicit and implicit financial commitments of government shareholders in some airlines may mean that this crystallises a lot of government liabilities. At the same time, two airlines are committed to an expansion strategy with new aircraft, and one PIC is starting a joint government and private sector owned domestic airline to replace a private airline that ceased operating prior to the pandemic. Adding to this, another PIC airline is seeking to privatise and is exploring collaboration with, and potential investment in, other regional carriers. In the midst of this, carriers from Australia and New Zealand are developing plans mindful of potential PIC airline failures, and at the same time are willing to collaborate with PIC carriers. There is a need for support to PIC airlines going through crises, and to work with governments and carriers on a regional basis to support collaborative initiatives that might produce a more sustainable framework than at present, potentially introducing economies of scale through working on a regional basis.

8 COVID-19 Recovery – Strategies and Initiatives

As discussed above, the greatest and most basic need expressed by PIC airlines and airport operators is for financial support to sustain their domestic services and retain basic capability to operate internationally while borders remain closed. This need may extend beyond border opening if there are any ongoing quarantine requirements that make it impractical to fly internationally. When access is fully opened up without quarantine constraints, the industry sees that demand will start to return and that the markets will be progressively serviced on a commercial basis, lessening and ultimately eliminating the requirement for financial support. However, it is expected that routes covered and frequency of service could grow quite slowly, and that there will be a transition period where in order to sustain supply, less-than-commercial operations will occur, and that some form of cash flow support may continue to be needed in this transition period. This suggests that primary recovery strategies need to address ways of quickly moving cash into airlines and airports, whether through Government budget support, directly through financial instruments accessible to airlines and airports, or indirectly through market intervention and stimulus, e.g. route underwriting and contract air services.

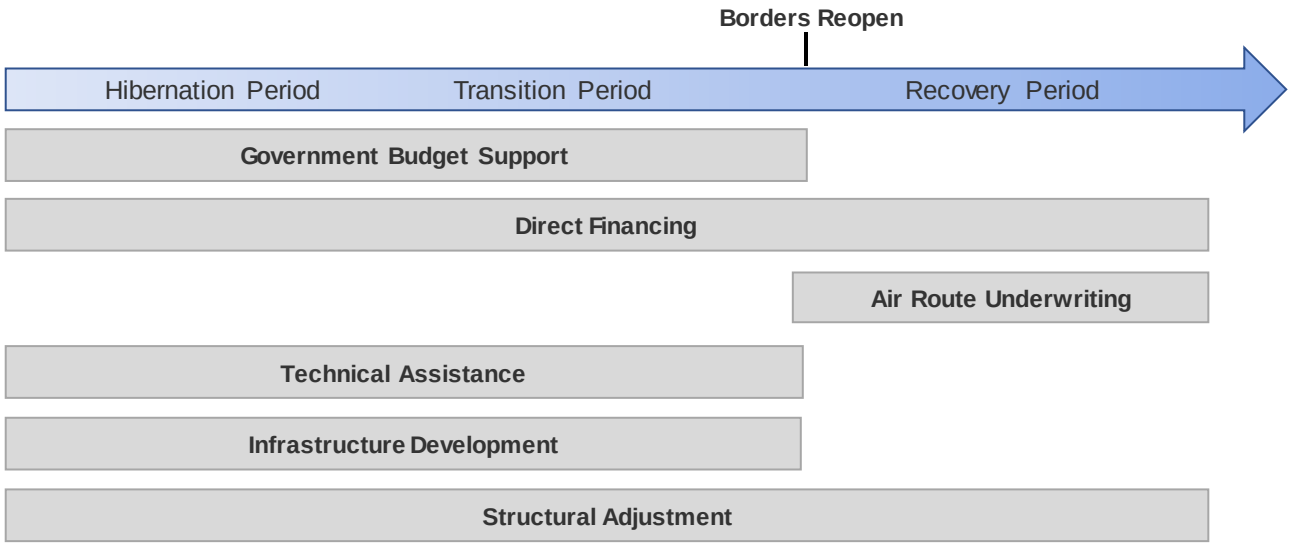
In the transition period, there is also recognition that early growth in revenue is inextricably linked to first restoring operational readiness (regulatory compliance, crew currency, maintenance of airworthiness standards, infrastructure readiness, airport compliance as discussed above), and that a range of support services are needed for this, whether through technical assistance or direct funding.

Another key factor for consideration in the support strategy raised above is the need for confidence among consumers and the Pacific island community in the aviation systems' and national health systems' capacity to manage infection risk. PICs (including PIC airports and PIC airlines) are doing extensive work in this area but there is express need for both technical assistance and financing physical infrastructure to support both.

When contemplating financial support, there is concern that, for some airlines that have been under financial stress before COVID-19, such assistance may be counterproductive – it will simply buy short term survival for a struggling operator who will go on to require ongoing financial support in the long term. Given that the air transport sector regionally and globally may well be structured entirely different post COVID-19, it is recognised that any funding to PIC airlines and airports should be contingent on assessment of sustainability of such funding. Consideration will need to be given for major structural adjustment (e.g. extended commercial collaboration between airlines, merger, cross-investment, privatisation of airlines and airports, exit from air services altogether and changes to the enabling environment, etc.). It is also noted that one PIC has lost its sole domestic air service provider and is working rapidly to develop a replacement provider, potentially with private sector involvement. Another two airlines are committed to adding new jet aircraft to their fleet – support for these processes may need to be considered in the design of any assistance package.

Figure 8-1 provides a summary of the various strategies and initiatives to address these issues, considered over all the phases leading to the recovery and beyond. The sections to follow elaborate on the above in the form of a menu of potential initiatives.

Figure 8-1: COVID-19 Recovery Strategies and Initiatives



8.1 Budget Support to Government for on-Forwarding to SOEs

The simplest, and perhaps fastest, method of directing cash to largely insolvent airlines and airports is to provide financial assistance to PIC governments in the form of (preferably concessional) loans and grants. The rationale is that governments have been providing a range of support initiatives both across the general economy and specifically to the tourism, health and air transport sectors and are simply running out of capacity to provide further support. Budget support would allow governments to balance priorities and disperse the funds according to greatest need and would potentially involve a simpler and more time-efficient process than project-specific financing by other means. The funds could be allocated through lending or grants to:

- Provide working capital for airports and airlines to survive hibernation, to maintain basic capacity, including maintenance and safety compliance;
- Enable airlines and airports to clear trade debtors that are preventing re-entry to service;
- Fund regulators to allow them to meet both their direct regulatory obligations and their obligations to PASO;
- Fund capital investment activity needed to transition back into operation of air services; and
- Fund collateral areas essential to air services recovery, e.g. development of COVID-19 testing and tracing, quarantine and treatment capability, destination marketing, etc.

It does, however, lead to the risk that:

- Funds may be directed to unsustainable enterprises or activities;
- Funds may not be allocated to the most efficient recovery activities;
- Funding via governments might be slow and, in some cases may not reach the targeted SOEs; and
- This mechanism does not address the needs of private sector operators.

It should be noted that several PICs expressed the desire that any funds allocated to the aviation sector be directed to long-term sustainability of the sector and not simply be consumed by preserving the status quo. Other PICs indicated that they had undertaken substantive planning and had in place many programs and initiatives to mitigate the impact of COVID-19 and would welcome budget support to reinforce these initiatives, preference to project-specific means of accessing funds, which meant additional administrative burden.

8.2 Direct Financing of Airports and Airlines

A direct financing for aviation enterprises (airline or airport business, or related businesses such as a freight terminal or ground handling operator) is seen as a more targeted way to deliver cash to operating entities compared to government budget support. The primary mechanism could conceivably be loans for working capital for the businesses to survive the hibernation period and to fund transition back into service. Grant funding could also be considered for this application, albeit that there is a risk that those funds would be consumed without a sustainable impact unless the finance was appraised to a similar standard as debt. Another risk of donors acting as lender to airlines is the potential to crowd out traditional commercial finance. This effect can be minimised by development partners providing guarantee instruments to local banks so as to provide aviation enterprises, airlines and airports access to traditional bank finance, potentially on concessional terms. It is recognised that this type of financing structure is limited to those PRIF Development Partners that are engaged in private sector finance and takes time for preparation and approval. It does, however, provide a channel to provide support to private sector operators in addition to SOEs.

8.3 Air Route Underwriting Strategy

The previous two strategies intervene directly to inject cash into airlines and airports with the sustainability of this approach being uncertain. An alternative or supplementary approach is to work on the supply of services through route underwriting. Some participants were strongly supportive of underwriting for thin line routes that would likely be unprofitable to service during the initial phases of the recovery, until traffic is built up to pre COVID-19 levels. Such initiatives could be contemplated on a national basis (similar to that adopted on the Sydney-Rarotonga and Los Angeles-Rarotonga routes), particularly for PICs that do not have an airline. However, interest was also expressed in a region-based approach where an underwriting fund might be established, and tenders sought from airlines funding “at risk” services. However structured, such an underwriting scheme would be an important source of revenue during the start-up period, restore air access earlier than would otherwise be experienced, and through a tender process, ensure that the service is supplied

by the carrier most suitable to carry out the service. Key issues for consideration under such a scheme would include:

- The scheme could only commence once borders reopen and even then, would only be applicable, once quarantine restrictions are removed on routes to be serviced, as that is considered by the industry to be the single most significant issue holding back growth in air travel (placing great emphasis addressing public health issues before anything else);
- There would be considerable pressure to select the national airline of any destination being serviced, rather than the best/most efficient solution(s);
- There would be concerns about better resourced airlines from Australia and New Zealand capturing the subsidies (consultations with those airlines confirmed interest in bidding for such underwriting); and
- There is a need for any subsidy to be progressive, in that it should cover the gap between commercial revenue and operating cost, such that, as demand grows, the subsidy would phase out.

It is important to note that for an underwriting agreement to fully succeed, attention would need to be given to bilateral air services agreements. Most PICs have little difficulty in negotiating bilateral air services agreements to accommodate services to the PIC from multiple carriers, and many have in fact signed and ratified the Pacific Islands Air Services Agreement (PIASA), which effectively allows open skies between PICs. However, the most vulnerable routes generally require access to Fiji which has relatively restrictive air services agreements and has publicly declared its policy of retaining this to support Fiji Airways. A prerequisite for the widespread use of an underwriting fund would be the negotiation of more open access to Fiji, especially in the context of any support offered to Fiji in any of the modalities discussed here.

A supply-driven route underwriting fund alone may be not be sufficient in itself to stimulate demand, as efforts may need to be simultaneously directed at generating consumer confidence in post COVID-19 air travel. This would require first having in place comprehensive infection prevention/detection/control systems and processes, coupled with a public communications strategy incorporated into the destination marketing framework (e.g. a tourism support campaign fund may need to be established simultaneously with health system improvements and an underwriting fund, all as part of the wider strategy).

Case Study: The Cook Islands Route Underwriting Arrangements

Up until the COVID-19 pandemic, the Cook Islands was serviced from New Zealand by Air New Zealand, Virgin Australia, and Jetstar, all achieved without any financial assistance or economic regulation. Air New Zealand also serviced the Sydney-Rarotonga and Los Angeles. These latter routes operated under an underwriting agreement paid by the Cook Islands Government, costing an estimated NZ$12 million in 2019.

Case Study: New Zealand International Air Freight Capacity Scheme

The New Zealand Government announced the NZ$330 million scheme in March 2020 which provided financial support to air freight carriers to ensure critical air freight capacity despite the reduction in international passenger flights caused by the COVID-19 pandemic.

The process involved a tender process where airlines submitted proposals indicating the minimum and maximum viable freight capacity, frequency of flights, financial support required for each route and how it was calculated, methodology for the prioritisation of freight categories, and market pricing strategy for freight. The financial support was offered for at least 6 months from April 2020 and Air New Zealand became the provider of air freight from Auckland to the Cook Islands, Niue, Tonga, Samoa, and Fiji under the IAFC scheme.

8.4 Technical Assistance – Operational Readiness

As discussed in **Section 7**, restoring operational readiness will be critical to recovery taking place as soon as borders reopen. It is identified that a possible way forward will be to provide technical assistance packages. Technical assistance is assessed to be needed for airlines, airports and other regulated entities to maintain domestic services, to maintain capacity to deliver limited international services during border closure, and to be ready to enter service in scale as, and when, borders and quarantine restrictions are lifted. Such assistance would address the following aspects in a multi-faceted safety compliance program:

- Aircraft airworthiness compliance – funds and technical support for completion of key maintenance activities and inspection and certification of such works.
- Airport maintenance and safety compliance.

- Air crew currency – simulator time for currency and renewal of pilot licenses and ratings (inclusive to travel, accommodation, quarantine cost). Fiji, PNG, Australia, and New Zealand are primary locations for simulators. Other locations may arise based on aircraft types and the crew training required and may lead to longer international travel and possible further issues with border closures in these areas.
- Air traffic controller currency
- Medical examination – roving Designated Aviation Medical Examiners including travel, accommodation, and quarantine time.
- Compliance inspection – support to regional CAAs/PASO to provide a surge of inspectors (inclusive of travel, accommodation, quarantine time) in respect of airline AOC renewal, airport certification, Air Traffic Control (ATC) certification and all other regulatory compliance obligations that will expire without further action.
- Certification of new aircraft types for entry into service (e.g. Vanuatu and Kiribati[54]).
- Certification for the issue of a new Air Operators Certificate (Tonga new domestic airline).

A central component of the above technical assistance is seen to be the provision of regulatory inspection services from PASO. As discussed in previous sections, one of the key reasons that the technical assistance is required is that PASO inspections have been curtailed by the pandemic and by lack of funding, and with the passage of time, various aviation certificates are expiring. Following consultation with PASO, it is assessed that much of the above technical assistance can be delivered by funding PASO and PIC CAAs to take on board a number of inspectors and in-country technical support resources in various disciplines, to cover much of this work remotely while borders are closed, and to provide a surge of in-country support when access is reopened.

The technical assistance would ideally be grant funded and directed at:

- PASO operating and overhead costs;
- PIC CAAs engagement of in-country support resources as required;
- Project specific costs for CAAs;
- Provisional sums for specific works e.g. outer airport maintenance contractors, aircraft engineers, etc;
- Travel and living costs; and
- Downtime costs associated with quarantine, if necessary.

Long Term PASO Funding

The support described above is needed most during the hibernation and transition to recovery periods, but some ongoing capacity is needed for this work to be sustainable. This is not a COVID-19 specific issue but rather, a long-term strategic issue for the Pacific aviation sector. PASO has been through numerous reviews previously where the funding issue has been attempted to be addressed, and it is beyond the scope of this study to add to this body of work. However, it is observed that the unprecedented impact of the COVID-19 events, the evaporation of the capacity of PICs to fund PASO's work, and the willingness by PRIF Development Partners to intervene in recovery, all suggests that ongoing donor support deserves consideration.

8.5 Infrastructure Financing

Much of the COVID-related airport development needs are identified to be readily served by public sector infrastructure financing loans or grants for targeted works to ensure serviceability and safety compliance. This would be to remove barriers to the effective reintroduction of air services when borders open, or to enable the highest possible degree of control over prevention of infection paths, and detection and management of infected people. The scope of such funding would be expected to include the following:

- Funds for outer island airport maintenance for continuity of domestic services during hibernation and recovery stages (either for external contractors or using local resources);
- International airport gateway maintenance needed for ensuring access post recovery, e.g. urgent runway resurfacing;
- Construction of COVID-19 management facilities (separate passenger processing streams, detection and management of infected person, holding and quarantine facilities, contactless check-in, segregated security processes, etc.);
- Airport ATC facilities (e.g. Niue – new tower fit out);

[54]Air Kiribati may be certifying its aircraft in Australia under the Australian regulations.

- Other airport facilities and equipment, e.g. fire service tenders; and
- Technical assistance for project preparation.

There has been much airport infrastructure work undertaken across the Pacific by many of the PRIF Development Partners, and some of the urgent needs (e.g. runway resurfacing, ATC system fit-out) is fully funded but is interrupted by the inability of contractors to access the projects due to border closure and quarantine requirements. Some PICs are remobilising these projects by bringing the contracted foreign firms back via a period of quarantine, so in some cases, funding could come from variations to existing projects to accommodate the extra labour time lost in quarantine. Other projects (e.g. fit-out to accommodate ICAO CART recommendations) are new and warrant funding as a new project. A weakness of infrastructure financing is the lead time required for project preparation.

8.6 Aviation Restructuring Assistance

As identified previously, a number of airlines are in a financial crisis and that, depending on the duration of border closure, simply providing financial support for ongoing operations as suggested above will not necessarily lead to a sustainable outcome. Some airlines raised the desire for more detailed commercial and technical collaboration with fellow regional airlines, and some went so far as to consider equity investment in a sub-regional airline structure. Other airlines are contemplating sourcing investment in the business by a well-resourced airline strategic partner or selling off equity to a financial investor. It is recognised however, that both options are constrained at present by the need for potential investing airlines to preserve cash, and the poor valuation that would be achieved by regional airlines at this time. Depending on the length of time borders remain closed and the level of emergency assistance accessible, some airlines may be forced into receivership anyway, leading to a fire sale of the business.

This all leads to the prospect of a major structural change to the sector, being forced either by insolvency or voluntarily as part of a survival/recovery strategy. There is some appetite amongst industry participants to use the pandemic to regroup into a more efficient and effective Pacific region air services framework. The following areas of potential support were identified in this context:

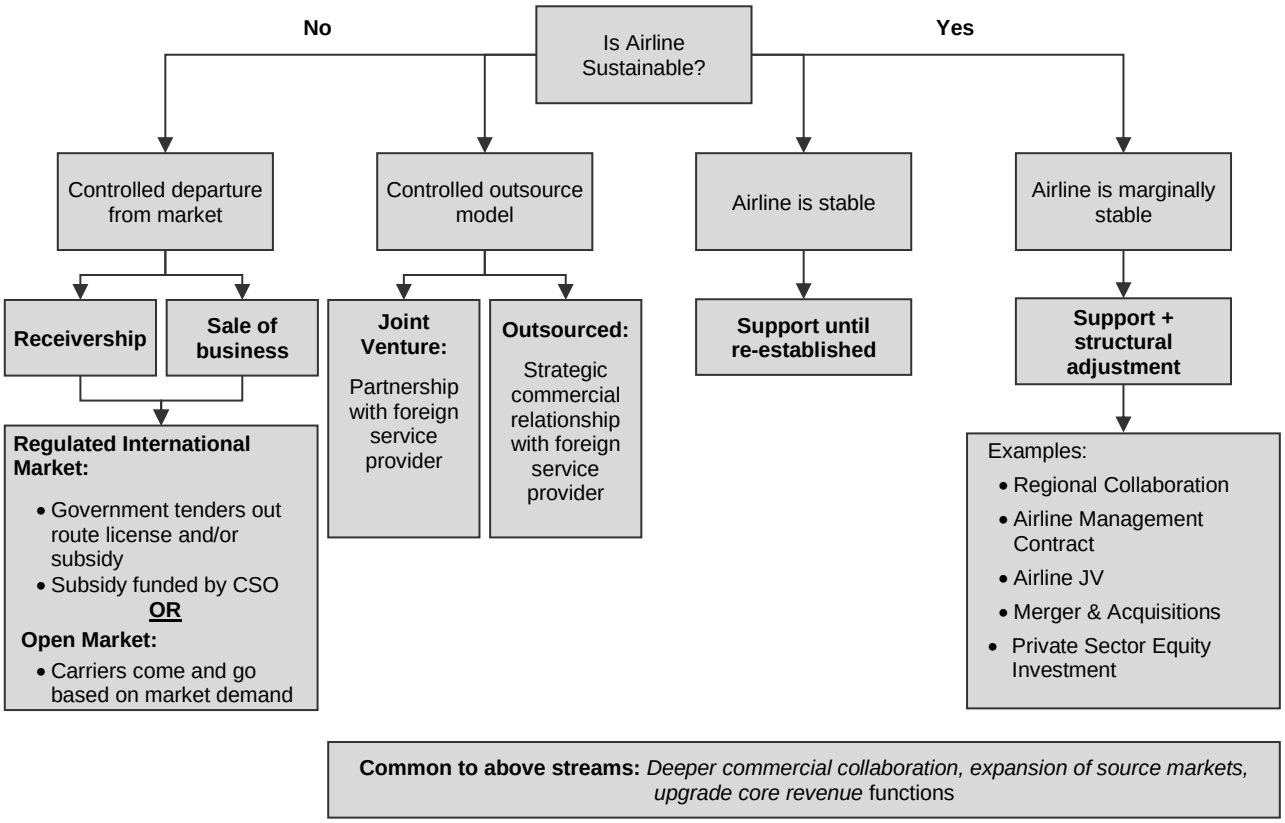
- Technical assistance in the carrying out of strategic options analysis, feasibility studies, due diligence, and facilitation of the structuring of a new framework, including sourcing and securing investment for such restructuring.
- Financial support in the form of debt, equity or guarantee instruments offered by multilateral institutions. This would provide an “investor of comfort” position for any commercial refinancing. It should be noted that sector participants were not fully aware of such financing options as potential tools to be used in such restructuring.

Working against such restructuring options were considerations of national interest in retaining government ownership and control of airlines, and the acknowledgement by all airlines within and outside the Pacific of the critical need to preserve cash and thus, little capacity for entrepreneurial initiatives.

8.6.1 Airline Restructuring Options

Any form of restructuring of a regional airline in the Pacific must of course be done on a case-by-case basis, with each airline having differing requirements. However, it is possible to examine the options through a generic decision-making framework as suggested in **Figure 8-2**. This is designed around PICs that presently run an international service that is government owned. The following provides a brief discussion of this framework.

Figure 8-2: Restructuring Options for a Pacific Airline



Basic Sustainability Test

Firstly, it must be established whether the airline is likely to be viable post COVID-19. This may require the airline to supply to the funder (potentially with donor assistance) a business plan that can demonstrate a sound strategy to meet long-term (post COVID-19) solvency, liquidity, and earnings targets. An airline that could meet these criteria would be considered stable, and for whom cash flow support is justified until regular services and a level of normalcy are re-established.

If the airline is considered to only "marginally" meet these criteria, then cash flow support could be considered, but such support would need to be conditional on some form of structural adjustment to improve the underlying performance. An assessment of "marginally stable" could be made on the basis that the entity has the potential to meet the solvency and liquidity requirements, and while not necessarily generating commercial scale earnings, could generate significant economic benefits in proportion to government support. The entity would need to have the potential for improvement through a structural adjustment process if provided the necessary level of support to achieve this. PRIF Development Partner technical assistance support may be appropriate in facilitating the analysis and implementation of such structural adjustment.

Structural Adjustment Options for Marginally Viable Airlines

A range of structural adjustment options could be considered for marginally viable PIC airlines, mostly focussed on strategies to reduce costs, increase economies of scale and to transform the management paradigm, all with the aim of reducing dependence on future government support. Typical responses might include:

- Strategic collaboration with other airlines – falling under the general heading of alliance partnerships, this can involve extended collaboration in revenue areas (such as code-sharing, joint frequent flyer schemes, network coordination, schedule, capacity and price coordination, joint marketing, shared lounges, alliance branding). This collaboration could potentially extend to collaboration at a cost level (all of the above plus addition of common ground handling, joint maintenance, joint sales and marketing, joint call centres, common IT platform, joint flights, joint purchasing, joint catering, even common branding and shared aircraft purchase). There is strong support amongst several PIC carriers and some

donors for adopting key elements of such an alliance framework across the region. An alternative approach still using the alliance concept involves one or more small PIC airlines developing such an in-depth strategic relationship with one or more larger, better-resourced airlines. Airlines from Australia, New Zealand and the larger Pacific airlines indicated willingness to explore such arrangements if they are commercially sound.

- Hybrid airline model – taking the alliance concept one step further by engaging in joint product development, sharing of aircraft and crew, joint passenger and cargo services, most likely facilitated by either a management agreement or equity investment, or both.
- Merger and Acquisition – merger with, or sale part of or the whole of the airline to, another well-resourced airline, or sale of shares to financial investors to the extent permitted by the regulatory regime and international air services agreements.

PRIF Development Partner technical assistance could facilitate the analysis of structural adjustment options and planning and implementation of such structural adjustment.

Structural Adjustment Options for Unviable Airlines

If the airline is not considered sustainable, and border closure becomes extended, then cash flow support will be difficult to justify. In this case, PIC governments face a situation whereby, the national carrier is driven to cease direct provision of international services altogether, such that, the continuation of international air access after borders reopen, would be dependent on foreign carriers. This could be pursued through several options as shown in **Figure 8-2**:

- Controlled Outsourcing – like the strategic collaboration models described above, this scenario envisages a PIC carrier entering into an arrangement with a foreign carrier to deliver services on the previously serviced routes. The difference in this case is that the PIC carrier would have no participation in the service delivery. Implementation options include a revenue sharing contractual relationship or an equity joint venture (in the latter case, not unlike the arrangement previously struck between Samoa and Virgin Australia – see Case Study below).
- Controlled Departure from the International Airline Business - this scenario envisages either selling or winding up the business, and either leaving air access to the open market, or to retain some degree of government intervention (route licensing, with or without underwriting).

PRIF Development Partner technical assistance support would be relevant to the planning and implementation of the outsourcing/joint venture establishment and in the design and implementation of any route underwriting framework (which could be separate to or be an integral part of a general COVID-recovery route underwriting framework).

Implementation Issues for Structural Adjustment

Several considerations arise in the implementation of any structural adjustment:

- The need for fast implementation – the cash flow support needs are urgent, while the structural adjustment may take time to design and implement;
- There is a need for corresponding adjustment of the enabling environment, particularly bilateral air services agreements – any airline collaboration brings up issues controlled by international air services agreements, in particular, rules governing ownership and control provisions of national designated carriers, and beyond rights;
- There is a strong political will in PICs to maintain their national carriers, so there will be resistance to restructuring issues that water down PICs' ability to control the supply of air access, although the depth of the crisis is a strong catalyst for change; and
- Collateral issues (e.g. upper airspace revenue, PASO funding model) are not COVID-related but may be encompassed in any structural adjustment considerations.

Pacific Islands Forum Economic Ministers Meeting August 2020: Analysis of Policy Measures – Economic Impact of COVID-19 on Recovery in PICs

"…examine opportunities to reset, reform and redesign the regional aviation landscape to strengthen regional collaboration in the industry"

Case Study: Virgin Samoa Joint Venture

From 2005 to 2017, Virgin Australia Holdings (formerly Virgin Blue Holdings) took up a 49% stake in the national carrier from the Government of Samoa through a joint venture to form, Virgin Samoa (initially Polynesian Blue). The joint venture agreement allowed Virgin Samoa to take over the international routes and the restructured flagship carrier, Polynesian Airlines (now Samoa Airways), to operate regional and local flights. The airline did not own any aircraft, instead, Virgin Australia operated the services on behalf of the airline.

The Joint Venture was reported to be generally profitable: debt was repaid, dividends were paid over a number of years and further Government financial support was not required. The Joint Venture was not renewed on expiry, in an environment of reported rising costs and decreasing demand, with the Government citing that the arrangements no longer serviced Samoa's interests.

8.6.2 Airport Restructuring Options

The preceding discussion has been focused on airlines. Airport businesses are facing many of the same sort of issues, however they have lesser vulnerabilities compared to airlines when considering the impact of failure for the following reasons:

- In the smaller PICs, airports are largely public goods, funded under government budgets.
- In the larger PICs, airports have mostly been through reform processes to become state-owned commercial enterprises operating under company law and are relatively business like, in most cases making (pre COVID-19) operating surpluses (albeit not always operating profitably after consideration of asset depreciation and finance costs).
- PIC airports are mostly monopolies and if they can survive hibernation, their revenues will recover as air access recovers, whether or not the service is provided by the national carrier.
- Airports are asset rich with long lasting immovable assets like runways, terminal buildings and air navigation facilities which can generally remain fit for purpose with minimal maintenance.

Accordingly, when considering the corporatized airports, an airport business experiencing temporary insolvency is more sustainable than an airline in the same situation. Provided costs are able to be kept low during hibernation (staff stand downs, deferring loans, refinancing etc), provided basic maintenance, and certification can be kept up or restored quickly, the business can rebound as soon as traffic returns and quickly return to solvency (or reducing the impost on government budgets) as traffic grows.

Notwithstanding this, it is reasoned that any financial support for airports should still be framed in a similar context to that for airlines described in **Figure 8.2**, i.e. the finance approval to be assessed on the basis of a business plan establishing the potential for post COVID-19 sustainability, and to also link the investment to the scope of further reform. Generally, the reform options open to PICs include:

- Corporatisation of those government run airports that are commercial in character.
- Improved accountability and performance of those airports that are corporatized as a state-owned enterprise – some of the PRIF Development Partners have been working with several PICs on state-owned enterprise reform, seeking to update regulatory frameworks to improve corporate governance and performance monitoring of SOEs, but these reforms have often had difficulty gaining traction.
- Securing private sector investment and management expertise – the SOE reform initiatives described above have an objective of reducing or removing the dependence of SOEs on government finance, and have the private sector take a greater role in financing and in commercial service delivery, either through privatisation or public private partnership (PPP)[55]. The airport SOEs in most of the larger PICs had sufficient financial performance pre COVID-19 to attract private investment and management expertise for at least parts of their business (e.g. terminal building development and operation).

Despite a broad commitment to the reform processes described, there has been little political will in most PICs to implement such specific reforms to airports, leaving them ultimately dependent to some degree on government financial support or underwriting through guarantees. The dire circumstances of the COVID-19 pandemic may present an opportunity to pursue these reforms further.

[55] Noting that Palau (ROR) operates under an airport management contract, and PNG (POM) has been progressing an airport PPP.

9 Summary and Cost Assessment

9.1 Summary of Issues and Initiatives

Table 9-1 attempts to bring all of the issues and strategies discussed above into a whole-of-region summary for the focus countries. Similar tables on a country-by-country basis are provided in **Appendix A**. The tables consolidate the issues and potential strategies, and where possible, identify whether the initiative should be conducted at the national or regional level, if there are any ongoing initiatives to address the highlighted issues, whether the intervention of PRIF Development Partners is required, and some level of prioritisation, prior to further refinement.

This assessment is based on the information gleaned from research and consultations undertaken. As it was not possible to secure consultation with all PICs or for all relevant agencies within some PICs, some entries in this table are identified as having insufficient information to make an assessment.

Table 9-1: Summary of Issues and Initiatives for the Focus Countries

		Status	Issues and Challenges	PICs Affected	Strategies and Initiatives	Local vs Regional Approach	Ongoing or Upcoming Programs and Schemes to Address the Issue	PRIF Development Partners' Action Required	Priority
Airlines Financial Status			Airlines in need of immediate cash flow support	Cook Islands, Kiribati, Nauru, Solomon Islands, Vanuatu	Govt budget support or direct financing	Local	Local governments are providing/are about to provide financial support but more assistance is needed.	Yes	HIGH
			PIC in need of new domestic airline	Tonga	Technical assistance and possible future direct private sector finance	Local	Local governments are providing/are about to provide financial support but more assistance is needed.	Yes	MEDIUM
			No specific assistance sought	Fiji, Niue, PNG, Tuvalu	n/a	Local	Local governments are providing/are about to provide financial support.	No	n/a
Airports Financial Status			Significant drops in revenues put the airports in strong negative cash flows and cash reserves are about to run out.	Cook Islands, Fiji, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu	Gov't budget support or direct financing	Local	Local governments are providing/are about to provide financial support but more assistance is needed.	Yes	HIGH
			No specific assistance sought	Kiribati, PNG	n/a	Local	Local governments are providing/are about to provide financial support.	No	n/a
Healthcare Readiness			Healthcare facilities are insufficient to handle an outbreak or more facilities are needed to deal with the virus	Cook Islands, Nauru, Niue, PNG, Tonga, Tuvalu	Technical assistance	Local	Various programs in place from donors	Yes	MEDIUM
			No specific assistance sought	Fiji, Kiribati, Solomon Islands	n/a	n/a	None	No	n/a
Local Population Support to Reopen Borders			Locals are anxious about COVID-19 emerging in their country when borders reopen	Niue, Solomon Islands, Tuvalu	Public awareness and training	Regional	None	Yes	MEDIUM
			No specific assistance sought	Cook Islands, Fiji, Kiribati, Nauru, Tonga	n/a	n/a	None	No	n/a
Restoring Passenger Confidence			All PICs recognise the need to reassure traveling public of initiatives implemented to cope with the virus and restore passenger confidence	All PICs	Public awareness and destination marketing	Regional	None	Yes	MEDIUM
Airlines Operational Readiness	Certification and Compliance		Certification/compliance to expire. PASO inspectors cannot currently enter without quarantine restrictions and extra costs.	Cook Islands, Kiribati, Samoa, Solomon Islands	Financial support to PASO	Regional	NZ MFAT has been providing support to PASO but additional funding is needed.	Yes	HIGH
			AOC needed for new airline or new aircraft	Samoa, Tonga, Vanuatu	Financial support to PASO	Regional	NZ MFAT has been providing support to PASO but additional funding is needed.	Yes	HIGH
			No specific assistance sought	Fiji, Nauru, Niue, PNG, Tuvalu	n/a	n/a	None	No	n/a
	Restoring Crew Currency		Airlines face difficulty to keep staff competent and compliant during hibernation period. Crew will need training to ensure recovery can take place.	Cook Islands, Nauru, Samoa, Solomon Islands, Tonga, Vanuatu	Technical assistance	Regional	None	Yes	HIGH
			No specific assistance sought	Fiji, Niue, PNG, Tuvalu	n/a	n/a	None	No	n/a
	Fleet Maintenance		Airlines are falling behind on maintenance or are waiting on aircraft parts to complete necessary maintenance.	Cook Islands, Kiribati, Samoa, Solomon Islands, Tonga, Vanuatu	Technical assistance	Regional	None	Yes	HIGH
			No specific assistance sought	Fiji, Nauru, Niue, PNG, Tuvalu	n/a	n/a	None	No	n/a
Airports Operational Readiness	Certification and Compliance		Certification/compliance to expire. PASO inspectors cannot currently enter without quarantine restrictions and extra costs.	Cook Islands, Kiribati, Nauru, Solomon Islands, Tonga, Tuvalu	Financial support to PASO	Regional	NZ MFAT has been providing support to PASO but additional funding is needed.	Yes	HIGH
			No specific assistance sought	Fiji, Niue, PNG	n/a	n/a	None	No	n/a

		Status	Issues and Challenges	PICs Affected	Strategies and Initiatives	Local vs Regional Approach	Ongoing or Upcoming Programs and Schemes to Address the Issue	PRIF Development Partners' Action Required	Priority
	Domestic Airport Maintenance		Some PICs have difficulties keeping up with Outer Islands' airport maintenance.	Cook Islands, Fiji, Kiribati, Solomon Islands, Tonga, Vanuatu	Infrastructure financing or technical assistance	Local	Government support	Yes	HIGH
			No specific assistance sought	Nauru, Niue, PNG, Tuvalu	n/a	n/a	None	No	n/a
	Infrastructure Work Halted due to COVID-19		Airport projects have been put on hold or delayed due to the pandemic and need to resume.	Cook Islands, Fiji, Kiribati, Niue, PNG, Solomon Islands, Tonga, Tuvalu	Infrastructure financing	Local	Various donor funded projects	Yes	MEDIUM
			No specific assistance sought	Nauru	n/a	n/a	None	No	n/a
	Airport Facility Improvements Critical to Recovery		Main international gateways for some of the PICs need COVID-19 management facilities for segregation of passenger processing steams, detection and management of infected person, holding and quarantine facilities, contactless check-in, segregated security processes etc.	Cook Islands, Fiji, PNG. Vanuatu	Infrastructure financing	Local	None	Yes	HIGH
			No specific assistance sought	Niue, Solomon Islands, Tonga, Tuvalu Kiribati	n/a	n/a	None	No	n/a
Minimum Air Service Provisions	Domestic Services		Hibernation period: some PICs have retained some level of domestic activity.	Cook Islands, Fiji, Kiribati, PNG, Solomon Islands, Vanuatu	Govt budget support or direct financing	Local	Some of the PIC governments are currently subsidising domestic flights.	Yes, if government support runs out	HIGH
			Hibernation period: some PICs have lost all domestic air services.	Tonga	Advisory technical assistance and potential future private sector finance	Local	Government is providing some of the funding to get the airline started but more financial support is required.	Yes	HIGH
			Recovery period: there is a need to ensure continuity of services from hibernation and through recovery. Domestic traffic recovery is linked to international recovery.	All	Govt budget support or direct financing	Local	PIC governments are expected to continue their support.	Yes, if government support runs out	HIGH
	Air Cargo Services		Some level of air cargo connectivity has been maintained during hibernation. However, the recovery of air cargo services will be heavily reliant on international air services recovery.	Cook Islands, Fiji, Kiribati, Nauru, Niue, PNG, Samoa, Solomon Islands, Tonga, Vanuatu	Air route underwriting	Regional	The IAFC scheme is covering some of the routes currently served.	Yes (linked to international air service support)	HIGH
			PIC currently solely relies on shipping for essentials goods.	Tuvalu	n/a	Local	None	No	n/a
	International Services		Hibernation period: some of the critical routes have been maintained but PICs have lost most connectivity in and out of the Pacific.	Cook Islands, Fiji, Kiribati, Nauru, Niue, PNG, Samoa, Solomon Islands, Tonga, Vanuatu	Air route underwriting	Regional	The IAFC scheme is covering some of the routes currently served.	Yes, if IAFC scheme runs out	HIGH
			Hibernation period: some PICs have lost all international air services due to COVID-19 and border closures.	Tuvalu	Air route underwriting	Regional	None	Yes	HIGH
			Recovery Period: focus should be given to critical routes to ensure populations in the PICs get access to essential air service connectivity.	All	Air route underwriting	Regional	None	Yes	HIGH
			Recovery period: some routes with low demand pre COVID-19 would be difficult to restart particularly in the early phases of the recovery.	All	Air route underwriting	Regional	None	Yes	MEDIUM

9.2 Critical Decision-Making Path

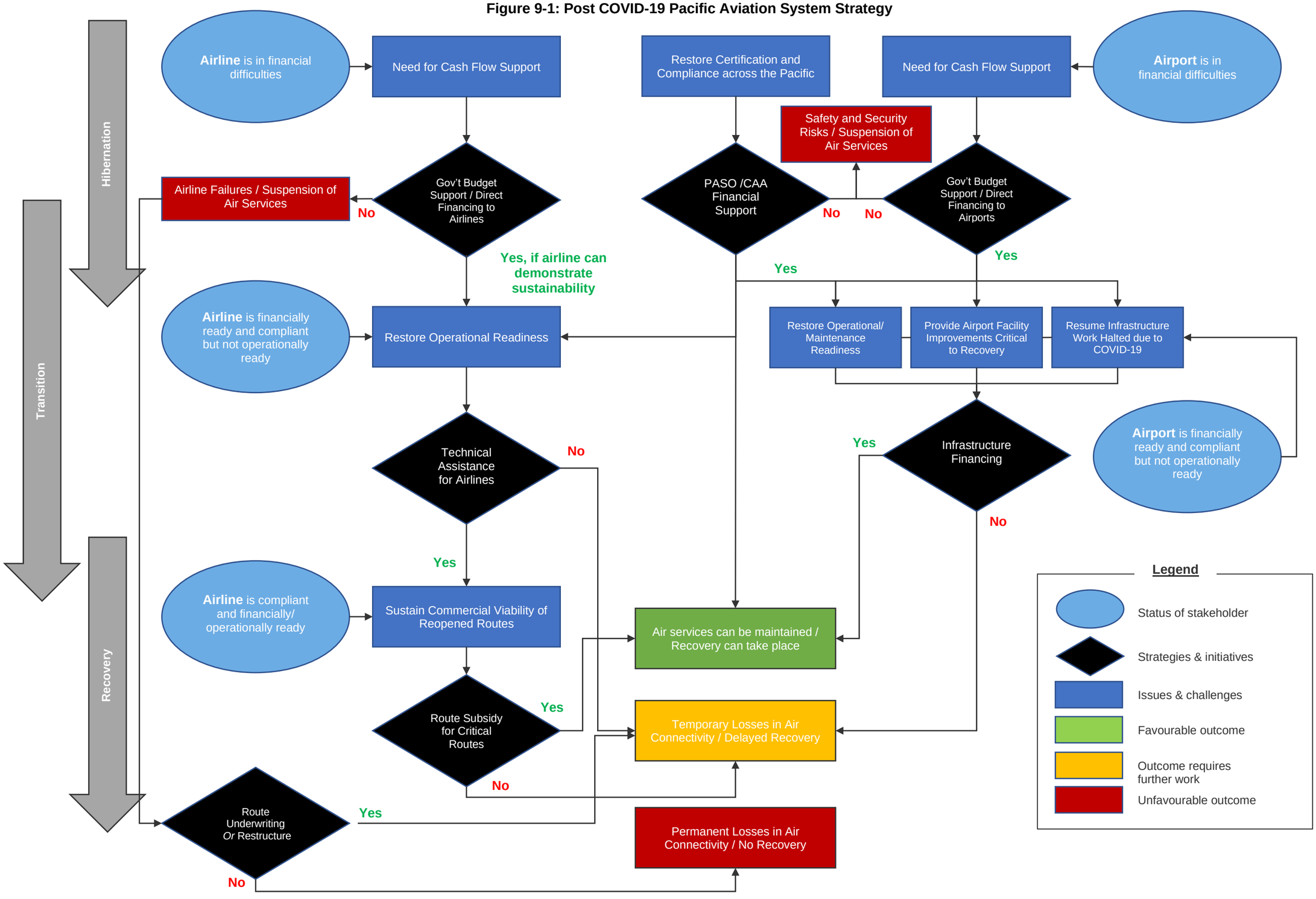
Figure 9-1 provides a schematic of a suggested decision-making process to address issues and challenges in the Pacific from hibernation through recovery.

It is clear from the interviews with stakeholders that support has to be provided across the entire aviation system as the pandemic affected all aviation enterprises. Focussing only on a portion of the issues while ignoring other key elements of the system would result in failures of the overall regional aviation system. The diagram below aims at providing a logical decision-making sequence in approaching the issues and challenges presented in this document and the outcome of the decision process in each key step from the hibernation period through transition and recovery period.

- Step 1 – as discussed previously, the hibernation period is critical for most PICs and stakeholders and requires immediate attention and support. Cash flow support to airlines and the airports as well as getting funding to PASO to resume certification and compliance work have been identified as the critical first steps leading to a potential recovery.
- Step 2 – once there is a clear idea of a travel bubble timeline and of the reopening of borders, support will be needed to get both airlines and airports operationally ready to resume regular air services.
- Step 3 – during the initial phase(s) of recovery, support will be needed to ensure critical routes throughout the Pacific are reinstated to avoid putting too much pressure on the fragile airline finances.

It is acknowledged in this process that PRIF Development Partners will not be able to assist all PICs/stakeholders until the recovery takes place. The diagram therefore identifies potential outcomes when support is not provided. These outcomes range from a delay in the recovery process and a temporary loss in air service connectivity in some PICs to a complete failure of some airlines which would require some restructuring of the aviation system as described in Section 8, to minimise the impact on the PICs' populations and economies.

Figure 9-1: Post COVID-19 Pacific Aviation System Strategy



9.3 Cost Estimates

This study has identified a range of issues and challenges and potential strategies and initiatives for the aviation industry in the Pacific. These issues and initiatives were classified into three main timeframes or stages: hibernation, transition back into service and finally recovery and beyond. The analysis has shown that the aviation industry would need various types of financial support through each of these stages in order to ensure operational readiness and recovery in an effective and efficient manner.

In order to complete the overall post COVID-19 strategy, a high-level indicative estimate of the costs associated with each of the strategies and initiatives discussed has been prepared. These estimates or range of estimates were identified to be needed to assist PRIF and its Development Partners strategise a coordinated response for the PICs and make sure that their support will be sufficient to address the most critical issues facing the recovery.

The information in this costing was gleaned through consultation with PIC governments, airlines and airport operators, as well as from a short follow up questionnaire that was distributed to all PIC stakeholders to gather their view on the level/magnitude of financial support required for each of the three stages. The questionnaire was tailored to each stakeholder (government ministries, airport authority, and airline) so that questions could properly address each of these enterprises' needs to respond to the crisis and how to best support them to ensure proper traffic recovery in the future.

The information gleaned from this research has been used for the development of a simple financial model to determine the level of financial support needed. **Table 9-2** provides a summary of these cost estimates for each key strategy/initiative. The cost estimates take into account the duration of each time period (hibernation, transition, recovery) based on the traffic projections developed in **Section 6**. It should be noted that the costs below are high-level orders of magnitude and that a more thorough analysis of support is required, and associated costs should be conducted during detailed project preparation activities. This is further discussed in **Section 10**.

Table 9-2: Estimated Costs Associated with Strategies and Initiatives for the Pacific Aviation System

Needs	Instruments	Relevant PICs	Baseline Forecast	Optimistic Forecast	Pessimistic Forecast
Cash Flow Support for Airlines	Government budget support (grants, loans) Direct private sector finance (grants, loans, guarantees)	Cook Islands, Kiribati, Nauru, Solomon Islands, Tonga, Vanuatu	US$30-40m	US$5-10m	US$60-80m
Cash Flow Support for Airports	Government budget support (grants, loans) Direct private sector finance (grants, loans, guarantees)	Cook Islands, Fiji, Solomon Islands, Tonga, Tuvalu, Vanuatu	US$9-10m	US$4.5-5.0m	US$18-20m
Restoring Airline Operational Readiness	Technical assistance grants to PIC governments for onforwarding to airlines	Cook Islands, Kiribati, Nauru, Samoa, Solomon Islands, Tonga, Vanuatu	US$0.5-1.0m		
Restoring Airport Operational Readiness	Technical assistance grants to PIC governments for on-forwarding to airports	Cook Islands, Fiji, Kiribati, Samoa, Solomon Islands, Tonga, Vanuatu	US$3-3.5m		
Restoring Regulatory Certification/ Compliance	Technical assistance grant to PASO (direct or via PIC regulators)	Cook Islands, Kiribati, Nauru, Samoa, Solomon Islands,	US$4-4.5m (near-term surge) + US$7-8m (2-year subsidy)		

Needs	Instruments	Relevant PICs	Baseline Forecast	Optimistic Forecast	Pessimistic Forecast
		Tonga, Tuvalu, Vanuatu			
Sustaining Commercial Viability of Reopened Routes	Regional route subsidy grant fund	High priority routes: Kiribati, Nauru, Niue, Samoa, Solomon Islands, Tuvalu Medium priority routes: Cook Islands, Fiji, PNG, Tonga, Vanuatu	US$27-30m	US$12-15m	US$45-48m
Airline and airport structural reform	Technical assistance grants to governments for facilitation of structural reform or orderly exit; direct private sector finance for qualified new ventures	All PICs with international or domestic airlines	US$1.0-2.0m		
Airport Infrastructure Needs	Infrastructure loans and grants for airports and associated health facilities (or variation to existing projects)	Cook Islands, Fiji, Kiribati, Niue, PNG, Solomon Islands, Tonga, Tuvalu, Vanuatu	US$8-10m		
Ensuring Local Support for Reopening Borders and Restoring Passenger Confidence	Existing budget support programs for COVID-19 management capacity + destination marketing	Tourism dependent PICs e.g. Cook Islands, Fiji, Kiribati, Niue, Samoa, Solomon Islands, Tonga, Vanuatu	Assumed included in existing COVID-19 recovery programs		
TOTAL			**US$89.5-109.0m**	**US$45-59m**	**US$146.5-177.0m**

10 Conclusions and Next Steps

The analysis above has identified that air traffic access to, from and within the Pacific region has been significantly disrupted and is unlikely to restart international services until at least the end of 2020, with recovery to pre-pandemic levels likely by the end of 2023 to mid-2024. While some residual activity is occurring for domestic travel, freight and repatriation, many PIC economies and their air access providers are clearly experiencing severe financial difficulties associated with the hibernation of the aviation sector. The level of financial stress will compound, the longer the recovery takes, and these PICs are welcoming support from the donor community.

10.1 Summary of Findings

The research undertaken for this report has identified a variety of different needs depending on the circumstances of each PIC but all converging on the following common themes:

- To provide cash flow support to keep Pacific aviation enterprises sustain a minimum capability until borders reopen.
- To support the continuation of domestic air services and international air cargo services functions.
- To be able to restore operational readiness of airlines and airports to enter back into service when borders reopen, including maintaining or restoring regulatory compliance and certification.
- To assist the commercial viability of critical routes in order to re-establish lost connectivity faster than the markets would allow.
- To provide infrastructure and processes that give local communities confidence in reopening borders and that gives visitors confidence to travel again.
- Amongst all of the above, to support struggling participants in the regional aviation sector to reform and restructure to a more sustainable business model.

In response to these needs, this study has identified a range of specific financing initiatives that PRIF Development Partners may wish to consider that will help to address these needs, comprising:

- Funding for government budget support in the form of grants or loans, to be on-forwarded to the air transport entities, or allied sectors such as tourism or health.
- Direct cash flow financing of airlines or airports where this is a more targeted intervention.
- Air route underwriting on critical routes, either on a national or regional basis.
- Technical assistance to airports and airlines to maintain their assets as fit for service and to retain regulatory compliance and certification (including support for regulatory services from CAAs and PASO).
- Financing infrastructure development, particularly to ensure infection control, and essential safety compliance measures necessary for the restoration of services.
- Financing structural adjustment of the sector through the provision of technical assistance funding and where appropriate, direct investment by international finance institutions.

The high-level assessment of the cost of such a program conducted for this study has identified that funds in the range of US$45 to US$177 million could reasonably address these needs. Such a large range arises from the uncertainty of the border closing date, with these figures bracketing the optimistic and pessimistic reopening scenarios presented in this report. The authors' most realistic estimate is within the range of US$90 to US$109 million.

10.2 Priorities

The research has identified that the greatest priorities for donor intervention are for:

- cash flow support for airlines and airports (either via government budget or direct); and
- support for PASO (either directly to PASO or via the PIC regulators) for a surge of activity to restore regulatory compliance.

The first item is fundamental to the commercial survival of the sector until borders reopen, while the second is about ensuring enterprises are in a compliant position to ramp back up to near pre-pandemic levels of traffic demand after borders reopen. By reference to **Table 9-2**, these priorities account for around US$43-US$55 million.

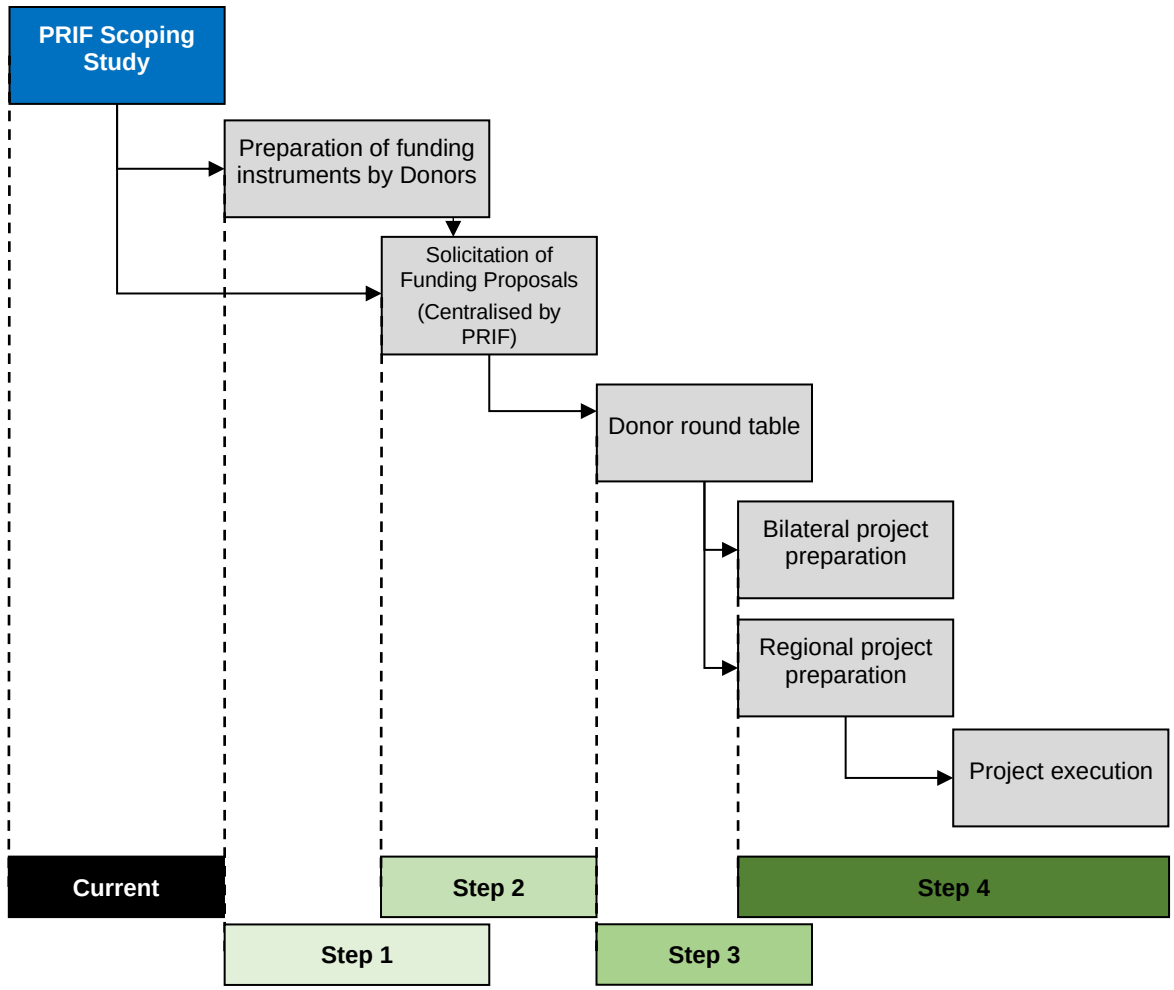
As stated throughout this report, the cash flow support, particularly for airlines, needs to be viewed in the context of the sustainability of the business model being supported. Given the magnitude of financial support required, the urgent need of assistance and the appetite that some regional airlines have for reform at this time, the priority allocated to cash flow support should also be attached to structural adjustment funding for those airlines judged to be marginally viable or unviable. These funds would be to support the analysis and implementation of structural change, taking into account the options outlined in this document. A notional amount of US$1-2 million is added for this, assuming one to two such change processes across the region.

Of the remaining categories, other operational readiness needs have been accorded second priority, although they could be picked up under the heading of cash flow support rather than addressed as separate investment projects with attendant additional administration required. Airport infrastructure investment has been accorded second priority as well, mainly from recognition that some PICs have no need in this area, and for other PICs, these needs can be addressed through variation of projects already funded. Route subsidies have also been included in the secondary category due to the magnitude of funding that might be required, and on the basis that if funds are limited, there is a higher need to focus on survival during hibernation and transition.

10.3 A Suggested Implementation Strategy

The Development Partners will have their own methods of processing the support requirements beyond the findings of this report. However, recognising that the purpose of this study is to facilitate coordination between donors, a conceptual implementation plan outlining the next steps has been developed based on such a coordinated approach, with PRIF as a facilitator. It envisages a four-step process beyond this study as shown in **Figure 10-1** and discussed below.

Figure 10-1: Step-By-Step Implementation Strategy



10.3.1 Step 1 - Preparation of Funding Instruments by Donors

This study has identified a high-level range of financing needs and indicative funding instruments. It is anticipated that Development Partners will need to review this material and identify amongst their current or projected programs what sort of funding instruments are available, the areas of eligible expenditure, as well as the available budget, and identify which types of initiatives they would support.

10.3.2 Step 2 - Solicitation of Proposals for Funding from PICs

The information gleaned by this study on funding needs, is of necessity of a high level, designed to identify strategic requirement. More project definition work needs to be undertaken to identify a sound financing program that best matches the detailed needs. Development Partners will have their own mechanisms for such project definition, however given the urgency of some of the priority needs, the spread of PICs and the range of different types of funding required, a PRIF-coordinated project definition stage is identified as a possible strategy. This envisages to be centred on the preparation of a formal invitation to PICs to submit specific funding proposals. The invitation would document (on donor advice) the form of financing instruments available, the purposes of each instrument and eligibility requirements, and seek more specific data on the individual funding requirements. It is envisaged that proposals would be consolidated by PRIF and forwarded to the Development Partners for analysis.

10.3.3 Step 3 - Donor Round Table

It is envisaged that following their individual analysis, Development Partners would meet at a Donor Round Table to discuss the proposals, their priorities, and to allow the respective Partners to nominate those proposals that they would contemplate funding. Discussion with other Partners would identify co-financing opportunities.

10.3.4 Step 4 - Detailed Project Preparation and Execution

It is assumed that with the coordination completed, each Development Partner would proceed with their own detailed project preparation and funding approval processes to the point of execution and apply their own monitoring and evaluation processes. It is feasible that for co-funded projects there may be a lead Partner. It is anticipated that some projects will be carried out on a per-PIC basis, and others regionally.

10.3.5 Other Execution Paths

Some development partners are already providing support or may elect to provide support through existing programs (e.g. expansion of existing COVID-19 recovery budget support programs, or creating a variation on existing infrastructure projects), and thus it may be more expeditious to bypass this coordination process.

Appendix A: Study Focus Countries Strategies and Initiatives

A1 Cook Islands

		Status	Issues and Challenges	Strategies and Initiatives	Local vs Regional Approach	Ongoing or Upcoming Programs and Schemes to Address the Issue	PRIF Development Partners' Action Required	Priority
Airlines Financial Status			Significant decrease in revenues due to the pandemic. The privately owned domestic airline is under financial pressure.	Gov't Budget Support or Direct Financing	Local	Government is currently providing financial support.	Yes, if government support runs out.	HIGH
Airports Financial Status			Airport revenues dropped 70%.	Gov't Budget Support or Direct Financing	Local	Government is currently providing financial support.	Yes, if government support runs out.	HIGH
Healthcare Readiness			No ability to analyse COVID-19 tests locally. Tests are sent to NZ and results are provided in a week.	Technical assistance	Local	ADB looking into providing necessary equipment. Gov't currently in talks with New Zealand to have passengers screened in Auckland before arriving in the Cook Islands.	No	n/a
			Limited medical equipment to deal with COVID-19 outbreak.					
Local Population Support to Reopen Borders			No particular issues.	n/a	Regional	None	No	n/a
Restoring Passenger Confidence			Close relationship with New Zealand should help boosting passenger confidence during recovery.	Technical assistance	Regional	None	Yes	MEDIUM
Airlines Operational Readiness	Certification and Compliance		Certification/compliance to expire. PASO inspectors cannot currently enter without quarantine restrictions and extra costs.	PASO Support	Regional	NZ MFAT has been providing support to PASO but additional funding is needed.	Yes	HIGH
	Restoring Crew Currency		Difficulty to keep staff competent and compliant during hibernation period.	Technical assistance	Regional	None	Yes	HIGH
	Fleet Maintenance		PASO inspectors cannot currently enter without quarantine restrictions and extra costs.	PASO Support	Regional	NZ MFAT has been providing support to PASO but additional funding is needed.	Yes	HIGH
Airports Operational Readiness	Certification and Compliance		Certification/compliance to expire. PASO inspectors cannot currently enter without quarantine restrictions and extra costs.	PASO Support	Regional	NZ MFAT has been providing support to PASO but additional funding is needed.	Yes	HIGH
	Domestic Airport Maintenance		Outer Islands' airports maintenance issues.	Infrastructure Financing	Regional	None	Yes	HIGH
	Infrastructure Work Halted due to COVID-19		Runway slab replacement delayed.	Infrastructure Financing	Local	None	Yes	MEDIUM
			Runway End Safety Area work delayed to 2022.					
	Airport Facility Improvements Critical to Recovery		The international gateway would need touchless systems in place prior to reopening the borders.	Infrastructure Financing	Local	None	Yes	HIGH
Minimum Air Service Provisions	Domestic Services		Hibernation period: down to 30-40% of pre COVID-19 levels.	Domestic Air Route Underwriting	Local	Domestic flights are currently subsidised by government.	No	n/a
			Recovery period: needs to ensure continuity of service. Domestic traffic is linked to international recovery.	Domestic Air Route Underwriting	Local	Domestic flights are currently subsidised by government.	Yes if government support runs out.	HIGH
	Air Cargo Services		Essential air freight services are fully reliant on international passenger flights.	Air Route Underwriting	Local	Air New Zealand service to Auckland is underwritten under the IAFC scheme.	Yes if IAFC scheme runs out	HIGH
	International Services		Hibernation period: RAR-AKL is the only international route into the Cook Islands maintained by Air New Zealand during COVID-19 (1 x weekly).	Air Route Underwriting	Local	Air New Zealand service to Auckland is underwritten under the IAFC scheme.	Yes if IAFC scheme runs out	HIGH
			Recovery period: Need to maintain the RAR-AKL critical route beyond hibernation and through recovery.	Air Route Underwriting	Local	Air New Zealand service to Auckland is underwritten under the IAFC scheme.	No	n/a
			RAR-SYD route (only link to Australia) was identified as candidate for subsidy during early phases of recovery.	Air Route Underwriting	Local	None	Yes	MEDIUM

A2 Fiji

		Status	Issues and Challenges	Strategies and Initiatives	Local vs Regional Approach	Ongoing or Upcoming Programs and Schemes to Address the Issue	PRIF Development Partners' Action Required	Priority
Airlines Financial Status			Fiji Airways is in need of cash support.	Gov't Budget Support or Direct Financing	Local	Currently receiving financial support from the government and ADB.	No	n/a
Airports Financial Status			Airports Fiji Limited revenues dropped 88%. Cash reserves are running out soon.	Gov't Budget Support or Direct Financing	Local		Yes	MEDIUM
Healthcare Readiness			Fiji has demonstrated the ability to contain COVID-19 through the effective management and isolation of confirmed cases. Additionally, FA is working with Health authorities to enhance health and safety measures at Nadi Airport.	n/a	Local	None	No	n/a
Local Population Support to Reopen Borders			No particular issues.	n/a	Regional	None	No	n/a
Restoring Passenger Confidence		*Insufficient information to comment*						
Airlines Operational Readiness	Certification and Compliance		No particular issues.	n/a	Regional	None	No	n/a
	Restoring Crew Currency	*Insufficient information to comment*						
	Fleet Maintenance	*Insufficient information to comment*						
Airports Operational Readiness	Certification and Compliance		No particular issues.	n/a	Regional	None	No	n/a
	Domestic Airport Maintenance		Outer island maintenance programs cannot be sustained due to the ongoing COVID-19 pandemic.	PASO Support	Regional	NZ MFAT has been providing support to PASO but additional funding is needed.	Yes	HIGH
	Infrastructure Work Halted due to COVID-19		Deferral of all non-essential projects.	n/a	Local	None	No	n/a
	Airport Facility Improvements Critical to Recovery		Nadi Airport needs COVID-19 management facilities for segregation of passenger processing steams, detection and management of infected person, holding and quarantine facilities, contactless check-in, segregated security processes, etc.	Infrastructure Financing	Local	None	Yes	HIGH
			Fiji Airports would require funding to continue to carry out Capital Works Program for 13 Outer Island Airports.	Infrastructure Financing	Local	None	Yes	HIGH
Minimum Air Service Provisions	Domestic Services		Hibernation period: domestic services are running at 35-50% of pre COVID-19 levels. Load factors remain low.	Domestic Air Route Underwriting	Local	Domestic tourism is being support by the government.	No	n/a
			Recovery period: needs to ensure continuity of service. Domestic traffic is linked to international recovery.	Domestic Air Route Underwriting	Local	Domestic tourism is being support by the government.	No	n/a
	Air Cargo Services		Some freighter operations have been maintained during the hibernation period. Essential air freight services are fully reliant on international passenger flights.	Air Route Underwriting	Local	None	Yes	MEDIUM
	International Services		Fiji airways plans to continue to support intra-Pacific traffic. However, reopening of routes will be demand based. Some of the critical routes in the Pacific may need some funding in the early phases of recovery to ensure minimum connectivity across the PICs: NAN-TRW, NAN-CXI-HNL, NAN-INU, NAN-POM, NAN-APW, NAN-HIR, NAN-TBU, SUV-FUN, SUV-VLI. On the international side, NAN-HKG was identified as candidate for subsidy in the early phases of recovery.	Air Route Underwriting	Local	None	Yes	HIGH

A3 FSM

No detailed discussions have taken place with any stakeholders from the Federated States of Micronesia.

A4 Kiribati

		Status	Issues and Challenges	Strategies and Initiatives	Local vs Regional Approach	Ongoing or Upcoming Programs and Schemes to Address the Issue	PRIF Development Partners' Action Required	Priority
Airlines Financial Status			Air Kiribati is reduced to solely a domestic service at present. Net jet service yet to be inaugurated	Gov't Budget Support or Direct Financing	Local	Government has approved aviation stimulus extended through December 2020.	Yes, if government support runs out.	HIGH
Airports Financial Status			The airport authority relies on revenues from international airlines. Cash inflows are limited and reserves are about to run out.	Gov't Budget Support or Direct Financing	Local	Government has approved aviation stimulus extended through December 2020.	Yes, if government support runs out.	HIGH
Healthcare Readiness			Testing facilities to be put in place – SPC and Fiji to be used as guide	Technical Assistance	Local	Government funding is being put in place to meet capital work requirements.	No	n/a
Local Population Support to Reopen Borders			No particular issues.	n/a	Regional	None	No	n/a
Restoring Passenger Confidence			International travellers to/from Kiribati are generally not tourists with first people to travel after reopening of borders to be mainly expats and aid organisations.	Technical Assistance	Regional	None	No	n/a
Airlines Operational Readiness	Certification and Compliance		New Embraer aircraft acquired by Air Kiribati cannot be put into service and is currently in storage.	Aircraft in Service Technical Assistance – aircraft is anticipated to be certified in Australia	Local	NZ MFAT has been providing support to PASO but additional funding is needed.	Yes	MEDIUM
	Restoring Crew Currency		No particular issues.	n/a	Local	None	No	n/a
	Fleet Maintenance		Air Kiribati is currently waiting on parts for its domestic fleet to meet demand on the domestic network.	Technical Assistance	Local	Funding for these parts has been approved.	No	n/a
Airports Operational Readiness	Certification and Compliance		Compliance (certification) of aerodromes has been long-term issue. There is a need to ensure that local regulatory capability is strong, and that PASO operates in a mentoring capacity.	PASO Support	Regional	NZ MFAT has been providing support to PASO but additional funding is needed.	Yes	HIGH
	Domestic Airport Maintenance		Outer islands' airports maintenance needs funding.	Infrastructure Financing	Local	Government funding is being put in place to meet capital work requirements.	No	n/a
	Infrastructure Work Halted due to COVID-19		Some domestic airports require immediate capital works to resume service.	Infrastructure Financing	Local	Government funding is being put in place to meet capital work requirements.	No	n/a
	Airport Facility Improvements Critical to Recovery		Modifications will need to be done to the main international airport to meet requirements of a post COVID-19 situation.	Infrastructure Financing	Local	Government funding is being put in place to meet capital work requirements.	No	n/a
Minimum Air Service Provisions	Domestic Services		Recovery period: needs to ensure continuity of service. Domestic traffic is linked to international recovery.	Domestic Air Route Underwriting	Local	Government has approved aviation stimulus extended through December 2020.	Yes, if government support runs out.	HIGH
	Air Cargo Services		Essential air freight services are fully reliant on international passenger flights.	Air Route Underwriting	Local	None	Yes	HIGH
	International Services		International services have stopped as the country has closed its borders. The critical route identified for Kiribati in the initial phase of recovery is the link to Fiji (TRW-NAN). This route may require some funding in the initial phases of recovery.	Air Route Underwriting	Regional	None	Yes	HIGH
			Other routes identified as candidates for subsidy during early phases of recovery include HNL-CXI-NAN (link to the U.S.) and TRW-MAJ (link to the RMI).	Air Route Underwriting	Regional	None	Yes	HIGH

A5 Nauru

	Status	Issues and Challenges	Strategies and Initiatives	Local vs Regional Approach	Ongoing or Upcoming Programs and Schemes to Address the Issue	PRIF Development Partners' Action Required	Priority
Airlines Financial Status		Air Nauru is currently surviving through its cash reserves. Cash reserves will run out by Q1 2021.	Gov't Budget Support or Direct Financing	Local	Government providing financial support.	Yes if government support not provided.	HIGH
Airports Financial Status	*Insufficient information to comment*						

		Status	Issues and Challenges	Strategies and Initiatives	Local vs Regional Approach	Ongoing or Upcoming Programs and Schemes to Address the Issue	PRIF Development Partners' Action Required	Priority
Healthcare Readiness			Nauru has been increasing its quarantine and medical capabilities. However, Nauru's rudimentary healthcare system could be a weakness in dealing with an outbreak.	Technical Assistance	Local	A$4.5 million provided by the Australian government.	No	n/a
Local Population Support to Reopen Borders			No particular issues.		Regional	None	No	n/a
Restoring Passenger Confidence			Nauru serves as transfer point between Micronesian countries and Fiji. Restoring passenger confidence in the PICs will be critical.	Technical Assistance	Regional	None	Yes	MEDIUM
Airlines Operational Readiness	Certification and Compliance		CASA compliance for all aircraft. AOC can easily be renewed in Australia.	n/a	Regional	None	No	n/a
	Restoring Crew Currency		Training needed to obtain airline operational readiness. 35% of workforce has been laid off (mostly pilots and engineers). While recruitment of pilots is not expected to be difficult, finding engineers (especially certified to service the Boeing 737-300) could be a challenge.	Technical Assistance	Local	None	Yes	MEDIUM
	Fleet Maintenance		CASA compliance for all aircraft. AOC can easily be renewed in Australia.	n/a	Regional	None	No	n/a
Airports Operational Readiness	Certification and Compliance	*Insufficient information to comment*						
	Domestic Airport Maintenance	n/a						
	Infrastructure Work Halted due to COVID-19	*Insufficient information to comment*						
	Airport Facility Improvements Critical to Recovery	*Insufficient information to comment*						
Minimum Air Service Provisions	Domestic Services	n/a						
	Air Cargo Services		Intra-regional freight demand is thin and unidirectional. Freight services need passenger service to sustain them.	Air Route Underwriting	Regional	None	Yes	HIGH
	International Services		INU-BNE was identified as critical international route for recovery.	Air Route Underwriting	Regional	None	Yes	HIGH
			Routes from Fiji to Micronesia region via Nauru typically have low demand. Bilaterals with Fiji would have to be amended to allow 5th Freedom flights.	Air Route Underwriting	Regional	None	Yes	MEDIUM

A6 Niue

		Status	Issues and Challenges	Strategies and Initiatives	Local vs Regional Approach	Ongoing or Upcoming Programs and Schemes to Address the Issue	PRIF Development Partners' Action Required	Priority
Airlines Financial Status		n/a						
Airports Financial Status		*Insufficient information to comment*						
Healthcare Readiness			The country is not equipped to deal with an outbreak. Niue will require all health screening measures to be taken at departure in AKL.	Technical Assistance	Local	None	No	n/a
Local Population Support to Reopen Borders			Locals are worried about COVID-19 emerging in Niue when borders open.	Technical Assistance	Regional	None	No	n/a
Restoring Passenger Confidence			Close relationship with New Zealand should help boosting passenger confidence during recovery.	Technical assistance	Regional	None	No	n/a
Airlines Operational Readiness	Certification and Compliance	n/a						
	Restoring Crew Currency	n/a						
	Fleet Maintenance	n/a						
Airports Operational Readiness	Certification and Compliance		Certification not seen as an issue.	n/a	Local	Local expertise used.	No	n/a
	Domestic Airport Maintenance	n/a						

		Status	Issues and Challenges	Strategies and Initiatives	Local vs Regional Approach	Ongoing or Upcoming Programs and Schemes to Address the Issue	PRIF Development Partners' Action Required	Priority
	Infrastructure Work Halted due to COVID-19		Need for a new Category 6 fire engine Need for new ATC equipment Several airport projects were funded (90% by MFAT, 10% by Niue) but have been put on hold.	Infrastructure Financing	Local	None	Yes	MEDIUM
	Airport Facility Improvements Critical to Recovery		Nothing required as screening of passenger will take place in New Zealand.	n/a	Local	None	No	n/a
Minimum Air Service Provisions	Domestic Services	n/a						
	Air Cargo Services		Essential air freight services are fully reliant on international passenger flights.	Air Route Underwriting	Local	Air New Zealand service to Auckland is underwritten under the IAFC scheme.	Yes, if IAFC scheme runs out	HIGH
	International Services		Hibernation period: IUE-AKL is the only international route into Niue maintained by Air New Zealand during COVID-19 (1 x weekly).	Air Route Underwriting	Local	Air New Zealand service to Auckland is underwritten under the IAFC scheme.	Yes, if IAFC scheme runs out	HIGH
			Recovery period: Need to maintain the IUE-AKL route beyond hibernation and through recovery.	Air Route Underwriting	Local	Air New Zealand service to Auckland is underwritten under the IAFC scheme.	Yes, if IAFC scheme runs out	HIGH

A7 Palau

No detailed discussions have taken place with any stakeholders from Palau.

A8 PNG

		Status	Issues and Challenges	Strategies and Initiatives	Local vs Regional Approach	Ongoing or Upcoming Programs and Schemes to Address the Issue	PRIF Development Partners' Action Required	Priority
Airlines Financial Status			Airline revenues dropped by 90+% due to the pandemic.	Gov't Budget Support or Direct Financing	Local	Financial support from the PNG government is an interest-bearing loan, repayable after three years.	No	n/a
Airports Financial Status			Airport revenues declined significantly with the pandemic.	Gov't Budget Support or Direct Financing	Local	Government providing financial support.	No	n/a
Healthcare Readiness			Support needed at the airport level for effective COVID-19 testing.	Technical Assistance	Local	None	Yes	MEDIUM
Local Population Support to Reopen Borders		*Insufficient information to comment*						
Restoring Passenger Confidence			PNG has a resilient gas mining industry: this drives some international traffic.	Technical Assistance	Local	None	No	n/a
Airlines Operational Readiness	Certification and Compliance		PNG CASA is self-sustaining so no inspection/certification issues.	n/a	Local	None	No	n/a
	Restoring Crew Currency		Crew is rotating on annual leave to keep their training current.	Technical assistance	Local	None	No	n/a
	Fleet Maintenance		No particular issues.	n/a	Local	None	No	n/a
Airports Operational Readiness	Certification and Compliance		PNG CASA is self-sustaining so no inspection/ certification issues.	n/a	Local	None	No	n/a
	Domestic Airport Maintenance		No particular issues.	n/a	Local	None	No	n/a
	Infrastructure Work Halted due to COVID-19		ADB has a programme for airport upgrade that is still progressing but significantly disrupted by COVID-19.	n/a	Local	ADB is working on it.	No	n/a
	Airport Facility Improvements Critical to Recovery		PNG would seek financial support for cold-storage facilities required at POM in the near-term as well as upgrading of nationwide air navigation capabilities.	Infrastructure Financing	Local	None	Yes	MEDIUM

		Status	Issues and Challenges	Strategies and Initiatives	Local vs Regional Approach	Ongoing or Upcoming Programs and Schemes to Address the Issue	PRIF Development Partners' Action Required	Priority
Minimum Air Service Provisions	Domestic Services		Hibernation period: capacity stands at about 70% but load factors are very low due to significant reduction in domestic demand. Current conditions require prior authorisation from ATC to travel domestically.	Domestic Air Route Underwriting	Local	None	Yes	MEDIUM
			Recovery period: needs to ensure restoration of domestic services once restrictions ease. Domestic traffic is linked to international recovery.	Domestic Air Route Underwriting	Local	None	Yes	MEDIUM
	Air Cargo Services		PNG currently has freight services to Singapore and Cairns. Air cargo recovery will be linked to international air service recovery.	Air Route Underwriting	Local	None	No	n/a
	International Services		Hibernation period: international flights to BNE, CNS, and SIN operate at reduced frequency, driven by gas and mining industry.	Air Route Underwriting	Local	None	No	n/a
			International restart to key Pacific destinations is likely to be a 'bus stop' service to Port Vila, Honiara, and Nadi. The ability to restart international traffic depends on demand from the Chinese, as 50% of the traffic is reliant on China. Operations to Micronesia are dependent on Australian and Chinese markets. Routes identified for subsidy in the early phases of recovery include POM-HIR, POM-NAN, POM-SIN and POM-HKG.	Air Route Underwriting	Local	None	Yes	MEDIUM

A9 RMI

No detailed discussions have taken place with any stakeholders from the Republic of Marshall Islands.

A10 Samoa

		Status	Issues and Challenges	Strategies and Initiatives	Local vs Regional Approach	Ongoing or Upcoming Programs and Schemes to Address the Issue	PRIF Development Partners' Action Required	Priority
Airlines Financial Status			Revenues have decreased by 90%. Most revenues come from domestic activity.	Gov't Budget Support or Direct Financing	Local	Some stimulus provided by the government but more support is needed.	Yes	HIGH
Airports Financial Status			Revenues have decreased substantially.	Gov't Budget Support or Direct Financing	Local	Some stimulus provided by the government but more support is needed.	Yes	HIGH
Healthcare Readiness		*Insufficient information to comment*						
Local Population Support to Reopen Borders		*Insufficient information to comment*						
Restoring Passenger Confidence		*Insufficient information to comment*						
Airlines Operational Readiness	Certification and Compliance		Certification is needed for the new aircraft.	PASO Support	Regional	NZ MFAT has been providing support to PASO but additional funding is needed.	Yes	HIGH
	Restoring Crew Currency		Pilot retraining will be a challenge as simulator training will be required (normally taking place in Sydney).	Technical assistance	Regional	None	Yes	HIGH
	Fleet Maintenance		Samoa Airways relies on desktop maintenance with CAA and PASO. New B737-800 is currently not in Samoa and it is a challenge to get the aircraft delivered.	PASO Support	Regional	NZ MFAT has been providing support to PASO but additional funding is needed.	Yes	HIGH
Airports Operational Readiness	Certification and Compliance	*Insufficient information to comment*						
	Domestic Airport Maintenance	*Insufficient information to comment*						
	Infrastructure Work Halted due to COVID-19	*Insufficient information to comment*						
	Airport Facility Improvements Critical to Recovery	*Insufficient information to comment*						
Minimum Air Service Provisions	Domestic Services	*Insufficient information to comment*						
	Air Cargo Services		Essential air freight services are fully reliant on international passenger flights.	Air Route Underwriting	Local	Air New Zealand service to Auckland is underwritten under the IAFC scheme.	Yes, if IAFC scheme runs out	HIGH

		Status	Issues and Challenges	Strategies and Initiatives	Local vs Regional Approach	Ongoing or Upcoming Programs and Schemes to Address the Issue	PRIF Development Partners' Action Required	Priority
	International Services		Hibernation period: APW-AKL is the only international route into Niue maintained by Air New Zealand during COVID-19 (1 x weekly).	Air Route Underwriting	Local	Air New Zealand service to Auckland is underwritten under the IAFC scheme.	Yes if IAFC scheme runs out	HIGH
			APW-NAN and APW-SYD were identified as candidates for subsidy during the early phases of recovery.	Air Route Underwriting	Local	None	Yes	MEDIUM

A11 Solomon Islands

		Status	Issues and Challenges	Strategies and Initiatives	Local vs Regional Approach	Ongoing or Upcoming Programs and Schemes to Address the Issue	PRIF Development Partners' Action Required	Priority
Airlines Financial Status			The airline is in severe financial difficulties.	Gov't Budget Support or Direct Financing	Local but interested in a regional approach	Local government is providing/is about to provide financial support but more assistance is needed.	Yes	HIGH
Airports Financial Status			Significant reductions in revenues due to COVID-19.	Gov't Budget Support or Direct Financing	Local	Airports are not expecting to get much from the government stimulus.	Yes	HIGH
Healthcare Readiness			No particular issues.	n/a	Local	None	No	n/a
Local Population Support to Reopen Borders			Locals are worried about COVID-19 emerging in the Solomon Islands.	Technical Assistance	Regional	None	No	n/a
Restoring Passenger Confidence			Essential international travel expected to occur first before non-essential travel recovers. Tourism developments will help in the recovery process.	Technical Assistance	Local	None	No	n/a
Airlines Operational Readiness	Certification and Compliance		Struggling as PASO fees are too high.	PASO Support	Regional	NZ MFAT has been providing support to PASO but additional funding is needed.	Yes	HIGH
	Restoring Crew Currency		Inability to move personnel around for maintenance and training due to border restrictions.	Technical assistance	Regional	None	Yes	HIGH
	Fleet Maintenance		Inability to move personnel around for maintenance and training due to border restrictions.	PASO Support	Regional	NZ MFAT has been providing support to PASO but additional funding is needed.	Yes	HIGH
Airports Operational Readiness	Certification and Compliance		Certification/compliance to expire. PASO inspectors cannot currently enter without quarantine restrictions and extra costs.	PASO Support	Regional	NZ MFAT has been providing support to PASO but additional funding is needed.	Yes	HIGH
	Domestic Airport Maintenance	*Insufficient information to comment*						
	Infrastructure Work Halted due to COVID-19		There are plans to pave the four main domestic airports in the country (currently gravel runways).	Infrastructure Financing	Local	NZ is looking to fund these improvements.	Yes	MEDIUM
			Major donor-funded infrastructure projects have been delayed due to the difficulty of mobilizing international consultants and contractors. JICA-funded work at HIR, including not only terminal, but also apron, taxiway, and flood dike, was suspended on March 23, 2020 due to the COVID-19 pandemic impacts and travel restrictions and is yet to be re-commenced. MUA terminal upgrade work is stalling due to costs being higher than expected.	Infrastructure Financing	Local	None		
	Airport Facility Improvements Critical to Recovery		There are currently no plans to reconfigure designs/plans to accommodate traffic when borders reopen.	n/a	Local	None	No	n/a
Minimum Air Service Provisions	Domestic Services		Hibernation period: domestic traffic has been reduced by 50%.	Domestic Air Route Underwriting	Local	Local government is providing/about to provide financial support but more assistance is needed.	Yes	HIGH
			Recovery period: needs to ensure continuity of service. Domestic traffic is linked to international recovery.	Domestic Air Route Underwriting	Local	Local government is providing/about to provide financial support but more assistance is needed.	Yes	HIGH

		Status	Issues and Challenges	Strategies and Initiatives	Local vs Regional Approach	Ongoing or Upcoming Programs and Schemes to Address the Issue	PRIF Development Partners' Action Required	Priority
	Air Cargo Services		Essential air freight services are fully reliant on international passenger flights.	Air Route Underwriting	Local	None	No	n/a
	International Services		HIR-BNE is expected to come back during the recovery and be sustainable with low frequency at first and progressive build up over time.	Air Route Underwriting	Local	None	No	n/a
			BNE-MUA could be a new route with great potential for tourism expansion in the Solomon Islands. The Government wants to promote tourism in the western part of the country, using MUA as an international gateway that would feed passengers onto domestic routes. This new route will need financial subsidies in the initial phases of development.	Air Route Underwriting	Local	None	Yes	HIGH
			HIR-POM and HIR-NAN were also identified as candidates for subsidy during the early phases of recovery.	Air Route Underwriting	Local	None	Yes	MEDIUM

A12 Tonga

		Status	Issues and Challenges	Strategies and Initiatives	Local vs Regional Approach	Ongoing or Upcoming Programs and Schemes to Address the Issue	PRIF Development Partners' Action Required	Priority
Airlines Financial Status			REALtonga ceased service. A new airline is to be set up by the government with private sector assistance.	Technical Assistance potentially future Direct Financing	Local	Government is providing some of the funding to get the airline started but more financial support is required.	Yes	HIGH
Airports Financial Status			Significant losses in revenues due to COVID-19.	Gov't Budget Support or Direct Financing	Local	Government is providing financial stimulus.	Yes, if government support runs out.	HIGH
Healthcare Readiness			There are insufficient quarantine facilities to accommodate inbound travellers.	Infrastructure Financing	Local	None	Yes	HIGH
Local Population Support to Reopen Borders			No particular issues.	n/a	Regional	None	No	n/a
Restoring Passenger Confidence		*Insufficient information to comment*						
Airlines Operational Readiness	Certification and Compliance		An AOC is required before the new airline can start operations.	PASO Support	Regional	NZ MFAT has been providing support to PASO but additional funding is needed.	Yes	HIGH
	Restoring Crew Currency		REALtonga employees are expected to transition to the new airline.	Technical assistance	Local	None	No	n/a
	Fleet Maintenance		REALtonga fleet is expected to transition to the new airline.	Technical assistance	Local	None	No	n/a
Airports Operational Readiness	Certification and Compliance		Airport authority is struggling to keep up with maintenance compliance. Certification is due to expire soon. The cost of bringing PASO inspectors is too high due to the COVID-19 pandemic and quarantine requirements.	PASO Support	Regional	NZ MFAT has been providing support to PASO but additional funding is needed.	Yes	HIGH
	Domestic Airport Maintenance		Maintenance of some equipment requires external assistance.	Technical Assistance	Regional	NZ MFAT has been providing support to PASO but additional funding is needed.	Yes	HIGH
	Infrastructure Work Halted due to COVID-19		Runway resurfacing project for Ha'apai originally funded by WB has been put on hold and needs to resume. The costs associated with the delay are high and bringing people in for project involves quarantine costs.	Infrastructure Financing	Local	WB is providing funding but Fiji contractor cannot travel to Tonga to start the project.	No	n/a
	Airport Facility Improvements Critical to Recovery		No physical changes have been made to the airports.	n/a	Local	None	No	n/a
Minimum Air Service Provisions	Domestic Services		Hibernation period: currently no domestic services due to REALtonga ceasing operations. Need for immediate support to get a new airline operational.	Domestic Air Route Underwriting	Local	Government is providing some of the funding to get the airline started but more financial support is required.	Yes	HIGH
			Recovery period: a new domestic airline will be crucial to ensure proper recovery. Domestic traffic is linked to international recovery.	Domestic Air Route Underwriting	Local	Government is providing some of the funding to get the airline started but more financial support is required.	Yes	HIGH

		Status	Issues and Challenges	Strategies and Initiatives	Local vs Regional Approach	Ongoing or Upcoming Programs and Schemes to Address the Issue	PRIF Development Partners' Action Required	Priority
	Air Cargo Services		Hibernation period: TBU-AKL is the only international route into Tonga maintained by Air New Zealand during COVID-19 (1 x weekly). Essential air freight services are fully reliant on international passenger flights.	Air Route Underwriting	Local	Air New Zealand service to Auckland is underwritten under the IAFC scheme.	Yes, if IAFC scheme runs out	HIGH
	International Services		TBU-AKL route is expected to continue being served from hibernation through recovery.	Air Route Underwriting	Local	Air New Zealand service to Auckland is underwritten under the IAFC scheme.	Yes, if IAFC scheme runs out	HIGH
			TBU-NAN route was identified as candidate for subsidy during the early phases of recovery.	Air Route Underwriting	Local	None	Yes	MEDIUM

A13 Tuvalu

		Status	Issues and Challenges	Strategies and Initiatives	Local vs Regional Approach	Ongoing or Upcoming Programs and Schemes to Address the Issue	PRIF Development Partners' Action Required	Priority
Airlines Financial Status		n/a						
Airports Financial Status			The airport relies on reserves and government subsidies.	Gov't Budget Support or Direct Financing	Local	Government is currently providing financial support.	Yes, if government support runs out.	MEDIUM
Healthcare Readiness			Limited medical equipment to deal with COVID-19 outbreak.	Technical Assistance	Local	None	No	n/a
Local Population Support to Reopen Borders			Locals are worried about COVID-19 emerging in Tuvalu when borders open.	Technical Assistance	Regional	None	No	n/a
Restoring Passenger Confidence		*Insufficient information to comment*						
Airlines Operational Readiness	Certification and Compliance	n/a						
	Restoring Crew Currency	n/a						
	Fleet Maintenance	n/a						
Airports Operational Readiness	Certification and Compliance		Gaps in compliance have to be addressed.	PASO Support	Regional	NZ MFAT has been providing support to PASO but additional funding is needed.	Yes	HIGH
	Domestic Airport Maintenance	n/a						
	Infrastructure Work Halted due to COVID-19		World Bank funded projects are still ongoing but COVID-19 is triggering delays and additional costs.	Infrastructure Financing	Local	None	Yes	MEDIUM
	Airport Facility Improvements Critical to Recovery		There are currently no plans to reconfigure designs/plans to accommodate traffic when borders reopen.	n/a	Local	None	No	n/a
Minimum Air Service Provisions	Domestic Services	n/a						
	Air Cargo Services		Tuvalu currently relies on sea transport for essentials.	n/a	Local	None	No	n/a
	International Services		Recovery period: Need to reinstate critical services to Fiji (FUN-SUV).	Air Route Underwriting	Local	None	Yes	HIGH

A14 Vanuatu

	Status	Issues and Challenges	Strategies and Initiatives	Local vs Regional Approach	Ongoing or Upcoming Programs and Schemes to Address the Issue	PRIF Development Partners' Action Required	Priority
Airlines Financial Status		The airline is under severe financial pressure with negative cash flow	Gov't Budget Support or Direct Financing	Local	Government loan of Vt400m provided to the airline and airport but extra support likely to be required	Yes, if Gov't does not have capacity for extra support	HIGH

		Status	Issues and Challenges	Strategies and Initiatives	Local vs Regional Approach	Ongoing or Upcoming Programs and Schemes to Address the Issue	PRIF Development Partners' Action Required	Priority
Airports Financial Status			Significant reductions in revenues due to COVID, negative cash flow	Gov't Budget Support or Direct Financing	Local	Government loan of Vt400m provided to the airline and airport but extra support likely to be required	Yes, if Gov't does not have capacity for extra support	HIGH
Healthcare Readiness			Strong national COVID-19 response capability with donor assistance. Airport has incorporated ICAO/IATA COVID-19 management processes	n/a	Local	Donor community is already providing Govt budget support for COVOD-19 response	No	n/a
Local Population Support to Reopen Borders			While tourism industry is eager to reopen, community concerns are expressed about the risk of introduction of COVID-19	n/a	Local	Donor community is already providing Govt budget support for COVOD-19 response	No	n/a
Restoring Passenger Confidence			Task force addressing COVID-19 management and tourism recovery. Marketing campaign "We'll keep it beautiful for you" in place	n/a	Local	Donor community is already providing Govt budget support for COVOD-19 response	No	n/a
Airlines Operational Readiness	Certification and Compliance		Need addition of new aircraft onto AOC and preparation for entry into service.	Technical Assistance	Regional	Government provided shareholder loan has in part contributed to PASO costs for this work	Yes, if Gov't does not have capacity for extra support	HIGH
	Restoring Crew Currency		Inability to move personnel around for maintenance and training due to border restrictions.	Technical Assistance	Regional	Use of repatriation flights to position personnel (incl quarantine). Also use of jet services on domestic routes for currency	Yes, if Gov't does not have capacity for extra support	HIGH
	Fleet Maintenance	*Insufficient information to comment*						
Airports Operational Readiness	Certification and Compliance		Recently recertified	n/a	Local	n/a	No	n/a
	Domestic Airport Maintenance		AVL is also responsible for SON and TAH, smaller airports are Govt responsibility	Direct budget support	Local	n/a	Yes	MEDIUM
	Infrastructure Work Halted due to COVID-19		Routine Capex on hold	Infrastructure loan or grant	Local	Normal capex from retained revenue	Yes	Low
	Airport Facility Improvements Critical to Recovery		Modifications to terminal to accommodate equipment and processes for full post-COVID risk management	Infrastructure loan or grant	Local	Changes to existing processes made but more renovation needed to properly accommodate equipment and processes	Yes	HIGH
Minimum Air Service Provisions	Domestic Services		CSO scheme was introduced pre COVID-19 but not fully funded,	Domestic air route underwriting	Local	Existing CSO scheme unable to be supported by Govt	Yes	HIGH
	Air Cargo Services		Essential air freight services are fully reliant on international passenger flights.	Air Route Underwriting	Regional	No	No	n/a
	International Services		Main international routes are expected to come back during the recovery and be sustainable with low frequency at first and progressive build up over time.	Air Route Underwriting	Local	None	No	n/a
			BNE-SON route is vulnerable and important to the development of tourism in Espirtu Santo and outer islands and will likely cease without subsidy. VLI-AKL is an important tourist route and may need assistance early in recovery. VLI-SUV is an important Pacific connectivity route and may need support.	Air Route Underwriting	Local	None	Yes	MEDIUM

Appendix B: PRIF Member Countries Supplementary Aviation Data

B1 List of Airport IATA Codes

Table B-1: Study Focus Countries Airport IATA Codes

Country	Airport IATA Code	Airport Name
Cook Islands	RAR	Rarotonga International Airport
Fiji	NAN	Nadi International Airport
	SUV	Nausori International Airport
Kiribati	CXI	Cassidy International Airport
	TRW	Bonriki International Airport
Marshall Islands	KWA	Bucholz Army Airfield
	MAJ	Majuro International Airport
Micronesia	KSA	Kosrae International Airport
	PNI	Pohnpei International Airport
	TKK	Chuuk International Airport
	YAP	Yap International Airport
Nauru	INU	Nauru International Airport
Niue	IUE	Hanan International Airport
Palau	ROR	Palau International Airport
Papua New Guinea	BUA	Buka Airport
	GUR	Gurney Airport
	KVG	Kavieng Airport
	LNV	Lihir Island Airport
	MAG	Madang Airport
	POM	Port Moresby International Airport
	RAB	Rabaul Airport
Samoa	APW	Faleolo International Airport
	FGI	Fagali'I Airport
Solomon Islands	BAS	Balalae Airport
	HIR	Honiara International Airport
Tonga	TBU	Fua'amotu International Airport
	VAV	Vava'u International Airport
Tuvalu	FUN	Funafuti International Airport
Vanuatu	SON	Santo International Airport
	VLI	Bauerfield International Airport

Table B-2: Other PIC's Airport IATA Codes

Country	Airport IATA Code	Airport Name
American Samoa	PPG	Pago Pago International Airport
French Polynesia	PPT	Faa'a International Airport
Guam	GUM	Antonio B. Won Pat International Airport
New Caledonia	NOU	La Tontouta International Airport
Northern Mariana Islands	SPN	Saipan International Airport
Wallis and Futuna Islands	WLS	Hihifo Airport

Table B-3: Non-Pacific Countries Airport IATA Codes

Country	Airport IATA Code	Airport Name
Australia	ADL	Adelaide Airport
	BNE	Brisbane Airport
	CNS	Cairns Airport
	MEL	Melbourne Airport
	SYD	Sydney (Kingsford Smith) Airport
Canada	YVR	Vancouver International Airport
Chile	IPC	Mataveri International Airport
China	CAN	Guangzhou Baiyun International Airport
	HGH	Hangzhou Xiaoshan International Airport
	PEK	Beijing Capital International Airport
	PVG	Shanghai Pudong International Airport
Hong Kong (SAR)	HKG	Hong Kong International
Indonesia	DPS	Ngurah Rai International Airport
	FUK	Fukuoka Airport
	KIX	Kansai International Airport
	NGO	Chubu Centrair International Airport
	NRT	Narita International Airport
Macau (SAR)	MFM	Macau International Airport
New Zealand	AKL	Auckland Airport
	CHC	Christchurch Airport
	WLG	Wellington Airport
Philippines	MNL	Ninoy Aquino International Airport
Singapore	SIN	Singapore Changi Airport
South Korea	ICN	Incheon International Airport
Taiwan	TPE	Taiwan Taoyuan International Airport
United States	HNL	Daniel K. Inouye International Airport
	LAX	Los Angeles International Airport
	SFO	San Francisco International Airport

B2 International Routes 2019 Seating Capacities

Table B-4: The Cook Islands 2019 Route Seating Capacities

Country	Airline Name	Route (IATA)	Seats
Australia	Air New Zealand	SYD-RAR	15,316
French Polynesia	Air Tahiti	PPT-RAR	2,928
New Zealand	Air New Zealand	AKL-RAR	119,579
	Jetstar Airways	AKL-RAR	40,968
	Virgin Australia International	AKL-RAR	35,552
United States	Air New Zealand	LAX-RAR	15,161

Table B-5: The Federated States of Micronesia 2019 Route Seating Capacities

Country	Airline Name	Route (IATA)	Seats
Guam	United Airlines	TKK-GUM	41,166
		YAP-GUM	16,224
Marshall Islands	Nauru Airlines	PNI-MAJ	924
	United Airlines	KSA-KWA	17,224
		KSA-MAJ	1,992
		PNI-KWA	8,632
		PNI-MAJ	6,600
Papua New Guinea	Air Niugini	TKK-POM	3,952

Table B-6: Fiji 2019 Route Seating Capacities

Country	Airline Name	Route (IATA)	Seats
Australia	Fiji Airways	NAN-ADL	7,332
		NAN-BNE	61,313
		NAN-MEL	66,849
		NAN-SYD	181,173
		SUV-SYD	4,514
	Jetstar Airways	NAN-SYD	45,507
	Qantas Airways	NAN-SYD	28,188
	Virgin Australia	NAN-BNE	67,573
		NAN-MEL	36,652
		NAN-SYD	72,083
China	Fiji Airways	NAN-HGH	508
		NAN-TSN	626
Hong Kong (SAR)	Fiji Airways	NAN-HKG	63,803
Japan	Fiji Airways	NAN-NRT	30,731
Kiribati	Fiji Airways	NAN-CXI	6,848
		NAN-TRW	16,640
Nauru	Nauru Airlines	NAN-INU	13,860

New Caledonia	Aircalin	NAN-NOU	9,300
New Zealand	Air New Zealand	NAN-AKL	159,248
		NAN-CHC	11,239
		NAN-WLG	7,245
	Fiji Airways	NAN-AKL	122,220
		NAN-CHC	22,041
		NAN-WLG	13,394
		SUV-AKL	6,578
		SUV-CHC	164
Papua New Guinea	Air Niugini	NAN-POM	2,428
Samoa	Fiji Airways	NAN-APW	35,674
Singapore	Fiji Airways	NAN-SIN	26,817
Solomon Islands	Air Niugini	NAN-HIR	5,454
	Fiji Airways	NAN-HIR	6,394
South Korea	Korean Air	NAN-ICN	25,863
Tonga	Fiji Airways	NAN-TBU	31,708
		NAN-VAV	8,364
Tuvalu	Fiji Airways	SUV-FUN	10,472
United States	Fiji Airways	NAN-HNL	8,414
		NAN-LAX	104,848
		NAN-SFO	38,577
Vanuatu	Air Vanuatu	NAN-VLI	8,118
	Fiji Airways	NAN-VLI	17,068
		SUV-VLI	6,936
Wallis and Futuna Islands	Aircalin	NAN-WLS	11,270

Table B-7: Kiribati 2019 Route Seating Capacities

Country	Airline Name	Route (IATA)	Seats
Fiji	Fiji Airways	CXI-NAN	6,848
		TRW-NAN	16,646
Marshall Islands	Air Marshall Islands	TRW-MAJ	1,924
	Nauru Airlines	TRW-MAJ	6,996
Nauru	Nauru Airlines	TRW-INU	6,864
Solomon Islands	Solomon Airlines	TRW-HIR	7,072
Tuvalu	Air Kiribati	TRW-FUN	1,924
United States	Fiji Airways	CXI-HNL	6,848

Table B-8: The Marshall Islands 2019 Route Seating Capacities

Country	Airline Name	Route (IATA)	Seats
Kiribati	Air Marshall Islands	MAJ-TRW	1,924
	Nauru Airlines	MAJ-TRW	6,864
Micronesia	Nauru Airlines	MAJ-PNI	924
	United Airlines	KWA-KSA	17,390
		KWA-PNI	8,632
		MAJ-KSA	1,992
		MAJ-PNI	6,600
United States	United Airlines	MAJ-HNL	34,448

Table B-9: Nauru 2019 Route Seating Capacities

Country	Airline Name	Route (IATA)	Seats
Australia	Nauru Airlines	INU-BNE	13,728
Fiji	Nauru Airlines	INU-NAN	13,728
Kiribati	Nauru Airlines	INU-TRW	6,996
Solomon Islands	Nauru Airlines	INU-HIR	13,728

Table B-10: Niue 2019 Route Seating Capacities

Country	Airline Name	Route (IATA)	Seats
New Zealand	Air New Zealand	IUE-AKL	17,433

Table B-11: Palau 2019 Route Seating Capacities

Country	Airline Name	Route (IATA)	Seats
Guam	United Airlines	ROR-GUM	43,878
Japan	Japan Airlines	ROR-NRT	3,153
	T'way Air Co. Ltd	ROR-KIX	378
		ROR-NGO	378
Macau (SAR)	Lanmei Airlines	ROR-MFM	15,780
Philippines	United Airlines	ROR-MNL	13,270
South Korea	Asiana Airlines	ROR-ICN	25,056
	Korean Air Lines	ROR-ICN	8,694
Taiwan	China Airlines	ROR-TPE	28,282

Table B-12: Papua New Guinea 2019 Route Seating Capacities

Country	Airline Name	Route (IATA)	Seats
Australia	Air Niugini	POM-BNE	83,550
		POM-CNS	46,827
		POM-SYD	12,688
	Alliance Airlines Pty Limited	BUA-CNS	52
		GUR-CNS	104
		KVG-CNS	52
		MAG-CNS	204
		POM-BNE	80
		RAB-CNS	100
	PNG Air	LNV-CNS	3,536
		POM-CNS	1,700
	Qantas Airways	POM-BNE	62,640
		POM-CNS	20,276
	Virgin Australia International	POM-BNE	28,588
Fiji	Air Niugini	POM-NAN	2,140
Hong Kong (SAR)	Air Niugini	POM-HKG	31,914
Japan	Air Niugini	POM-NRT	3,940
Micronesia	Air Niugini	POM-TKK	3,952
Philippines	Air Niugini	POM-MNL	35,404
	Philippine Airlines	POM-MNL	35,952
Singapore	Air Niugini	POM-SIN	56,486
Solomon Islands	Air Niugini	POM-HIR	28,370

Table B-13: Samoa 2019 Route Seating Capacities

Country	Airline Name	Route (IATA)	Seats
American Samoa	Samoa Airways	FGI-PPG	20,520
Australia	Samoa Airways	APW-BNE	15,901
		APW-SYD	17,847
	TUI Airways Limited	APW-CNS	552
	Virgin Australia International	APW-BNE	10,736
		APW-SYD	20,064
Fiji	Fiji Airways	APW-NAN	35,479
New Zealand	Air New Zealand	APW-AKL	99,501
	Samoa Airways	APW-AKL	59,405
Tonga	REAL Tonga Airline	APW-VAV	850
United States	Fiji Airways	APW-HNL	8,090

Table B-14: The Solomon Islands 2019 Route Seating Capacities

Country	Airline Name	Route (IATA)	Seats
Australia	Nauru Airlines	HIR-BNE	13,728
	Solomon Airlines	HIR-BNE	35,064
	Virgin Australia International	HIR-BNE	18,128
Fiji	Air Niugini	HIR-NAN	8,814
	Fiji Airways	HIR-NAN	6,558
Kiribati	Solomon Airlines	HIR-TRW	7,072
Nauru	Nauru Airlines	HIR-INU	13,860
Papua New Guinea	Air Niugini	HIR-POM	28,436
Vanuatu	Air Niugini	HIR-VLI	7,632
	Solomon Airlines	HIR-VLI	7,072

Table B-15: Tonga 2019 Route Seating Capacities

Country	Airline Name	Route (IATA)	Seats
Australia	Virgin Australia International	TBU-SYD	18,480
Fiji	Fiji Airways	TBU-NAN	31,708
		VAV-NAN	8,364
New Zealand	Air New Zealand	TBU-AKL	75,925
	Virgin Australia International	TBU-AKL	19,184
Samoa	REAL Tonga Airline	VAV-APW	850

Table B-16: Tuvalu 2019 Route Seating Capacities

Country	Airline Name	Route (IATA)	Seats
Fiji	Fiji Airways	FUN-SUV	10,472
Kiribati	Air Kiribati	FUN-TRW	1,924

Table B-17: Vanuatu 2019 Route Seating Capacities

Country	Airline Name	Route (IATA)	Seats
Australia	Air Vanuatu	SON-BNE	7,182
		VLI-BNE	23,062
		VLI-MEL	14,450
		VLI-SYD	59,330
	TUI Airways Limited	VLI-HBA	92
	Virgin Australia International	VLI-BNE	32,912
Fiji	Air Vanuatu	VLI-NAN	8,118
	Fiji Airways	VLI-NAN	17,068
		VLI-SUV	6,936
New Caledonia	Aircalin	VLI-NOU	16,886
	Air Vanuatu	VLI-NOU	14,416
New Zealand	Air Vanuatu	VLI-AKL	36,084
Solomon Islands	Air Niugini	VLI-HIR	7,488
	Solomon Airlines	VLI-HIR	7,208

Appendix C: Consultant's Survey Questions

C1 Questions for Airlines

1. **<u>Cash Flow Support During Hibernation:</u> Please provide an estimated range of the minimum monthly level of cash flow support (in local currency) required (above and beyond any existing Government support) to keep your airline solvent and able to maintain basic capability until the borders reopen. (If appropriate, identify domestic and international separately)**
   Example: FJD 300,000-350,000 per month

   [Open-ended response]

2. **<u>Transition from Hibernation to Operational Readiness:</u> Please provide an estimated range of additional costs (lump sum local currency) above and beyond hibernation costs that will be needed to transition to capability of fully servicing international and domestic routes again.**
   These costs may include, but are not limited to, recruitment, crew training, and aircraft airworthiness compliance costs, PASO fees etc, but should exclude assistance already being provided by government
   Example: FJD 300,000-350,000

   [Open-ended response]

3. **Please provide a list of routes previously flown that you consider critical and which might not be reopened or slow to reopen due to lack of post-COVID viability, and for which financial underwriting may be important to ensuring recovery of supply of air access. Please also give an indicative minimum level of subsidy that might be justified**
   Example: MEL-SYD, 3x weekly, AUD 50,000 (per flight)

   [Open-ended response]

4. **Is there anything else you would like to let us to take into account in recommending support programs?**
   We recognise that operational needs and issues for your airline may have changed since our interview.

   By keeping track of your airline's needs, the recovery initiatives may be better tailored to suit the needs of the industry.

   Please list any noteworthy changes to your airline including, but not limited to, new technical and financial issues, new loans and financial support from governmental bodies or financial institutions, staffing changes, fleet changes, etc.

   [Open-ended response]

C2 Questions for Airports

1. **Cash Flow During Hibernation: Please provide an estimated range of the minimum monthly level of cash flow support (in local currency) required (above and beyond any existing Government support) to keep your airport business solvent and able to maintain basic capability until the borders reopen. (If appropriate, identify domestic and international separately)**
   Example: FJD 300,000-350,000 per month

   [Open-ended response]

2. **<u>Transition from Hibernation to Operational Readiness:</u> Please provide an estimated range of additional costs (lump sum local currency) above and beyond hibernation costs that will be needed to transition to capability of fully servicing international and domestic routes again.**
These costs may include, but are not limited to, re-employment of staff, carrying out maintenance on airport facilities, regulatory compliance costs including, PASO fees etc, but should exclude assistance already being provided by government
Example: FJD 300,000-350,000

   [Open-ended response]

3. **Capital Cost to Accommodate Post COVID-19 health requirements:** Please identify the works required and approximate cost of airport or airport-related facilities upgrades necessary to effectively manage the opening up of borders.
These costs may include, but are not limited to renovation of terminals for passenger segregation, procurement of health checking facilities, construction of quarantine facilities for passengers and cargo etc

4. **Is there anything else you would like to let us know?**
We recognise that operational needs and issues for your airport(s) may have changed since our interview.

   By keeping track of your airport's needs, the recovery initiatives may be better tailored to suit the needs of the industry.

   Please list any noteworthy changes to your airport(s) including, but not limited to, new technical and financial issues, new loans and financial support from governmental bodies or financial institutions, staffing changes, etc.

   [Open-ended response]

C3 Questions for Governments

1. **If additional budget support were to become available targeted at the survival and restart of international and domestic air access in your country, please provide an estimated range of the level of such support (lump sum in local currency) required to restart your country's aviation industry (particularly the international sector).**
These include, but are not limited to, funding towards airports, airlines, tourism marketing, route subsidy schemes, and quarantine/medical facilities. For the purpose of this analysis please assume a reopening of borders by the end of the first quarter of 2020

   Example: FJD 300,000-350,000

   [Open-ended response]

2. **Is there anything else you would like to let us know?**
We recognise that operational needs and issues for your aviation sector may have changed since our interview.

   By keeping track of your aviation sector's needs, the recovery initiatives may be better tailored to suit the needs of the industry. Please identify additional costs.

   Please list any noteworthy changes to your aviation sector including, but not limited to, new technical and financial issues, new loans and financial support from governmental bodies or financial institutions, policy changes, etc.

   [Open-ended response]

Appendix D: Consultants Meeting Minutes & Survey Responses

Refer to Separate Document for the Consultant's Meeting Minutes & Survey Responses

Appendix E: List of Stakeholders Consulted and Approached

Country	Contact Name	Organisation	Role	Email	Date
Completed					
Australia	Ben James	Brisbane Airport	Aviation Business Development Manager	ben.james@bne.com.au	13/10/2020
Cook Islands	Joseph Ngamata	Cook Islands Airport Authority	CEO	jngamata@airport.gov.ck	19/08/2020
Cook Islands	Garth Henderson	Ministry of Finance and Economic Management	Financial Secretary	garth.henderson@cookislands.gov.ck	20/08/2020
Cook Islands	John Hosking	Ministry of Transport	Secretary of Transport	john.hosking@cookislands.gov.ck	20/08/2020
Fiji	Geoffrey Shaw	Airports Fiji Limited	Chair of Board	Geoffrey.Shaw@GHMGroup.com.au	12/08/2020
Fiji	David Crute	Airports Fiji Limited	Projects Director	david.crute@fijiairports.com.fj	12/08/2020
Fiji	Isei Tudreu	Airports Fiji Limited	GM Operations	IseiT@fijiairports.com.fj	12/08/2020
Fiji	Sanjana Mishra	Airports Fiji Limited	Senior Financial Accountant	SanjanaM@fijiairports.com.fj	12/08/2020
Fiji	Athi Narayan	Fiji Airways	Executive GM Airport & Cargo Operations	athil.narayan@fijiairways.com	12/08/2020
Fiji	Paul Doherty	Fiji Airways	GM Operations	Paul.Doherty@fijiairways.com	12/08/2020
Fiji	Kamal K. Gounder	Minstry of Economy	Manager/Coordinator Infrastructure Sector	kamal.gounder@economy.gov.fj	17/09/2020
Fiji	Artika Paayal	Minstry of Economy	Infrastructure Sector	artika.paayal@economy.gov.fj	17/09/2020
Kiribati	Mike Gahan	Airport Kiribati Authority (AKA)	CEO	ceoaka@mcttd.gov.ki	31/07/2020
Kiribati	Finau Soqo	National Economic Planning Office (NEPO)	Director	dnepo@mfep.gov.ki	31/07/2020
Kiribati	Petero Manufolau	Tourism Authority Kiribati	CEO	pmanufolau@kiribatitourism.gov.ki	31/07/2020
Nauru	Geoff Bowmaker	Nauru Airlines	CEO	geoff.bowmaker@nauruairlines.com.au	19/08/2020
Niue	Bill MacGregor	Department of Civil Aviation	Director	wkl.macgregor@gmail.com	13/08/2020
Niue	Sonya Talagi[1]	Ministry of Infrastructure - Transport	Director	Sonya.Talagi@mail.gov.nu	By email
Papua New Guinea	Bruce Alabaster	Air Niugini	Chief Executive Officer	balabaster@airniugini.com.pg	12/08/2020
Samoa	Galumaninoa Tasi (Galu)	Ministry of Finance	Executive Assistant to Leasiosio Oscar Malielegaoi	Galumaninoa.Tasi@mof.gov.ws	23/10/2020
Samoa	Alvin W. Tuala	Samoa Airways	CEO	atuala@samoaairways.com	2/09/2020
Samoa	Robert Rounds	Samoa Airways	General Manager Commercial	rrounds@samoaairways.com	9/09/2020
Solomon Islands	Tony Telford	SIRAP	Consultant	ttelford@sirap.sb	11/08/2020
Solomon Islands	Brett Gebers	Solomon Airlines	CEO	bgebers@flysolomons.com	13/08/2020
Tonga	John Havea	Civil Aviation Tonga (CAT)	Director	kilifihavea@gmail.com	7/08/2020
Tonga	Balwyn Fa'otusia	Ministry of Finance (MoF)	CEO	atalau@finance.gov.to	7/08/2020
Tonga	Viliami "Bill" Maake	Tonga Airports Limited (TAL)	CEO	VMaake@tongaairports.com	7/08/2020
Tuvalu	Uiga Paelate	Department of Civil Aviation	Director	upaelate@gov.tv	23/09/2020
Tuvalu	Favia. K. Lee Moresi[1]	Ministry of Finance	CEO	moresi.k.l@gmx.com	By email
Tuvalu	Vitoli Iosefa	Tuvalu Aviation Investment Project	Project Manager	faaoga@gmail.com	23/09/2020
Vanuatu	Sinclair Rakau	Airports Vanuatu Limited (AVL)	Finance Manager	srakau@airports.vu	21/10/2020
Vanuatu	Benson Kanas	Airports Vanuatu Limited (AVL)	CFO	bkanas@airports.vu	21/10/2020
Vanuatu	Samuel Ebely	Airports Vanuatu Limited (AVL)	Head of Accounts Payable	-	21/10/2020
PRIF Development Partners	Dong Kyu Lee	Asian Development Bank	Director of the Transport Division, Pacific Department	dklee@adb.org	4/09/2020
PRIF Development Partners	Kuancheng Huang	Asian Development Bank	Senior Transport Specialist	khuag@adb.org	4/09/2020
PRIF Development Partners	Matthew Harding	DFAT	Director, Pacific Economic Growth	Matthew.Harding@dfat.gov.au	14/09/2020
PRIF Development Partners	Paul Alexander	MFAT	Manager Energy and Infrastructure aid Investments	Paul.Alexander@mfat.govt.nz	7/09/2020
PRIF Development Partners	David Weisman	MFAT	Senior Adviser Transport and Infrastructure	David.Weinstein@mfat.govt.nz	8/09/2020
PRIF Development Partners	Ken Okumura[2]	JICA	-	okumura.ken@jica.go.jp	By email
PRIF Development Partners	Serizawa Ran[2]	JICA	-	Serizawa.Ran@jica.go.jp	By email
PRIF Development Partners	Pierre Graftieaux	World Bank	Chair, PRIF Transport Working Group	pgrafiteaux@worldbank.org	24/08/2020
Regional Bodies	George Faktaufon	Association of South Pacific Airlines (ASPA)	CEO	georgefaktaufon@aspa.aero	4/08/2020
Regional Bodies	Tasha Siaosi	Pacific Islands Forum Secretariat	SIS Adviser	tashas@forumsec.org	21/09/2020
Regional Bodies	Andrew Valentine	PASO	General Manager	gm@paso.aero	13/08/2020
Regional Bodies	Riaz Deen	PASO	Programme Manager	rdeen@paso.aero	13/08/2020

Country	Contact Name	Organisation	Role	Email	Date
Regional Bodies	Sean O'Sullivan	PRIF	Coordination office team leader	sosullivan@theprif.org	23/07/2020
Regional Bodies	Jane Romero	PRIF	Technical Assistance Officer	jromero@theprif.org	23/07/2020
Regional Bodies	Darin Cusack	PRIF	Consultant	darin@cusack.nz	23/07/2020
Airlines Serving the Region	Clive Ashmore Butler	Jetstar	Alliances Manager	Clive.AshmoreButler@jetstar.com	30/06/2020
Airlines Serving the Region	Matthew Yarrow	Virgin Australia	Head of Network Management	matthew.yarrow@virginaustralia.com	15/09/2020
Airlines Serving the Region	Rachael Pizey	Air New Zealand	Alliances Executive	Rachael.Pizey@airnz.co.nz	27/07/2020
Airlines Serving the Region	Simon Kleinsorge	Air New Zealand	Manager – Network Planning	simon.kleinsorge@airnz.co.nz	27/07/2020
Contacted with no response or unable to attend consultation					
Federated States of Mirconesia	Glenn Harris	Civil Aviation Division	Acting Assistant Secretary	glenn.harris@tci.gov.fm	-
Kiribati	Phil Statham	Air Kiribati	CEO	pstatham@airkiribati.com.ki	-
Marshall Islands	Stanley Myazoe	Directorate of Civil Aviation	Director	rmidca@yahoo.com	-
Marshall Islands	Maybeline Andon Bing	Ministry of Finance	Secretary for Finance	mayabing@gmail.com	-
Palau	Peter Polloi	Bureau of Aviation	Director General	saampalau@gmail.com	-
Palau	Richard Alonz	Palau National Aviation Administration	Acting Administrator	pnaa@palaunet.com	-
Palau	Hon. Elbuchel Sadang	Ministry of Finance	Minister of Finance	esadang@gmail.com	-
Samoa	Magele "Hoe" Viali	Ministry of Works, Transport Infrastructure	Secretary MWTI and PASO Chair	hoe.viali@mwti.gov.ws	-
PRIF Development Partners	Ella Drake	European Investment Bank	-	e.drake@eib.org	-
PRIF Development Partners	Paul Devoti	FAA	Foreign Affairs Specialist, Asia-Pacific	paul.devoti@faa.gov	-
PRIF Development Partners	Jenny Morrell	U.S. DOT	-	MorrellJL@state.gov	-
Regional Bodies	Arun Mishra	ICAO APAC	-	amishra@icao.int	-
Airlines Serving the Region	Barbara Hepburn	United Airlines	-	barbara.hepburn@united.com	-

[1]Stakeholder was contacted only through a response to the consultant's survey questions.

[2]Staleholder was contacted through correspondence over email only.