Public Disclosure Authorized

Report Number: ICRR0022207

1. Project Data

Project ID Project Name

P154149 Vanuatu Aviation Investment Project

Country Practice Area(Lead)

Vanuatu Transport

L/C/TF Number(s)

IDA-56320,IDA-59440,IDA-D1610,TF-

A0607

Closing Date (Original)

31-Dec-2019

Total Project Cost (USD)

73,755,571.71

Bank Approval Date

08-May-2015

Closing Date (Actual)

31-Dec-2019

IBRD/IDA (USD)

Grants (USD)

 Original Commitment
 59,800,000.00
 300,000.00

 Revised Commitment
 73,900,000.00
 300,000.00

Actual 73,755,571.71 300,000.00

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2. Project Objectives and Components

a. Objectives

The Project Development Objective (PDO) as stated in the Financing Agreement (Schedule 1, page 5) and the Project Appraisal Document (PAD, page 4):

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

- b. Were the project objectives/key associated outcome targets revised during implementation?
 No
- c. Will a split evaluation be undertaken?
- d. Components

This project was the third phase of the Pacific Aviation Investment Program (PAIP). The first phase, included Kiribati, Tonga and Tuvalu. The second phase, included Samoa, and reform of the Pacific Aviation Safety Program (PASO) in Vanuatu. This project had five components (PAD, pages 5 - 7).

1. International Airport Infrastructure Investments. The estimated cost at appraisal (including contingencies and taxes) was US\$44.1 million. The revised estimate with AF was US\$64.5 million. The actual cost was slightly more at US\$65.8 million.

This component planned to finance international aviation infrastructure investments to meet International Civil Aviation Organization's (ICAO) safety and security standards in the three international airports (Bauerfield, Pekoa and Whitegrass). Activities in this component included: (i) rehabilitation of airport runway, apron and taxiway pavements at Bauerfield: (ii) extension of the apron area at Bauerfield: (iii) construction of new taxiways and widening the existing taxiway at Bauerfield: (iv) upgrading the airport runway lighting and cabling at Bauerfield, Pekoa and Whitegrass, and approach lighting at Bauerfield: (v) construction of a new domestic terminal, and demolition of the existing domestic terminal at Bauerfield: (vi) provision of air traffic control equipment at Bauerfield and Pekoa: (vi) provision of air traffic control equipment at Bauerfield and Pekoa: (vii) installation of aviation navigation kits: (viii) installation of weather monitoring equipment at Bauerfield and Whitegrass: (ix) upgrading the communications equipment and systems: (x) installation of 'Very Small Aperture Terminal (VSAT) communications systems in the airports: (xi) provision of equipment for improved power supply for Bauerfield and Whitegrass: (xii) upgrading the fire safety equipment at Bauerfield and Whitegrass: (xiii) providing safety and security equipment for passenger baggage and cargo screening: and (xiv) providing design and supervision consulting services.

Following an updated pavement investigation to revaluate the extent of damage after Cyclone Pam in March 2015, the scope of this component was expanded with AF. These activities were added: (i) The scope of pavement works was to be increased in the three airports: (ii) The operational capacity of Bauerfield was to be increased to receive larger jets: (iii) The existing apron at Bauerfield was to be expanded to accommodate larger aircrafts: and (iv) The activity of relocating the domestic terminal at Bauerfield airport was cancelled, in view of the government's decision to build a new terminal, and the need for more investments for pavement rehabilitation at the Pekoa and Whitegrass airports.

2. Aviation Sector Reform and Training. The estimated cost at appraisal (including contingencies and taxes) was US\$1.0 million. The revised estimate with AF was US\$1.5 million. The actual cost was US\$0.8 million.

This component planned to strengthen the capacities of the Civil Aviation Authority of Vanuatu (CAAV), the Ministry of Infrastructure and Public Utilities (MIPU), and other line ministries. Activities in this component included: (I) developing an aviation sector strategy: (ii) providing advisory services to CAAV for updating

the sector legislative framework, the national and international regulatory standards for the sector, and implementing the sector strategy: (iii) providing advisory services for the MIPU to manage oversight: and, (iv) capacity building training.

3. Strengthening of Airport Operations and Management Capacity. The estimated cost at appraisal (including contingencies and taxes) was US\$0.9 million. The revised estimate with AF was US\$1.1 million. The actual cost was US\$0.5 million.

This component planned to strengthen the capacity of Airport Vanuatu Limited (AVL). Activities in this component included: (i) developing an Airport Master Plan: (ii) Technical Assistance (TA) to improve planning, financial viability, and safety of airport operations: and (iii) training on aviation policy, operations and management.

4. Emergency Reconstruction. The estimated cost at appraisal (including contingencies and taxes) was US\$3.7 million. The revised estimate with AF was US\$3.8 million, The actual cost was US\$3.4 million.

During preparation of this project, cyclone PAM devastated Vanuatu in March 2015, and the three international airports were affected. In 2016, key international airlines announced flight cessation at Bauerfield airport over runway safety concerns. This component planned to support the government with emergency reconstruction activities.

5. Project Support. The estimated cost at appraisal (including contingencies and taxes) was US\$2.1 million. The revised estimate with AF was US\$2.8 million. The actual cost was US\$2.7 million.

This component planned to provide project management support. Activities in this component included: (i) management support to the Vanuatu Project Management Unit(VPMU) and the AVL: (ii) costs for the support services provided by the Pacific Aviation Investment Program (PAIP) to the VPMU and AVL: (iii) incremental operating costs of the PMU and TSFU: and (iv) support for financial audits.

The scope of this component was increased with AF to provide additional support to the VPMU for implementing the project.

e. Comments on Project Cost, Financing, Borrower Contribution, and Dates Project cost. The estimated cost at appraisal was US\$59.8 million. With AF, the revised estimate was US\$73.9 million. The actual cost was US\$73.5 million.

Project financing. The project was funded by an IDA credit of US\$59.5 million. AF of US\$14.1 was approved. With this, the total IDA credit for the project was US\$73.6 million. The amount disbursed at closure of the IDA credit was US\$73.4 million.

The Government of Australia, through the Pacific Regional Infrastructure Facility (PRIF) Multi-donor Trust Fund was to provide co financing of US\$0.3 million at appraisal. This amount was fully disbursed when the project closed.

Borrower contribution. No borrower contribution was planned at appraisal. There was no borrower contribution during implementation.

Dates. The project approved on May 8, 2015, became effective on June 3, 2015. AF was approved on January 10, 2017. The project closed as originally scheduled on December 31, 2019.

Other changes. The following changes were made through a Level 2 restructuring on January 10, 2017, following the approval of AF.

- As discussed in section 2d, the scope of component activities was expanded significantly.
- The results framework was modified, and intermediate indications were added, in view of the expanded project scope.

3. Relevance of Objectives

Rationale

Country context. The Republic of Vanuatu, with 80 islands, is a small nation in South Pacific. Given its geographical location and distance from key export markets, Vanuatu's economy is dependent on tourism (with about a quarter of the Gross Domestic Product (GDP) coming from tourism-related activities), and remittances from workers employed abroad (accounting for 3.5% of the GDP). Vanuatu is also highly vulnerable to natural disaster risks, with an average 7% annual losses to GDP due to climate related risks and natural disasters.

Sector context. The aviation sector is vital to Vanuatu's economic development, by providing regional and international connectivity. Carrying over half of the international visitors to Vanuatu, aviation service is a prerequisite for the tourism sector. The sector, besides being essential to migrant workers, is also an indispensable lifeline for international human relief campaigns. At appraisal, the three international airports suffered from various infrastructure asset failures. Bauerfield, the main international gateway airport, was operating with significant cracking, and immediate risk of complete runway pavement failure. The situation was exacerbated by Cyclone Pam in March 2015, which led to actual flight suspensions from Air Zealand, and Virgin Australia in early 2016. Given that, withdrawal of air services would not only have a critical impact on GDP through the tourism sector, but also on the overall economic recovery in the aftermath of Cyclone Pam, the PDOs were highly relevant to the government strategy.

Government strategy. The government strategy articulated in the *Priorities and Action Agenda* for 2006 - 2015 identified, safe and secure domestic and international operations as a priority. The PDO was also well aligned with the government's vision articulated in *Vanuatu 2030*, the *National Development Plan for 2016-2030*, and the *Vanuatu Infrastructure Strategic Investment Plan for 2015-2024*. Vanuatu 2030 clearly stated the need for improving infrastructure quality, strengthening links between tourism and infrastructure, and ensuring compliance with international conventions and standards for safe and secure transport. The National Development Plan, Vanuatu's highest-level policy framework, stated the mission of building reliable infrastructure for people and businesses. The Infrastructure Strategic Investment plan highlighted the need for "ensuring adequate maintenance and upgrading of existing domestic airports and airstrips. The PDOs were also well-aligned with the overall objective of the regional Pacific Aviation Investment Program.

Bank Strategy. The PDOs were well aligned with the Bank's Regional Partnership Framework (RPF) for the nine Pacific Island Countries (PICs), including Vanuatu. The fourth focus area of the RPF specifically

identifies the need for strengthening the enablers of growth and opportunities, through investments in connective infrastructure.

This project was the largest single donor financed in Vanuatu at the time of approval, although the Bank had financed a Port Vila Urban Development Project and an education project in Vanuatu. This project became effective at a crucial time, when the targeted airports were severely damaged by Cyclone Pam in 2015, and faced a high risk of cessation of international flights. The rehabilitation of the international airports was urgently needed for restoring international visitors confidence and reviving the tourism sector, a major source of GDP for Vanuatu. The aviation investments in the airports were vital for the post-disaster response to Cyclone Harold, a category five hurricane, that affected Vanuatu in 2020. The disaster particularly hit the central islands of Vanuatu, including the Pekoa island. Owing to the upgrade under the project, the runways at Pekoa airport, and the other two international islands remained intact, and the airports proved critical for the humanitarian aid delivery to Vanuatu. Although challenging in the country context, the level of ambition was deemed to be appropriate, and the relevance of PDO is rated High.

Rating

High

4. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective

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

Rationale

Theory of Change. The theory of change was sound, and the links between project activities, outputs, and outcomes were logical. Rehabilitating the runways, taxiways and aprons of the international airports, installing navigation aids and other key communication equipment, and upgrading the airport's rescue and fire fighting equipment, would lead to improved operational safety of air transport. There was a reasonable cause and effect chain for the project, and there was the distinct possibility that without the project, international flight operations would be suspended, with a detrimental impact on the tourism sector in Vanuatu.

Outputs (ICR, pages 12 -16, and pages 36-37).

 The runway at Bauerfield airport was rehabilitated, in accordance with the physical characteristics required by the Vanuatu Civil Aviation Rules and the International Civil Aviation Organization (ICAO) standards, as targeted. The apron, runway, taxiways at the airport were upgraded to receive larger aircraft.

- A new Airport Ground Lighting (AGL) system was installed at Bauerfield as targeted, to provide safe visual aids to aircraft operations. (The ICR (paragraph 28) notes that the aircraft lighting system at the airport had been completely damaged by Cyclone Pam).
- A fire tender shelter was constructed at Bauerfield, and the fire crew were trained as targeted.
- Automatic Dependent Surveillance Broadcast (AD -B) ground station was installed at Bauerfield.
- Very Small Aperture Terminal (VSAT) communication systems were procured for Bauerfield, but not
 yet installed at closure (due to the international travel restrictions owing to COVID 19). The ICR
 notes that the systems are expected to be installed by the end of 2020.
- The activity associated with the critical navigation aids package to support ground voice communications and radio navigation services, was not completed at Bauerfield when the project closed, due to a shortfall in project financing. The ICR (paragraph 33) notes that the government has allocated a budget, approved by parliament in July 2019, for completing this activity. This activity is to be completed by the end of 2020.
- Aircraft pavement surfaces (including the runway, a single taxiway and the apron), at the Pekoa and Whitegrass airports were rehabilitated, as targeted.
- Two staff houses that were severely damaged at the Whitegrass airport were demolished, and new houses were built for staff safety, as targeted. The aircraft and fire fighting operations were installed at the airport.
- Automatic Dependent Surveillance Broadcast (ADS -B) ground stations were installed at the Pekoa airport.

Outcomes

- The Bauerfield international airport renewed its status as a Civil Aviation Authority Vanutau (CAAV) certified airport in May 2019. According to the inspection carried by CAAV, with support from the Pacific Aviation Safety Office (PASO), the aerodrome design and operations at the airport were compliant with the safety and security standards of the Vanuatu Civil Aviation rules, and applicable portions of the International Civil Aviation Organization (ICAO).
- The ICR (paragraph 54) notes that the number of international visitors by air increased by 17% between 2013 and 2015 (from 90,000 in 2013, to 109,500 in 2015), following the suspensions of flights by Air Zealand, Qantas and Virgin Australia after cyclone Pam. With emergency repairs under the project, the international air traffic increased over the following years and recovered to the 2014 level, by the end of 2017. By the end of the project in 2019, the number of international passengers through the international airports had increased to 120,500.

Given that the outcomes were realized with the Bauerfield international airport receiving its certification and growth in traffic of international passengers, and that most of the activities had been completed when the project closed, efficacy of this PDO is substantial.

Rating Substantial

OBJECTIVE 2

Objective

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

Rationale

Theory of Change. The theory of change for this objective was based on the premise that to improve oversight, capacity building of the relevant aviation agencies was required. Capacity building of the Airport Vanuatu Limited (AVL, the enterprise managing Vanuatu's international airports) for developing airport management plans, capacity building of the Civil Aviation Authority Vanuatu (CAAV), and technical assistance to the AVU and CAAV for setting up a process for safety and security levy collection from international passengers, were likely to improve oversight of the aviation sector. The links between project activities, outputs and outcomes were logical. These activities, in combination with the activities described above, were likely to aid in the long-term development outcome of developing the tourism sector.

Outputs

- Training was provided to the CAAV for rewriting aerodrome manuals in accordance with ICAO standards.
- Technical assistance was provided by the Pacific Aviation Safety Office (PASO) inspectors to assist CAAV to renew Vanuatu's air operator certification.
- Airport master plans were completed for the three international airports as targeted. The plans
 included a twenty- year airport strategic development plan, a ten-year prioritized investment plan, and
 recommendations on financing options and implementation schedules.

Outcomes

- The aviation sector strategy (providing practical recommendations for future policy development and sector reforms), developed under the project, was endorsed by the government.
- Starting from September 1, 2017, the government started collecting a regional safety and security levy of five Australian dollars from departing passengers. As per law, CAAV and AVL must use the revenue solely for improving aviation safety and security.
- The oversight capacity of CAAV was to be measured by a third-party audit of the ICAO Universal Safety Oversight Audit Program (USOAP). The baseline for this indicator was from the USOAP audit conducted for Vanuatu in 2016, which resulted in an average implementation score of 49.24, far below the global average of 58.62. The ICR notes that there was no USOAP audit when the project closed, and hence no audit result to compare against the baseline. At the same time, the ICR captured the related progress under applicable audit areas.

This review concludes that the project had no control over the USOAP audit, and in view of the activities delivered as planned and the outcomes achieved related to improving the oversight, the efficacy of this PDO is rated as substantial.

Rating Substantial

OVERALL EFFICACY

Rationale

Given that most of the outcomes were realized, overall efficacy is substantial.

Overall Efficacy Rating

Substantial

5. Efficiency

Economic analysis. A cost- benefit analysis was used to calculate the economic returns of the project activities. These activities accounted for 89% of the appraisal estimate and 90% of the actual cost. Without the project, the condition of the runways at the international airports would have resulted in more cessation of international air services through the airports. This assumption was realistic, given the actual flight suspensions from Air Zealand, Qantas, and Virgin Australia in early 2016, in the wake of Cyclone Pam. The economic benefits of the project were assumed to come from: (i) avoided operational accidents, caused by the deterioration of the runways and other safety and security risks at the airports: (ii) minimized GDP losses from tourism and travel related activities: and (iii) avoided runway repair costs from frequent condition failures. The Net Present Value (NPV) at 10% discount rate at closure was US\$28.3 million, as compared to the NPV of US\$12.0 million at appraisal. The ex post EIRR at 84.7% was marginally lower than the ex ante EIRR of 85.2%.

Administrative and operational issues. As an emergency project, the project was prepared within four months, and the project design was made possible through leveraging the existing technical capacity and design features from other Pacific Aviation Investment Program. The costs were underestimated, due to the lack of comparable contract awarded in Vanuatu that could serve as a benchmark for the cost estimates. There were implementation delays following the change in project scope to receive larger air crafts at Bauerfield, at government request. The financing shortfall of US\$6.0 million, contributed to the non-completion of the activity associated with the installation of navigation aids at Bauerfield airport. This activity was to be completed by the government budget. With the exception of this activity, all other activities were completed, and the project closed as scheduled.

In sum, efficiency is rated as substantial, given the economic justification for the project and minimal administrative shortcomings during implementation.

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	✓	84.70	89.00 □ Not Applicable
ICR Estimate	✓	85.20	90.00 □ Not Applicable

^{*} 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 strategies for Vanuatu is High. Efficacy of the two objectives is substantial, given that most of the outcomes were realized. Efficiency is substantial, in view of the economic justification for the project. Taking these ratings into account, outcome is rated as satisfactory.

a. Outcome Rating Satisfactory

7. Risk to Development Outcome

Natural disaster risk and risks associated with exposure to pandemic. There are risks to ongoing project benefits, due to the after effects of Cyclone Harold, a cyclone five hurricane that struck Vanuatu in 2020, and the global pandemic of COVID - 19, due to the following reasons: (i) The already allocated government budget for the navigation aids package might be diverted for other purposes, such as for COVID -19 and responding to Cyclone Harold: (ii) The safety and security levy could shrink due to the decline of international travel. This could undermine CAAV's capacity to respond to aviation safety oversight: and (iii) There is a risk that the reduced air traffic will have an adverse impact on the revenue raised by Airport Vanuatu Limited's (AVL) by way of landing fees, to fund maintenance activities.

8. Assessment of Bank Performance

a. Quality-at-Entry

Project preparation drew on the experiences from the first and second phase of the regional PAIP. As an emergency operation, the project was prepared within four months and the project became effective a month after approval. At appraisal, the preparation team mobilized US\$1 million from the Bank's Project Preparation Facility (PPF), to support activities at the Bauerfield Airport, and the design included retroactive financing of up to US\$10.0 million, to cover the cost of technical and fiduciary services until project effectiveness (PAD, paragraph 32). The Ministry of Infrastructure and Public Utilities (MIPU) was overall in charge of implementation, and the Vanuatu Project Management Unit (VPMU) for fiduciary management and M&E. The arrangements were appropriate, as VPMU had experience with other donor-

funded projects. Several risks were identified at appraisal, including risks associated with political and governance risks, weak institutional capacity and stakeholder risk. Mitigation measures incorporated at design, included representing all stakeholders through the VPMU, and technical assistance to the relevant agencies. Even with mitigation measures, project risk was rated as high at appraisal (PAD, page 11). Appropriate arrangements were made at appraisal for safeguards and fiduciary compliance (discussed in section 10).

There were minor shortcomings at quality at entry. One, the costs were underestimated, mainly due to lack of comparable costs in Vanuatu before the project. As a result, the preparation team had to come with the best possible estimate, using prices from previous PAIP projects; and two, there were shortcomings in M&E design, due mainly to the requirement of the regional IDA program (discussed in section 10a).

Quality-at-Entry Rating Satisfactory

b. Quality of supervision

Fourteen supervision missions were conducted during the lifetime of the project, representing three to four full-fledged missions until the middle of 2018. The ICR (paragraph 102) reports that the number of missions reduced, after the resident Task Team Leader (TTL) was deployed to Vanuatu. This presence of the TTL in country aided in providing more accessible technical support on site. The proactive support provided by the supervision team aided in resolving issues during implementation (such as, preparing an expedited emergency works program to repair the Bauerfield airport in less than three months, providing technical inputs to help the government to understand the cost and technical implications of changing work scope at Bauerfield, and providing advisory services during implementation). The Mid Term Review held in February 2018, aided in identifying issues, particularly relating to the financing gap. The support provided by the team aided in procurement compliance (discussed in section 10b).

Quality of Supervision RatingSatisfactory

Overall Bank Performance Rating Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design

This project was part of the Pacific Aviation Investment Program, and the M&E design was harmonized across the program. This approach was expected to provide comparable measurement across all projects. The Vanuatu Project Management Unit (VPMU) was to be in charge of collecting data for

monitoring, with assistance from the Technical and Fiduciary Services Unit (TFSU) of the Pacific Aviation Investment Program (PAIP).

Although the key outcome indicators were sound, there were shortcomings at M&E design. One, the key outcome indicator - regulatory certification of safety and security - was defined to measure Bauerfield international airport's compliance with the Vanuatu Civil Aviation rules and applicable portions of ICAO guidelines. As the only indicator that measured the improvement of airport's safety compliance, it failed to cover the Pekoa and Whitegrass international airports; and two, the key outcome indicator "State requirements for safety and security reaches global average" depended on third- party audit. Since the project had no control over this aspect, this indicator failed to capture the actual progress relative to the baseline.

b. M&E Implementation

The ICR (paragraph 86) notes that there were frequent delays in quarterly reporting of M&E data, due to the difficulty in communication between the VPMU and the TFSU. Because TFSU was not based in Vanuatu, it had limited means to help VPMU overcome challenges in timely data collection. Further, there was lack of clarity in the project implementation arrangement, regarding whether VPMU or TFSU, was ultimately responsible for the timely delivery of project reports.

c. M&E Utilization

The M&E information was used for taking corrective actions for the issues that arose during implementation (such as, the delay in implementing the safety and security levy for international passengers, and financing gaps for the activity associated with installing the navigation aids package).

In sum, M&E is rated as modest, in view of the shortcomings in M&E design and M&E implementation.

M&E Quality Rating Modest

10. Other Issues

a. Safeguards

The project was classified as a Category B (partial assessment) project, under World Bank safeguard policies. Two safeguard policies were triggered at appraisal: Environmental Assessment (OP/BP 4.01) and (Involuntary Resettlement (OP/BP 4.12) (PAD, page 15). The ICR (paragraph 90) notes that no additional safeguards were triggered with the AF for the project.

Environmental assessment. The PAD (paragraph 58) notes that the project activities were to be undertaken within the existing airport precincts, and the potential negative environmental impacts were expected to be site-specific (such as noise and dust during construction). An Environmental and Social Management Plan (ESMP) was prepared and publicly disclosed at appraisal (paragraph 62).

The ICR (paragraph 91) notes that the overall rating for environmental compliance was moderately unsatisfactory when the project closed. The contractor did not have adequate understanding of the Bank's environment policies, and produced an Environmental and Management Plan (ESMP) approximately 160 days after the project became effective. There were issues of occupational health and safety standards, with 20 reported incidents under the project. The ICR (paragraph 93) notes that two grievances submitted during implementation (termination of contracts with local workers without advance payment or adequate payment, and dumping of excess bitumen by the contractor's workers in the bush behind the Whitegrass airport), were addressed in a timely fashion.

Involuntary resettlement. No land acquisition or resettlement was envisaged at appraisal (PAD, paragraph 56). A Resettlement Action Plan (RAP) was included in the ESMP to cover any eventualities (PAD, paragraph 59). The ICR (paragraph 90) notes that there was no land acquisition, as all project activities were conducted within the existing airport areas.

b. Fiduciary Compliance

Financial management. A financial management assessment conducted at appraisal, concluded that the financial arrangements were satisfactory (PAD, paragraph 52). The ICR (paragraph 96) notes that there were frequent delays in the submission of Interim Financial Reports (IFRs), and audited project financial statements, due to inadequate staff with relevant experience at the VPMU. The first audited financial statement was submitted five months after the due date, and four overdue IFRs were submitted only at the time of the Mid Term Review in February 2018. At project completion, the audited financial statement for 2018 was still pending. The CR provides no information on the quality of audits.

Procurement. The ICR (paragraph 94) notes that a regional approach was used for procurement under the Pacific Aviation Investment Program (PAIP), with procurement centralized through the Technical and Financial Services Unit (TFSU) of the PAIP. This was appropriate, given the capacity constraints and the small and remote nature of the targeted countries There were no procurement issues during implementation and there were no incidents of mis - procurement (ICR, paragraph 95). However, there were seven unfinished procurement activities (mainly with respect to installation of the navigation aid package), that was currently under procurement by the government (as indicated in section four, the parliament has approved the government budget for completing these activities).

c. Unintended impacts (Positive or Negative)

d. Other

11. Ratings			
Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Satisfactory	Satisfactory	
Bank Performance	Satisfactory	Satisfactory	
Quality of M&E	Modest	Modest	
Quality of ICR		Substantial	

12. Lessons

The following three lessons are used from the experience of implementing this project, with some adaptation of language:

- 1. The regional approach could be an ideal option for countries with limited IDA allocation and an urgent need for developing complex large scale investments. As part of an IDA regional program, this project provided additional funding from regional IDA sources. This aided Vanuatu in accessing additional resources and support from the Pacific Aviation Investment Program (PAIP) aided in preparing the project in an expedited manner. Further, a regional procurement approach can be helpful in enabling the participating countries to standardize their practice.
- 2. While maintaining the benefit of using harmonized solutions across participating countries, regional programs need to allow a certain flexibility in tailoring the design to reflect country context. In this project, the regional requirements on results indicators limited the project's option to offset some shortcomings in the M&E framework by making it more relevant to the country context.
- **3.** Remoteness needs to be factored into project budgeting, especially when there are limited benchmarks for certain sectors. Given that this was a first of its kind financing in the sector, cost estimates proved to be challenging. The lesson is that higher cost contingencies need to be factored into the project design at appraisal, and these estimates need to be updated continuously based on the latest data available data during implementation.

13. Assessment Recommended?

Yes

Please Explain

This project in Vanuatu was the third phase of the Pacific Aviation Investment program, with the phase one and two, covering projects in the Republic of Kiribati, the Kingdome of Tonga, Tuvalu, Samoa, and the fourth

phase of the ongoing project in Solomon Islands. Once all these phases are completed, it would be instructive to conduct a field assessment to learn from implementation experience of an aviation program at the regional level.

14. Comments on Quality of ICR

The ICR is well-written. It candidly discusses the issues associated with overestimation of costs, given the lack of comparable benchmarks. The narrative supports the ratings and available evidence. The ICR overall follows the guidelines and is focused on results. The theory of change provided in the ICR helps the reader in understanding how the outcomes have been reached. The ICR draws good lessons from the experience of implementing this project.

The details provided in the ICR on financial management is sparse. The main text of the ICR at 27 pages is almost twice the recommended length of 15 pages.

a. Quality of ICR Rating Substantial