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Report No: 57978-TO

### RESTRUCTURING PAPER

ON A

## PROPOSED PROJECT RESTRUCTURING OF TONGA TRANSPORT SECTOR CONSOLIDATION PROJECT GRANT H416-TO

TO THE

KINGDOM OF TONGA

November 4, 2010

Timor-Leste, Papua New Guinea and the Pacific Island Sustainable Development Department East Asia and Pacific Region

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### **CURRENCY EQUIVALENTS**

(Exchange Rate Effective August 6, 2010)

Currency Unit = Tongan pa'anga (TOP)

TOP 1 = US\$ 0.52US\$ 1 = TOP 1.92

### Other currency equivalents

Australian dollar (AUD) 1 = US\$ 0.92

US\$1 = AUD 1.09

Special Drawing Rights (SDR) 1 = US\$ 1.51

US\$1 = SDR 0.66

### FISCAL YEAR

July 1 – June 30

### ABBREVIATIONS AND ACRONYMS

AusAID Australian Government Overseas Aid Program

AUD Australian Dollar

CQ Consultants' Qualification

EMP Environmental Management Plan

FM Financial Management

GOT Government of Kingdom of Tonga

ICAO International Civil Aviation Organization

ICB International Competitive Bidding
IDA International Development Association
MOF Ministry of Finance and National Planning

MOT Ministry of Transport MOW Ministry of Works

NCB National Competitive Bidding

NZAID New Zealand Government Overseas Aid Program

PDO Project Development Objective

PRIF Pacific Region Infrastructure Facility

PST Project Support Team

QBS Quality-Based Selection of Consultant firms

QCBS Quality and Cost-Based Selection of Consultant Firms

REF Regional Engagement Framework

SDR Special Drawing Rights
SIL Specific Investment Loan
TAL Tonga Airports Limited
TBU Tongatapu Airport
TOP Tongan Pa'anga

TSCP Tonga Transport Sector Consolidation Project

US\$ United States Dollar VAV Vava'u Airport

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## COUNTRY TONGA: Transport Sector Consolidation Project

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# Restructuring Restructuring Type: Level one Last modified on date: 11/04/2010

1. Basic Information	
Project ID & Name	P096931: TO-Transport Sector Consolidation
Country	Tonga
Task Team Leader	Christopher R. Bennett
Sector Manager/Director	Charles M. Feinstein
Country Director	Ferid Belhaj
Original Board Approval Date	07/08/2008
Original Closing Date:	12/31/2011
Current Closing Date	12/31/2011
Proposed Closing Date [if applicable]	12/31/2013
EA Category	C-Not Required
Revised EA Category	B-Partial Assessment-Partial Assessment
EA Completion Date	
Revised EA Completion Date	07/30/2010

2. Revised Financing Plan (US\$m)			
Source	Original	Revised	
BORR	1.08	2.33	
IDAT	5.44	5.44	
PRIF	0.00	9.32	
Total	6.52	17.09	

3. Borrower		
Organization	Department	Location
Kingdom of Tonga	Ministry of Finance	Tonga

4. Implementing Agency		
Organization	Department	Location
Ministry of Transport		Tonga
Tonga Airports Ltd.		Tonga

5. Disbursement Estimates	(US\$m)	
Actual amount disbursed as of 1	2/02/2010	1.19
Fiscal Year	Annual	Cumulative
2011	6.45	7.64
2012	5.50	13.14
2013	1.76	14.90
	Total	14.90

6. Policy Exceptions and Safeguard Policies	
Does the restructured project require any exceptions to Bank policies?	N
Does the restructured projects trigger any new safeguard policies? If yes, please select	Y
from the checklist below and update ISDS accordingly before submitting the package.	

Safeguard Policy	Last Rating	Proposed
Environmental Assessment (OD 4.01)	X	
Natural Habitats (OP 4.04)		
Forestry (OP 4.36)		
Pest Management (OP 4.09)		
Physical Cultural Resources (OP 4.11)		
Indigenous Peoples (OD 4.20)		
Involuntary Resettlement (OP 4.12)		
Safety of Dams (OP 4.37)		
Projects in International Waters (OP 7.50)		
Projects in Disputed Areas (OP 7.60)		

### 7a. Project Development Objectives/Outcomes Original/Current Project Development Objectives/Outcomes

To establish and consolidate the operations of the newly-created Ministry of Transport as a unified transport sector-policy, planning and regulatory ministry and to improve the level of compliance of the civil aviation and maritime subsector entities with international safety and security standards.

### 7b. Revised Project Development Objectives/Outcomes [if applicable]

The transport sector has (i) stronger policy, planning, and regulatory institutions and framework, (ii) improved safety and security facilities and compliance with international safety and security standards, and (iii) greater domestic capacity for road rehabilitation and maintenance.

#### TONGA TRANSPORT SECTOR CONSOLIDATION PROJECT

#### RESTRUCTURING PAPER

#### **SUMMARY**

- 1. This Restructuring Paper seeks the approval of the Executive Directors to introduce changes to the Tonga Transport Sector Consolidation Project (TSCP), IDA Grant H416-TO. The proposed restructuring would: (i) increase project financing to include new funds made available by the Government of Australia and coordinated through the Pacific Region Infrastructure Facility (PRIF); (ii) modify the project activities and costs to better target current government strategies and priorities, particularly related to maritime safety and new investments in road maintenance; (iii) revise the project development objective (PDO) to reflect the project's new activities; and, (iv) extend the closing date from December 31, 2011 to December 31, 2013, primarily to allow sufficient time to undertake the new civil works activities.
- 2. With its remote location, small dispersed islands, and other geographical factors, Tonga faces many challenges in developing and maintaining sustainable internal, regional and international transport linkages. Such linkages are essential to the country's economic development and social wellbeing. The original objectives of the TSCP were to strengthen policy, planning and regulation by consolidating the newly created Ministry of Transport (MOT) and to improve compliance with international safety and security standards in the aviation and maritime sectors. This in turn would improve the efficiency, safety and sustainability of the transport sector, thereby benefitting Tongans directly through improved services and indirectly by removing potential barriers to tourism and other economic activities.
- 3. The project has four components:
  - **Component A:** Establishment of a sustainable transport sector policy, and institutional and operational framework;
  - Component B: Provision of high priority strategic investments required to meet with mandatory safety and security standards required under international agreements, treaties and obligations;
  - Component C: Further investments consistent with the policy/planning frameworks and investment plans developed in Component A for a more sustainable transport sector; and,
  - Component D: Provision of project implementation support.
- 4. The majority of the project's physical investments were to be in the aviation and maritime sectors. Investments in land transport were the focus of other development partners. The Asian Development Bank (ADB) was financing an Integrated Urban Development Sector Project to upgrade selected roads in the Nuku'alofa urban area. The Government of China has provided finance to upgrade main roads in Nuku'alofa and elsewhere around the island of Tongatapu.
- 5. Since the project became effective in December 2008, Tonga's vulnerable economy has been affected by the global economic downturn. In 2008/9 remittances from Tongans living abroad, the country's largest source of hard currency income, fell by about 15 percent. Tourism is the second largest source of hard currency earnings, but has been in decline since December 2008, although it has begun to rebound in 2010. Domestic economic activity is based mainly on

the agricultural sector and an estimated 70 percent of the population derives at least part of their livelihood from farming. However, sales of squash-pumpkin to Japan and Korea, once Tonga's dominant agricultural export, have all but collapsed. The fishing sector is also facing difficult times, with the reduction in catches mirroring that elsewhere in the Pacific.

- 6. To help address these economic challenges, on August 7, 2009 the governments of Australia and Tonga signed a *Partnership for Development between the Government of Australia and Government of Tonga*, which includes "Priority Outcome 4: Develop Infrastructure to Improve the Everyday Lives of People." The partnerships goals for this outcome are to facilitate access to markets and services, increase the role of the domestic private sector in infrastructure provision and operation, and develop systematic approaches to the provision and long-term maintenance of infrastructure. This will ensure that there is the necessary technical capacity to maintain roads once the current donor assisted projects (Para 4 above) are completed. In addition, these investments will have the important short-term effect of generating employment and stimulating the economy. The funds that the Government of Australia has committed to achieving Outcome 4 will be channeled through a PRIF grant to support domestically contracted road maintenance activities under the restructured TSCP.
- 7. In 2009 Tonga suffered enormous strain with the loss of 74 people in the sinking of the MV Princess Ashika (August 5) and the loss of life and damage to property as a result of the tsunami that swept across Niuatoputapu (September 30). The Royal Commission of Enquiry into the MV Princess Ashika sinking found that lack of enforcement of regulatory controls by the MOT contributed to the disaster. This has led to a renewed commitment by the Government of Tonga (GOT), with support from its development partners, to address the issue of maritime safety and strengthen the MOT's capacity to identify, implement and enforce the necessary maritime safety and security standards.
- 8. On August 3, 2010 the GOT requested that the Bank restructure and expand the TSCP to meet these evolving challenges and opportunities. The proposed restructuring would therefore: (i) increase project financing to include new funds made available by the Government of Australia and coordinated through PRIF; (ii) modify the project activities and costs to better target current government strategies and priorities, particularly related to maritime safety and new investments in road maintenance; (iii) revise the project development objective (PDO) to reflect the project's new activities; and, (iv) extend the closing date from December 31, 2011 to December 31, 2013, primarily to allow sufficient time to undertake the new civil works activities.
- 9. The original PDO included two main objectives: (i) to establish and consolidate the operations of the newly-created MOT as a unified transport sector-policy, planning and regulatory ministry; and, (ii) to improve the level of compliance of the civil aviation and maritime subsector entities with international safety and security standards
- 10. The revised PDO would restate the two original development objectives in more concise and results-oriented terms, and add a third objective related to road maintenance activities that are mainly financed by the new trust fund sources:

"The objective of the project is to assist the Recipient to develop its transport sector to have (i) stronger policy, planning and regulatory institutions and framework; (ii) improved safety and

security facilities and compliance with international safety and security standards, and (iii) greater domestic capacity for road rehabilitation and maintenance."

- 11. Some of the original project activities will be cancelled or reduced while financing for others will be increased, and new activities added (particularly in maritime safety, road maintenance and rehabilitation, and project implementation support).
- 12. The project monitoring and evaluation framework and indicators will be revised to reflect the changes to the project and the new outcomes.
- 13. The original project activities that would be discontinued or significantly revised by the restructuring amount to about SDR 1.2 m, or about 35 percent of the original credit<sup>1</sup>. The expansion and scaling up of the project will be supported by about AUD 10.2 m (approximately US\$9.32 m) in funds made available by the Government of Australia and coordinated through PRIF.

### **PROJECT STATUS**

- 14. The TSCP was approved in July 2008 and became effective in December 2008. It is currently financed by an IDA Grant of SDR 3.4 m (approximately US\$5.44 m). Disbursements to date are SDR 0.59 m (approximately US\$ 1.19 m), against commitments of about US\$ 3.01 m.
- 15. The project started slowly, mainly due to challenges in filling key staffing positions, and the significant national strain in 2009 following the sinking of MV Princess Ashika and the tsunami. In the July 2010 mid-term review the project implementation progress was rated as moderately satisfactory. Below is a summary of the progress to date in implementing the main components which focus on policy and institutional framework (Component A) and priority safety and security investments (Component B):
  - A total of 11 contracts are now underway, representing commitments of US\$ 2.7 m.
  - All policy studies under Component A have commenced, with the exception of the Aviation Sector Strategic Development Plan which is under procurement.
  - The aviation sector legal and regulatory surveillance and compliance review (B.1) is completed and will assist MOT to address the 78 points raised by the March 2010 International Civil Aviation Organization (ICAO) audit of Tonga's aviation sector.
  - GOT is self-financing (with AusAID budget support) an urgent, comprehensive needs assessment to identify priority maritime investments in the short term. This study is not part of the project but it is expected to identify improvements that will be financed by the project through a new activity B.9.
- 16. On June 29, 2010, IDA advised GOT of the mis-procurement by Tonga Airports Ltd. (TAL) of a contract for a large piece of aviation equipment (US\$ 0.99 m DVOR/DME). The winning bid contained a material commercial deviation that was inconsistent with the bidding documents. IDA found that TAL's actions were a genuine error as a result of limited procurement capacity. Therefore it was agreed that the funds would be reallocated as part of the project restructuring to provide TBU with: (i) a rescue fire station; and, (ii) transit screening

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<sup>&</sup>lt;sup>1</sup> As explained in Para 16, about SDR 600,000 of this was made available after the finding of mis-procurement without cancellation for the DVOR equipment for the airport. The funds are used to finance other investments at the airport related to achieving the same development objective.

point and terminal expansion. TAL honored the signed contract with its own resources and the critically needed DVOR is due to be installed, calibrated and operational by November 2010.

- 17. Staffing of senior management positions in MOT has been an on-going challenge for the GOT, and is a key factor in the recent assessment of both progress toward the PDO and overall implementation progress as moderately satisfactory. Most notably, the MOT has been headed by acting CEOs for most of the 18 months the project has been effective. Many other key positions are also filled on an acting basis. Lack of adequately qualified and experienced staff in the MOT continues to pose substantial risk to the effective implementation of the initial project as well as the proposed scaling up.
- 18. A new CEO was appointed in August 2010. In addition, MOT also committed to actively recruiting and appointing appropriately qualified and experienced staff in the positions of Director of Civil Aviation, Director of Marine and Ports and the Director of Land Transport. The MOT is reviewing their options for the Director of Marine and Ports, including the possibility of seeking donor support for the position. The restructured project also includes full time procurement and accounting staff.

### PROPOSED CHANGES

- 19. **Scaling Up of Project Activities:** Following a request from GOT dated August 3, 2010, IDA is processing new project financing of about AUD 10.2 m (approximately US\$ 9.32 m) over three years, from the Government of Australia, coordinated through PRIF.
- 20. **Project's Development Objective:** It is proposed to adopt the revised PDO:

"The objective of the project is to assist the Recipient to develop its transport sector to have (i) stronger policy, planning and regulatory institutions and framework; (ii) improved safety and security facilities and compliance with international safety and security standards, and (iii) greater domestic capacity for road rehabilitation and maintenance."

- 21. The development objectives (i) and (ii) restate the two original development objectives in more concise and results-oriented terms; objective (iii) is an additional project development objective linked to funds provided by the Government of Australia coordinated through PRIF.
- 22. **Results/indicators:** Annex 1 contains the proposed project monitoring indicators. These have been substantially revised from the original indicators to: (i) include the appropriate IDA Core Indicators; and, (ii) to provide clearer monitoring of the outcomes for the original and additional activities on the project.
- 23. **Components:** The restructured project still contains the same four components. However, due to changing circumstances, in particular with regard to the GOT's renewed focus on maritime safety, a number of activities in the original project are no longer appropriate. As noted above, mis-procurement, without cancellation, of the TAL DVOR/DME equipment resulted in the reallocation of the funds to other activities. The scaling up introduces new activities, particularly related to road maintenance works. The project's activities are presented in Annex 2 which shows the original proposed allocations by component and activity.
- 24. The Government of Australia has committed financing through PRIF to assist Tonga with domestic job creation through road maintenance. The project will therefore undertake a three

year program of road maintenance activities with the specific objective of creating domestic capacity for road maintenance. This will be done by: (i) providing specialist advisory services and training to contractors and consultants on how to successfully execute road maintenance; (ii) the procurement of specialized equipment (such as a bitumen spreader, pneumatic tired roller, etc.) which will be available for hire to contractors at published rates<sup>2</sup>; and (iii) a three-year rolling program of small and medium road maintenance works, ranging from minor maintenance works to the upgrading of unpaved coral gravel roads to paved standard.

- 25. The increased investments in the maritime sector will be identified based on a needs assessment being undertaken by the MOT with the assistance of AusAID. This assessment will identify high priority short- and medium-term investments in the sector, some of which will be financed by this project (using both the original IDA grant proceeds and the new financing provided by the Government of Australia and coordinated through PRIF). In anticipation of this, the restructuring has reallocated funds from previous maritime activities which are no longer a priority for the government to a single activity (B.9) which will include all maritime improvements.
- 26. The aviation sector investments consist primarily of a reallocation of the funds from the original grant which, as noted earlier, were mis-procured without cancellation. These funds will be used to procure for TBU: (i) a rescue fire station; and, (ii) transit screening point and terminal expansion. In addition, the scaling up will provide financing for CCTV and access control at TBU.
- 27. **Safeguards**: The original project was rated as a Category C project since there were very limited civil works investments. However, the restructured project has been reclassified as a Category B project due to the inclusion of a major civil works activity for road maintenance. This activity will repair roads on the existing alignments, with no land acquisition. An Environmental Management Plan (EMP) was prepared and disclosed July 30, 2010. Community consultations with affected parties will be undertaken after disclosure, and additional consultations will be done during the design stage and prior to any civil works commencing.
- 28. The EMP clearly defines the roles, responsibilities and specific actions to be taken during civil works to mitigate the negative environmental impact on the project. Mitigation measures are given for: (i) the design, construction and operation stages of all civil works; (ii) the aviation and maritime sectors; and, (iii) road maintenance. The EMP also contains general guidelines on environmentally sound practices applicable to road maintenance activities. As part of the restructuring, the project also includes activities for improving the environmental management capabilities through training and the procurement of equipment.
- 29. **Financing:** As shown in Annex 2, uncommitted funds from the on-going Grant and from activities no longer required are proposed to be reallocated to higher priority, appraised new activities. Table 1 shows the financing allocations by component for the original and restructured projects. Annex 2 has more details.

financed procurements.

<sup>&</sup>lt;sup>2</sup> As described in Para 46 and 47, the GOT is currently considering options for the establishment of an organization, potentially a State Owned Enterprise (SOE), which will manage the government quarry (the only one able to provide suitable surfacing stone), and specialized equipment to be financed by other donors such as an asphalt plant. It is anticipated that this organization will also control the equipment to be procured under the project so the GOT will need to ensure that it be established and operated in such a way as to make it eligible to participate in World Bank

**Table 1: Project Costs (US\$)** 

Component	Original	Restructured	Change
A – Policy	1,000,000	1,544,000	544,000
B – Priority Investment Options	2,723,500	5,757,029	3,033,529
C – Other Investments	446,000	5,740,000	5,294,000
D – Implementation Support	410,000	1,245,444	835,444
Unallocated	860,500	470,000	-390,500
Sub-Total	5,440,000	14,756,473	9,316,473
GOT (Taxes and Incremental Operating Costs)	1,036,000	2,333,471	1,297,471
Total	6,476,000	17,089,944	10,613,944

30. **Financing Plan:** Table 2 shows the revised financing plan. As with the existing project, the GOT's contribution is for taxes (15%) and some operating costs.

**Table 2: Financing Plan** 

Source	Local (\$US m)	Foreign (\$US m)	Total (\$US m)
Government of Tonga	\$2.33	\$0.00	\$2.33
IDA Grant	\$2.26	\$3.18	\$5.44
Government of Australia financing coordinated through PRIF	\$3.86	\$5.45	\$9.32
Total	<b>\$8.45</b>	\$8.64	\$17.09

31. **Reallocations:** Annex 2 gives the original activities with their cost allocations as well as the revised activities and the new cost allocations. Table 3 summarizes the costs by each component and sector; Table 4 for all components in a sector.

**Table 3: Cost by Component and Sector** 

Component	Sector	Estimated C	Cost (\$US m)	Percentage	e of Finance
_		Current	Proposed	Current	Proposed
A – Policy	Aviation	0.37	0.52	6.7%	3.5%
	Land Transport	0.37	0.68	6.7%	4.6%
	Marine	0.27	0.35	4.9%	2.4%
D. Duionita	Aviation	2.23	2.83	41.0%	19.2%
B – Priority Investments	Land Transport	0.15	0.12	2.8%	0.8%
mvestments	Marine	0.34	2.81	6.3%	19.0%
C – Other	Aviation	0.07	0.10	1.2%	0.7%
Investments	Land Transport	0.07	5.54	1.2%	37.5%
mvestments	Marine	0.31	0.10	5.7%	0.7%
D. Implementation	Aviation	0.16	0.43	2.9%	2.9%
D – Implementation	Land Transport	0.13	0.41	2.3%	2.8%
Support	Marine	0.13	0.41	2.3%	2.8%
Unallocated		0.86	0.47	15.8%	3.2%
Sub-Total		5.44	14.72		
GOT (Taxes and Incre	emental Operating Costs)	1.04	3.33		
,	Total	6.48	17.09		

**Table 4: Cost by Sector** 

Sector	<b>Estimated Co</b>	st (\$US m)	Percentage of Finance		
	Current	Proposed	Current	Proposed	
Aviation	2.82	3.88	51.9%	26.3%	
Land Transport	0.71	6.74	13.0%	45.7%	
Marine	1.05	3.66	19.3%	24.8%	
Unallocated	0.86	0.47	15.8%	3.2%	
Sub-Total	5.44	14.76			
GOT (Taxes and Incremental Operating Costs)	1.04	3.33			
Total	6.48	17.09			

- 32. **Financial Management:** A Financial Management supervision mission on September 23, 2010 found the Financial Management of the project was satisfactory, with no follow up actions required. There are no overdue audits.
- 33. The project will supply a full-time accountant to ensure that the financial management requirements for the project are fulfilled. With the proposed inclusion of a Force Account as one of the procurement methods, to allow the MOT and the Ports Authority to undertake small works, appropriate supervision arrangements will be required to ensure that ineligible expenditure such as public servant salaries or rental of ministry-owned equipment are not funded by the project. Eligible expenses relating to work under the Force Account will be subject to the existing financial management requirements relating to internal controls and appropriate record keeping, and will be included in the Statement of Expenses for disbursement purposes. There will be no other changes to the existing financial management processes.
- 34. **Procurement:** Annex 3 contains the procurement plan. Procurement under the restructured project will be carried out in accordance with the Bank's "Guidelines: Procurement Under IBRD Loans and IDA Credits" dated May 2004, revised May 2010 and "Guideline: Selection and Employment of Consultants by World Bank Borrowers" dated May 2004, revised May 2010. The Implementing Agency has hired a full time procurement advisor to provide assistance with all aspects of procurement.
- 35. The restructured project will include Single Source Selection (SSS) as an additional selection method. Consideration would be given for SSS regarding assignments meeting the requirements of paragraph 3.10 of the Consultant Guidelines. This could be the case for design and supervision of the first year road maintenance program, which fall under the circumstance listed under paragraph 3.10(c). The project will also include Force Account as an additional procurement method. This method would be adopted for small maritime works located in the outer islands for which qualified construction firms are unlikely to bid at reasonable prices. The MOT is currently using its own staff and those of Ports Authority to install navigation lights procured on the project and to undertake minor works in preparation for the new ferry so it has the overall capacity to implement such activities.
- 36. The road maintenance works will be procured using a combination of National Competitive Bidding (NCB) for contracts estimated to cost US\$50,000 or more but less than US\$700,000 and Shopping for works estimated to cost less than US\$50,000. The Year 1 program will be approximately 15 km and be bid as three NCB contracts. Roads for two of the three contracts have been identified. The packaging of the Year 2 and Year 3 programs will be

established once the road sections are identified and taking into account the available finance and sector capacity.

37. **Closing date:** It is proposed to revise the closing date from December 31, 2011 to December 31, 2013. This will allow sufficient time for the civil works to be executed.

### APPRAISAL SUMMARY

- 38. **Economic and Financial Analysis:** All of the improvements envisaged under the project are expected to have significant positive impact upon both direct users and the country as a whole. About one-third of all Tongans live on outer islands so any investment that improves the safety, quality and reliability of domestic air and sea transport has substantial benefits in terms of access to markets, education and health services, as well as facilitating tourism.
- 39. As noted in the original PAD: "Because of the nature of the components, it is not easy to do traditional cost-benefit analysis with internal economic rate of return (IERR), sensitivity analysis, net present value or other such analyses. [Many investments] are needed to ensure that Tonga meets minimum international safety and security standards and requirements. For TAL, while the equipment will be in line with the airport grade level, they are basic, specified and standardized equipment with little flexibility for considering other options. Without this essential equipment, there is a risk of loss of international accreditation and reduced international air services. This would have a substantial effect on tourism which directly adds about US\$12-15 million per annum in foreign exchange earnings to the Tongan economy, and together with its multiplier effects accounts for up to 30 percent of GDP (Tonga Reserve Bank estimate)."
- 40. The road maintenance investments are being financed by the Government of Australia through PRIF and will have the objectives of: (i) improving rural transport; (ii) generating employment; and, (iii) establishing domestic capacity for road maintenance. In general, public works activities have a positive impact on employment generation and poverty reduction<sup>3</sup>. The investments will mainly be on the minor, secondary road network which has low traffic volumes and which are unpaved, coral gravel roads. Improvements to these roads will have social benefits which are not quantifiable using traditional economic analysis principles which are driven by vehicle operating cost savings.
- 41. **Technical:** The proposed investments are in three different sectors. The aviation sector, under the leadership of TAL, has shown themselves capable to identify and implement the necessary investments in the aviation sector successfully. For the land transport sector, there are existing standards and the domestic capacity to undertake the necessary works, with proper training and support. This work is therefore within the existing technical capacity. With regard to the maritime sector, the MOT has already successfully implemented some safety improvements, such as navigational lights. However, the successful implementation of the scaled up activities is dependent on improved technical leadership, which calls for the appointment of a Maritime Division head (see below under risks).
- 42. **Social:** There is no land acquisition or other negative social impacts from the proposed investment activities. The restructured project will have positive social benefits through the

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<sup>&</sup>lt;sup>3</sup> For example, see "Improving Local Roads and Creating Jobs through Rapid Response Projects: Lessons from Armenia Lifeline Roads Improvement Project". Transport Note 39. February 2010.

employment creation, improved rural roads, and improvements to security for aviation and maritime travel.

- 43. **Environment:** The proposed investments will have a minimal negative impact on the environment. Mitigation measures are given in the EMP for: (i) the design, construction and operation stages of all civil works; (ii) the aviation and maritime sectors; and, (iii) road maintenance. The EMP will form part of the bidding documents and therefore be legally binding on the contractors to implement.
- 44. **Exceptions to Bank Policy:** There are no exceptions to Bank policy.
- 45. **Risks**: The GOT will be reducing the number of ministries by the end of 2010. It is currently considering combining the MOT and the MOW but the plan is not finalized. This uncertainty is affecting the staffing and institutional capacity to implement the project. The largest risk to the project is with regard to senior staffing at the MOT. A condition of effectiveness for the original grant was the appointment of a permanent CEO for the MOT. This was met, after some delay, but in early 2010 the position became vacant again. A new CEO was appointed in August 2010. The CEO needs to be supported by strong heads of Divisions. These positions are held as temporary assignments. The GOT is actively working to recruit permanent staff to these positions—for example they are now advertising outside of government.
- 46. There are a number of investments in the road sector either underway or planned by the GOT with financing from the World Bank, Asian Development Bank, and China's EXIM Bank. The GOT has proposed to establish a State Owned Enterprise (SOE) which would hold key equipment, such as the country's sole asphalt plant, the government owned quarry, etc. for lease to private sector contractors. In order for the project to undertake the proposed maintenance works it is necessary for it to procure surface dressing and related equipment. The equipment should be held by the organization referred to in Paragraph 23. There is a risk to the project that the GOT may create the organization in such a way that it would be eligible for participating in World Bank or other International Financing Institution procurements.
- 47. The World Bank Group has applied to the Pacific Infrastructure Advisory Facility to finance technical assistance to advise the GOT on (i) the options that exist to create a transparent and cost effective institutional framework for the ownership and management of the quarry, the asphalt plant and larger road maintenance equipment in order to avoid the disadvantages of monopolistic tendencies and stimulate the development of a local industry of small and medium enterprises for road maintenance and related infrastructure projects; and, (ii) carry out a pre-feasibility analysis and prepare the outline of a business plan for the establishment, possible incorporation and operationalization of an organizational entity for this purpose. It is anticipated that this study will be completed early 2011.

### ANNEX 1: Results Framework and Monitoring TONGA: TRANSPORT SECTOR CONSOLIDATION PROJECT

	Project	Development	t Objective (	(PDO): To establish	and consolida	te the operations	of the newly-	created Ministry	of Transport a	s a unified transp	ort sector- i	policy, planning	and regulatory
				of compliance of the								poney, pramme	, una regulatory
				bjective: The object ty and security facil									
	maintena		1	.,	r				,	, 8			
		D=Drop ped			Cumulative Target Values**							Data	D 11114
PDO Level Results Indicators*	Core	C=Conti nue N= New R=Revised	Unit of Measure	Baseline (April 2008)	YR 1 (2008)	YR 1 (2009)	YR 2 (2010)	YR 3 (2011)	<b>Yr 4</b> (2012)	<b>YR5</b> (2013)	Freq- uency	Source/ Method- ology	Responsibility for Data Collection
Indicator One: MOT functioning as a fully integrated ministry responsible for compliance and safety oversight of land, sea and air transport		R		Nine separate entities with some transport sector function				(i) MOT functioning as a fully-integrated ministry responsible for compliance and safety oversight of land, sea and air transport in Tonga with all necessary legal approvals accompanying its new responsibilities.  (ii) Definition of the new roles of MOT and relevant ministries in respect of land transport.		(i) MOT functioning as a fully-integrated ministry responsible for compliance and safety oversight of land, sea and air transport in Tonga with all necessary legal approvals accompanying its new responsibilities.  (ii) Definition of the new roles of MOT and relevant ministries in respect of land transport.	Annual Report	Supervision Missions, progress reports	MOT, PST

Indicator Two: ICAO certification of safety and security at Fua' amotu airport	R	%	Fua'amotu airport ICAO compliance: Security 48%; Fire & Safety 53%;Air traffic management 56% reliable; Operation 50%;		Certification of the Fua'amotu Internationa 1 Airport in accordance with TCAR Parts 139 and 157 (22 April 2008).	Certificatio n of the Fua'amotu Internationa 1 Airport in accordance with TCAR Parts 139 and 157 (22 April 2008).	Annual Report	ICAO review	TAL, PST
Indicator Three: Proper systems in place for safe maritime travel	R		Sea navigation aids missing or in disrepair and ferry terminals in poor condition and without lights		Adoption of investment plan to address issues identified in 2010 needs assessment	Maritime safety aids identified as priorities in 2010 needs assessment installed and operational	Annual Report	Supervision missions, progress reports	MOT, PST
Indicator Four: Consultants as well as small and medium domestic contractors with capacity for implementing effective road maintenance	N	km	Road maintenance done by international contractors or public sector (Ministry of Works)			75 km of roads designed, supervised and maintained by Tongan companies	Annual Report	Supervision missions, progress reports	MOW, PST

	Intermed	liate Result (	Component A):		INTE	RMEDIATE R	RESULTS					
	Revised 1	Intermediate	Result (Component A): MO	T established w	ith clear roles, fun	ctions and resp	onsibilities wit	h adequate staff	and resources,	providing necess	ary sector guidan	ice.
Intermediate Result indicator One: Regulations in place with improved monitoring, enforcement and compliance mechanisms		D	(i) No MOT national transport sector policy study  (ii) No draft laws or regulations.  (iii) No changes to institutional responsibilitie s.	(i) National transport sector study completed.  (ii) Sector study findings used to draft laws.  (iii) New institutional responsibilities submitted for approval	(v) Report completed on ICAO requirement				(i) Phase 1 of phased study to formulate a transport sector national policy and planning framework (multimodal) completed.  (ii) Associated findings	Annual Report	Supervision Mission	MOT

		ı		1	1	1	ı		1	ı	
			vehicle	to privy					and		
			registration	council.					recommend		
			system.						ations used		
				(iv) New					to draft		
			(v) No	vehicle					laws and		
			aviation sect						associated		
			compliance	system					regulations.		
			review	operational.							
			undertaken.						(iii) New		
									institutional		
									responsibili		
									ties		
									submitted		
									for approval		
									by Privy		
									Council.		
									Council.		
											]
									(iv) New		]
									motor		
									registry		
									system		
									established		
									and		
									operational.		
									operational.		
									(v) Aviation		
									sector		
									regulatory		
									and		
									surveillance		
									compliance		
									review and		
									support		
									completed.		
Intermediate Result			MOT			Governmen	Appointme		All senior		
indicator Two:			insufficiently	,		t confirms	nt of all		positions at		
			staffed to			structure for	division		MOT filled		
Appropriately skilled		D									
staff recruited by		R	fulfill its			MOT and	heads		with		
MOT and equipped			obligations.			MOW			qualified		
to fulfill their									staff		
respective mandate.											
Intermediate Result			No plans in				Aviation,		Investment		
indicator Three:			place.				land		plans		]
Completion of			[ ~				transport		adopted and		
aviation, land		N					and		under		]
transport and	]						maritime		implementa		
maritime sector							plans		tion.		
investment plans							completed.		tion.		
mvestinent plans	T	madiata P	ult (Component B):	I	1	1	completed.	ı		l	<u> </u>
						0					
	Revis	sed Intermed	liate Result (Component l	6): High Priority I	ivestments in In	itrastructure Con	npleted				

Intermediate Result indicator One: Improved security arrangements and compliance with requirements for international air transport	N	(i) No ICAO action plan.  (ii) No navigational equipment acquired.  (iii) No fire truck.  (iv) ICAO security audit not addressed.  (v) ICAO highest priorities not addressed.	(i) Action plan to address ICAO regulatory and related requirement s established and in operation.	(ii) Navigation equipment acquired, installed and operational.	(iii) Fire truck acquired and operational (iv) CCTV security system operational	(v) ICAO highest priority areas addressed.	(i) Action plan to address ICAO regulatory and related requirement s established and in operation.  (ii) Navigation equipment acquired, installed and operational.  (iii) Fire truck acquired and operational.  (iv) 100% of ICAO 2007 Security Audit addressed  (v) ICAO highest priority areas addressed.  All	Annual Report	Supervision missions, progress reports	TAL, PST
indicator Two: Installation of maritime safety equipment completed	N	lights installed.  (ii) Ferry terminal improvements not done.  (iii) Navigational aids not installed.		lights installed and operational	of Year 1 program of maritime needs	of Year 2 program of maritime needs	All maritime safety equipment installed	Annual Report	Supervision missions, progress reports	MOT, PST

Intermediate Result indicator Three: Road safety audit completed for Tongatapu		N		No road safety audit available.				Road safety audit completed and recommend ations under implementa tion.			Annual Report	Supervision missions, progress reports	MOT, PST
	Intermed	diate Result (	Component	: C):									
	Revised	Intermediate	Result (Co	mponent C): Inve	stments in Othe	r Infrastructure	Completed						
Intermediate Result indicator One: Number of domestic consulting firms with full capability to design and supervise road maintenance		N		0				3		3	Annual Report	Supervision missions, progress reports	MOT, PST
Intermediate Result indicator Two: Number of domestic small and medium sized domestic contractors trained and participating in bidding		N		0				3	5	8	Annual Report	Supervision missions, progress reports	MOT, PST

Intermediate Result indicator Three: SOE established for providing specialized equipment for contractors		N		No sustainable equipment rental mechanism exists		Sustainable equipment rental mechanism exists				
Intermediate Result indicator Four: Number of kilometers of rural roads maintained	$\boxtimes$	N	km	0		15	45	75		

**ANNEX 2: Project Costs By Activity** 

Activity	Description	Original Project (PAD) SDR	Original Project (PAD) \$US	Restructured \$US	% Current	% Proposed
A.1	Transport Sector Policy and Planning Framework (Multi-modal)	218,750	\$350,000	\$460,000	6.4%	3.1%
A.2	Aviation Sector Strategic Development Plan	93,750	\$150,000	\$197,000	2.8%	1.3%
A.3	TAL Future Airport Investment Study	62,500	\$100,000	\$170,000	1.8%	1.2%
A.4.A	Maritime Sector Strategic Development Plan	93,750	\$150,000	\$195,000	2.8%	1.3%
A.4.B	Marine Sector Specialist Advisor	0	\$0	\$0	0.0%	0.0%
A.5.A	Options for Sustainable Road Maintenance – Institutional Arrangements and Funding	156,250	\$250,000	\$272,000	4.6%	1.8%
A.5.C	Training of Domestic Contractors and Consultants			\$200,000		1.4%
A.5.D	Road Network Condition Survey			\$25,000		0.2%
A.5.E	Sustainable Road Maintenance Planning			\$25,000		0.2%
B.1	Aviation Sector Legal and Regulatory Surveillance and Compliance Review	93,750	\$150,000	\$159,251	2.8%	1.1%
B.2	PAPI Navigational Aid (TBU): Supply, Commission and Installation; DVOR/DME (TBU): Supply, Commission and Installation	687,500	\$1,100,000	\$142,000	20.2%	1.0%
B.3	New Fire Tender (TBU)	531,250	\$850,000	\$887,415	15.6%	6.0%
B.4	Hand Baggage Screening X-ray Machine and Emergency Power Generator (TBU)	81,250	\$130,000	\$128,863	2.4%	0.9%
B.5	Navigational Lights and Improvements to Ferry Terminal Facilities	202,188	\$323,500	\$104,000	5.9%	0.7%
B.6	Outboard Motors and Work Boats for Pollution Management (HAP, VAV, TBU)	12,500	\$20,000	\$0	0.4%	0.0%
B.7	Reform of Motor Registry Systems	93,750	\$150,000	\$0	2.8%	0.0%
B.8	Road Safety Audit			\$100,000		0.7%
B.9	Priority Maritime Improvements			\$2,685,500		18.2%
B.10	Rescue Fire Station			\$500,000		3.4%
B.11	Transit Screening Point and Terminal Expansion			\$500,000		3.4%
B.12	CCTV and Access Control			\$250,000		1.7%
B.13.1	Environmental Management Training			\$25,000		0.2%
B.13.2	Environmental Management Equipment			\$25,000		0.2%
B.14	Design of Future Airport Investments			\$250,000		1.7%
C.1	Legislative Framework	125,000	\$200,000	\$300,000	3.7%	2.0%
C.2	Ferry Terminal Resurfacing	137,500	\$220,000	\$0	4.0%	0.0%
C.3	Ferry Terminal Solar Lighting	16,250	\$26,000	\$0	0.5%	0.0%
C.4	Road Maintenance Design and Supervision			\$500,000		3.4%

Activity	Description	Original Project (PAD) SDR	Original Project (PAD) \$US	Restructured \$US	% Current	% Proposed
C.5	Enhanced Road Maintenance Technologies			\$500,000		3.4%
C.6	Road Maintenance Works			\$4,440,000		30.1%
D.1	Project Manager	112,500	\$180,000	\$300,000	3.3%	2.0%
D.2	Procurement Advisor (periodic)	75,000	\$120,000	\$75,000	2.2%	0.5%
D.3	Audit of Designated and Project Accounts	46,875	\$75,000	\$25,000	1.4%	0.2%
D.4	Aviation Sector Specialist Technical Advisory	21,875	\$35,000	\$17,944	0.6%	0.1%
D.5	Project Accountant			\$77,500		0.5%
D.6	Procurement Advisor (full time)			\$550,000		3.7%
D.7	Project Support Costs (IOC)			\$200,000		1.4%
	Unallocated	537,813	\$860,500	\$470,000	15.8%	3.2%
	Sub-Total	3,400,000	\$5,440,000	\$14,756,473		
	GOT Contribution					-
	Incremental Operating Costs	137,500	\$220,000	\$120,000		
	Taxes	510,000	\$816,000	\$2,213,471		
	Total Project	4,047,500	\$6,476,000	\$17,089,944		
	Original Grant			\$5,440,000		
	Scaling Up			\$9,316,473		
	Total Grant Financing			\$14,756,473		

### ANNEX 3: Procurement Plan September 10, 2010

Activity	Contract Description	Method	Prior Review	Estimated or Actual Cost (US\$)	Start Date (pen to paper)	Contract Signed Date (Actual/Est)	% Physical Completion (June 30th, 2010)	% Financial Completion (June 30th, 2010)	Completion Date (Actual/Est.)
A.1	Transport Sector Policy and Planning Framework (Multi- modal)	QCBS	Y	\$460,000	20-Mar-09	26th May 10	0%	0%	31-Dec-11
A.2	Aviation Sector Strategic Development Plan	cqs	Y	\$197,000	15-Jul-09	14th Jun10	0%	0%	14 <sup>th</sup> Mar 11
A.3	TAL Future Airport Investment Study	cqs	Y	\$170,000	20-May-09	o/a Aug 10	0%	0%	o/a Mar 11
A.4.A	Maritime Sector Strategic Development Plan	cqs	Y	\$195,000	31-Mar-09	o/a Sep 10	0%	0%	o/a Mar 11
A.5.A	Options for Sustainable Road Maintenance – Institutional Arrangements and Funding	QCBS	Y	\$272,000	15-Mar-09	26th May 10	0%	0%	o/a Feb 11
A.5.C	Training of Domestic Contractors and Consultants	ICS	Y	\$200,000	1 Sep 10	o/a Nov 10			o/a Nov 12
A.5.D	Road Network Condition Survey	cqs	N	\$25,000	1 Oct 10	o/a Feb 10			o/a Apr 10
A.5.E	Sustainable Road Maintenance Planning	ICS	Y	\$25,000	1 Oct 10	o/a 15 Nov 10			15 Dec 10
B.1	Aviation Sector legal and regulatory surveillance and compliance review	CQS	Y	\$159,251	20-Mar-09	9-Nov-09	30%	38%	3-Sep-10
B.2	PAPI navigational aid (TBU): Supply, Commission and Installation	ICB	Y	\$142,000	16-Mar-09	30-Sep-09	100%	90%	11-Dec-09
В.3	New Fire Tender (TBU) (new fire truck)	ICB	Y	\$887,415	23-Mar-09	8-Feb-10	20%	20%	10-Nov-10
B.4	Hand Baggage Screening X-ray machine (TBU)	SHP	Y	\$34,339.41	30-May-09	12-Oct-09	100%	100%	10-Jan-10
B.4	Upgrade Emergency Power (new generator) (TBU and VAV)	ICB	Y	\$94,524	30-May-09	31-Mar-10	0%	0%	29 Aug 10
B.5	Navigational Lights	ICB	Y	\$104,000	3-Jul-09	14-Dec-09	100%	100%	15-Feb-10
B.8	Road Safety Audit	ICS	Y	\$100,000	30 Jan 11	o/a Apr 11			o/a Aug 11
B.9.1	Maritime Improvements (Goods)	ICB	Y	\$900,000	1 Feb 11	o/a Jun 11			o/a Feb 12
B.9.2	Maritime Improvements (Works)	NCB, FA	Y	\$1,785,500	1 Feb 11	o/a Jun 11			o/a Nov 11
B.10	Rescue Fire Station (TBU)	NCB	Y	\$500,000	1 Sep 10	1 Feb 11			o/a Aug 11
B.11	Transit Screening Point and Terminal Expansion (TBU)	NCB	Y	\$500,000	1 Sep 10	1 Feb 11			o/a Aug 11
B.12	CCTV and Access Control (TBU)	ICB	Y	\$250,000	1 Oct 10	21 Feb 11			21 Jun 11

B.13.1	Environmental Management Training	ICS	N	\$25,000	1 Jun 11	1 Aug 11			o/a Oct 11
B.13.2	Environmental Management Equipment	SHP	Y	\$25,000	1 May 11	1 Jul 11			1 Nov 11
B.14	Design of Future Airport Investments	QCBS	Y	\$250,000	20 Jan 11	6 Sep 11			6 Dec 11
C.1	Legislative Framework	QCBS	Y	\$300,000	1 Oct10	o/a Jul 11	0%	0%	o/a Sep 13
C.4.1	Road Maintenance Design and Supervision (Year 1)	SSS	Y	\$100,000	1 Sep 10	o/a Oct 10			o/a Apr 11
C.4.2	Road Maintenance Design and Supervision (Year 2)	cqs	Y	\$200,000	1 Mar 11	o/a Jul 11			o/a Mar 12
C.4.3	Road Maintenance Design and Supervision (Year 3)	cqs	Y	\$200,000	1 Jul 12	o/a Nov 12			o/a Sep 13
C.5	Enhanced Road Maintenance Technologies	ICB	Y	\$500,000	1 Nov 10	o/a Mar 11			o/a Nov 11
C.6.1	Road Maintenance Works (Year 1) (3 contracts)	NCB	Y	\$940,000	o/a Nov 10	o/a Jan 11			o/a Apr 11
C.6.2	Road Maintenance Works (Year 2) (multiple contracts)	NCB	Y	\$1,750,000	o/a Sep 11	o/a Dec 11			o/a Aug 11
C.6.3	Road Maintenance Works (Year 3) (multiple contracts)	NCB	Y	\$1,750,000	o/a Dec 12	o/a Mar 13			o/a Sep 13
D.1	Project Manager	ICS	Y	\$300,000	1-Sep-08	28-Nov-08	29.50%	26.20%	31-Dec-11
D.2	Procurement advisor (periodic)	ICS	Y	\$75,000	1-Sep-08	9-Dec-08	100%	100%	4-Jun-10
D.3	Audit of Designated and project accounts	cqs	Y	\$25,000	15-Mar-10	15-Jul-10	0%	0%	31-Dec-11
D.4	Aviation sector specialist technical advisory	ICS	Y	\$17,943.60	14-Jan-09	3-Mar-09	100%	100%	3-Nov-09
D.5	Project Accountant	ICS	Y	\$77,500	10-Apr-10	o/a Aug 10	0%	0%	31-Dec-11
D.6	Procurement advisor (full time)	ICS	Y	\$550,000	1-Dec-09	27-Apr-10	0%	0%	31-Dec-11
D.7	Project Support Costs (IOC)	TBD	Y	\$200,000					
	Unallocated			\$470,000					
	Base Costs			\$14,756,473					

Notes: CQS = Consultants' Qualifications Selection; FA = Force Account; ICB = International Competitive Bidding; ICS = Individual Consultant Selection; NCB = National Competitive Bidding; SSS = Single Source Consultant Selection; QCBS = Quality-and Cost-Based Consultant Selection; SHP = Shopping; TBD = To be determined.