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IDA/R2017-0323/1

October 30, 2017

Closing Date: Thursday, November 16, 2017 at 6 p.m.

FROM: Vice President and Corporate Secretary

### Tuvalu

### **Tuvalu Aviation Investment Project**

### Third Additional Financing and Restructuring

### **Project Paper**

Attached is the Project Paper regarding a proposed third additional grant and restructuring to Tuvalu for the Tuvalu Aviation Investment Project (IDA/R2017-0323), which is being processed on an absence-of-objection basis.

### Distribution:

Executive Directors and Alternates
President
Bank Group Senior Management
Vice Presidents, Bank, IFC and MIGA
Directors and Department Heads, Bank, IFC and MIGA

### Document of The World Bank

### FOR OFFICIAL USE ONLY

Report No: PAD2468

### INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT PAPER

ON A

PROPOSED THIRD ADDITIONAL FINANCING

IN THE AMOUNT OF SDR6.2 MILLION (US\$ 8.75 MILLION EQUIVALENT)

TO

**TUVALU** 

AND A PROPOSED RESTRUCTURING

FOR THE

TUVALU AVIATION INVESTMENT PROJECT

October 26, 2017

Transport & ICT Global Practice EAST ASIA AND PACIFIC REGION

This document is being made publicly available prior to Board consideration. This does not imply a presumed outcome. This document may be updated following Board consideration and the updated document will be made publicly available in accordance with the Bank's policy on Access to Information.

### **CURRENCY EQUIVALENTS**

(Exchange Rate Effective 31 August, 2017)

Currency Unit = Australian Dollar (AUD)

AUD 1 = US 0.798SDR 1 = US 1.41339

FISCAL YEAR

January 1 – December 31

### ABBREVIATIONS AND ACRONYMS

AF Additional Financing

ESMP Environmental and Social Management Plan

FM Financial Management FOREX Foreign Exchange

FUN Funafuti International Airport

GBV Gender Based Violence GoTv Government of Tuvalu

GRM Grievance Redressal Mechanism

ICAO International Civil Aviation Organization IDA International Development Association

NPF New Procurement Framework
OHS Occupational Health and Safety
PAD Pacific Aviation Document

PAIP Pacific Aviation Investment Program

PAYE Pay-As-You-Earn

PDO Project Development Objectives

PP Project Paper

PPSD Project Procurement Strategy Document PRIF Project Regional Infrastructure Facility

SDR Special Drawing Rights

TF Trust Fund

TFSU Technical and Fiduciary Services Unit TvAIP Tuvalu Aviation Investment Project

USD United States Dollar

VAC Violence Against Children VSAT Very Small Aperture Terminal

WB World Bank

Vice President: Victoria Kwakwa
Country Director: Michel Kerf

Senior Global Practice Director:

Practice Manager/Manager:

Task Team Leader:

Jose Luis Irigoyen
Almud Weitz

Nora Weisskopf

### TUVALU TUVALU AVIATION INVESTMENT PROJECT ADDITIONAL FINANCING III (P163856)

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Annex 1: Revised Results Framework and Monitoring Indicators

### ADDITIONAL FINANCING DATA SHEET

Tuvalu

Tuvalu Aviation Investment Project Additional Financing III (P163856)

### EAST ASIA AND PACIFIC

GTI02

Basic Information – Parent											
Parent P	roject ID:	P12	P128940		Origina	Original EA Category: B		: В	B - Partial Assessment		
Current	Closing Date	Date: 30-Jun-2018									
			Basic Inform	atio	on – Addit	tio	nal Financir	ng (A	F)		
Project I	D:	P16	63856				al Financing m AUS):	Re	estructu	ring, Scale Up	
Regional Presiden		Vic	toria Kwakwa		Propos	ed	EA Categor	y:			
Country	Director:	Mic	chel Kerf		Expect Date:	ed	Effectivenes	ss 07	-Feb-20	018	
Senior G Director	lobal Praction:	ce Jos	Jose Luis Irigoyen			ed	Closing Dat	e: 30	-June-2	2020	
Practice Manager	:/Manager:	Alr	Almud Weitz		Report	Report No: PA			PAD2468		
Team Le	eader(s):		ra Weisskopf, ristopher R. Be	enne	tt						
					Borrow	ver	•				
Organiza	ation Name		Contact		Title	tle Telephone			Email		
	of Finance a ic Developm		Hon. Maatia Toafa		Minister	finister 68820201			mtoafa@gov.tv		
		,							,		
Projec	t Financing	Data -	Parent (Paci	fic A	Aviation I	nv	estment - Tu	uvalu	-P1289	40) (in USD Million)	
Key Dat	es										
Project	Ln/Cr/TF	Status	Approval Date	Sig Da	gning	1	ffectiveness	Orig Clos Date	ing	Revised Closing Date	
P12894 0	IDA- D1090	Effect	i 31-Mar- 2016	20- 201	-May- 16	24	4-Jun-2016	30-Ji 2018		30-Jun-2018	
P12894 0	IDA- H7490	Effect	i 13-Dec- 2011	17- 201	-Feb- 12	20	0-Mar-2012	31-E 2016		30-Jun-2018	

P12894 0	IDA- H8960	Effecti ve	01-Nov- 2013	05-De 2013		01-Apr-2014	31-Dec- 2016	30-Jun-20	18
P12894 0	TF-12703	Effecti ve	30-Jul-201	12 27-Au 2012	_	27-Nov-2012	31-Dec- 2016	30-Jun-20	18
Disburse	ments	<del></del>	<del>1</del>	T	<del></del>		Γ	T	T <sub>2</sub> ,
Project	Ln/Cr/TF	Status	Currency	Original	Revised	d Cancelled	Disbursed	Undisbursed	% Disbursed
P12894 0	IDA- D1090	Effecti ve	USD	2.88	2.88	0.00	0.16	2.71	5.50
P12894 0	IDA- H7490	Effecti ve	USD	11.85	11.85	0.00	10.70	0.00	90.26
P12894 0	IDA- H8960	Effecti ve	USD	6.06	6.06	0.00	3.92	1.64	64.61
P12894 0	TF-12703	Effecti ve	USD	0.17	0.17	0.00	0.15	0.02	86.53
Proje	ct Financii	ng Data				valu Aviation (in USD Milli		nt Project Ad	lditional
[ ] L	oan [ ]	Grant		•			,		
[ ] C	redit [ ]	Guara	antee [ ]	Other					
Total Pro	ject Cost:	10.0	15		Total B	Bank Financing	g: 8.75		
Financing	g Gap:	0.00							
Finan	cing Source	e – Addi	itional Fin	ancing (A	<b>AF</b> )				Amount
IDA Grai	nt								8.75
Governm	ent of Tuva	alu (Fore	gone Taxe	s)					1.30
Total									10.05
Policy W	aivers								
Does the respects?		art from	the CAS in	a content	or in oth	her significant	No		
Explanat	ion								
Does the	Does the project require any policy waiver(s)?  No								
Explanat	ion								
				Too	Camp	4			
Team Composition									

Bank Staff	· · ·		l	1~				
Name	Role		Title	+	ialization	Unit		
Nora Weisskopf	Team Lead (ADM Responsible		Transport Analyst	Avia	tion	GTI02		
Christopher R. Bennett	Co-Team Leader		Lead Transport Specialist	Engi	neering	GTI02		
Cristiano Costa e Silva Nunes	Procurement Specialist (ADM Responsible)		Senior Procurement Specialist	Proci	ırement	GGO08		
Stephen Paul Hartung	Financial Management Specialist		Financial Management Specialist	Finar Mana	ncial agement	GGO20		
Christopher J. De Serio	Team Member		Transport Specialist	Trans	sport	GTI02		
Ross James Butler	Safeguards Specialist		Senior Social Development Specialist	Social		GSU02		
Loren Jayne Atkins	Counsel		Associate Counsel	Legal		LEGES		
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Penelope Ruth Ferguson	Team Mem	ber	Consultant	Envi	ronment	GENDR		
Deviyani Dixit	Team Mem	ber	Consultant	Gend	ler	GTI02		
Extended Team								
Name	Name Title					Location		

Locations					
Country	First Administrative Division	Location	Planned	Actual	Comments
Tuvalu	Funafuti	Funafuti		X	
			·		•
		Instituti	onal Data		
Parent (Pac	eific Aviation Investm	ent - Tuvalu-P12	8940)		
<b>Practice Ar</b>	ea (Lead)				
Transport &	ICT				
Contributir	ng Practice Areas				
Additional	Financing Tuvalu Av	iation Investment	Project Additi	onal Fin	ance III (P163856)
Practice Ar	ea (Lead)				
Transport &	ICT				
Contributin	ng Practice Areas				
	Consultants (Wi	ll be disclosed in t	he Monthly On	erationa	al Summary)

Consultants Required? Yes.

### **Tuvalu Aviation Investment Project Additional Financing III (P163856)**

### I. Introduction

- 1. This Project Paper (PP) seeks the approval of the Executive Directors to: (i) provide an additional IDA grant in a total amount of SDR6.2 million (US\$8.75 million equivalent, comprised of US\$2.90 million equivalent national IDA grant and US\$5.85 million equivalent regional IDA grant) to the Tuvalu Aviation Investment Project (TvAIP) (IDA Grants H7490/H8960/D1090 and Pacific Regional Infrastructure Facility (PRIF) Grant TF12703); and (ii) restructure the project to: (a) support the Recipient's participation in the International Civil Aviation Organization; (b) to include taxes as eligible expenditures; (c) adapt the results framework and disbursement projections; and, (d) extend the closing dates of the existing project financings (IDA Grants H7490/H8960/D1090 and PRIF Grant TF12703) to 30 June 2020.
- 2. The proposed Additional Financing (AF) is being prepared under Paragraph 12 of OP 10.00, which provides for exceptions to normal policy requirements in cases where the borrower/beneficiary is deemed by the Bank to: (i) be in urgent need of assistance because of a natural or man-made disaster or conflict; or (ii) experience capacity constraints because of fragility or specific vulnerabilities (including for small states). Tuvalu meets the above-defined requirements set out in (ii) of a country experiencing capacity constraints because of fragility and meets the eligibility criteria on the basis of the small states exception. Furthermore, the proposed emergency maintenance and repair works are urgent to ensure that runway safety is guaranteed and airport operations are not interrupted, which would have a devastating impact on the Tuvaluan economy. Under the provision of Paragraph 12 of OP10.00 and with approval from the Country Director at the Decision Review meeting, Technical Discussions were held upon completion of appraisal and permission was granted to upgrade Technical Discussions to Negotiations once all requirements were met.
- 3. The proposed AF would finance the following activities:
  - (i) Component A: Airport and Associated Airport Infrastructure Investments (US\$8.55 million equivalent): (i) design and construction of runway repairs and resiliency measures addressing pavement defects on Funafuti runway that have resulted from water pressure under the recently paved runway. This will include pilot testing of a number of alternative remedial options throughout the 2017-18 cyclone season which will inform the final design; (ii) emergency interim maintenance and monitoring regime for pavement defects; (iii) the supervision cost for the runway civil works and construction of the flight services center and fire tender shelter—including through the defect liability period; (iv) ongoing monitoring of the impact of the civil works on the sub-runway water pressures; and, (v) a budget shortfall under the parent project due to foreign exchange fluctuations and higher than anticipated supervision costs.
  - (ii) Component C: Project Support (US\$0.2 million equivalent): (i) enhanced Gender Based Violence (GBV) and Violence Against Children (VAC) training, prevention and

<sup>1</sup> Comprising a National IDA contribution of SDR2.1 million (or approximately US\$2.90 million equivalent) and a Regional IDA contribution of SDR4.1 million (or approximately US\$5.85 million equivalent).

support activities; (ii) Occupational Health and Safety (OHS) and ESMP monitoring tools and trainings for civil works contractors; and (iii) support the Recipient's participation in International Civil Aviation Organization (ICAO), all of which are new activities under TvAIP.

- 4. In addition, the proposed AF includes a Level 2 restructuring of TvAIP to:
  - Revise the Results Framework and monitoring indicators to reflect the revised closing dates and include additional indicators related to GBV and VAC as well as the runway repairs and resiliency works;
  - Extend the closing dates of the existing project financings (IDA Grants H7490, H8960, and D1090 and PRIF TF1270) by 24 months to 30 June 2020 to cover the defect liability period for the proposed civil works;
  - Support the Recipient's participation in ICAO by making ICAO membership fees an expenditure that is eligible to be financed out of IDA grants H7490, H8960 and D1090;
  - Retroactively make IDA grants H7490, H8960 and D1090 inclusive of taxes to enable PAYE and international travel related taxes to be financed:
  - Change the disbursement estimates; and,
  - Change the components and costs.
- 5. The above modifications proposed as part of this restructuring are within the scope of the current TvAIP Project Development Objective (PDO). No additional safeguard policies will be triggered, and there will be no change to the current (Category B) safeguards classification. There will be no changes to the PDO, implementation arrangements or financial management arrangements currently in place for TvAIP.

### II. Background and Rationale for AF

- 6. **Country Context.** Located approximately 1,100 km north of Fiji, Tuvalu consists of nine islands, with a total land area of around 26 km<sup>2</sup>. Fongafale, the main island within Funafuti atoll, is home to the capital and just under 50 percent of the country's population of some 10,000 people. It is also where the country's hospital, primary school, a branch campus of the University of the South Pacific, radio station, main port, as well as most of the businesses are located. The island is in most places less than 75 m wide, which provides limited space for any development.
- 7. Tuvalu is a very low-lying country with a maximum elevation of approximately 4.5 meters. These geographical features have considerably exposed Tuvalu to the impacts of climate change. Storm surges, king tides and floods are common occurrences. These have intensified due to changes in weather patterns, and sea level rise (estimated by some at about 5 mm/year). The more frequent and extreme

weather events such as tropical storms and cyclones have resulted in significant damage to the islands and their inhabitants in the past<sup>2</sup>.

- 8. The runway of Funafuti International Airport (FUN), which is located at the widest part of Fongafale (about 650m), covers around one third of the whole island and plays a key role in connecting Tuvalu to the region. Unlike most other Pacific Island Countries, which predominantly rely on their airports for bringing tourists into their countries, FUN is Tuvalu's strategic lifeline. Tourism accounts for roughly half of all arrivals, however, given the shortage of work opportunities in Tuvalu there is a significant migrant work culture reliant on air travel to reach associated work destinations. Travel for education, health and family connections are also common.
- 9. **Project Background.** On December 13, 2011, IDA approved the Pacific Aviation Investment Program (PAIP), a regional, horizontal Adaptable Program Loan that consists of a series of projects designed to ensure that critical aviation infrastructure meets operational safety requirements, and to strengthen regulatory compliance of international air transport of participating countries in the region. Tuvalu was included in Phase 1 of PAIP. TvAIP was approved with a US\$11.85 million equivalent IDA grant (IDA Grant H7490) and a US\$0.17 million equivalent grant from the Pacific Regional Infrastructure Facility (PRIF) (PRIF Grant TF12703).
- 10. In 2013 and in 2016, additional IDA grants of US\$6.06 million equivalent and US\$2.88 million equivalent, were provided. The objective of the first Additional Finance (IDA Grant H8960-TV) (AF1) in 2013 was to scale up the ongoing TvAIP to support the resurfacing of roads on Fongafale Island, which provide access to FUN, and the building of a water cistern under the new terminal. The objective of the second additional financing (IDA Grant D1090-TV)(AF2), was to address a funding gap under the project and extend the closing dates for all funding sources (IDA Grants H7490, H8960, and PRIF TF12703). Table 1 shows the total financing, including this AF3.

**Table 1: TvAIP Financing** 

	IDA						
	ational Grant		egional Grant	]	PRIF	ŗ	Γotal
Original Project	\$ 3.50	\$	8.35	\$	0.17	\$	12.02
AF1	\$ 6.06	\$		\$		\$	6.06
AF2	\$ 0.88	\$	2.00	\$		\$	2.88
Proposed AF3	\$ 2.90	\$	5.85	\$		\$	8.75
Total	\$ 13.34	\$	16.20	\$	0.17	\$	29.71

Note: The Government of Tuvalu provided counterpart financing in the form of foregone taxes. This is not reflected in Table 1.

11. The original PDO was "to improve operational safety and oversight of international air transport infrastructure". This PDO was modified as part of AF1 to reflect the investment in the access road and water infrastructure, and updated to: "to improve the safety and security of air transport and associated infrastructure". The PDO will remain unchanged for this AF3.

3

<sup>&</sup>lt;sup>2</sup> The devastating Tropical Cyclone Pam, for example, which ravaged the region in early 2015, resulted in large scale damage of 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).

- 12. *Project Components*. The project (including the original, AF1, and AF2) consists of three components:
  - Component A: Airport and Associated Airport Infrastructure Investments (US\$18.78 million including contingencies). This component finances aviation and associated infrastructure improvements. Investments include: (i) rehabilitation of the runway, taxiway and apron (including, if viable 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 navigation aids, automatic weather monitoring, safety and security equipment; (v) provision of the satellite communications network; (vi) conducting a survey of obstacles infringing on the airport; (vii) provision of fire safety equipment; (viii) provision of design and supervision consulting services required for implementation of the infrastructure investments; (ix) provision of equipment for the maintenance of aerodrome facilities; (x) construction of a fire tender shelter; (xi) resurfacing and maintenance of road infrastructure, including installation of solar street lighting; and (xii) removal of solid waste.
  - Component B: Aviation Sector Reform and Training (US\$0.70 million including contingencies). Provision of technical assistance to the Ministry of Communications and Transport (MCT) and other Line Ministries for: (i) strengthening the capabilities for aviation sector management, policy, safety and security oversight; (ii) training on aviation policy, management and operations; (iii) 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; (iv) carrying out safety and security oversight audits; and, (v) carrying out a project management training program to strengthen the project management capacity of the MCT.
  - Component C: Project Support (US\$1.32 million including contingencies). This component finances the provision of technical, advisory and administrative support to MCT, other Line Ministries, the regional PAIP project management unit called the Technical and Fiduciary Services Unit (TFSU), provision of office space and equipment, services of financial auditors and annual subscriptions for the operation of the VSAT communications network during project implementation.
- 13. Project Progress. The project is in its sixth year of a seven-year implementation schedule. The project implementation and the progress towards achieving the PDO have been rated Satisfactory or Moderately Satisfactory for the entire project life. The most recent ratings (May 2017) were Satisfactory for achieving the PDO, and Moderately Satisfactory for the implementation progress. The key investments under Component A, with the exception of a combined flight services center and fire tender shelter, are completed or are under way. The GoTv has reorganized the MCT to separate airport operations from regulatory oversight. Due to the very limited number of movements there is no potential for a concession or to put in place a contract for external parties to manage the airport. Since July 2014, the GoTv has implemented: (i) PAIP Safety and Security Levy of AU\$5 on international departing passengers; and, (ii) AU\$30 departure tax as part of the ticket price. These are two key actions to help ensure the financial sustainability of the sector<sup>3</sup>.

<sup>&</sup>lt;sup>3</sup> The Safety and Security Levy is hypothecated for expenditures related only to safety and security, using a framework approved by the World Bank. The Departure Tax is used for the operations of the sector.

- 14. Safeguards. The safeguards compliance on the project is Moderately Satisfactory. Environmental and Social Management Plans (ESMPs) have been prepared and implemented for each phase of the civil works (runway, road, terminal). The supervision engineer has been overseeing the contractor's compliance with the Project ESMP, including the preparation and implementation of the Contractors' ESMP. No significant incidents or near misses have occurred to date and minor incidents have been satisfactorily addressed. In 2015 the GoTv prepared an Abbreviated Resettlement Action Plan to address expired leases covering the airport land and all land owners have agreed to renew their leases. In early 2017, the GoTv did not follow the provisions of the Resettlement Policy Framework with regard to compensating project affected people prior to cutting down trees but, once aware of the situation, moved expeditiously to address this. All payments to identified owners have been made, with only a small number of outstanding claims unpaid, awaiting clarification of ownership. The Ministry of Finance and Economic Development (MFEM) has provided a written confirmation to IDA that funding has been set aside to compensate these outstanding claims. No grievances have been reported to date.
- 15. Legal Covenants. The project is in compliance with all legal covenants.
- 16. *Disbursement*. Disbursements as of June 20, 2017, amounted to US\$10.70 million equivalent for the original IDA Grant (90 percent), US\$3.92 million equivalent for AF1 (65 percent), and US\$0.16 million equivalent for AF2 (6 percent). Disbursements of the PRIF grant amount to US\$147,000 (87 per cent).
- 17. Financial Management. Financial Management (FM) performance is currently rated as Moderately Satisfactory. There were a number of taxation issues raised in the previous FM Implementation Review, which are being progressed through project team discussions with Government. Final resolution of taxation issues will occur through the enabling treatment of taxation in the proposed project restructuring. No additional mitigation measures or conditions will need to be included in the AF. There are no overdue audits. The existing designated account will be used to receive funds from this AF. There will be no change to the disbursement methods.
- 18. The Original Project, AF1 and AF2 have been exclusive of taxes prior to this AF and restructuring. Two taxes have been incurred throughout project implementation that both the GoTv and IDA consider appropriate to be financed by the Project. These two taxes are: (i) 'Pay-As-You-Earn' (PAYE) tax for Tuvaluan consultants; and (ii) taxes incurred on travel expenses for international trips. To ensure that previously incurred and future expenses for PAYE and international travel taxes can be eligible under the Project, the restructuring will revise the legal agreements for the three existing IDA grants for this Project (IDA Grants D1090, H7490, and H896-TV) to enable the retroactive financing of taxes starting from the respective signing date of the legal agreement for each grant. Thus, the financing of taxes would be an eligible expenditure under IDA Grant D1090 starting from May 20, 2016; under IDA Grant H8960 starting from December 5, 2013; and under IDA Grant H7490 starting from February 17, 2012. Similarly, AF3 is proposed to be inclusive of taxes. The expected cost of retroactively financing PAYE tax is approximately AUD\$40,000 (US\$ 32,000 equivalent) and approximately AUD\$1,000 (US\$785 equivalent) for international travel related taxes until the Closing Date. Written confirmation has been provided by the Minister of Finance and Economic Development that all Project related costs will continue to be exempt of other domestic taxes.
- 19. *Procurement*: In July 2016 the World Bank adopted a new procurement framework to be used for all new projects, including AF. The New Procurement Framework (NPF) will be adopted for this AF and the GoTv has prepared a Project Procurement Strategy Document (PPSD) for the activities to be financed under this AF.

- 20. The project is expected to have only a small number of contracts related to:
  - Works: Civil works for the runway works; and,
  - Services: This includes: (i) the design of civil works; (ii) supervision of civil works; (iii) monitoring of runway; (iv) provision of GBV and VAC services; and (v) project management. Retroactive financing up to US\$200,000 will finance the ongoing design work for the concept design and trial preparation to be ready prior to the cyclone season, additional supervision for activities to date and the provision of GBV and VAC services.
- 21. With the agreement of the client, the contract ceiling of the Design and Supervision consultant under the parent project was exceeded by around NZD\$488,000 (approx.US\$350,000) due in part to the need of the consultant to continue supervising ongoing civil works once the ceiling was met. The outstanding invoices are currently being reviewed in detail to identify any potential questionable expenditures. No payments for invoices above the contract ceiling have been made to date and the Government recognizes that they will be liable for the costs should the Bank decline to finance.
- 22. Risk. The overall implementation risk has been recently increased from Moderate to Substantial, due to the failure to implement the agreed wildlife management plan (WMP) for the airport. The WMP is critical for airport safety as there is no perimeter fence. As a condition of negotiations, the Government of Tuvalu established a Wildlife and Domestic Animal Management Committee comprised of relevant stakeholders with Cabinet-approved Terms of Reference and adopted a time-bound plan to implement the WMP. It is expected that once the WMP is implemented the risk will be again reduced to Moderate. Some progress has recently been made with regards to the implementation of the plan. This includes the undertaking of a survey of pig pens around the airport and the identification of repair needs by the Committee. It is planned that the implementation of major elements of the WMP (e.g. dog and pig control) will be concluded by June 2018.
- 23. Rationale for AF. The proposed AF (AF3) will finance the following project activities: (i) design and construction of runway repairs and resiliency measures addressing pavement defects on Funafuti runway that have resulted from water pressure under the recently paved runway this will include the pilot testing of a number of alternative remedial options which will inform the final design; (ii) emergency interim maintenance and monitoring regime for pavement defects; (iii) the supervision cost for the runway civil works and construction of the flight services center and fire tender shelter—including throughout the defect liability period; (iv) ongoing monitoring of the impact of the civil works on the sub-runway water pressures; (v) a budget shortfall under the parent project due to foreign exchange fluctuations and higher than anticipated supervision costs; (vi) enhanced GBV and VAC prevention activities; (vii) OHS and ESMP monitoring tools and trainings for civil works contractors in accordance with standard bidding document Environmental, Social, Health and Safety requirements; and (viii) supporting the Recipient's participation in ICAO by financing ICAO membership fees.
- 24. Specifically, additional funding for works and consulting services is required due to:
  - Runway Climate Resiliency Repairs: In 2015 under the parent project the Funafuti runway was given a coarse/fine (14/7 mm) two coat surface dressing, with the fine aggregate top coat interlocking into the coarse lower base coat to provide a tight surface matrix.
    - Within six months of the runway resurfacing being completed areas of the pavement began to 'blister' and have vent cracks which led to pavement 'heaving'. According to an inspection report by the supervision consultant these were ascribed to "... a build-up of vapor pressure from trapped moisture. The up and down tidal movement below the runway pavement is capable of

displacing a large volume of air which vents through the coralline pavement structure, as can be seen by the now observable clusters of vent cracks. Rapid response to tidal movements also requires a high degree of permeability through the underlying atoll reef formation with direct connectivity to the ocean area. This action is also capable of causing blisters and upheaval of the surfacing, especially during high tides and the storm event experienced earlier this year. Further, the vent cracks allow water to enter the pavement, causing moisture build-up under the surfacing which aggravates the condition"<sup>4</sup>.

With funding from the Government of Japan through a World Bank-executed Quality Infrastructure Investment (QII) Partnerships Trust Fund grant, the University of Auckland<sup>5</sup> undertook a detailed investigation of sub-surface barometric pressures, groundwater levels and pavement properties of the damaged areas to confirm the impact of sea level fluctuations and potentially associated barometric pressures on the pavement. The study concluded that there was a correlation between the water table beneath the runway and sub-surface pressure from surface water coupled with sea tidal fluctuations. Spikes (caused by heavy rain and high tides such as those in spring) acerbated these trends and appear to have been sufficient in places to lift the pavement surface. In addition, small voids beneath the pavement became super-heated by the sun, resulting in localized pressure ruptures. This phenomenon has shown to be extremely rare and has only been observed and documented in research in a few instances, most notably at Hong Kong SAR, China airport runway and some cases in Australia. The latter may not be representative however as the defects had resulted primarily from extreme rain events rather than the combination of extreme rain, tidal influences, and rising water levels observed at Funafuti. Given the nature of these defects, and the underlying cause, any remedial works will not be covered by the contractor's defect liability period obligations as these could not have been foreseen at the design stage.

To avoid further deterioration of the runway and consequent disruption to airport operations, urgent funding is required to implement a strict interim maintenance and monitoring regime for the runway, in particular patching materials, equipment and potential technical support. In parallel, it is proposed to initiate the pilot testing of alternative long term-remedial options to inform the final design and construction technique. It is critical that the alternative solutions are installed as soon as possible to allow for monitoring over a period of 3-5 months during 2017-18 cyclone season, where rainfall is heaviest and the high spring tides arise. Given the uniqueness of the pavement defects and the limited research literature available, pilot testing prior to finalization of designs is deemed critical as it will ensure that the best suited and most cost-effective solution can be selected for final design and construction.

- Civil works supervision: Additional funding will be required to finance civil works supervision associated with the runway repairs and the defect liability period of the works as well as the combined flight services center and fire tender shelter.
- Budget shortfall: Funding of approximately US\$0.5 million to cover a budget shortfall arising from: (i) foreign exchange losses; and, (ii) a cost overrun for civil works supervision. The latter was a result of sequencing changes of the civil works undertaken to date. All civil works were

<sup>5</sup> Uniservices (2017). Implications of Sea Level Rise on Coastal Infrastructure: A Case Study on the Funafuti Airport Runway. Report to the World Bank.

<sup>&</sup>lt;sup>4</sup> AECOM (2016). Funafuti Runway and Apron Inspection Report. AECOM Consultants. Auckland.

originally planned to be undertaken simultaneously, however, due to design changes and implementation delays across the program, works were required to be undertaken sequentially resulting in significant increases in supervision costs.

- Gender-based Violence, Violence Against Children, Occupational Health & Safety and ESMP monitoring Tools and Training: The inclusion of the additional GBV and VAC activities within the restructuring reflect a renewed emphasis on these issues by the Global Practice as well as the Bank's ESHS policies. In 2016 the Bank undertook detailed analytical work which confirmed the scale and extent of GBV in the Pacific Islands. In Tuvalu forty-seven percent of women reported having experienced either physical or sexual violence consistent with results from the broader Pacific Islands. A grant has been provided to the task team from the State and Peace Building Multi-Donor Trust Fund to prepare GBV related activities for implementation under AF3. Under AF3 the following activities will be undertaken:
  - The AF will address the lack of counseling services available for victims of GBV and VAC by providing funding for the training of local counsellors, which will benefit the wider community.
  - o The development and application of several tools and trainings will be financed to strengthen awareness, monitoring and evaluation around GBV and VAC. The activities will target civil works contractors through the adoption of a 'Code of Conduct' and dedicated training for workers.
  - o AF3 will also finance the piloting of a number of tools to improve Environmental and Social Management Plan (ESMP) monitoring in the project through monitoring apps.
- *ICAO Membership Fees:* As part of this restructuring ICAO's joining fee (about US\$65,000) will be eligible to be financed under the project. There is significant benefit for Tuvalu to join ICAO including: (i) access to resources in terms of technical training and workshops; (ii) regular auditing missions to assess Tuvalu's regulatory capacity and propose remedial actions; and (iii) dedicated technical support to Tuvalu to strengthen regulatory oversight. The latter will directly support Tuvalu in meeting the PDO indicator "Resolution of safety concerns at participating airports reaches global ICAO average".
- 25. *Gender:* The AF is fully gender informed and addresses all three gender flags:
  - Analysis: As highlighted in the Systematic Country Diagnostic (SCD) and the Regional Partnership Framework (RPF) for the 9 Pacific Islands Countries (PIC-9), which includes Tuvalu, the rates of gender-based violence (GBV) are extremely high in PIC-9 countries and must be addressed as a priority. Activities addressing GBV and/or employment of women is also a key activity in the PIC-9 Consolidated Gender Action Plan FY17-21. Based on consultations with the Tuvalu Gender Affairs Department, Tuvalu Family Health Association and the Tuvalu National Council of Women—with support from the Australia's Department of Foreign Affairs and Trade's (DFAT) Pacific Women's Gender Advisor in Tuvalu—opportunities were identified for the project to support DFAT's

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<sup>&</sup>lt;sup>6</sup> Gender-Based Violence in the 9 Pacific Island Countries, October 2016

- Tuvalu Gender Plan which has a significant portion on addressing, mitigating and reducing GBV.
- Action: On the basis of previous assessments and consultations, the activities proposed under the project were identified to support these ongoing initiatives by addressing key gaps. The new activity "Gender-Based Violence, Violence Against Children, Occupational Health & Safety and ESMP monitoring Tools and Training" will address some of these gaps by e.g. supporting the training of GBV counselors.
- *Monitoring:* The project has included an additional intermediate results indicator "Successful implementation of GBV and VAC counselling program" to monitor the implementation of the proposed activities.
- 26. Climate resilience measures: A screening of the proposed project for short and long term climate change and disaster risks was undertaken using the World Bank Climate and Disaster Risk Screening Tool. The proposed works will directly improve the climate resilience of the runway infrastructure from events such as sea level rise, and extreme tidal and weather events. In the absence of the proposed project the runway will be unable to operate safely for at least three months of the year, and require major ongoing repairs as well as major pavement works in the medium term. Climate resilience measures have also been reflected across the other infrastructure investments under the project including cyclone resilient building standards for the terminal and the air traffic services tower.
- 27. Rationale for Regional IDA. The PAIP Program countries have drawn on significant resources from regional IDA. Regional IDA funds provide access to supplemental capital for the financing of investments in international airport infrastructure, the costs of which are otherwise beyond (or significantly absorb) the resources available from national IDA allocations. PAIP qualified for regional IDA because: (i) the investments generate significant cross-boundary benefits and network effects (when activities were only of national benefit, national IDA is used); (ii) there is clear evidence of regional commitment through PASO; (iii) there is active support from regional donors (Asian Development Bank, Australia, New Zealand, and PRIF); and, (iv) PAIP provides a platform for harmonization of regional aviation policy and standards, as well as harmonization and implementation of important regional safety and security infrastructure.
- 28. The utilization of Regional IDA resources for TvAIP AF3 is consistent with its use in the original project and AF2: improved international airport infrastructure and aviation safety oversight brings regional cross-country benefits by further enabling potential intra-regional passenger and air freight services. AF1 did not utilize Regional IDA as the investments were focused on airport access road improvements, which were not considered as having a direct regional benefit across the wider Pacific Region.
- 29. **Alternatives to Additional Finance Considered.** The project investigated whether it would be possible to finance the necessary investments from within the existing envelope by reallocating funds. This was not possible because:
  - Cancelling a number of less critical activities, such as the flight services center and fire tender shelter, would potentially lead to savings but would undermine the achievement of the PDO; and
  - Even with the deferral/cancellation of the maximum number of activities there would still be a funding gap to address the FOREX shortfall and the supervision needs for the currently ongoing civil works.

### **III. Proposed Changes**

### **Summary of Proposed Changes**

The proposed US\$8.75 million equivalent in AF and the associated project restructuring will result in the following changes:

- Activities and Cost: The following changes will be made to the activities and cost.
  - O Component A: There will be a cost increase of US\$8.55 million to Component A. The cost increase will finance: (i) design and construction of runway repairs and resiliency measures including the pilot testing of a number of alternative remedial options which will inform the final design; (ii) emergency interim maintenance and monitoring regime for pavement defects; (iii) the monitoring of the runway post-construction; and, (iv) additional supervision cost of civil works for the runway climate resiliency works, overruns in the current project, as well as the flight services center and fire tender shelter and the defect liability period supervision.
  - o Component C: There will be a component cost increase of US\$0.2 million allocated to Component C to: (i) implement GBV and VAC protection, which is a core consideration under the Bank's ESHS policies. This will include activities such as: (a) delivery of training for runway and terminal contractor staff on GBV and VAC; (b) establishment of counseling service for survivors of GBV and VAC; (c) in-country professional GBV training for counselors and other partners; (d) Monitoring and Evaluation of GBV and VAC outcomes; (e) adaptation of Grievance and Complaint Logging System to fully integrate GBV and VAC related complaints and encryption mechanism for sensitive information; (ii) OHS and ESMP monitoring tools and training including: (a) development of storage and reporting modules for OHS activities including training for staff usage; and (b) piloting of mobile-based tools for ESMP monitoring; and (iii) support the Recipient's participation in the International Civil Aviation Organization (ICAO) by making ICAO membership fees an expenditure under Part C of the project that is eligible to be financed out of IDA grants H7490, H8960, D1090, and the proposed AF.
- Results Framework: The results framework has been updated with three new indicators: (i) implementation of repair and resiliency works for FUN runway; (ii) successful implementation of the GBV and VAC Prevention Action Plan by the major civil works contractors (i.e. the runway drainage and the flight services center/fire tender shelter contractors); and (iii) successful implementation of GBV and VAC counselling strategy. Furthermore, the revised closing date will be reflected where considered appropriate. The

Project Operations Manual (POM) has been revised to reflect the updates to the indicators.

- **Disbursements:** The disbursement estimates have been updated to reflect the AF of US\$8.75 million and to reflect the revised closing date. The disbursement category description for IDA grants D1090, H7490, and H896-TV has been revised to include ICAO Membership Fees as an expenditure eligible for financing under these three grants, and this AF.
- Inclusive of Taxes: IDA grants D1090, H7490, and H896-TV are retroactively made inclusive of taxes to enable the financing of previously incurred expenses from PAYE taxation of Tuvaluan consultants and taxes previously incurred on travel expenses for international consultants. AF3 is also proposed to be inclusive of taxes. The amount of these previously incurred and expected future expenses are small relative to the overall project financing (approximately AUD\$41K to date in total). The GoTv has undertaken to exempt the project from all other domestic taxes.
- Closing Date: The closing dates of the project have been extended to 30 June 2020 for all IDA grants (D1090, H7490, and H896-TV) and the PRIF grant (PRIF Grant TF12703) so as to cover the runway repair works and the two-year defect liability period for the proposed civil works.

Change in Implementing Agency	Yes [ ] No [ X ]
Change in Project's Development Objectives	Yes [ ] No [ X ]
Change in Results Framework	Yes [ X ] No [ ]
Change in Safeguard Policies Triggered	Yes [ ] No [ X ]
Change of EA category	Yes [ ] No [ X ]
Other Changes to Safeguards	Yes [ ] No [ X ]
Change in Legal Covenants	Yes [ ] No [ X ]
Change in Loan Closing Date(s)	Yes [ X ] No [ ]
Cancellations Proposed	Yes [ ] No [ X ]
Change in Disbursement Arrangements	Yes [ ] No [ X ]
Reallocation between Disbursement Categories	Yes [ ] No [ X ]
Change in Disbursement Estimates	Yes [ X ] No [ ]
Change to Components and Cost	Yes [ X ] No [ ]
Change in Institutional Arrangements	Yes [ ] No [ X ]
Change in Financial Management	Yes [ ] No [ X ]
Change in Procurement	Yes [ ] No [ X ]
Change in Implementation Schedule	Yes [ X ] No [ ]

Other Change(s)  Yes [ ] No [ X ]						] No [ X ]							
		Development	Objective/Re	esults	PHHHI	00							
Project's Develo	pment Objective	S											
Original PDO													
The project devel infrastructure.	opment objective	is to improve operat	ional safety an	d oversight of	international	l air transport							
Current PDO													
The project devel infrastructure.	opment objective	is to improve the sat	fety and securit	cy of air transp	oort and assoc	ciated							
Change in Resul	ts Framework		•										
Explanation:			•										
implementation o successful implem	Three new indicators: (i) implementation of repair and resiliency works for FUN runway; (ii) successful implementation of the GBV and VAC Prevention Action Plan by the major civil works contractors; and (iii) successful implementation of GBV and VAC counselling strategy. Revisions, as appropriate, are also made to reflect the revised closing date.												
		Co	mpliance										
Covenants - Add P163856)	litional Financin	g (Tuvalu Aviation	Investment P	roject Additio	onal Financi	ng III -							
Source of Funds	Finance Agreement Reference	Description of Covenants	Date Due	Recurrent	Frequency	Action							
	•												
Conditions													
Source Of Fund	1	Name		Туре									
Description of C	Condition												
			Risk	PH	HHRISKS								
Risk Category	Risk Category Rating (H, S, M, L)												
1. Political and G	overnance			Mode	rate								
2. Macroeconomi	С			Mode	rate								
3. Sector Strategic	es and Policies			Mode	rate								
4. Technical Desi	gn of Project or P	rogram		Low									
5. Institutional Ca	pacity for Implen	nentation and Sustain	nability	Mode	rate								
6. Fiduciary				Low		. Fiduciary Low							

7. Environment and Social	Low
8. Stakeholders	Moderate
9. Other	Substantial
OVERALL	Substantial

### Finance

### **Loan Closing Date - Additional Financing (Tuvalu Aviation Investment Project Additional Financing III - P163856)**

Source of Funds	Proposed Additional Financing Loan Closing Date
IDA Grant	30-Jun-2020

### **Loan Closing Date(s) - Parent (Pacific Aviation Investment - Tuvalu - P128940)**

### Explanation:

The closing dates will be extended by 24 months to 30 June 2020 so as to cover the defect liability period for the proposed civil works.

Ln/Cr/TF	Status	Original Closing Date	Current Closing Date	Proposed Closing Date	Previous Closing Date(s)
IDA-D1090	Effective	30-Jun-2018	30-Jun-2018	30-Jun-2020	30-Jun-2018
IDA-H7490	Effective	31-Dec-2016	30-Jun-2018	30-Jun-2020	30-Jun-2018
IDA-H8960	Effective	31-Dec-2016	30-Jun-2018	30-Jun-2020	31-Dec-2016, 30- Jun-2018
TF-12703	Effective	31-Dec-2016	30-Jun-2018	30-Jun-2020	31-Dec-2016, 30- Jun-2018

### **Change in Disbursement Estimates** (including all sources of Financing)

### Explanation:

The AF of US\$8.75 equivalent is reflected in the disbursement schedule below

### **Expected Disbursements (in USD Million) (including all Sources of Financing)**

Fiscal Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Annual	0.50	8.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cumulative	0.50	8.75	8.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### Allocations - Additional Financing (Tuvalu Aviation Investment Project Additional Finance III - P163856)

Source of Fund	Currency	Category of Expenditure	Allocation	Disbursement %(Type Total)
		Expenditure	Proposed	Proposed
IDAT	USD	Goods, works, Training, Operating Costs, ICAO Membership Fees,	8.75	100.00

		TFSU Costs and consulting services		
		Total:	8.75	
IDRT	USD		0.00	0.00
		Total:	0.00	

### **Components**

### **Change to Components and Cost**

Explanation: The AF is necessary to meet the funding requirements for Components A and C of the Project, including the following additional activities:

### **Component A – Airport and Associated Airport Infrastructure Investments**

- Emergency interim maintenance and monitoring regime for pavement defects.
- Design and construction of runway repairs and resiliency measures including the pilot testing of a number of alternative remedial options which will inform the final design.
- Additional supervision cost of civil works for the runway climate resiliency works, overruns in the current project, as well as the flight services center and fire tender shelter and the defect liability period supervision.
- Post-construction monitoring of the runway to confirm the impact of the civil works.

### **Component C – Project Support**

- Supporting the Recipient's participation in the ICAO.
- The design and implementation of GBV and VAC activities.
- OHS and ESMP monitoring tools and training.

**Total Financing:** The total financing is now US\$29.55 million.

<b>Current Component Name</b>	Proposed Component Name	Current Cost (US\$M)	Proposed Cost (US\$M)	Action
Aviation Infrastructure Investments	Aviation Infrastructure Investments	18.78	27.33	Revised
Aviation Sector Reform	Aviation Sector Reform	0.70	0.70	No Change
Project Support and Training	Project Support and Training	1.32	1.52	Revised

Total:	20.80	29.55	

### **Change in Implementation Schedule**

Explanation:

To account for activities including: (i) pilot testing of alternative remedial options; (ii) implementation of repair and resiliency works for FUN runway; and, (iii) implementation of the GBV and VAC Prevention Action Plan by the major civil works contractors.

### **Appraisal Summary**

### **Economic and Financial Analysis**

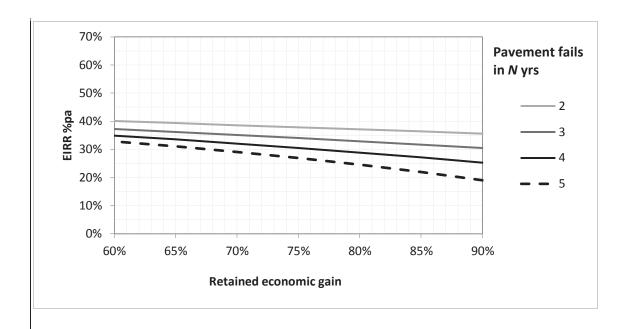
Explanation:

The importance of aviation for connectivity in the Pacific Islands is well known. Tuvalu depends on regular air services for remittances, tourism and trade, as well as for emergency services. A failure of the runway would result in significant economic losses, particularly with tourism and remittances, which are elastic to aviation services. Furthermore, the threat of the runway pavement failing completely and becoming unusable in the next three to five years would undermine the investments that the Bank has already made at Funafuti Airport.

The cost-benefit analysis is performed on the additional investment of US\$8.5 million to prevent the runway pavement from failing. Without the investment, the pavement already delaminates in 2017 and is expected to become unusable as early as in 2020. The analysis covers the period of 10 years (2012-2022), incorporating the previous investments under the project as well as the AF3. It is assumed that, with a delaminating pavement, there is still 75% retained economic gain until failure in 3 years. As with the original project, the growth rate of economic gain is assumed to be 2% per year and the discount rate is 12%.

The Net Present Value (NPV) and the Economic Internal Rate of Return (EIRR) yield US\$8.64 million and 34%, respectively. This indicates that the additional financing provided under AF III will have net benefits.

A sensitivity analysis was undertaken to confirm these results. Under the scenario that the runway could retain 90% of the economic gains and would fail only after five years, the EIRR would still be at around 19% (see graph).



### **Technical Analysis**

### Explanation:

The AF will cover: (i) design and construction of runway repairs and resiliency measures including the pilot testing of a number of alternative remedial options which will inform the final design; (ii) emergency interim maintenance and monitoring regime for pavement defects; (iii) monitoring of the runway post-construction; (iv) supervision cost for the repair works, the flight services center and fire tender shelter and the pavement defect liability period; under existing *Component A "Airport and Associated Airport Infrastructure Investments"*.

It will also finance: (i) the implementation of GBV and VAC prevention activities; (ii) OHS and ESMP monitoring tools and training; and (iii) supporting the Recipient's participation in ICAO (US\$0.2 million) under a revised *Component C "Project Support and Training"*.

The following additional works and services will be financed:

• Runway Resilience and Interim Repairs (US\$8.05 million equivalent): In 2015/16, the runway at Funafuti International Airport (FUN), Tuvalu received minor patch repairs, turning node widening and a 2-coat resurfacing treatment across its 1550m length. Since this time the newly resurfaced runway has experienced a number of visible failures. It is postulated that these are due to pressure build up under the runway caused by water infiltration exacerbated by tidal and sea level impacts. While there is anecdotal evidence of similar distress events prior to resurfacing, the addition of a thick waterproof membrane (2-coat seal) over the existing seal has made the issue more prominent. A site assessment of 'observable' venting areas (characterized by an uneven surface) was completed in April 2017. It identified approximately 40 active areas totaling around 160m2. The observed venting was generally only visible over an 800m length from the southern (RWY03) end. 70-80% of the observed defects occur within a 300-400m length.

This phenomenon has shown to be extremely rare and has only been observed and documented in research in a few instances, most notably at Hong Kong SAR, China airport runway and some cases in Australia. The latter may not be representative however as the defects had resulted primarily from extreme rain events rather than the combination of extreme rain, tidal influences, and rising water levels observed at Funafuti.

An assessment by the University of Auckland (UoA) has proposed the construction of a 'fish-bone' drainage system through horizontal drilling under key areas of the runway, along with other drainage enhancements to alleviate pressure below the runway. A design consultancy has been engaged to further assess the proposed option and to pilot a number of different potential design solutions on the runway to test the efficacy of the options in alleviating the pressure under the runway. The pilot solutions will be monitored over the cyclone season and based on the test results, a detailed design solution will be developed. Given the uniqueness of the pavement defects and the limited research available with regards to remedial designs this will ensure that the most cost-effective solution is implemented. As part of their scope of work the consultants will develop a 3D model of the catchment area and a complete catchment drainage study to determine the interaction of storm water runoff from the runway/apron, the roads, the built-up areas and the open spaces, and the resulting peak flows and drainage pathways. The final design solution selected will be in accordance with ICAO SARPs and NZCARs standards.

In the interim the necessary materials and technical expertise, if necessary, will be financed to ensure a strict monitoring and maintenance scheme and to address any immediate repair needs on the runway to avoid cessation of flights.

Associated with the above, a study will be done to monitor post-construction impacts of the civil works on the sub-runway pressures.

- Civil Works Supervision (US\$0.5 million equivalent): The AF3 will finance the supervision of civil works for the runway climate resiliency works, as well as the flight services center and fire tender shelter and the defect liability period supervision.
- Gender Based Violence, Child Protection, Occupational Health & Safety and ESMP monitoring tools and training (US\$0.2 million equivalent): This will include the following two general activities (i) Implement GBV and VAC protection. This will include activities such as: (a) delivery of training for runway and terminal contractor staff on GBV and VAC; (b) establishment of counseling service for survivors of GBV and VAC; (c) in-country professional GBV training for counselors and other partners; (d) Monitoring and Evaluation of GBV and VAC outcomes; (e) adaptation of Grievance and Complaint Logging System to fully integrate GBV and VAC related complaints and encryption mechanism for sensitive information; and; (ii) OHS and ESMP monitoring tools and training including: (a) development of storage and reporting modules for OHS activities including training for staff usage; and (b) piloting of mobile-based tools for ESMP monitoring. Additionally, Component C funds will be used to support the Recipient's participation in the ICAO by financing ICAO membership fees.

### **Social Analysis**

### Explanation:

**Social Safeguards:** The proposed works under AF3 are expected to be within the airport footprint so no Abbreviated Resettlement Action Plan (ARAP) is required. In the unlikely event that any works are undertaken outside the airport footprint, an ARAP will be prepared.

Compliance with social safeguards on the project has been Satisfactory with only two minor issues arising:

- In late 2014, the Government learned that the leases for the airport land had expired, although they continued to pay the leaseholders the annual rent. In 2015 the GoTv prepared an ARAP to address expired leases covering the airport land and all landowners have signed new lease agreements. Annual lease payments are up to date.
- In early 2017 the GoTv did not follow the provisions of the Resettlement Policy Framework with regard to compensating project affected people prior to cutting down trees, but has moved expeditiously to address this. All payments to identified owners have been made, with only a small number of outstanding claims unpaid, awaiting clarification of ownership. A confirmation has been provided by the Ministry of Finance and Economic Development (MFEM) showing that funding has been set aside to compensate these outstanding claims.

Gender: A detailed assessment was made during project preparation of opportunities to address GBV and VAC issues. Through consultations with the Tuvalu Gender Affairs Department, Tuvalu Family Health Association and the Tuvalu National Council of Women—with support from the Australia's Department of Foreign Affairs and Trade's (DFAT) Pacific Women's Gender Advisor in Tuvalu—opportunities were identified for the project to support DFAT's Tuvalu Gender Plan which has a significant portion on addressing, mitigating and reducing GBV. On the basis of this, the activities proposed under the project were identified to support these ongoing initiatives by addressing key gaps, such as the need to develop a counseling service for survivors of GBV and VAC.

### **Environmental Analysis**

### Explanation:

There are no changes to the current Environmental Assessment Category B classification. Compliance with environmental safeguards on the project has been Satisfactory.

The supervision engineers have been overseeing the contractors' implementations of the ESMP in consultation with the TFSU and the PST, and have provided regular reports on progress. A new ESMP Addendum was prepared for the construction and operation of the terminal building. The ESMP was updated to reflect any potential environmental and social impacts resulting from the proposed runway repair and resiliency work and the proposed GBV/VAC and Environmental Monitoring or OHS activities. The design and implementation of new tools to improve ESMP

monitoring financed by the AF will significantly benefit safeguards supervision, reporting and compliance.

### Risk

Explanation: The overall implementation risk is *Substantial*. The recent increase in risk from *Moderate* to *Substantial* is associated with the fact that the wildlife management plan for the airport has not yet been implemented, which, given there is no perimeter fence, may affect the safety of the runway. Once addressed the risk will be again reduced to *Moderate*.

### V. World Bank Grievance Redress

Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit <a href="http://www.worldbank.org/GRS">http://www.worldbank.org/GRS</a>. For information on how to submit complaints to the World Bank Inspection Panel, please visit <a href="http://www.inspectionpanel.org">www.inspectionpanel.org</a>.

The project operates a Grievance Redress Mechanism (GRM) and publishes statistics on grievance and complaint resolution on the project website (<a href="www.tvaip.com">www.tvaip.com</a>). Statistics published reflect the proposed indicators in the 2014 Guidance Note on Results Framework and Monitoring & Evaluation (M&E) including (i) grievances registered related to delivery of project benefits that are addressed (%); and (ii) grievances responded and/or resolved within the stipulated service standards (%). The public display of this data also fulfills the indicator "Project-supported organization(s) publishing periodic reports on GRM and how issues were resolved" proposed in the guidance note. The GRM will be updated to include GBV and VAC issues.



## Results Framework

Project Name:	Tuvalu Aviation Investment Project Additional Finance III (P163856)	ect Additional Finar		Project A	Additional Financing	Status:	DRAFT
Team Leader(s)	Team Leader(s) Nora Weisskopf	Requesting EA Unit:	EACNF	Created by:	Nora Weisskopf on 01-Jun-2017	un-2017	
Product Line:	IBRD/IDA	Responsible GTI02 Unit:		Modified by:	Nora Weisskopf on 17-Aug-2017	Aug-2017	
Country: Tuvalu	Tuvalu	Approval FY: 2018	8				
Region:	Region: EAST ASIA AND PACIFIC	Financing Inv Instrument:	estment Pro	Investment Project Financing			
Parent Project ID:	oject P128940	Parent Project Pacific Aviation Investment - Tuvalu (P128940) Name:	ific Aviatio	n Investment -	Tuvalu (P128940)		

## Project Development Objectives

Original Project Development Objective - Parent:

The project development objective is to improve operational safety and oversight of international air transport infrastructure.

Current Project Development Objective - Parent:

The project development objective is to improve the safety and security of air transport and associated infrastructure.

Proposed Project Development Objective - Additional Financing (AF):

### Results

Core sector indicators are considered: Yes

Results reporting level: Project Level

# Project Development Objective Indicators

End Target
Actual(Current)
Baseline
Unit of Measure
Corpor ate
Indicator Name
Status



Revised	Indicator One: ICAO certification of safety and security at project airports	Text	Value	FUN currently not certified	Fun currently not certified	Certification of airports in accordance with agreed goals
			Date	13-Dec-2011	08-May-2017	30-Jun-2020
			Comment			
Revised	Indicator Two: Resolution of	Percentage	Value	95.00	95.00	40.00
	safety concerns at participating airports reaches global ICAO		Date	13-Dec-2011	08-May-2017	30-Jun-2020
	average		Comment			
No Change	Indicator Three: Modernization of air traffic management	Text	Value	No VSAT or ADS-B	No VSAT or ADS-B	VSAT and ADS-B operational
			Date	13-Dec-2011	08-May-2017	30-Sep-2017
			Comment			
No Change	Indicator Four: Implementation of a regional safety levy for international passengers	Text	Value	No levy	Levy being collected. Funds now being received by GoTv	AU\$5 collected from each departing international passenger
			Date	13-Dec-2011	08-May-2017	30-Jun-2014
			Comment			
No Change	Roads rehabilitated, Rural	Kilometers	Value	0.00	8.00	8.00
			Date	23-May-2013	08-May-2017	30-Jun-2015
			Comment			
No Change	Roads rehabilitated, Non-rural	Kilometers	Value	0.00	7.40	7.40
			Date	23-May-2013	08-May-2017	30-Jun-2015
			Comment			

No Change	Roads in good and fair		Percentage	Value	50.00	100.00	100.00
	condition as a share of total classified roads			Date	23-May-2013	08-May-2017	30-Jun-2015
				Comment			
No Change	Size of the total classified network		Kilometers	Value	15.40	15.40	15.40
			Sub Type Supplemental				
Intermediate F	Intermediate Results Indicators						
Status	Indicator Name	Corpor ate	Unit of Measure		Baseline	Actual(Current)	End Target
No Change	Component A: Intermediate		Percentage	Value	0.00	95.00	100.00
	Result indicator One: Navigation and safety aids			Date	13-Dec-2011	08-May-2017	30-Jun-2017
	fully operational			Comment			
New	Component A - Intermediate		Percentage	Value	0.00	0.00	100.00
	Indicator Seven: Implementation of repair and			Date	19-Jun-2017	19-Jun-2017	30-Jun-2020
	resiliency works for FUN runway			Comment			
New	Component C: Intermediate		Yes/No	Value	No	No	Yes
	Kesults Indicator Six - Successful implementation of			Date	19-Jun-2017	19-Jun-2017	30-Jun-2019
	the GBV and YAC Prevention Action Plan by the runway civil works contractor			Comment			
New	Component C: Intermediate		Yes/No	Value	No	No	Yes
	Kesults Indicator / - Successful implementation of GBV and			Date	14-Aug-2017	14-Aug-2017	30-Jun-2020
	VAC counselling program			Comment			
No Change	Component A: Intermediate		Percentage	Value	0.00	100.00	100.00



	Result indicator Two:		Date	13-Dec-2011	08-May-2017	30-Jun-2015
	Rehabilitation of Funafuti runway		Comment			
No Change	Component A: Intermediate	Text	Value	N/A	Category 5	Category 5
	Result indicator Three: Achievement of Fire Standards		Date	13-Dec-2011	08-May-2017	30-Sep-2017
			Comment			
Revised	Component A: Intermediate	Percentage	Value	0.00	40.00	100.00
	Result indicator Four: Funatuti terminal and control tower		Date	13-Dec-2011	08-May-2017	31-Dec-2017
	upgrade		Comment			
No Change	Component A - Intermediate	Kilometers	Value	0.00	15.40	15.40
	Result indicator Five: Number of kilometers of paved roads		Date	23-May-2013	08-May-2017	30-Jun-2015
	improved		Comment			
No Change	Component B: Intermediate Result indicator One:	Text	Value	No training plan	Training plan under	Training plan completed
	Successful implementation of				implementation.	
	agreed training plan		Date	13-Dec-2011	08-May-2017	30-Jun-2018
			Comment			