



Project Information Document (PID)

Appraisal Stage | Date Prepared/Updated: 13-Apr-2023 | Report No: PIDA35599



BASIC INFORMATION

A. Basic Project Data

Country Tuvalu	Project ID P180674	Project Name Tuvalu Safe and Resilient Aviation Project	Parent Project ID (if any)
Region EAST ASIA AND PACIFIC	Estimated Appraisal Date 17-Apr-2023	Estimated Board Date 31-May-2023	Practice Area (Lead) Transport
Financing Instrument Investment Project Financing	Borrower(s) Tuvalu	Implementing Agency Ministry of Transport, Energy and Tourism	

Proposed Development Objective(s)

To improve the safety and resilience of the Recipient's aviation sector and to ensure reliable regional air connectivity.

Components

Safe and Resilient Airport Infrastructure Solutions
Strengthening Capacity of the Aviation Sector
Project Implementation Support

The processing of this project is applying the policy requirements exceptions for situations of urgent need of assistance or capacity constraints that are outlined in OP 10.00, paragraph 12.
Yes

PROJECT FINANCING DATA (US\$, Millions)

SUMMARY

Total Project Cost	23.00
Total Financing	23.00
of which IBRD/IDA	23.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	23.00
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of which IDA Recommitted	11.00
IDA Grant	23.00

Environmental and Social Risk Classification

Moderate

Decision

The review did authorize the team to appraise and negotiate

B. Introduction and Context

Country Context

- The Pacific region is widely recognized as heavily exposed to climatic and natural hazards such as floods, droughts, tropical cyclones, earthquakes, volcanic eruptions, and tsunamis.** Although there is a high level of uncertainty related to the projected impacts of climate change, recent studies¹ indicate that the risk will increase over the coming decades. For example, it is expected that climatic changes will raise ocean and land temperatures, intensify tropical cyclones, and increase storm surges in Pacific Island countries (PICs). The changing climate and increasing extreme shocks will adversely affect infrastructure, agriculture, fisheries, coastal zones, water resources, health, and ecosystems and thus threaten entire communities and economies. People and economies in the Pacific are particularly vulnerable to hazard and climate change impacts because of geographical remoteness and isolation, dispersion across a large area of the Pacific Ocean, economic and social challenges, and the degradation of natural resources.
- Among the PICs, Tuvalu is one of the most vulnerable countries and categorized as a fragile state.** Located approximately 1,100 km north of Fiji, Tuvalu consists of nine scattered islands, with a total land area of around 26 km², and a population of approximately 11,000. Remoteness, physical isolation, low elevation, typically less than 1m above sea level, for most of built up areas combined with frequent tropical cyclones, damaging winds, rains, storm surges and sea level rise make Tuvalu extremely vulnerable to the impacts of climate change. Given the increasing severity of weather events, urgent action is needed to make Tuvalu’s infrastructure more resilient to climate and disaster risks.
- The country’s GDP per capita for 2021 was US\$5,632, and its nominal GDP of US\$63 million² is among the smallest globally.** Employment is heavily reliant on the public sector, which employs an estimated 65 percent of the population. Other sources of formal employment except small-scale processing of timber (sourced locally or from New Zealand), handicrafts, and tourism, where small numbers of Tuvaluans are working. The latest unemployment statistics collected in 2016 show that Tuvalu has an unemployment rate of 8.49 percent. Around 26 percent of Tuvalu’s population lives below the national poverty line, and the majority of the nation’s limited land area is devoted to subsistence agriculture. Tuvalu’s economy is highly dependent on remittances and the country is considered one of the most economically and environmentally vulnerable in the world.

¹ Regional Climate Consortium for Asia and the Pacific, NextGen Climate Projections (<https://www.rccap.org/climate-change-update-for-the-pacific/>)

² The World Bank Group, World Development Indicators (2021); <https://data.worldbank.org/country/TV>



4. **Climate change and natural hazards pose critical constraints and risks for Tuvalu's social and economic development.** Frequent tropical cyclones in the Pacific bring damaging winds, extreme precipitation, and storm surges to Tuvalu. These storms can cause moderate to severe damage to buildings, infrastructure, and crops with significant economic and social losses. On average, one tropical cyclone passes within 400 km of Tuvalu's islands per year. Tropical Cyclone Pam³, which struck Tuvalu's northern islands in 2015, caused damage to assets equivalent to more than 25 percent of national GDP. The recent projections tend to show a decrease in the frequency of tropical cyclones by the late 21st century and an increase in the proportion of the more intense storms⁴.
5. **Tuvalu has made some progress strengthening legislative frameworks and policies related to gender, including gender-based violence (GBV), but challenges remain to ensure effective implementation.** While many forms of GBV, including domestic violence, were illegal under criminal law, the Family Protection and Domestic Violence Act 2014⁵ created a new offense of domestic violence and made protection orders more readily accessible to survivors, including through the 2015 amendment which enabled members of the Island court to grant a protection order. Financial constraints and capacity of state and non-state action are major barriers in the implementation of legislation and policies and the development of women's rights in general. The Gender Affairs Department (GAD) is under-resourced, with limited capacity to advocate and perform gender analysis, gender-responsive planning, advocacy, and interventions in other arms of government, gender-responsive budgeting, program and project evaluation, and financial management.
6. **There are gender gaps in employment.** 55.4 percent (4,400) of Tuvaluans ages 15 and over were in the labor force, with a significant gap between men and women: 71.2 percent of men and only 38.3 percent of women took part in the labor force.⁶ Women represent only about 36 percent of paid employees in the country and hold less than one-third of managerial positions.⁷ The Government remains the largest employer in Tuvalu, accounting for 78 percent of women's and 69 percent of men's paid employment.⁸ In the Ministry of Transport, Energy and Tourism (MTET), women represent around 15 percent of technical staff while the department of civil aviation has achieved gender parity among men and women in technical positions.

Sectoral and Institutional Context

7. **Pacific Island Countries' roads, ports, and airports are among the region's most vulnerable infrastructure assets.** This is because in many small island countries, including Tuvalu, critical transport infrastructure is adjacent to the coast. In PICs, primary roads are frequently less than 1 meter above sea level, and most of the population lives within 1 kilometer of the sea. In addition, securing adequate maintenance budgets is often a challenge, and the resulting maintenance backlogs exacerbate transport assets vulnerability to extreme weather. Pacific transport networks and their respective users already

³ The devastating TC Pam ravaged the region in early 2015, resulted in large-scale damage to houses, agriculture, and livestock. According to the Intergovernmental Panel on Climate Change, even small increases in sea level would have "severely negative effects on atolls and low islands" (IPCC 2001, p. 856)

⁴ Regional Climate Consortium for Asia and the Pacific, Current and Future Climate for Tuvalu, October 2021

⁵ Government of Tuvalu. 2014. *Family Protection and Domestic Violence (Amendment) Act 2015* (accessed January 17, 2022), http://www.paclii.org/tv/legis/num_act/fpadva2015459/.

⁶ Household Income and Expenditure Survey (HIES) survey, 2016

⁷ Tuvalu 2016 Household Income and Expenditure Survey.

⁸ Ibid.



suffer regular temporary disruptions—sometimes for hours but occasionally longer—as vulnerable links or locations can be frequently rendered impassible due to flooding, debris deposit, culvert, and bridge and/or pavement damage. This affects, in particular, access to critical services and infrastructure, for example, hospitals, schools, and power plants. Expected climate change effects will place coastal assets and communities at an even higher level of risk.

8. **Funafuti International Airport, the only international airport in Tuvalu, plays a key role in connecting Tuvalu to the region.** The airport is located on the capital atoll of Tuvalu where over 50 percent of the country's population of 11,000 live. The island accommodates the country's hospital, primary school, a branch campus of the University of the South Pacific (USP), radio station, main port, as well as most of the businesses. The runway is on the widest part, covering around one third of the whole island. The first runway was built during the United States Force's Pacific campaign in 1943, constructed on reclaimed land in very close proximity to the coastline. Like most other PICs, which predominantly rely on their airports for bringing tourists into their countries, the Funafuti Airport is Tuvalu's strategic lifeline. Tourism accounts for roughly half of all arrivals. Given the shortage of work opportunities in Tuvalu, a migrant work culture has developed in which many rely on air services to reach work destinations. Travel for education, health and family connections is also common.
9. **Climate change poses increasing threats to aviation infrastructure assets and operations in Tuvalu.** The runway of Funafuti International Airport is currently in a distressed condition, showing multiple areas of ruptures and blisters, which negatively impacts safe operations. Recent damage records indicate that these defects are due to climatic events, i.e., a combination of heavy rainfall and tidal movements. During extreme rainfall events, the drainage system is not capable of providing adequate runoff, and the runway surface floods. Although the government has been providing patching/repair and maintenance works, defects remain evident on the runway pavement and are likely to worsen overtime and more rapidly due to climate change. Without proper rehabilitation, including a stringent asset management and maintenance regime, the runway remains perpetually at risk of further degradation toward unserviceability.
10. **The aviation sector in Tuvalu is overseen by the Department of Civil Aviation (DCA), which is under the Ministry of Transport, Energy, and Tourism (MTET).** The regulation of civil aviation activity in Tuvalu is detailed in the Civil Aviation Act 2008, as amended by the 2014 Amendment Act, and which prescribes the functions of the Minister, and the functions and powers of the Director of Civil Aviation. The Act also provides for adoption of other States' civil aviation rules (Tuvalu has adopted New Zealand's rules). The DCA is divided into three divisions and is responsible for the whole of the aviation sector in Tuvalu, including both regulatory and operational matters. The DCA also plays the role of commercial airlines' agency, carrying out their operations activities and acting as a point of contact for the airlines in the country. Currently, the DCA employs six technical staff, out of which three are females. The Airport Manager reports to the Director of DCA and has Flight Service and Airport operations staff, including ground handling and terminal staff.
11. **Since 2011, the World Bank has been supporting the aviation sector in Tuvalu through the ongoing Tuvalu Aviation Investment Project (TvAIP)⁹ under PAIP.** The Government of Tuvalu (GoTv) approached

⁹ The original TvAIP financing approved December 13, 2011 was US\$ 11.85 million. This was followed by four Additional



the World Bank in 2011 for support in improving the efficiency and safety of the aviation sector. This resulted in the formulation and commencement of the Tuvalu Aviation Investment Project (TvAIP) and the project objective was “to improve operational safety and oversight of international air transport infrastructure” in Tuvalu, which would be achieved through ensuring infrastructure and operations of Funafuti International Airport met International Civil Aviation Organization (ICAO) standards, and improving the sustainability of the airport and civil aviation of Tuvalu.

12. **Majority of the project activities under TvAIP have been completed by 2019 prior to the COVID-19 pandemic while a few critical activities remain uncomplete.** The complete activities include the following: (i) rehabilitation of the taxiway and apron including storage facilities for water runoff; (ii) construction of a new terminal and control tower; (iii) provision of air traffic control equipment; (iv) installation of new automatic weather monitoring, safety and security equipment; (v) provision of the satellite communications network; (vi) a survey of obstacles infringing on the airport; (vii) provision of fire safety equipment; (viii) provision of equipment for the maintenance of aerodrome facilities; (ix) construction of a fire tender shelter; (x) resurfacing and maintenance of road infrastructure, including installation of solar street lighting; (xi) provision of technical assistance to strengthen the capabilities for aviation sector management, policy, safety and security oversight; (xii) training on aviation policy, management and operations; and (xiii) carrying out of a baseline audit of the safety and security at Funafuti Airport and review progress in the implementation of the ICAO Corrective Action Plan by the Recipient. The activities that remain to be completed are: (i) the rehabilitation works of Funafuti Airport runway and its associated activities – the Project Management and Supervision Engineer consultancy services; and (ii) technical assistance on airport certification for which the consultant recruitment process will start only after the contract for the runway rehabilitation has been awarded.

13. **Rehabilitation of the runway of Funafuti International Airport is urgently needed to ensure the climate resilience for the runway and a safe operation for the airport.** The runway was rehabilitated under TvAIP in 2014 but experienced several visible failures just six months after the works were completed. In March 2015, the runway began to blister and had vent cracks which led to pavement heaving. Independent testing by Auckland University, funded by Quality Infrastructure Investment (QII) through the World Bank, was completed in May 2017 and the report¹⁰ suggested that the depressions and potholes on the runway were caused by venting of air pressure in voids under the pavement, potentially caused by tidal movements. Following a lengthy trial to find the most suitable pavement materials, detailed design and specifications for the runway rehabilitation works were completed in 2019.¹¹ A comprehensive cost and risk assessment identified the most cost-effective remedial option was to rehabilitate a 600m most critical section of the central part of the runway. Since 2019, three rounds of bidding for the runway rehabilitation works were carried out but all failed for multiple reasons, including lack of bidder’s interest due to COVID-19 travel restriction and the global supply chain crisis, and the financial proposals coming in much higher

Financings (AF) in 2013 , 2016 , 2017 and 2021, including Tuvalu Aviation Investment Project Additional Financing (P145310), Tuvalu Aviation Investment Project Additional Financing II (P157779), Tuvalu Aviation Investment Project Additional Financing III (P163856), and Tuvalu Aviation Investment Project Additional Financing IV (P176893).

¹⁰ Implications of Sea Level Rise on Coastal Pavement Infrastructure: A Case Study on the Funafuti Airport Runway (Tuvalu), May 2017

¹¹ GHD Funafuti International Airport Runway Improvements Final Detailed Design Report, July 2019



than the Engineer's estimate.¹² As a result, TvAIP cannot complete the rehabilitation works prior to its closing date of June 15, 2023.

14. **The runway rehabilitation is also essential for ensuring a reliable regional and international air connectivity for Tuvalu.** There is only one scheduled commercial flight connection to Tuvalu, which is Fiji Airways flight from Suva, Fiji. Through Suva and Nadi, a largest international hub airport in the region, Tuvalu is connected to many destinations in North America, Asia, Australia, and New Zealand, and other Pacific countries. Before the COVID-19 pandemic, the flight between Tuvalu and Fiji was operated three times weekly. The flight was suspended during the COVID-19 pandemic and has resumed on September 15, 2022 with one flight per week and on January 1, 2023 with three per week. However, the runway conditions still remain as a risk for the airline. The runway rehabilitation works are urgently needed to build more confidence to the airline in having a reliable scheduled flight to Tuvalu, and eventually to promote a better regional and international air connectivity through higher frequency, more destinations, and participation of other airlines.
15. **In addition, the Funafuti International Airport has not yet managed to obtain aerodrome certification based on ICAO standards due to multiple safety concerns.** The airport is currently under a temporary self-certification scheme in order to allow aircraft operations on a provisional basis. TvAIP has supported various safety and security countermeasures. However, a formal Aerodrome Operator Certificate based on international ICAO standards and best practices has not yet been obtained due to a number of safety and security deficiencies. In February 2023, PASO conducted an on-site Pre-Certification Assessment¹³ which identified various observations and actions that are needed to be addressed by the respective authorities in Tuvalu to achieve aerodrome certification. The assessment proposed 14 actions required for obtaining the certification, which includes safety of air navigation and critical systems, obstacles near the runway, fire rescue provisions, as well as completion of management manuals and systems of regular safety trainings and emergency practice to maintain competency.
16. **An internship program under TvAIP has successfully promoted junior people to obtain basic business and technical operation skills, including females.** The internship program is 6-month long to obtain professional experiences related to the aviation sector. The program is open to any Tuvaluan citizens, especially focusing on those who have just finished their studies from a secondary school and do not have a chance to get a formal academic training. Selection process for interns involves thorough screening of applicants on their academic background, work experiences and their basic ability to work. Evaluation is conducted by a panel of 4 or 5 members carefully selected from people relating to TvAIP such as the MOF, and MTET and other PMUs. The final evaluation report will be endorsed by MTET. The program provides online courses on procurement and contract management. At the end of the program, successful interns will receive a certificate. More than 40 interns have participated in the program and 50% of them are females. Four of them were hired as staff position after the program.
17. **A permanent arrangement for an office of Tuvalu National Council of Women (TNCW) remains pending under TvAIP.** TNCW provides job opportunities to women particularly from outer islands through

¹² Procurement activity numbers MCT/ICBW/T A15 2A, MCT/ICBW/T A15 2A-3 and TO-TFSU-297400-CW-RFB. The Government's evaluation panel discussed the reasons of the failed bidding and concluded that market remoteness as well as ongoing regional demand for civil works contributed to limited market interest.

¹³ Pre-Certification Assessment Report 001-TUV-2023, Funafuti International Airport Part 139 Aerodrome, PASO, 21-25 February 2023



operating a cafeteria and handicraft shop. Their office used to be located within the airport terminal building but needed to be relocated to outside of the terminal when the new terminal building was constructed by TvAIP. As of April 2023, their office, located right next to the new terminal, is temporary and a permanent arrangement for their office is still pending. Necessary actions to ensure that TNCW can continue to operate as before are included in the Environmental and Social (E&S) Post-Closure Action Plan (PCAP) of TvAIP.

18. **A proposed new project, Tuvalu Safe and Resilient Aviation Project (TuSRAP) will support rehabilitation of Funafuti International Airport runway and improvement of safety and resilience of the Tuvalu's aviation sector.** GoTV and the World Bank have agreed to proceed with a direct contracting arrangement for rehabilitation of the runway to pre-empt a critical runway failure that would undermine safe airport operations.¹⁴ The proposed contractor advised GoTV that works can commence in October 2023 and be completed by August 2024, due to the human resource and supply chain constraints in the region. Such a late start of the works would most likely face further cost inflation. Accordingly, GoTV requested the World Bank to finance a new project, through a request letter dated January 12, 2023, to ensure sufficient funding and time for completion of the proposed rehabilitation works. The new project will also support MTET in implementing the safety and security actions required for obtaining an aerodrome certificate in accordance with the ICAO standards. These activities were included in TvAIP but not fully completed prior to the closing date of TvAIP. Finally, the new project will support a continuation of the internship program which has been conducted by TvAIP, and implementation of TvAIP E&S PCAP, including improvement of their office.

19. **Condensed Procedures are required to accommodate the urgent need of assistance because of a natural or man-made disaster and to respond to capacity constraints because of specific vulnerabilities of small states.** Application of paragraph 12 of Section III of the World Bank Policy for Investment Project Financing (IPF) and Condensed Procedures can be triggered based on (i) urgent need of assistance because of a natural or man-made disaster or (ii) capacity constraints because of fragility or specific vulnerabilities of small states. The circumstances qualify as a situation of urgent need of assistance because of a natural disaster as without proper rehabilitation, there is a high-risk of total failure of the airport pavement in the near future that would create a preventable human-made disaster. Funafuti Airport is the only airport for the entire country, thus maintaining its safe operations is critical and urgent, not only for supporting recovery from the COVID-19 pandemic, but to also supply basic goods via air cargo for emergency response and humanitarian aid after disasters. Use of emergency procedures is also justified in response to capacity constraints because of specific vulnerabilities related to small states. The recent World Bank-supported projects in Tuvalu have highlighted key capacity limitations, including capacity of the local project implementation teams and setting up realistic project timelines. The Application of Paragraph 12 of Section III of the IPF Policy and Condensed Procedures was approved by the Country Director for Papua New Guinea and Pacific Islands on Jan 17, 2023.

20. **Series of Project Objective and Phases.** The proposed project is part of the 'Pacific Aviation Investment

¹⁴ Procurement activity number TO-TFSU-320299-CW-DIR. The direct contracting is justified from the following: (i) the current market has not responded to the scale and nature of the works (failure of three rounds of bidding), and (ii) the runway rehabilitation works are a critical action to maintain safe operations for the Funafuti airport, the only gateway to Tuvalu. The direct contracting has been agreed by the World Bank based on the WB Procurement Regulations, clause 6.9.d. the case is exceptional.



Program' (PAIP) Series of Projects (SOP) financed by the World Bank, with support from Australia and New Zealand governments through Pacific Region Infrastructure Facility (PRIF). The objective of the PAIP is to improve operational safety and oversight of international air transport and associated infrastructure. The projects under PAIP have been investing in infrastructure, capacity development, and regulatory oversight and contributing to the regional aviation sector improvement. The program, originally financed through an Adaptable Program Loan, was approved in December 2011. Prior phases of the program include Kiribati, Tonga, and Tuvalu (Phase I), Samoa (Phase II), Vanuatu (Phase III), and Solomon Islands (Phase IV)¹⁵. The Pacific Aviation Safety Office (PASO) reform project is also part of PAIP. Tuvalu was identified at the onset as a potential participant in PAIP, as it meets the PAIP eligibility criteria and will benefit from the breadth of information and experience accumulated under PAIP.

C. Proposed Development Objective(s)

Development Objective(s) (From PAD)

21. To improve the safety and resilience of the Recipient's aviation sector and to ensure reliable regional air connectivity.

Key Results

22. Progress will be measured against the following PDO-level results indicators (see section VII for the Results Framework):
 - a) Funafuti airport runway made climate resilient (percentage). This indicator will measure the improvements to aviation resilience.
 - b) Safety and security at Funafuti International Airport improved according to ICAO standards (percentage). This indicator will measure improvements in aviation safety and security.
 - c) Capacity of civil aviation safety management improved (Yes/No). This indicator will measure improvements to safety capacity within the aviation sector.
 - d) Reliable regional air connectivity to Tuvalu maintained or increased (Yes/No). This indicator will measure reliability of regional air connectivity to Tuvalu.

D. Project Description

23. **The proposed project focuses on developing a safe and resilient aviation sector building on the achievements of TvAIP.** This is to be achieved through the following components: (a) Component 1: Safe and Resilient Airport Infrastructure Solutions, (b) Component 2: Strengthening Capacity of the Aviation Sector, and (c) Component 3: Project Implementation Support..
24. **Component 1: Safe and Resilient Airport Infrastructure Solutions (approximately US\$19.0 million, US\$10.34 million of which will be financed by Regional IDA).** This component will improve the climate

¹⁵ PAIP has invested in infrastructure, capacity development, and regulatory oversight to improve operational safety and oversight of international air transport infrastructure. The program, originally approved in December 2011, includes Kiribati (P128938), Tonga (P128939), and Tuvalu (P128940) in Phase I, Samoa (P143408) in Phase II, Vanuatu (P154149) in Phase III, and Solomon Islands in Phase IV. Of these, the projects in Kiribati, Tonga, Samoa, and Vanuatu have been completed. It has a PDO of improving operational safety and oversight of international air transport (and associated) infrastructure.



resilience and safety of Funafuti International Airport infrastructure, thereby contributing to ensuring reliable regional air connectivity. The following activities are proposed: (i) rehabilitation and repairs of the runway to mitigate runway failure risk due to water infiltration exacerbated by tidal and sea level impacts; (ii) an engineering consultancy to supervise runway rehabilitation and repair works; and (iii) provision of navigation and operational safety equipment and associated facilities to enhance operational safety, in particular, during bad weather with low visibility.¹⁶ Component 1 is assigned to Pillar 3 of GCRF.

25. **Component 2: Strengthening Capacity of the Aviation Sector (US\$2.1 million).** This component will finance activities that will improve the capabilities of regulators and operators in aviation sector management, policy, resilience, safety and security oversight, including (i) provision of technical advisory support to DCA on safety and security oversight, regulatory compliance, aerodrome and operational certification, airport asset maintenance, and airport infrastructure resilience; (ii) support to the implementation of the safety improvement actions, including implementation of a wildlife management plan¹⁷; (iii) Improvement of aviation operational safety and resilience management strategies, manuals and protocol in accordance with ICAO standards; (iv) training on aviation operational safety and security, ICAO-based management protocols, aviation policy, and climate resilient asset management; and (v) support to DCA’s internship program through provision of stipends to interns, focusing on support to females in the sector, Component 2 is assigned to Pillar 4 of GCRF.

26. **Component 3: Project Implementation Support (US\$1.9 million).** This component will finance the provision of technical, advisory, operational, and administrative support to MTET. This will include the following: (i) hiring of MTET Project Management Unit (PMU) staff including specialists in the areas of project management, coordination, environmental and social (E&S) risk management, procurement, contract management, financial management (FM), communications, monitoring and evaluation (M&E), and assistants; (ii) recruitment of technical advisers to support the PMU in project implementation with appropriate technical advice on the relevant topics; (iii) technical and operational assistance to the project implementation through operating costs; (iv) Other priority activities on project management, coordination, supervision, E&S risk management, procurement, contracts management, FM, communication, and M&E; and (v) support to TNCW activities in accordance with the TvAIP E&S PCAP.

Legal Operational Policies

	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

¹⁶ Under TvAIP, the two systems, Navigation Aids (NavAids) and VSAT were acquired and installed. However, this equipment was damaged and not operational due to the fire in August 2017. The project will finance the installation of the equipment for safety improvement subject to the termination of the previous equipment acquisition contract. Firefighting equipment to be acquired under TuSRAP is additional to the ones provided by TvAIP, which was recommended by the PASO assessment.

¹⁷ A support to the wildlife management plan is limited only to prevent stray dogs and escaped pigs from entering the runway during flight operations. No other species will be affected or targeted. The wildlife management plan was prepared under TvAIP.



Summary of Assessment of Environmental and Social Risks and Impacts

27. **The E&S risks and impacts associated with project activities are not expected to be significant and will be easily mitigated in a predictable manor through the implementation of the Project's E&S instruments.** Accordingly. The project's E&S risk rating is considered as 'Moderate'. The area of influence of the project is limited as the proposed civil works and the equipment replacement/installation will be undertaken on disturbed land already used for construction and storage of materials. Project construction materials will be imported to minimize the environmental impacts on the very limited local natural resources. The planned civil work of runway rehabilitation expects approximately 10 expatriate influx workers, but the impact of the influx will be managed under the labor management plan.
28. **The E&S risk management instruments have been prepared while the existing Environmental and Social Management Plan (ESMP) and Labor management Plan (LMP) will be updated later with interim requirements included in the Environmental and Social Commitment Plan (ESCP).** The environmental risks associated with the rehabilitation of the runway and the installation of navigational aiding system are addressed in the existing ESMP that were prepared for TvAIP under the World Bank safeguard polices. PMU along with support from CPMO E&S staff will upgrade the existing instruments prepared for TvAIP to address ESF gaps. There are minor, temporary impacts on informal, intermittent recreational uses of the temporary asphalt plant, laydown and stockpile sites.
29. **An E&S PCAP for one outstanding resettlement issue from TvAIP has been prepared, and actions included under Component 3 to correct this outstanding issue.** The former airport terminal that was demolished to make way for the new terminal previously housed a café, retail space and workspace operated by the TNCW. Several site and accommodation options have been provided to the TNCW; however, they have not been able to restore their lost livelihoods at these locations. They are currently in temporary accommodation and operating aspects of their former activities but require a sustainable solution. The TvAIP PCAP details the steps to be taken including a preparing Resettlement Summary Report, preparing a site and development options report, in-depth consultation with the TNCW on options, and execution of the preferred option, including physical works, as appropriate. The completion of the TvAIP PCAP is one of the ESMP requirements.
30. **The existing ESMP has identified potential risks and impacts associated with rehabilitation of a section of the existing asphalt pavement and installation of navigational aiding system.** Mainly, these will result in the downstream construction-related nuisances such as noise, dust, and exhaust emissions, generation of non-hazardous construction wastes, storage and handling of fuels and oil for construction vehicles and accidental damage of assets due to construction activities.

E. Implementation

Institutional and Implementation Arrangements

31. **The project implementation will be managed by MTET.**¹⁸ A PMU for TuSRAP will be established within

¹⁸ In the previous PAIP series of projects, there had been regional arrangements for project implementation in place, such as Technical and Fiduciary Services Unit, a steering committee, a regional procurement evaluation committee, etc. These are no longer available, and TuSRAP will be managed via its own IA and PMU.



MTET, which will be responsible for all the activities under Components 1, 2, and 3. It will cover the areas of technical, E&S risk management, procurement, FM, M&E, and stakeholder engagement. The PMU will be staffed with a Project Manager, based in Funafuti, with additional PMU project management support staff to be recruited. The PMU will be supported by the Department of Civil Aviation (DCA) under MTET and the Central Project Management Office (CPMO) under MOF.

32. **PMU implementation support.** The PMU will be established no later than two months after the effective date of the Financing Agreement and will be responsible for day-to-day management and implementation of the project. The PMU will coordinate the implementation of TuSRAP with MTET, DCA, and the CPMO. The PMU will also be responsible for implementing TuSRAP in accordance with annual work plans and budgets, which are to be prepared no later than four months after the effective date of the Financing Agreement and July 1 of each subsequent year during project implementation and will detail TuSRAP's activities and eligible expenditures. The Project Manager, who leads the PMU, will be responsible for working collaboratively with all stakeholders to facilitate implementation by providing technical support and working with the CPMO to facilitate the procurement, budgeting, and work programming process.
33. **CPMO implementation support.** The CPMO was established within MOF as part of the Tuvalu Learning Project¹⁹ and is a functional unit that supports the implementation of the World Bank portfolio, which has grown quickly and is anticipated to expand even further over the next few years. GoTv identified the need for strong implementation of the World Bank portfolio and to look for ways to maximize efficiencies. The CPMO provides support on core implementation functions needed for all projects. Under TuSRAP, the CPMO will provide project implementation advisory and technical support to the PMU in the areas of project management, procurement, FM, E&S risk management, M&E, and outreach and communications. The individuals responsible for these functions report to the CPMO director and provide services and hands-on support to the MTET for preparation, implementation, and capacity-building activities. Project implementation responsibilities however remain with the PMU.
34. **Role of MTET and the CPMO with respect to contract signing and invoicing.** All contracts with consultants, contractors, and suppliers will be signed by the MTET secretary, with the administration and contract management tasks of the contract being implemented by the PMU as their day-to-day responsibility. The MTET secretary will sign off on all consultant and contractor invoices and authorize the PMU to make payments. However, before doing so, the PMU will consult with the CPMO to ensure that all the due diligence has been completed and is satisfactory, where necessary.
35. **A Project Steering Committee (PSC) will provide strategic guidance and oversight to the project.** The PSC will be established and chaired by a secretary of MTET. The PSC will consist of representatives from MTET and other relevant entities. The PSC will meet regularly and provide strategic guidance and oversight to the project. The establishment of a PSC is common in World Bank-financed projects in Tuvalu.

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¹⁹ P171681



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APPROVAL

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