



# Completion Report

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Project Number: 52320-001  
Technical Assistance Number: 9702  
April 2020

## Timor-Leste: Preliminary Assessment for Dili Airport Runway Upgrading Project

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## TECHNICAL ASSISTANCE COMPLETION REPORT

<b>TA Number, Country, and Name:</b> TA 9702-TIM: Preliminary Assessment for Dili Airport Runway Upgrading Project		<b>Amount Approved:</b> \$225,000.00	
		<b>Revised Amount:</b> N/A	
<b>Executing Agency:</b> Ministry of Transport and Communication	<b>Source of Funding:</b> TASF 6	<b>Amount Undisbursed:</b> \$8,172.00	<b>Amount Used:</b> \$216,828.00
<b>TA Approval Date:</b> 21 Dec 2018	<b>TA Signing Date:</b> 21 Dec 2018	<b>TA Completion Date</b>	
		<b>Original Date:</b> 31 Aug 2019	<b>Latest Revised Date:</b> 29 Feb 2020
		<b>Financial Closing Date:</b> 13 Feb 2020	<b>Number of Extensions:</b> 1
<b>TA Type:</b> Knowledge and support TA	<b>Nature of Activity:</b> Research and Development	<b>TA Arrangement:</b> Small-scale	

### Description

One of the key pillars of Timor-Leste's Strategic Development Plan (2011 – 2030) to support its growing economy is to build and maintain core infrastructure, including airports and sea ports.<sup>1</sup> The Government of Timor-Leste targeted to improve the Presidente Nicolau Lobato International Airport (Dili Airport), the only international airport in Timor-Leste to an airport meeting the minimum level of international airport standards set by the International Civil Aviation Organization (ICAO) and the International Air Transport Association (IATA) by (i) improving associated infrastructure, and (ii) expanding the terminal and runway capacity from the current volume of 150,000 passengers (as of 2012) to one million passengers per year.

The government's objectives are the following: (i) maintain their civil aviation practice to the international standards; (ii) improve the limited available human resources to match the growing requirements; and (iii) build stronger aviation links with major Asian hubs to increase opportunities and enable growth in the tourism and other economic sectors.<sup>2</sup> Aside from the tourism sector, the Dili Airport also serves daily charter flights for oil companies.

The government undertook previous studies to identify the physical development options and financing arrangements for the airport upgrade in cooperation with the International Finance Corporation (IFC), and Japan International Cooperation Agency (JICA).<sup>3, 4</sup> Currently, the length of the airport runway is 1,850 meters (m), restricting large aircrafts, including widebodies, to operate at the airport. Two main options to expand the runway were studied: (i) Option 1 to extend the runway to the west and into the sea; and (ii) Option 2 to extend the runway to the east across the river, which can avoid the extension to the sea but have resettlement impact for over 1,000 people. Further, there are options of the phased extension plan of the runway to: (i) 2,100 m; (ii) 2,500 m; and (iii) 3,000 m. The decision on the runway extension options is critical since development plans for affiliated facilities and infrastructure such as taxiways and aprons, and safety and security installations are dependent on it.

The TA was to build upon the two previous studies above and continue the technical discussions with relevant government agencies and other development partners involved. Through stakeholder workshops, the consensus on the preferred option must be determined. The TA's executing agency is the Ministry of Transport and Communications with the Administration of Airports and Air Navigation of Timor-Leste (ANATL) as the implementing agency.

<sup>1</sup> Government of Timor-Leste. 2011. *Strategic Development Plan 2011 – 2030*. Dili.

<sup>2</sup> The Dili airport serves regular connections to Darwin, Denpasar, and Singapore.

<sup>3</sup> International Finance Corporation. World Bank Group. *Presidente Nicolau Lobato International (Dili) Airport Study - Summary of Master Plan Recommendations*. Presentation prepared for the Government of Timor-Leste, Dili. 17 October 2019.

<sup>4</sup> Japan International Cooperation Agency. 2019. *Preparatory Survey for the Project for Improvement of Presidente Nicolau Lobato International Airport (Pre-release version)*. Unpublished.

### Expected Impact, Outcome, and Outputs

The intended impact was Dili Airport expanded to meet the future demand for air traffic. The TA outcome was airport development progressed. Two outputs of the TA were: (i) multi-criteria analysis to facilitate making the decision on the runway extension; and (ii) government's endorsement of the preferred option.

### Implementation Arrangements

A consulting firm, Nippon Koei Co. Ltd. (NK), Japan, (the Consultant) was engaged to conduct the study under quality - and cost- based selection (90:10) on a lump-sum basis. Advance action was originally proposed in November 2018, prior to the TA approval. However, due to the delay in finalizing the terms of reference, the plan for advance action was not materialized and actual recruitment process was initiated in January 2019. The Consultant was mobilized in June 2019.

### Conduct of Activities

The TA was extended once, for 6 months, resulting in a total implementation period of 14 months. There was no implementation delay other than the initial delay on consultant's mobilization. Multi-criteria analysis was developed through a consultative process to compare various options considering technical, economic, social and environmental impacts. Relevant stakeholders in the Government of Timor-Leste, including ANATL were well consulted, but the consultation with affected communities and interest groups identified were to lesser extent than original plan. Indicative cost estimates of each alternative were prepared and preliminary assessment of the social and environmental impacts was also conducted. The two outputs of the TA were successfully delivered. Actual key activities are listed below, as presented in the design and monitoring framework (DMF). Detailed achievements are described in Appendix 1. Actual TA allocation is reflected in Appendix 2.

Output 1: Multi-criteria analysis to facilitate making the decision on the runway extension

- 1.1 Consulting firm recruitment was processed from January to May 2019.
- 1.2 Consulting firm commenced services on 10 June 2019.
- 1.3 Consulting firm completed all required reports including submission of Final Options Report (Final Report) containing the multi-criteria analysis in December 2019.

Output 2: Government's endorsement of preferred option

2.1 Consulting firm conducted its first stakeholders' consultation workshop on 4 July 2019 participated by representatives from government (Ministries of Commerce, Industry and Environment; Finance; Planning and Strategic Investment; Petroleum and Natural Resources; Public Works, State Government; Transport and Communications, and Tourism), Development Partners, Civil Aviation Interest Group, and Civil Society. In lieu of a second stakeholders' consultation workshop originally scheduled in October 2019, the consultant presented findings of the final options report to the members of the government's Technical Working Group in the second week of October 2019. A separate presentation was made to ANATL in the last week of October 2019.

2.2 The Council of Ministers approved the Dili Airport Master Plan, presented by IFC, on 23 October 2019. TA's input to government's decision on the preferred option to extend Dili Airport's runway extension was the presentation in mid-October which preceded the Consultant's submission of the final options report (November 2019), and presentation to the government (December 2019).<sup>5</sup> The presentation and report have been used as supporting material to reinforce the decision.

### Technical Assistance Assessment Ratings

Criterion	Assessment	Rating
Relevance	The Dili Airport development is a top priority for the Government of Timor-Leste, an essential element of the government's strategy on tourism development. The TA is ADB's first aviation sector support to the Government of Timor-Leste and is considered a flagship support addressing the priority issue of the government. <sup>6</sup> The outputs of the TA adequately responded to the development stage of the ensuing project by providing better understanding of various alternative options and finally concluding the preferred option approved by the Government of Timor-Leste. The other options studied with various lengths (2,500 m and 3,000	Highly relevant

<sup>5</sup> ADB. 2019. *Preliminary Assessment for Dili Airport Runway Upgrading Project*. Consultant's report. Manila (TA 9702-TIM). <https://www.adb.org/sites/default/files/project-documents/52320/52320-001-tacr-en.pdf>

<sup>6</sup> Succeeding ADB support to Timor-Leste's aviation sector is reflected in ADB. 2019. *Country Operations Business Plan: Timor-Leste, 2020 – 2022*. Manila.

Criterion	Assessment	Rating
	m) of the runway extension were accepted by the Government of Timor-Leste as next phases for airport expansion. Upon completion of the TA, the government subsequently requested ADB to assist in conducting a feasibility study to cover the phased runway extension plan as well as other airport ancillary facilities including Air Traffic Control Tower (ATCT), fully utilizing the results of the TA.	
Effectiveness	The DMF target at the outcome level was achieved. The TA was effective in supporting the Government of Timor-Leste to make progress on airport development plan, engaging both the government stakeholders and development partners (ADB, DFAT, IFC, and JICA) to collectively mobilize needed resources for the ensuing project.	Effective
Efficiency	TA was completed without any cost overruns and significant delay except for the initial delay in mobilizing the consultants which required 6 months extension of TA implementation period. The initial implementation period of 8 months was too ambitious with the original plan of 2 – 3 months from EOI to Notice to Proceed stage. The TA was completed within the original budget and the use of lump-sum contract was an advantage in minimizing contract administration burdens.	Efficient
Overall Assessment	The TA was implemented as envisaged. This small-scale TA support was instrumental in diversifying ADB's support in Timor-Leste, into air transport subsector. TA also succeeded in leveraging resources of other development partners through effective engagement with them for a comprehensive development of the Dili airport expansion plan.	Successful
Sustainability	The government has been fully committed in developing the Dili Airport Upgrading Project with dedicated resources to move forward. This was evident through the establishment of an inter-ministerial technical working group to drive the technical level consultations as well as inter-ministerial steering committee to deliver policy decisions, both of which were established in October 2019. The realization of a project is highly likely.	Most likely sustainable

#### Lessons Learned and Recommendations

Implementation and/or delivery	The original implementation period of 8 months, inclusive of consultant selection process, was ambitious. The implementation period should be planned in consideration of a realistic consultants' selection timeframe.
Management of staff and consultants	The use of lump-sum contract has made the contract management much easier and cost effective. Contract was implemented within budget and schedule. Staff time was efficiently utilized, and administrative burden was reduced due to flexibility of managing a lump-sum contract.
Stakeholder participation	The involvement of affected communities and civil societies during the stakeholders' consultation process was not fully realized under the TA as envisaged. The government's policy decision on runway extension options preempted the process, and further consultations were limited only among the key government stakeholders.
Partnership and cofinancing	The TA made full use of previous studies by IFC and JICA in developing the alternative options. The TA generated substantive discussions among ADB, IFC and JICA, which assisted the Government of Timor-Leste in making an informed decision.
Replication and/or scaling up	The use of small-scale TA was effective in timely determining the project scope, financing gaps, and institutional set-up prior to preparation of a full-scale feasibility study. Similar approach can be adopted under TRTA facilities for multiple pipeline projects before starting full-scale studies.
Post-TA financial resource	ADB approved a regional transaction technical assistance facility (F-TRTA) in December 2019 to support the project preparation of proposed transport projects in Southeast Asia. <sup>7</sup> An allocation of \$1.14 million will prepare the

<sup>7</sup> ADB. 2019. *Technical Assistance for Southeast Asia Transport Project Preparatory Facility Phase 2*. Manila (TA 9925-REG)

	ensuing project indicatively programmed for 2021. Another TA can support project component relating to regional, cross-border tourism. <sup>8</sup>
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#### **Follow-up Actions**

As a result of this TA, the Government of Timor-Leste has requested ADB's assistance to prepare the \$40 million Dili Airport Runway Extension Project (footnote 6) under a F-TRTA. This follow-up TA support will be designed to ensure that safeguards due diligence requirements are fully complied, and project's technical and procurement readiness are enhanced with recommendations for development plan of the airport in a phased manner. The inclusion of the expansion project of the Dili Airport will need to be followed up through country programming consultations.

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<sup>8</sup> ADB. 2019. *Technical Assistance for Cross-Border Trade and Cooperation between Indonesia and Timor-Leste*. Manila (TA 9767-REG).

## DESIGN AND MONITORING FRAMEWORK

Impact Dili airport expanded		
Results Chain	Performance Indicators with Targets and Baselines	Achievements
<b>Outcome</b>  Airport development progressed	a. By July 2019, a decision on the direction of the runway expansion has been made (2018 baseline: no decision).  b. By July 2019, the detailed scope of assignment for undertaking full feasibility study has been prepared and endorsed by the government (2018 baseline: not available).	a. The Government of Timor-Leste decided its preferred option of extending the airport runway towards the sea on 23 October 2019. Consultant's final report was submitted to ADB in November 2019. Copy of final report was shared with the Government of Timor-Leste in December 2019.  b. Following completion of the Consultant's final report, the Government of Timor-Leste in December 2019 requested ADB assistance to undertake the full feasibility study. Full scope of the feasibility has been discussed with government in February 2020 and the detailed scope of assignment was prepared under the TA 9925-REG (footnote 7).
<b>Outputs</b>  1. Multi-criteria analysis to facilitate making the decision on the runway extension.  2. Government's endorsement of preferred option.	1a. By June 2019, a multi-criteria analysis prepared, including consultations of the stakeholders out of which at least 40% are women (2018 baseline: not available).  2a. By July 2019, the multi-criteria analysis presented to the government, including consultations of the stakeholders (2018 baseline: not available).	1a. Stakeholders' consultation workshop was conducted on 9 July 2019. There were 6 women, equivalent to 17%, of total 35 participants who attended the stakeholders' consultation workshop in July 2019.  2a. The final report was shared with the Government of Timor-Leste in December 2019. Cover letter indicated that the work done by consultant was coordinated with Loan and PPP Unit of Ministry of Finance, Administration of Airports, Air Navigation of Timor-Leste, and Civil Aviation Authority of Timor-Leste prior to the Government of Timor-Leste's decision selecting the option to extend the airport runway towards the sea based on 23 October 2019 Council of Minister-approved master plan. In lieu of a second stakeholders' workshop originally scheduled in early October 2019, the Government of Timor-Leste's Technical Working Group, which leads the preparatory work for the upgrading and modernization of Dili Airport, requested that the consultant present the findings reflected in its final report.

**Actual Key Activities with Milestones**

**1. Output 1: Multi-criteria analysis to facilitate making the decision on the runway extension.**

- 1.1 Recruitment of the consultant from 10 January 2019 (publication of consulting services recruitment notice) to 13 May 2019 (end of contract negotiations).
- 1.2 Consultant mobilized on 10 June 2019.
- 1.3 Multi-criteria analysis completed and presented to the Government of Timor-Leste's Technical Working Group in October 2019. The final report was approved by ADB in December 2019.

**2. Output 2: Government's endorsement of preferred option**

- 2.1 Consultations of the stakeholders conducted on 9 July 2019.
- 2.2 Government's decision made by October 2019.

**Actual Inputs**

Asian Development Bank: \$216,828

Government: \$22,500.00 (estimated at 10% of total ADB inputs; in-kind contribution from the government in the form of counterpart staff)

Source: Asian Development Bank.

## TECHNICAL ASSISTANCE COST

**Table A2.1: Technical Assistance Cost by Activity**  
(\$'000)

Item	Amount <sup>a</sup>	
	Original <sup>b</sup>	Actual
1. Consultants	210.0	203.1
2. Goods	000.0	000.0
3. Training, seminars and/or conferences	3.0	1.5
4. Surveys	7.0	12.2
5. Miscellaneous TA administration	000.0	000.0
6. Pilot testing	000.0	000.0
7. Contingency	5.0	000.0
<b>Total</b>	<b>225.0</b>	<b>216.8</b>

<sup>a</sup> Includes ADB-financed funds.

<sup>b</sup> Original estimated cost in the TA report.

Source: Asian Development Bank estimates.

**Table A2.2: Technical Assistance Cost by Fund**  
(\$'000)

	ADB	Total Cost
1. Original <sup>a</sup>	225.0	225.0
2. Revised	0.0	0.0
3. Actual	216.8	216.8
4. Unused	8.2	8.2

<sup>a</sup> Original estimated cost in the TA report.

Source: Asian Development Bank estimates.