



## 1. Project Data

<b>Project ID</b> P143408	<b>Project Name</b> Samoa Aviation Investment Project	
<b>Country</b> Samoa	<b>Practice Area(Lead)</b> Transport	
<b>L/C/TF Number(s)</b> IDA-58050,IDA-D4570,IDA-H9140,TF-17019	<b>Closing Date (Original)</b> 30-Jun-2019	<b>Total Project Cost (USD)</b> 41,732,156.14
<b>Bank Approval Date</b> 06-Mar-2014	<b>Closing Date (Actual)</b> 31-Dec-2020	
	<b>IBRD/IDA (USD)</b>	<b>Grants (USD)</b>
Original Commitment	25,000,000.00	300,000.00
Revised Commitment	44,118,965.34	299,100.25
Actual	42,141,701.71	299,100.25

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## 2. Project Objectives and Components

### a. Objectives

This project in Samoa was the second phase of the regional Pacific Aviation Investment Program (PAIP), with the first phase in Kiribati, Tonga and Tuvalu. This program aimed at improving the aviation infrastructure and the oversight of aviation operations in the participating countries.



The Project Development Objective (PDO) as stated in the Grant Agreement (Schedule 1, page 4) and in the Project Appraisal Document (PAD, page 4) was:

**" To improve operational safety and oversight of international air transport and associated infrastructure".**

The PDO is parsed as follows for this review:

1. To improve operational safety of international air transport and associated infrastructure; and 2. To improve operational oversight of international air transport and associated infrastructure.

The PDO was unchanged, although the project scope was expanded with the two Additional Financing's (AFs) for the project (discussed in section 2e).

**b. Were the project objectives/key associated outcome targets revised during implementation?**

No

**c. Will a split evaluation be undertaken?**

No

**d. Components**

There were four components (PAD, pages 5 - 6).

**1. International Airport Infrastructure Investments.** The estimated cost at appraisal was US\$32.5 million. The actual cost was US\$44.0 million. This component financed infrastructure investments at Samoa's Faleolo International airport. Activities in this component: (i) rehabilitating airport runways, taxiways and apron; (ii) installing new navigation aids, automatic weather monitoring, safety and security and air traffic control equipment; (iii) upgrading the generator capacity, and installing energy efficient equipment (terminal lightning); (iv) providing water storage tanks; (v) security improvements (closed circuit television); (vi) upgrading the runway lighting and fire safety equipment; (vii) providing Very Small Aperture Terminal (VSAT) secure communication system. (VSAT refers to a two-way secure satellite communication system that enables the regional civil aviation authorities and air transport organizations to communicate essential safety and security communications in a timely manner); (ix) design and consulting services.

The scope of this activity was increased to include additional works on the terminal and airside's pavement interface, as a result of the Government's airport terminal expansion project at the Faleolo international airport financed by another donor.

**2. Strengthening Policy and Regulatory Capacity and Training.** The estimated cost at appraisal was US\$1.6 million. The actual cost was US\$1.7 million. Activities in this component: (i) Technical Assistance (TA) and training to improve sector management and sector safety and security oversight; (ii) developing a national aviation policy; and (iii) safety and security oversight audits.

**3. Strengthening Airport Operations and Management Capacity.** The estimated cost at appraisal was US\$1.6 million. The actual cost was US\$0.6 million. Activities in this component: (i) studies to assess the



current condition of the aviation sector; (ii) developing a strategic business plan; and (iii) training on aviation policy, operations and management.

**4. Project Management.** The estimated cost at appraisal was US\$2.9 million. The actual cost was US\$4.0 million. This component provided implementation support, including technical, advisory, and administrative support to the Pacific Aviation Investment Program's (PAIP) Technical and Fiduciary Services Unit and the project support team, and financing the annual subscriptions for operating the VSAT infrastructure during implementation.

#### **e. Comments on Project Cost, Financing, Borrower Contribution, and Dates**

**Project cost.** The estimated cost at appraisal was US\$38.6 million. The actual cost was US\$51.5 million.

**Project financing.** The project was financed by an IDA grant of US\$25.0 million (US\$5.0 million from the IDA allocation and US\$20.0 million from the regional IDA funding for the program). AFs of US\$16.6 million and US\$2.2 million were approved on June 6, 2016, and April 18, 2019, respectively. With this, the Bank financing was US\$43.8 million. The amount disbursed was US\$42.1 million. About US\$58,954 was undisbursed. The difference between the IDA grant and the amount disbursed was due to the exchange rate changes during implementation.

There was a Trust Fund grant of US\$0.3 million from the Pacific Regional Infrastructure Facility (PRIF) for purchasing the Pacific Aviation Safety Office's (PASO) oversight services. US\$0.29 million of this grant was disbursed. There was parallel financing of US\$8.3 million for the civil works from the European Investment Bank (EIB) until it was replaced by IDA funding in the first AF (see below).

**Recipient contribution.** The recipient contribution was estimated at US\$5.0 million at appraisal. According to the Data Sheet (ICR, page 2), there was no recipient contribution during implementation.

**Dates.** The project was approved on March 5, 2014, became effective on May 8, 2014, and was scheduled to close on June 30, 2019. The project closed on December 31, 2020.

**Other changes.** The following changes were made during the project lifetime.

- **AF of US\$16.6 million was approved on June 3, 2016**, for: (i) expanding the project scope (discussed in section 2d); and (ii) to accommodate the Government's decision to replace EIB financing (about US\$8.3 million), with the more favorable terms of the IDA funding.
- To prepare an Integrated Environmental and Social plan for this project and the new terminal development project.
- The closing date was not extended with the AF, as it was anticipated that the grant would be fully disbursed by the original closing date.

**The second AF of US\$2.2 million was approved on April 18, 2019**, to close a financing gap, due to the cost overruns for activities associated with component one activities. The other changes made with this AF are as follows:

- A Grievance Redress Mechanism was added as an indicator.



- The closing date was extended by 18 months from June 30, 2019 to March 31, 2020 for completing the ongoing activities.

The project closing date was further extended by three months from March 31, 2020 to June 30, 2020, **through a Level 2 restructuring on March 22, 2020**, for additional training programs for the Samoa Airport Authority (SAA) and the Civil Aviation Division (CAD) staff. These programs were suspended following the declaration of travel restrictions by the government in the wake of the COVID-19 pandemic. As the original training program had been completed, the government opted to cancel the additional programs, and use the AF grant for purchasing additional equipment from local suppliers for activities associated with component one activities.

### 3. Relevance of Objectives

#### Rationale

**Country and sector context.** The project addressed a key development challenging facing the Samoan economy. Samoa is a group of islands in the South Pacific located in the "Cyclone belt". The gross domestic product (GDP) of the Samoan economy is dominated by tourism, but agriculture and fishing are also important in the economy. About 22% of Samoa's GDP comes from tourism, with the majority of tourists arriving by air, and about 18% of local employment comes from tourism- related activities. Air connectivity is essential for meeting Samoa's educational and medical needs. Given Samoa's geographic distance from main markets, air services are important for exports of high value, time-sensitive goods. Since Samoa is also vulnerable to natural disasters, the sector is crucial for effective disaster risk management in matters pertaining to delivering emergency aid.

The aviation sector in Samoa faced the following challenges: (1) constraints on airport profitability due to the long routes, thin traffic and low freight levels; and (ii) shortage of personnel with appropriate expertise. While these challenges were in general faced by the sector in all the Pacific Island Countries, a specific challenge faced by Samoa was that the latest International Civil Aviation Organization (ICAO) Universal Safety Audit Program (USOAP) in 2010 identified 59 findings, and benchmarked Samoa below the global average in six of the eight areas (discussed in section 4).

**Government and regional strategy.** At appraisal, the government strategy articulated in the *Development of Samoa* (2012 -2016) identified transport infrastructure as a priority sector. Before appraisal, the government enacted legislation demonstrating its commitment to the sector. In 2012, government approved the Airport Authority Act separating airport operations, with the SAA responsible for air traffic control and aviation security, and the CAD for regulatory oversight. This legislation authorized SAA to impose and collect fees for air services. At the regional level, Samoa ratified the Pacific Islands Air Services Agreement (PIASA) in 2007, thereby demonstrating its commitment to fostering an enabling environment for promoting regional market competition through new service routes. The government's Strategy for the *Development of Samoa* for 2017-2020 reiterated the goal of improving transport infrastructure as one of four priority areas. The government's long- term development agenda outlined in *Samoa 2040* underscored the aviation sector's role in accelerating sustainable development.

**Bank strategy.** The PDOs were well aligned with the Bank strategy. At appraisal, they were consistent with the Country Assistance Strategy (CAS) for 2013 - 2016. The CAS acknowledged that the level of finance



required for aviation investments exceeded the national IDA allocation. Given the regional cross-country spillover effects of investments under the PAIP, regional IDA funding resources were mobilized to support financing for the project. The PDOs were well aligned with the Bank's Regional Partnership Framework (RPF) for Pacific Island Countries for 2017- 2021. The RPF highlighted the importance of the aviation sector under objective 4.2: *Increased access to basic services and improved connective infrastructure*. The RPF highlighted the need for a regional approach to allow the Pacific Island countries ICs "to benefit from economies through bulk procurement and centralized implementation arrangements".

**Prior Bank experience.** The Bank has financed aviation sector investments under the Samoa Infrastructure Asset Management Project (SIAM) completed in 2000. Under this project, the Bank among other things, financed aerodrome upgrades at Faleolo international airport for compliance with the International Civil Aviation Organization's (ICAO) standards. The investment under this project was anticipated to meet a ten-year service life before future rehabilitation would be required, and this time span had been exceeded when this project was prepared.

This project, the first of its kind in Samoa, focused exclusively on the aviation sector. Unlike the prior Bank project, which financed only aviation infrastructure investments, this project also had components for driving sector reforms. Specifically, the project had a legal covenant stipulating SAA to collect a "safety and security levy from departing international passengers" by September 30, 2014, for strengthening the financial viability of the aviation sector in Samoa. Given the importance of the sector to the economy, the government strategy and the Bank's strategy at the country and at the regional level, the relevance of the PDO is assessed as High.

## Rating

High

## 4. Achievement of Objectives (Efficacy)

### OBJECTIVE 1

#### Objective

To improve operational safety of international air transport and associated infrastructure.

#### Rationale

**Theory of Change.** The results framework was clear. The causal links between the project activities, their outputs and outcomes were logical, and the intended outcomes were monitorable. Activities such as installing new navigation aids, Very Small Aperture Terminal (VSAT) secure communication system, rehabilitating airport runways, taxiways and apron, installing safety and security and energy efficient equipment, and training Samoan Airport Authority (SAA) were aimed at modernizing air traffic management. The outputs of these activities were expected to aid the Faleolo International airport to reach ICAO's global safety and security standards.



### **Outputs** (ICR, pages 17 -19).

- The apron at the Faleolo airport was expanded to 9,500 square meters, thereby creating a total surface area of approximately 41,500 square meters, with a new base and asphaltic surface. This expansion allowed the larger (Code E) aircraft, such as New Zealand's B777 and B787 to safely park on the apron, while allowing other aircrafts to enter, park and exit. The activities included expansion and strengthening of the apron, reconfiguration of the fuel hydrant infrastructure and modification of airfield drainage at the airport, in the wake of the Government's airport terminal expansion project financed by another donor.
- The Very Small Aperture (VSAT) secure satellite communication system was operational when the project closed. This system enabled the regional civil aviation authorities and air transport organizations to communicate essential safety and security information in a timely manner.
- The two-way Automatic Dependent Surveillance Broadcast (ADS-B), a satellite-based technology for aircraft monitoring and facilitating communications with other regional airports, was operational when the project closed.
- SAA staff were trained in using the VSAT and ADS-B equipment.
- The Navigation Aids, Airfield Ground Lighting (AGL) Power Systems and Air Traffic Control Equipment (ATC) were installed. The AGL was upgraded through replacing low intensity runway lighting with high intensity energy efficient lights for night operations.
- Safety screening equipment such as closed-circuit (CCTV) was installed at to cover all parts of the Faleolo terminal building.
- Two refurbished rescue vehicles were commissioned to ensure that the Faleolo airport was in compliance as an Airfield Rescue and Fire Fighting (ARFF) Category 10 airport.
- A Training Needs Assessment and a training plan was completed. The fire fighter staff, air traffic controllers and maintenance staff of SAA were trained by the Tonga Airport Limited (TAL) staff. According to the second project restructuring paper, by February 2019, 70% of SAA and 60% of CAD skill gap had been addressed. However, the third restructuring paper (paragraph nine) notes that about US\$465,000 was unspent, as the training program was stopped prematurely because of the COVID-pandemic and the funds were spent on buying equipment instead.
- The ICR (paragraph 85) notes that the contract for the Air Traffic Control equipment was signed in June 2018, with the equipment scheduled for installation in April 2019. However, the installation was only completed in March 2020. The ICR further notes that some spare parts supplies were only arriving in December 31, 2020. The ICR notes that when this project closed, one container of spare parts had not yet arrived in Samoa, and that the SAA was to cover the cost of the spare parts contained in this container (approximately US\$12,525). These delays were due to an underestimate in the amount of works required and poor planning by the contractor, which led to multiple shipment delays. The ICR does not provide details, but notes that not all the planned contracts under this project were completed by the project closing date.

### **Outcomes.**

The outputs of the project activities described above were expected to lead to the intended outcome of regulatory certification of the safety and security procedures at the Faleolo international airport.

The Faleolo international airport was certified. An inspection carried out by SAA with support from the Pacific Aviation Safety Office (PASO), certified that the aerodrome design and operations at the Faleolo international



airport were compliant with the safety and security standards required by the Samoa Civil Aviation Rules (part 139 and part 172), and applicable portions of ICAO (Annex 14).

While the intended outcome was realized, given that all not all of the planned activities were completed when the project closed, efficacy is assessed as substantial.

## Rating

Substantial

## OBJECTIVE 2

### Objective

To improve operational oversight of international air transport and associated infrastructure.

### Rationale

**Theory of Change.** The results framework was clear. The causal links between the project activities, their outputs and outcomes were logical. The intended outcomes were monitorable. Activities such as developing a strategic business development plan for SAA, conducting safety and security audits, implementing a safety and security levy for departing international passengers, and training the staff of SAA and the CAD were aimed at strengthening airport operations and management. The outputs of these activities were likely to aid in regulatory certification of the airport. The combination of these activities together with the aviation infrastructure investments discussed above, were aimed at supporting tourism and thereby the long-term development outcome of sustaining economic growth and reducing poverty.

### Outputs (ICR, paragraphs 42 - 46)

- An Aviation Sector Strategy was completed as targeted. The strategy provided an overview of the regulatory environment for Samoa, the role of air transportation, the current state of aviation infrastructure and the challenges of regulatory oversight in Samoa.
- The Master Plan and the Business Strategy was completed as targeted. The plan and the strategy focused on Samoa's operations and management capacity. The plan included a 30 year planning horizon, travel demand forecasts for passenger and freight traffic for international and domestic services, locating critical operational infrastructure that met international service standards and regulatory requirements, and recurrent expenditures for airport operations. This plan was to align long-term infrastructure action with national priorities, and guide decision-making on areas requiring investment.

### Outcomes

The outputs of these activities were expected to contribute to two outcomes: (1) implementing a regional safety and security levy for departing international passengers for strengthening the financial viability of SAA; and (2) ensuring that the safety and security standards of the airport reaches the global standards as validated by ICAO.

- The government imposed a regional safety and security levy of 11 Samoan Tala (WAT) (about Australian Dollar 0.6 or US\$0.44 cents) from each departing international passenger. 59% of the



revenue from this levy is allocated to the Ministry of Works, Transport and Infrastructure (MWTI), 39% to SAA, and 2% to the airlines as their administration fee. Since this levy was initiated in October 2015, over WST 6 million (approximately US\$2.4 million) was collected. These funds are used for oversight of the aviation sector. The Civil Aviation Division (CAD) was responsible for the MWTI's portion of the levy, and the fees collected by CAD are used for preparing manuals and reports for ICAO audits, implementing ICAO's standard recommended practices, and Samoa's payments to the Pacific Union Safety Office (PASO). The funds allocated to SAA are used for maintaining the equipment and staff remuneration.

The project activities were expected to ensure that the safety and security of the airport conforms with the global ICAO standards measured through the ICAO Universal Safety Audit Program (USOAP). The audits focus on a country's capability to provide safety oversight, by assessing whether the country has implemented key elements of the program. The audit covers eight areas (legislation, organization, licensing, operations, airworthiness, accident investigation and air navigation).

- Based on the ICAO USOAP Continuous Monitoring Approach (CMA), Samoa had an Effective Implementation (EI) score of 47.8%, as compared to 56.4% at the baseline in December 2010. This was short of the target of 41.3%. The ICR notes that Samoa is the only Pacific Island country to have updated the USOAP scores on a temporary basis, after cross checking with autonomous third-party assessments. The CMA was rigorous and overseen by the New Zealand aviation authorities. *The ICR however notes that the actual EI on the USOAP still needs be validated by ICAO, that is scheduled for 2022.*

Given that the intended outcomes were largely achieved although actual EI score still needs ICAO validation, efficacy of this objective is assessed as substantial.

### **Rating**

Substantial

## **OVERALL EFFICACY**

### **Rationale**

Given that the outcomes were achieved for the most part though ICAO validation is still required, overall efficacy is assessed as substantial.

### **Overall Efficacy Rating**

Substantial

## **5. Efficiency**





**Economic analysis.** A cost-benefit analysis was conducted for activities associated with aviation infrastructure investments, using the same methodology. These activities accounted for 84% of the project cost at appraisal, and 86% of the actual cost. The project benefits were assumed to come from the tourism sector's contribution to GDP. The methodology entailed a comparison of "without the project" and "with the project". The scenario with the project was that Samoa complies with the ICAO standards, and hence there is no disruption to the jet services and to tourism-related activities. The scenario with the project was that Samoa does not comply with the ICAO standards and there is disruption to the jet services that limits the number of incoming tourists. The economic analysis covered the time horizon of 12 years (2014 -2026). The key assumptions included: (i) tourism grows at an average rate of 3.6% per annum (according to the estimates of the World Travel and Tourism Council (WTTC) (this assumption may be unrealistic, given the disruptions due to the COVID-19 pandemic and decline in GDP); and (ii) there is a 25% reduction of tourists with an estimated impact of US\$48 million, due to the disruption of jet services without the project.

The Net Present Value (NPV) at a 6% discount rate was estimated at US\$76.0 million, as compared to the NPV of US\$117.0 million at appraisal, using the same discount rate. The ICR (page 21) notes that a 6% discount rate was used considering that the GDP per capita in Samoa has been increasing on average at 3% per year from 2010 - 2018; it also follows the World Bank's Guidance Note on Discounting Costs and Benefits in Economic Analysis of World Bank Projects (May 2016). The ex post Economic Internal Rate of Return (EIRR) was 31.9%, slightly lower than the ex ante EIRR of 33.6%, due to the increase in cost of the apron work related activity.

**Administrative and operational issues.** The costs of the apron works proved to be more than expected at appraisal, as the specifications of the apron pavement were changed from a flexible to rigid pavement to avoid damages to the underground services. This was not known at the time of contract tendering, as there were no documents regarding the apron layout and specifications at appraisal. This necessitated the AF of US\$2.2 million. There were delays of about 17 months in contracting for the civil works due to a combination of factors, including procurement delays, additional preparation of the technical proposal as the original proposal lacked key aspects of design, and the termination of the original design and supervision consultant in 2016 due to non-performance. The delays in the initial years were exacerbated by the delays in implementation of activities relating to airfield lighting, power system and air traffic control equipment. The ICR (paragraph 85) notes that not all the planned contracts under the project were completed at project closure, although the project closed 18 months behind schedule.

In sum, efficiency is assessed as substantial, due to the satisfactory economic justification of the project and the minor administrative and operational shortcomings.

## Efficiency Rating

Substantial

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal	✓	33.60	84.00 <input type="checkbox"/> Not Applicable



ICR Estimate	✓	31.90	86.00 <input type="checkbox"/> Not Applicable
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\* Refers to percent of total project cost for which ERR/FRR was calculated.

## 6. Outcome

The relevance of the PDO to the Government and Bank's regional strategy is assessed as High. Efficacy of the objectives to improve operational safety and oversight of international air transport and associated infrastructure is assessed as substantial. Although there were administrative and operational shortcomings during implementation, efficiency is assessed as substantial, in view of the economic justification for the project. Taking these ratings into account, overall outcome is assessed as satisfactory, reflecting minor shortcomings in the achievements of its objectives and in its efficiency.

### a. Outcome Rating

Satisfactory

## 7. Risk to Development Outcome

**Financial risk.** There is a substantial risk relating to the financial sustainability of the development outcomes. The ICR (paragraph 93) notes that SAA's revenue has been shrinking because of the decline of international arrivals in recent years due to a combination of factors, including the measles outbreak in 2019, the COVID-19 pandemic since 2020, and the flash floods as a result of Cyclone Zazu in December 2020. This revenue shortfall could undermine SAA's capacity to subscribe to the Pacific Aviation Safety Office's (PASO) technical service on aviation safety oversight. Furthermore, the reduced air traffic has also affected SAA's revenue from landing fees. This puts at risk the maintenance of the infrastructure created under this project, once the Defect Liability Period expires in September 2020.

**Exposure to Natural Disasters.** There is a substantial risk to the aviation infrastructure created under this project, given that Samoa is vulnerable to natural disasters. The ICR (paragraph 94) notes that the new airport terminal building was seriously impacted with the ground floor flooded, damaging electronic equipment within the terminal including the elevators, the escalators, check-in service computers, security x-ray system and baggage conveyors, in the wake of the torrential rains and gusty winds that Samoa experienced in December 2020 under Cyclone Zazu. There is also the risk associated with potential lack of preparedness for natural disasters, given that the training program was halted, prior to the ICAO inspection.

## 8. Assessment of Bank Performance

### a. Quality-at-Entry

The analytical underpinnings of the project, based on the assessments of the aviation sector in the South Pacific, were sound. These assessments indicated that the countries lacked the proper policy, regulatory



features and information to comply with the ICAO's safety and security requirements of airports. The project's design was well-aligned with the three projects in the first phase of the regional program. Lessons incorporated at design included: (i) incorporating policy triggers to achieve policy changes (the levy for international passengers; (ii) introducing regional Communication, Navigation and Surveillance (CNS) systems in view of their regional spillover benefits; and (iii) refurbishing fire tenders as opposed to purchasing new fire tenders, as the former was about 30% cheaper than the latter option, and the technologies used in new tenders were deemed to be unsuitable to the operating environment (PAD, pages 7- 8).

The implementation arrangements made at appraisal proved to be appropriate. The Samoa Airport Authority (SAA) was in charge of implementing the project. A Project Support Team (PST) was established to support SAA. In view of the weak implementation capacity in Samoa, the Technical and Fiduciary Services Unit (TFSC) based within Tonga Airports, Limited (TAL) was to provide additional support to project and fiduciary management, safeguard policies and M&E (PAD, paragraphs 30 - 31).

Several risks were identified at appraisal, including the Government's commitment to strengthening the regulatory oversight of the sector and weak implementation capacity in the country. Mitigation measures at design, included a passenger safety and security levy to departing passengers, and engaging the TFSC to assist Samoa. With mitigation measures, the project risk was rated moderate (PAD, page 10). Appropriate arrangements were made at appraisal for safeguards and fiduciary compliance (section 10).

There were minor shortcomings. The actual costs of apron works at the airport proved to be higher than expected and the project underestimated the risk associated with changes in donor funding. These issues were however addressed during implementation as part of the restructuring and AF in 2016. There were shortcomings in M&E design (discussed in section 10).

## **Quality-at-Entry Rating**

Satisfactory

### **b. Quality of supervision**

Supervision missions were held twice a year on average during implementation. These missions were supplemented with additional technical missions when deemed necessary. The ICR (paragraph 89) notes that weekly meetings were held with the implementation team to monitor progress. The team provided capacity building and training through World Bank workshops. There were four Task Team Leaders (TTLs) and changes in key project teams (safeguards and financial management) during the project lifetime of six and half years. However, the continuity of leadership was more or less maintained either through co-TTL-leadership, or a handover period when the incumbent worked with the new TTL/team member for a period of time. The team showed agility to address the risk that was not foreseen at appraisal. This risk was due to the Government's decision to construct the new terminal building financed by another donor. This required a significant change in project scope (expansion and strengthening of the apron and taxiways, reconfiguration of fuel hydrant infrastructure and modifications to airfield drainage), and ultimately total financing requirements. This issue was addressed through the AF for the project. A Grievance Redressal Mechanism (GRD) was added through the project restructuring.



### **Quality of Supervision Rating**

Satisfactory

### **Overall Bank Performance Rating**

Satisfactory

## **9. M&E Design, Implementation, & Utilization**

### **a. M&E Design**

This project was part of the regional Pacific Aviation Investment Program (PAIP), and the M&E design was harmonized across the program as part of the requirement for Regional IDA financing. This however required indicators that could be used for all the participating countries. A benefit of this approach was to provide comparable measurement across all projects in the series and to help in future preparation of projects in a streamlined fashion. The key outcome indicators - compliance by Samoa of the security and safety standards of ICAO and implementation of a levy for departing international passengers - were appropriate for monitoring project performance.

As highlighted by other projects under the series, indicator two (safety and security standards of the airport reaches global (ICAO) average was dependent on an external agency. Given that ICAO validation was not under the project's control, SAA updated the Universal Safety Oversight Audit Program (USOAP) score using the Continuous Monitoring Approach (CMA) on a temporary basis after cross checking with autonomous third party assessments. This score however still needs to be validated by the ICAO certification process (scheduled for 2022).

The ICR points out that since the ICAO indicator is an aggregate, it can only capture the measurable aspect of the USOAP. Thus the project's achievements would not be fully captured by this indicator.

### **b. M&E Implementation**

Even though this project was part of PAIP, it was responsible for its own M&E, which was then funneled to the Technical and Fiduciary Services Unit (TFSU) for overall reporting. This allowed for a more standardized approach in terms of measurement and data collection. The ICR (paragraph 75) notes that during the first part of implementation, not all achievements were captured in the Results Framework. However this issue was rectified, and all indicators were updated during the project lifetime. A Grievance Redress Mechanism (GRM) was established with the project restructuring.

The ICR (paragraph 76) notes that there were occasional delays of the project's quarterly reporting, due to the delay in transferring data between SAA and TFSU. Since TFSU was not based in Samoa, SAA had limited means to effectively help the Project Support Team overcome the challenges associated with timely data collection and transfer. These were however rectified by project closure. The ICR notes that several approaches were trialed during implementation to improve the M&E of the project such as spider graphics and new processes for collecting data.



### c. M&E Utilization

The results framework was used to measure project progress.

On balance, while there were shortcomings in M&E design and the choice of outcome indicators, the team provided the additional evidence to demonstrate the achievement of the objectives, therefore M&E is assessed as substantial.

### M&E Quality Rating

Substantial

## 10. Other Issues

### a. Safeguards

The project was classified as a Category B (partial assessment) project under the World Bank safeguard policies: two safeguard policies were triggered at appraisal: Environmental Assessment (OP/BP 4.01) and Indigenous Peoples (OP/BP 4.10) (PAD, page 31). No other safeguard policies were triggered during implementation.

**Environmental Assessment.** The adverse environmental impacts of the project were expected to be limited, and mainly site- specific. An Environmental Management Plan (EMP) was prepared and publicly-disclosed at appraisal to address environmental issues (PAD, paragraph 53).

The ICR (paragraph 80) notes that the project adhered to the Bank requirements for environmental safeguards. Since construction of a new terminal financed by another donor was introduced during implementation, an Integrated Environmental and Social Management Plan (IESMP) was prepared at the time of project restructuring and publicly-disclosed.

A Grievance and Complaint Logging system was set up and available on the Samoa Aviation Investment Project (SAIP) website. This system allowed the stakeholders to not only log potential issues, but also see anonymous information about other grievances. This included statistics on time taken to resolve and the level of priority. Thirteen complaints were received during the project life. Of these eleven were low priority, with two resolved within the standard service of 28 days, while the rest took up to 85 days to resolve.

**Indigenous Peoples.** A social assessment was conducted at appraisal and publicly-disclosed. The PAD (paragraph 51) notes that since the overwhelming majority of project beneficiaries in Samoa are Indigenous Peoples (IPs), no separate IP plan was prepared at appraisal. The PAD also notes that no impacts on indigenous culture, language, customs, institutions or customary lands were expected from the project activities.

The ICR (paragraph 80) notes that project adhered to Bank requirements for social safeguards.



**b. Fiduciary Compliance**

**Financial Management.** An assessment of the financial management capacity of the SAA conducted at appraisal, concluded that SAA's financial arrangements were satisfactory (PAD, paragraph 47).

The ICR (paragraph 82) notes that the financial management was rated satisfactory for the majority of the project's life. It was downgraded to moderately satisfactory in December 2019. The ICR (paragraph 83) notes that a major issue cutting across the IDA portfolio and affecting this project was due to the handling of contract tax liabilities. This issue was eventually resolved through the involvement of the Attorney General's Office and the Tax unit of the Revenue Division. The ICR provides no information on the quality of audits.

**Procurement.** A procurement assessment of SAA was conducted at appraisal. The assessment highlighted risks relating to accountability in evaluation and approval procedures, and adequacy of SAA staffing. The mitigation measures incorporated at design, establishing a post for procurement officer in the Project Support Team (PST), and using simplified procurement procedures and templates for the Pacific Region (PAD, paragraph 49).

A regional procurement approach was used for projects under the PVIP, with procurement centralized through the TFSU. This mitigated the high risk of procurement issues in capacity-constrained countries and increased the attractiveness of works, given the small and remote nature of countries under the program.

The ICR (paragraph 84) notes that procurement was rated moderately satisfactory of the project, with a downgrading to moderately unsatisfactory in June 2020. This was due to the delay in implementation and delivery of supplies and equipment for airfield lighting, power system and air traffic control equipment. The installation of these activities were however completed for the most part by March 2020. The Borrower's ICR (page 7) notes that the introduction of the Bank's new Systematic Tracking of Exchanges in Procurement (STEP) system created major delays in the implementation of some activities. The ICR does not report any case of misprocurement.

**c. Unintended impacts (Positive or Negative)**

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**d. Other**

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**11. Ratings**

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Highly Satisfactory	Satisfactory	Efficacy of the two PDOs are assessed as substantial. Not all the project activities were completed when the project closed and the safety and



			security standards of the Faleolo international airport still needs ICAO validation.
Bank Performance	Satisfactory	Satisfactory	
Quality of M&E	Modest	Substantial	Additional evidence is provided, beyond the RF indicators, to demonstrate the achievement of the intended outcomes.
Quality of ICR	---	Substantial	

## 12. Lessons

The ICR draws the following main lessons from the experience of implementing this project.

**1. The regional approach can be a good option for remote island countries with a limited IDA allocation.** Being part of an IDA regional program allowed Samoa to access additional regional IDA resources for large scale investments in the aviation sector. This project also demonstrated that a regional approach to central procurement can be effective in generating cost savings, as compared to procuring specializing equipment for each country separately.

**2. While regional programs help in harmonizing solutions across participating countries, such programs need to allow some flexibility for countries to tailor activities to specific country circumstances.** In this project, the same set of results indicators were used for all the participating countries. While this project was able to achieve the requirements of the results indicator, it was the only project that was able to do this. The lesson of this project is that results indicators in a regional program needs to take into consideration each country's context.

**3. Remoteness premiums need to be factored into project budgeting, especially when there are limited benchmarks for a certain sector.** For countries like Samoa with substantial remoteness premiums, the costs of shipping, equipment, maintenance and expert staff are usually two to three times higher than in less remote countries. The lesson is that higher cost contingencies needs to be factored into the project design at appraisal.

## 13. Assessment Recommended?

No

## 14. Comments on Quality of ICR

The ICR is clear and well-written. The efficacy section is notable for the adequate level of detail; it provides a clear and substantiated set of observations to assess the achievement of the PDO. The quality of analysis provides sufficient interrogation of the evidence and clearly links the evidence to findings. The lessons from the experience of implementing this project are linked to the narrative. The theory of change provided in the ICR



provides a clear linking of activities to the outputs and the intended outcomes. The ICR candidly discusses the advantages and disadvantages associated with projects with regional IDA funding.

The information provided in the ICR on financial management and environmental management is rather sparse. Also, the main body of the text at 27 pages is considerably more than the usually recommended length of 15 pages.

**a. Quality of ICR Rating**  
Substantial