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Report No: 42889-TO

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED GRANT

IN THE AMOUNT OF SDR 3.4 MILLION (US\$ 5.44 MILLION EQUIVALENT)

TO THE

KINGDOM OF TONGA

FOR A

TONGA TRANSPORT SECTOR CONSOLIDATION PROJECT

May 21, 2008

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CURRENCY EQUIVALENTS

(Exchange Rate Effective March 1, 2008)

Currency Unit = Tonga Pa'anga TOP

TOP 2.04 = US\$1US\$1.6 = SDR 1

FISCAL YEAR

July 1 – June 30

ABBREVIATIONS AND ACRONYMS

CERMP Cyclone Emergency Reconstruction Management Project

CQ Consultants' Qualification

EMP Environmental Management Plan

FM Financial Management

GoT Government of Kingdom of Tonga

HAP Ha'apai HFV Ha'afeva

ICAO International Civil Aviation Organization

ICB International Competitive Bidding
IDA International Development Association
IMO International Maritime Organization

M&E Monitoring and Evaluation

MLSNRE Ministry of Lands, Survey, Natural Resources and Environment

MLCI Ministry of Labor, Commerce and Industries MoF Ministry of Finance and National Planning

MoP Ministry of Police MoT Ministry of Transport MoW Ministry of Works

NCB National Competitive Bidding

NFTP Niuatoputapu NFTO Niuafo'ou

PAT Ports Authority Tonga Ltd.
PDO Project Development Objective

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
SDP Strategic Development Plan

TA Technical Assistance
TAL Tonga Airports Limited

TBU Tongatapu

TOP Tongan Pa'anga currency

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TSCP Tonga Transport Sector Consolidation Project

TTSR Tonga Transport Sector Review

US\$ United States of America Dollar currency

VAV Vava'u

Vice President: James W. Adams
Country Director: Nigel Roberts
Sector Manager: Junhui Wu
Task Team Leader: Thakoor Persaud

TONGA Tonga Transport Sector Consolidation Project

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TONGA

TONGA TRANSPORT SECTOR CONSOLIDATION PROJECT

PROJECT APPRAISAL DOCUMENT

EAST ASIA AND PACIFIC

EASTE

Date: May 21, 2008	Team Leader: Thakoor Persaud
Country Director: Nigel Roberts	Sectors: Aviation (50%);Ports, waterways and
Sector Manager/Director: Junhui Wu	shipping (25%);Roads and highways
_	(15%);General transportation sector (10%)
	Themes: Managing for development results
	(P);State enterprise/bank restructuring and
	privatization (S); Trade facilitation and market
	access (S);Other urban development (S);Rural
	policies and institutions (S)
Project ID: P096931	Environmental screening category: Not
	Required
Lending Instrument: Specific Investment Loan	•

Project Financing Data						
[] Loan	[] Credit	[X] Grant	[] Guarantee	[] Other:		

For Loans/Credits/Others:

Total Bank financing (US\$m.): 5.44

Financing Plan (US\$m)						
Source	Local	Foreign	Total			
BORROWER/RECIPIENT	1.08	0.00	1.08			
IDA Grant	0.72	4.72	5.44			
Total:	1.80	4.72	6.52			

Borrower:

Kingdom of Tonga

Tonga

Government of Tonga

Tonga

Responsible Agency:

Ministry of Finance

Vuna Road

Tonga

Tel: +676 27 579 Fax: +676 26 011

minfin@kalianet.to

Estimated disbursements (Bank FY/US\$m)								
FY	9	10	11	12				
Annual	1.00	2.00	1.83	0.61				
Cumulative	1.00	3.00	4.83	5.44				

Project implementation period: Start September 1, 2008 End: December 31, 2011

Expected effectiveness date: September 1, 2008 Expected closing date: December 31, 2011

Does the project depart from the CAS in content or other significant respects?	[]Yes [X] No
Ref. PAD I.C.	
Does the project require any exceptions from Bank policies?	
Ref. PAD IV.G.	[]Yes [X] No
Have these been approved by Bank management?	[]Yes [] No
Is approval for any policy exception sought from the Board?	[]Yes [X] No
Does the project include any critical risks rated "substantial" or "high"?	[]Vac [V] Na
Ref. PAD III.E.	[]Yes [X] No
Does the project meet the Regional criteria for readiness for implementation?	[V]Vac [] No
Ref. PAD IV.G.	[X]Yes [] No

Project development objective Ref. PAD II.C., Technical Annex 3

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.

Project description [one-sentence summary of each component] Ref. PAD II.D., Technical Annex 4

- A. Technical assistance to establish a sustainable transport sector policy, institutional and operational framework for the transport sector as well as provide support for preparation of sustainable investment plans for the aviation, maritime and roads sub-sectors so as to leverage current infrastructure to the maximum extent possible and be appropriate to the scale of activity and local environment.
- B. Strategic investments to respond to and meet mandatory (urgent and high priority) safety and security standards required under international agreements, treaties and obligations.
- C. Based on the findings and recommendations of Component A, support the Government of Tonga in the early stages of implementing key initiatives towards a more sustainable transport sector and to consolidate the transition to the unified Ministry of Transport.
- D. Project Implementation Support within MoT to provide the necessary technical support to both MoT and TAL to implement the project.

Which safeguard policies are triggered, if any? *Ref. PAD IV.F.*, *Technical Annex 10* Environmental Assessment (OP/BP 4.01) - An EMP has been prepared and disclosed.

Significant, non-standard conditions, **if any**, for:

Ref. PAD III.F.

Board presentation:

N/A

Loan/credit effectiveness:

- (i) Appointment of CEO for MOT or, failing that, time-bound action plan for recruitment, acceptable to IDA
- (ii) Appointment of a Project Manager and part time Procurement Advisor.
- (iii) Subsidiary financing agreement drawn up between GoT and TAL setting out commitments and responsibilities by both under the project.

Other Undertakings:

(i) Formal exchange of letters between MoT and Port Authority of Tonga Ltd. authorizing MoT to carry out improvements at Nuku'alofa domestic ferry terminal onbehalf of the Port Authority (before disbursement against part of B.5 (Improvement of ferry terminal) and against C.2(Resurfacing domestic ferry terminal at Nuku'alofa).

STRATEGIC CONTEXT AND RATIONALE

A. Country and sector issues

- 1. The Kingdom of Tonga (estimated population of 105,000 people), comprises three main island groups with a total land area of about 700 sq. km dispersed over a 400,000 sq. km area of the South Pacific (Polynesia sub-Region). Its basic infrastructure network is of reasonably good quality, as is its social-service system. However, its small size, geographic dispersion and isolation and limited natural resources provide a narrow economic base, making it particularly vulnerable to external economic fluctuations. Agriculture, fishing and tourism account for most export earnings and it has a high dependency on external aid (averaging US\$205 per-capita annually over 1999-2002) and remittances from the estimated 100,000 Tongans living abroad.
- 2. With its remote location, small size, dispersed islands setting and other geographical factors, Tonga faces many challenges in developing and maintaining sustainable internal (intra-and inter-island), regional and international transport and communication linkages, all of which are crucial to the economic development and social well-being of its population. The country is faced with limited capital resources and asset deterioration, combined with financial and administrative constraints typical of a small (micro) country, as well as increasingly stringent and onerous international transport security requirements. The situation was further exacerbated by the September 2005 civil servant strike and the November 2006 civil unrest with the latter resulting in significant damage to a large part of the capital city. These, together, create a new set of challenges for Tonga.
- 3. Recognizing the key role that transport plays in the economy and social fabric of a country with such isolated and dispersed population settlement, the Government of Tonga (GoT) is committed to improving the efficiency of the sector. It began this process in 2004, with a request to International Development Association (IDA) to support a joint review of the country's entire transport sector (responsibility for which was scattered throughout a number of different Ministries), and to recommend strategies and options for improving sector performance. The IDA-supported Tonga Transport Sector Review (TTSR-TF052906) was completed in 2005 and many of its recommendations were adopted as Government policy. This was subsequently included in the Government's national Strategic Development Plan #8 (SDP8) which was presented at a donors' conference shortly thereafter.
- 4. Among some of the actions already taken by GoT has been the combining of responsibilities of the Ministries of Civil Aviation and Marine & Ports under a Ministry of Transport (MoT) in March 2006. In July 2007, the Tonga Airports Ltd. (TAL) was created as a corporatized airport company, registered under both the Public Enterprises Act and the Companies Act, thus separating the regulatory role of the Ministry of Civil Aviation from the operator (TAL). The Government also undertook a review of user charges and fees across all sectors (including transport) with the goal of better matching service provision with costs, improved maintenance utilization of technology appropriate for Tonga and encouraging greater Public-Private Participation (PPP) initiatives. TAL has already reviewed its fees and charges and it has started to adjust these in line with regional charges and the cost of provision of the service. However, given Tonga's size and other constraints, the GoT is aware that subsidies will also likely need to be recognized as a long-term policy tool in its socio-economic development plans.

Thus, while it seeks to improve sector efficiency, the Government is also looking for ways of clearly identifying and rationalizing subsidies in line with its resource base.

B. Rationale for Bank¹ involvement

- 5. Following IDA's upstream technical assistance support to the sector and recommendations of the TTSR, and consistent with it's own Strategic Development Plan (SDP8), the GoT recently requested IDA grant assistance to continue and accelerate the process of reforming and consolidating Tonga's transport sector to be better able to respond to both recent changes in international security and safety requirements as well as to help put in place sector reforms to enable the GoT to better address current and future domestic needs.
- 6. IDA's support primarily would be in the form of assistance to the Government to take forward its policy and regulatory functions for the sector (including realigning and strengthening relevant divisions within the newly established MoT), as well as supporting the GoT and subsector operators in meeting some priority safety and security obligations, some of which include the need for urgent repairs and/or replacement of equipment and small upgrading works on existing facilities.
- 7. The GoT expects that the proposed IDA grant would also complement several other ongoing or planned transport sector initiatives and help to ensure greater consistency, compatibility and sustainability with improved benefits from all of the activities and works. Among such initiatives are:
 - (i) ADB funding of an "Integrated Urban Development Project" with road upgrading works within a sector of the Nuku'alofa urban area. The Governments of China, Australia and New Zealand have approved reconstruction loans for destroyed sections of Nuku'alofa following the November 2006 civil unrest, and NZAID is carrying out associated small contractor road-maintenance training. The IDA grant would support studies and follow up actions requested by the GoT to help MoT to develop an overall policy framework and options for sustainable road maintenance. The planned relocation of the central motor registry to the MoT and upgrading its operations is expected to provide a more reliable registry for planning purposes as well as vehicle safety and controls.
 - (ii) The Government of Japan is donating an inter-island ferry to Tonga (scheduled for delivery in around March 2010). The GoT is preparing a development and investment policy and plan for more sustainable inter-island shipping services which will include both the new ferry as well as existing small-scale operators. To facilitate this, it has requested IDA grant assistance to upgrade obsolete navigation and security lights and equipment as well as to improve the safety of passenger ramps and goods loading areas at the main and outer-island ferry docking sites.
 - (iii) The IDA grant also would help TAL finance important navigational aids and fire fighting equipment at Fua'amotu International Airport and two other airstrips. This will complement TAL's own investments as well as the New Zealand Government's

¹ The terms "Bank", "IDA" or "Association" are used in this PAD to refer to International Development Association.

- past assistance in providing and maintaining baggage and passenger screening equipment.
- (iv) The World Meteorological Organization is donating weather monitoring equipment to GoT. This will complement proposed IDA grant-funded activities proposed for upgrading air and maritime safety and navigation systems.
- (v) The Government of Australia is currently holding discussions with the GoT for possible assistance with financing of some airport improvement works. These will complement IDA grant-funded activities under the proposed project.
- 8. IDA is recognized by GoT as having the specialist expertise and long-standing association with this particular sector in Tonga to be uniquely positioned to assist it in developing the appropriate policy and regulatory framework needed to better coordinate these various initiatives.

C. Higher level objectives to which the project contributes

9. The project would directly address the Government's vision for the transport sector as articulated in its national Strategic Development Plan #8 (SDP8). In addition, the Project falls within the ambit of the Bank's *Regional Engagement Framework FY 2006-2009 For Pacific Islands* under which Tonga is eligible for IDA14 grant resources over FY 2006-08. The Framework notes that subject to further discussions with the government, "the allocation is likely to be focused on infrastructure (transport sector) or on public expenditure management priorities" (IBRD IDA 2005 p78) and that the Bank "sees considerable potential for developing a longer term partnership and financing in the sector" (IBRD IDA 2005 p79).

PROJECT DESCRIPTION

D. Lending instrument

10. The lending instrument is a Specific Investment Loan (SIL). It is being used because it is a flexible lending instrument appropriate to providing both technical assistance/policy advisory activities and for addressing various, required safety and security investments as well complement other related GoT and donor-lender initiatives.

E. Program objective and Phases

11. Not applicable.

F. Project development objective and key indicators

12. The project development objective (PDO) is to assist the Government of Tonga to establish and consolidate the operations of the newly-created Ministry of Transport (MoT) as a unified transport sector-policy, planning and regulatory ministry and to improve the level of compliance of the civil aviation and maritime sub-sector entities with international safety and security standards. This is expected to advance ongoing transport sector reforms and consolidate past initiatives so that the sector can better respond to both current and future national needs in a safe, secure and sustainable manner. Achievement of the PDO will be measured in terms of the

following monitoring indicators: (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; (iii) Certification of the Fua'amotu International Airport in accordance with TCAR Parts 139 and 157 (as at 22 April 2008); and (iv) Domestic shipping services operated in line with an approved plan recommended by a study of options to service outer islands.

G. Project components

13. The components of the proposed project are summarized below with further details provided in Annex 4:

Component A: Establishing a sustainable transport sector policy, institutional and operational framework. (US\$1,000,000, 18% of total project cost). This component will provide technical assistance to help GoT develop an improved overall policy, planning and legislative framework for the transport sector as well as provide support for preparation of sustainable investment plans for the aviation, maritime and roads sub-sectors so as to utilize current infrastructure assets to the maximum extent possible and be appropriate to the scale of activity and local environment. There are five main tasks to be financed under this goal.

- ➤ A.1: Formulation of a national transport sector policy and planning framework (US\$350,000): Developing an improved policy, planning and legislative framework for the transport sector, including formulation of strategic principles for the transport sector and policy positions on key sector issues for consideration by GoT. The results will feed into a National Transport Policy Framework which will integrate sector and cross-sector polices and development plans, and into a program of legislative reform.
- ➤ A.2, A.3, A.4 and A.5: Preparation of sustainable investment plans for the aviation, maritime and road/land transport sub-sectors (US\$650,000): Under this component, the following will be prepared: (a) (A2-\$150,000), an aviation sector strategic plan to assist GoT develop a set of clear sector policies in relation to maintaining a stable and viable aviation market and network of airports, and a strong sector supervision capability; (b) (A.3 - \$100,000), a medium-term sustainable development and investment and financing plan for Fua'amotu International airport; (c) (A.4 - \$150,000), a sustainable investment and financing plan for medium term infrastructure needs of inter-island shipping and realistic medium term planning scenarios for the potential future state and operational needs of the inter-island shipping market; and (d) (A.5 - \$250,000) options for sustainable financing of the road maintenance needs of the country. The plans will focus upon preserving and fully utilizing existing assets and building upon them in line with financial and human resource capacity, local country environment conditions and related considerations. Proposed developments should respond to growth and new demand requirements in stages along a logical development path with any required central fiscal support clearly identified. The development plans for each sub-sector will be used in a National Transport Sector Development Plan and prioritized three-year actions plan for MoT.

Component B: Meeting mandatory urgent and high priority obligations. (US\$2,730,000), 50% of total project cost). The component comprises strategic investments required to respond to and meet mandatory (urgent and high priority) safety and security standards required under international agreements, treaties and obligations. It comprises:

- ➤ B.1 Aviation sector regulatory surveillance and compliance obligations review and support (US\$150,000). The technical assistance will strengthen the capacity of the Civil Aviation Division (in MOT) to supervise safety, security and environmental aspects of the aviation sector, with priority on achieving and maintaining ICAO safety and security standards; preparing for the comprehensive ICAO audit scheduled for late 2009 and addressing any high priority deficiencies identified in that audit; and capacity building in Civil Aviation Division to strengthen its regulatory capacity.
- ➤ B.2 Navigational aids and equipment at Fua'amotu International Airport (US\$1,100,000). The communication, navigation, and surveillance infrastructure of the country is limited and some of the existing equipment is not fully reliable. In particular, the VHF Omni-directional Radio Range (VOR)/Distance Measuring Equipment (DME) (a type of radio navigation system for aircraft) at Fua'amotu International is working, but has a poor reliability record and is well past its productive operational life. Replacement by a new DVOR/DME at Fua'amotu airport is necessary in order to ensure continued compliance with ICAO requirements. Similarly, the currently installed Visual Approach Slope Indicator (T-VASI) on the Fua'amotu runway is increasingly difficult to maintain. It is used by large air transport aircraft to provide visual descent guidance information during the approach to the runway and, without a working VASI, international flights cannot land. The currently installed T-VASI is to be replaced by a new Precision Approach Path Indicator (PAPI) which is similar to the basic VASI but also provides a visual indication of the aircraft's position on the glide-path to the runway.
- ▶ B.3 Fire tender at Fua'amotu International Airport (US\$850,000). Fua'amotu International Airport complies with a category 8 (highest) fire fighting level. However, three of the current five firefighting vehicles are old and in poor condition. Two are to be reconditioned by Tonga Airports Limited (TAL) from its own resources but one in particular (a Mack P447) has reached the end of its operational life and needs to be replaced to ensure continued compliance with ICAO requirements.
- ➤ B.4 Replacement of security (baggage screening) equipment and emergency power equipment (US\$130,000). The x-ray machine is needed to provide passenger screening as required by ICAO security regulations for international passengers, including those in transit at Fua'amotu airport. In addition, one back-up generator is needed at Fua'amotu airport and one at Vava'u airport to ensure airport service continuity and safe aircraft operations during (relatively frequent) power outages.
- ➤ B.5 Improvements to all ferry terminals (US\$330,000). Improvements will be made to the ramps, fenders, navigational lights, cabling and equipment of reefer power, as well as provision made for the isolation of dangerous goods Nuku'alofa², Ha'apai, Vava'u,

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² Excluding resurfacing of the domestic ferry terminal which is to be carried out under Component C.2.

Niuafo'ou, Niuatoputapu, Ha'afeva and Eua³ ferry terminals to improve safety and security of passengers and to facilitate the operation of essential ferry services between the Outer Islands.

- ➤ B.6 Marine safety and environmental protection equipment (US\$24,000), including outboard motors and workboats for pollution (oil spill) management and installation of isolation storage areas at the ferry terminals in Ha'apai and Vava'u.
- ➤ B.7 Reform of motor registry system (US\$150,000). The sub-component will finance the transition of the motor registry unit from the Ministry of Police to the MoT, and carry out a review of options and development and implementation of appropriate procedures and systems for managing the motor-vehicle registry and driver-licensing records.

Component C: Transition towards sustainability in the transport sector. (US\$ 596,000, 11% of total project costs): The component will build on the findings and recommendations of Component A. It comprises a package of strategic items (technical assistance and targeted investments) consistent with the policy/planning framework and medium-term sustainable investment plans developed in Component A and support GoT in the early stages of implementing key initiatives towards a more sustainable transport sector, as well as consolidate the transition to the unified Ministry of Transport. The precise program of sub-components will depend on the outcomes of the Component A analysis. However based on the findings of the project preparation missions and discussions with GoT, the following have been tentatively identified:

- ➤ C.1 Legislative framework (US\$200,000). Assistance with drafting of legislation to implement the recommended legislative reforms identified in the Transport Sector Planning and Policy Framework module of Component A.
- > C.2 Resurface the inter-island (domestic) ferry terminal at Nuku'alofa (US\$220,000) to provide safe working conditions for cargo handling and to improve passenger safety and convenience.
- > C.3 Installation of solar lighting at primary ferry terminals (US\$26,000)
- > C.4 Additional investment in safety and security equipment at airports (\$150,000) -- on-going airport investments.

Component D: Project Implementation Support (US\$630,000, 12% of total project cost): While the volume, diversity and scope of the various tasks to be undertaken under the project, is significant and there is a fairly limited institutional capacity available within Tonga, a full-fledged Project Unit with full-time staff and associated costs is not warranted under the proposed project. Consequently, a project implementation support team (PST) within MoT will provide the necessary technical support to both MoT and TAL. The PST will assist in the preparation of work-plans, budgets, progress and impact reports, and coordination of the overall

³ Minor navigational lighting at Eua

implementation of the project. It will comprise a full-time locally-recruited project manager, part-time internationally recruited procurement specialist and (to the extent needed) aviation advisers and locally recruited works supervisory support for the marine division. Project associated incremental operating costs (e.g. local workshops for stakeholders, procurement-associated activities, etc.) will be covered 100% by the GoT.

H. Lessons learned and reflected in the project design

- 14. The project design builds on the lessons learned from recent World Bank supported projects in Tonga and the Pacific Region, in particular the lessons of the Tonga Transport Sector Review (TTSR), Cyclone Emergency Reconstruction Management Project (CERMP) and Bank technical assistance provided to support the transition of the Tonga airport sector from a ministry/departmental structure to a corporatized entity (Tonga Airports Ltd.). The key lessons learned and the way that they have been reflected in the project design are as follows:
 - (i) In small (micro) countries, with very limited institutional capacity, successful projects are simple in terms of overall concept and implementing agencies and have modest objectives. In addition, the projects have clear linkages between the overall framework, achievable objectives and practical outcomes. In keeping with the lessons, the project has been designed so that implementing agencies are limited to two and each of the components advances the overall objectives of the project one step at a time and build on each other.
 - (ii) Government resources in Tonga for project management and complex procurement activities are limited and already stretched. As an alternative, under the project, a local Project Support Team (PST) will be established and resourced with responsibility for project management and reporting; contract management; and procurement. Recent experience with the Tonga CERMP project and the Samoa Second Infrastructure Asset Management (SIAM-2) project in Samoa has proven this approach to be successful and cost-effective. Accordingly, provision for a small PST comprising a full-time, locally recruited project manager and part-time international procurement specialist has been built into the proposed project. Given the complex nature (and international regulatory requirements) of the aviation sector, an international specialist will be recruited (as needed) to assist MoT and TAL prepare any TOR for Component A activities and specifications for equipment to be procured. In addition, locally recruited electrical and concrete supervisors will be contracted to provide MoT (Maritime Division) supervision of small works particularly on the remote outer islands.
 - (iii) Customary land and involuntary resettlement issues in the Pacific Region are complex and typically require a lengthy resolution process. The project avoids activities with resettlement implications. No new roads will be built or facilities extended beyond existing boundaries. The focus of the goods and works to be procured under the project is on rehabilitation and upgrading of existing facilities.
 - (iv) Complex high-technology computerized systems have a poor track record of sustainability in the Region. Accordingly, TSCP Component A emphasizes "fit for purpose" approaches that do not require any specialized hardware, are easy to

- operate with basic computer skills and minimal training, will not require expensive data collection activities to keep up-to-date; and are to be based on familiar technology (such as spreadsheets) which can be supported locally or remotely at low cost.
- (v) Recent assistance provided for the establishment of TAL demonstrated the success of a partnership approach to technical assistance. Consultants and counterparts worked together in a genuine team environment jointly addressing complex issues. Consultants provided specialist inputs and advice on international best practice and mentored and facilitated local processes. This maximized skills and knowledge transfer and the appropriateness and ownership of results and also produced sustained benefits. To the extent possible, the technical assistance components of this project will adopt a similar approach with individual consultants working closely with agencies to facilitate sustainable local solutions. Similarly, the procurement and aviation specialists will mentor local counterparts as part of their outputs.

I. Alternatives considered and reasons for rejection

- 15. In its communication with IDA, the GoT formally requested that the IDA grant should focus on consolidation of the transport sector. Within this overall framework, the main alternative that was considered (and subsequently rejected) was structuring the project so that it had a greater emphasis on delivering goods and works and less on technical assistance. However, there currently are no short or medium-term infrastructure development plans or policy frameworks for the Tonga transport sector. Thus, while embarking directly on a project of investment in goods and works would play an important role in responding to immediate high profile needs, the project would not be founded within a longer-term development strategy. Such an approach could be seen as reactive and piecemeal, and not consistent with broader goals of sustainability.
- 16. The proposed preferred approach builds on the findings of the TTSR and the lessons described above. It firstly supports technical assistance to build up infrastructure planning capacity and develop a policy framework for the transport sector (Component A); and then sustainable investments will be aligned with this framework (Component C). The only goods and works that are planned to proceed as soon as practicable are those that address urgent and high-priority investments required for compliance with international safety, security and environmental standards in the aviation and maritime sectors (Component B). Such investments would be required under any credible sector development scenario and need not be delayed. The proposed approach is aimed at ensuring that investments in the transport sector are made within a more sustainable development framework and with a clear strategic direction in mind. This is also expected to provide the foundation for complementary investments by GoT from its own budget resources and by other donors.

IMPLEMENTATION

J. Partnership arrangements (if applicable)

17. No partnership arrangements are currently included in the project. However, given the need for additional aviation and maritime sector safety and security equipment and land transport investments (Component C), bilateral donors are being asked by the Government to provide additional funds to the project. However, as currently designed, the works and activities envisaged under the proposed project comprise a viable package; any additional parallel funds will help to ensure that some of the consolidation-stage tasks could advance at a faster pace and with greater impact.

K. Institutional and implementation arrangements

- 18. <u>Project oversight</u>. The institutional arrangements for project implementation will follow the Government structure. At the central level, the Ministry of Finance and National Planning (MoF) and the Office of the Auditor General will be responsible for ensuring that project resources are used for the purposes intended and that project accounts are audited. The Ministry of Lands Survey, Natural Resources and Environment (MLSNRE) will be responsible for providing environmental assessments of all works carried out under the project. To the degree that ICAO and IMO conduct regular auditing visits to review compliance, their reports will also become a part of the monitoring process.
- 19. <u>Project Management</u>. The Ministry of Transport (MOT) (comprising the land-transport, civil aviation and maritime divisions) and Tonga Airports Limited (TAL) will be the implementing agencies for TSCP and will be accountable for project funds and coordinating activities under the project. The post of CEO in the MOT will be filled as a condition of project effectiveness in order to provide adequate project management of the TSCP. In the event that a suitable candidate cannot be selected in time, MOT will provide IDA with an acceptable time-bound action plan for recruiting a person into the post.
- 20. <u>Implementation Support</u>. A project implementation support team (PST), located in MOT, will provide the necessary technical support to MOT and TAL. It will assist in the preparation of work plans, budgets, progress and impact reports, and coordination of the overall implementation of the project. It will also act as an interface with IDA to ensure that TSCP is implemented as per the IDA/GOT Financing Agreement and IDA/TAL Project Agreement. MOT will be responsible for preparing terms of reference for the positions of project manager, part-time procurement adviser and aviation specialist (as needed) for review by IDA. These two former positions will be filled as a condition of project effectiveness. The positions of project manager, procurement adviser, and specialist advisory support (in particular in the aviation and marine divisions), will be financed under the project.

L. Monitoring and evaluation of outcomes/results

21. MOT and TAL are expected to routinely carry out most of the monitoring and evaluation (M&E) exercises required under the proposed project as part of their day-to-day and quarterly reports to management and the MoF. Both implementing agencies will be required to provide quarterly reports to specifically measure project progress (on a component and sub-component basis) with adequate description, explanation and analysis of all output variations. A consolidation of such reports at the end of each (fiscal) year will form the basis of annual project reports which will be used to update the impact (outcomes) evaluation and to inform joint annual reviews by the MOF, MOT, TAL and IDA representatives.

M. Sustainability

- 22. In many sectors in Tonga, current levels of operation-and-maintenance-funding and investments are not sufficient to halt asset deterioration and meet growing demands. In many cases, costly investments are made with direct user-charges poorly defined and collected and the assets either deteriorate over time or need a high level of subsidy from the central fiscus (directly through the national budget or through donor grants). The TSCP has been designed to create an environment where, to the degree possible, "right size" and "right technology" solutions will be provided. Taking account of lifeline/community service obligations (CSO), to the degree possible, sustainable maintenance will be built into the project through improved cost recovery and financing mechanisms; specification of long-life, minimal maintenance equipment; investments in stages; and facilitating improved maintenance practices within the responsible agencies.
- 23. One of the key overall emphasis of the project is on sustainability. It builds on the lessons from analytical work, ongoing and completed operations and reflects international best practices, especially in terms of compliance with ICAO and IMO standards. These are externally audited international standards for procedures and infrastructure in the aviation and maritime sectors.
- 24. Having highlighted several project design efforts to ensure maximum sustainability, it should also be noted that given the relative size of the country, its limited resources, poor history of willingness to pay by residents, along with the high cost of providing some services (because of the small scale and dispersed geography of the country), there may still be a mismatch in several sub-sectors and long-term subsidies may have to be considered (via output based, lifeline CSO and other such mechanisms).

N. Critical risks and possible controversial aspects

Potential Risks	Risk Mitigation measures	Rating of residual risk
Fiscal imbalances increase as	GoT to institute monetary tightening, limit	M
result of large Nuku'alor	private credit growth, trim non-wage spending,	
reconstruction loan, resulting	accelerate pace of structural reforms to improve	

Potential Risks	Risk Mitigation measures	Rating of residual risk
heightened pressures on the budget and balance of payments and a sharp increase in risks of debt distress.	business environment for private sector, and other IMF recommended measures.	
Public external debt is already high (37% of GDP) and country may reject further WB loans to contain current debt levels.	Transport Sector Consolidation Project to be 100% financed by IDA Grant.	L
On-going decline in governance indicators which have deteriorated in recent years and which remain well below the levels of regional comparators.	Constitutional Review Commission recommendations endorsed by Parliament, accepted by Monarch and elections for new Parliament held in free and fair circumstances in 2010 thus moderating the country's difficult political transition.	М
On-going decline in control of corruption indicators which are well below the levels of regional comparators.	Tonga remains engaged with IMF (Article IV Consultations), World Bank, ADB and other international bodies that work with the country to improve governance and corruption indicators.	М
Increasing tensions between Ministries as responsibilities and resources are reassigned as part of the sector rationalization process.	GoT has already recently created a specialized Ministry of Transport and begun reassigning responsibilities to the new Ministry and established a high level inter-Ministerial team to oversee the transition. All ministries confirmed their willingness to cede these functions which they do not consider their major activities.	L
Project design is overly complex and ambitious and is attempted in a sector with little prior Bank experience.	Project design is kept simple with measurable objectives, targets and systems for tracking and reporting progress.	L
Recipient implementation capacity has been weakened by the large 2006 redundancy program and sustainability of sector reforms invariably take some time to become fully operational.	Project implementation will be overseen by MoF which was responsible for overseeing the recently closed TCERMP project (rated Satisfactory) and by new technical Ministry and corporate entity with well-trained professional staff.	M
Past track record of financial management has been satisfactory with respect to audit reports and control arrangements but on-going risk of delays in submitting audit reports due to delays in the Auditor General's Office.	Project funds to be available for financial audits to be carried out by an independent auditor if Auditor General's Office is unable to meet the project auditing requirements.	L
As GoT has requested that no separate PMU be established for the	Project to fund full-time locally recruited Project Manager and part-time internationally	L

Potential Risks	Risk Mitigation measures	Rating of residual risk
project, the Government ministries may not be able to carry out procurement in a timely way, in spite of previous experience on WB projects.	recruited procurement advisor. Close implementation supervision to be provided by IDA missions throughout the life of the project with specialized procurement advice available from the Sydney Country Office.	
No social or environmental safeguards are expected to be triggered other than localized impacts at time of construction.	GoT to prepare EMP acceptable to the Bank and disclosed prior to appraisal.	Ĺ

25. The overall risk is Low to Moderate.

O. Grant conditions and covenants

- (i) Appointment of CEO for MOT (for effectiveness).
- (ii) Project Support Team has been established and a Project Manager and Procurement Advisor appointed within it (for effectiveness).
- (iii) Subsidiary Financing Agreement drawn up between GoT and TAL setting out commitments and responsibilities by both under the project (for effectiveness).
- (iv) Formal exchange of letters between MoT and Ports Authority Tonga authorizing MoT to carry out improvements at Nuku'alofa domestic ferry terminal on behalf of the Ports Authority (no later than December 31, 2008).

APPRAISAL SUMMARY

P. Economic and financial analyses

- 26. Annex 9 provides a qualitative assessment of the likely costs and benefits of each of the proposed project components. 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 project 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. Airport safety and security and service reliability are expected to improve after the new equipment is installed and management improvements in TAL and Civil Aviation are in place. Similarly, for the domestic ferry terminals, improved navigation aids and cargo handling and passenger facilities are expected to benefit all users. Having improved road-asset management procedures and a fully-functional motor registry system in place would improve road maintenance and revenue collection efficiency and set the foundation for possible future introduction of a road fund to help maintain the network.
- 27. 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. The main equipment purchased for TAL (navigation aids and fire engine),

as well as some of the marine navigation aids, 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).

28. To the extent possible, life-cycle least-cost analysis will be done for the minor works such as renovating the ferry terminals. Where costs/benefits can be identified and/or quantified (e.g. less damaged hulls after marine navigation aids are replaced), these are noted in Annex 6).

Q. Technical

29. The project is technically sound in design, and the choice of technology will be governed by both what is appropriate for national technical standards (for example, the small works associated with improvements to domestic ferry terminals) and in order to meet international requirements where applicable (primarily ICAO requirements regarding equipment and operations at the international airports). The strategy of focusing on establishing a policy framework (Component A) in parallel with meeting mandated international safety and security obligations (Component B) will be reviewed at mid-term to identify additional aviation and maritime sector safety and security equipment and land transport investments (Component C).

R. Fiduciary

Financial Management

- 30. Under the Bank's OP/BP 10.02 with respect to projects financed by the Association, the Recipient and the project implementing agencies are required to maintain financial management systems including accounting, financial reporting, and auditing systems adequate to ensure that they can provide the Bank with accurate and timely information regarding project resources and expenditures. The overall financial management assessment for this project is Modest, reflecting GoT's previous experience in implementing IDA projects, the relatively simple project structure from a financial management perspective, the use of direct payments for all payments over \$10,000, and the current strong capacity for project management within TAL which will be responsible for 44% of expenditures under the project (including 10% contingency).
- 31. The Ministry of Finance (MOF) which will have overall responsibility for ensuring that project resources are used for the purposes intended and that project accounts are audited, has agreed to these arrangements.
- 32. The Ministry of Transport is subject to Tongan Government Legislation including the *Public Finance Management Act 2002*. GOT operates a centralized financial system with the MOF approving and processing all expenditure and providing guidelines and ceilings for budget preparation. Funds for the MOT will make use of the existing institutional structure within

government. Hence MOT will receive support from the MOF in the form of overseeing the project Designated Account, final authorizing of expenditure and the processing and paying of expenditure through the government accounting system (SUN), and provision of reports.

- 33. Tonga Airports Limited (TAL) was established on July 2, 2007 under the *Public Enterprises Act 2002*. The Act is administered by the Minister of Public Enterprises. For TAL to be an implementing agency, an appropriate Subsidiary Agreement will be established between MOF and TAL and a Project Agreement between TAL and IDA. TAL will prepare its own annual financial statements on an accrual basis and use the services of an independent external auditor.
- 34. The disbursement arrangements will allow the project to use all of the following methods: (a) advances into and replenishment of the Designated Account: (b) direct payment from the Grant account: (c) special commitment: and (d) reimbursement. For large payments for the purchase of equipment and the payment of foreign technical advisors, the direct payment method (from IDA to contractor/supplier) will be used to facilitate payment on behalf of both TAL and MOT. The recommended threshold for determination of the direct payment is US\$10,000 per individual payment to overseas contractors/suppliers in foreign currency. All local payments in TOP would be paid through the local project accounts.

Budgeting

35. The annual procurement plan will form the basis for the preparation of the project budget. Each implementing agency will be required to prepare a budget enabling budget identification at a component, sub-component and account level. Given the relatively small number of transactions envisaged and the similarity of many of the transactions (technical assistance fees, asset purchases, incremental operating costs, etc.) this will be relatively straightforward. Project funds to be managed by the MOT will be incorporated into the GoT's annual estimates and are expected to complement (not supplant) existing budgets. Both implementing agencies will provide adequate budgets on an annual basis to cover operations and maintenance costs of the assets obtained under the project. MOF will provide an adequate budget on an annual basis to cover local consumption taxes and import duties through the "Tax Expenditure for Development Projects" budget item. MoT and TAL will provide adequate annual budgets to cover their respective project incremental operating cost.

Reporting and Monitoring

36. Both implementing agencies are required to provide interim un-audited quarterly financial reports within 45 days of the end of the reporting period. As these reports are to be used as a measuring tool, they should report project progress (on a component and subcomponent basis) with adequate description, explanation and analysis of variances. A consolidation of such reports at the end of the fiscal year may form the basis of annual project financial statements which will be subject to audit.

External Audit

37. Both implementing agencies will be required to provide annual audited financial statements for each fiscal year of the project. These reports must be received by the World Bank within six months of the end of the fiscal year for which the reports have been audited. The MOF will be responsible for ensuring project funds are audited.

Procurement

38. A Procurement Capacity Assessment was carried out for MoT and TAL; the full assessment is provided in Annex 8. The assessment reviewed the organizational structure for implementing the Project and the interaction between the staff responsible for procurement. The Procurement Risk Assessment carried out indicates that the overall risk for all implementing agencies is rated as High. This is based on MOT's and TAL's lack of procurement expertise and the project's multi-faceted organizational structure. An action plan to offset the risks has been adopted for implementation and the key issues and risks will be monitored closely.

S. Social

- 39. There will be no land acquisition required under the project for any reason. In the case of maritime sector activities, these will be located or undertaken at the existing sites of the domestic ferry terminals in Nuku'alofa and the other islands, and similarly, regarding aviation, at the existing site of the international airport (Fua'amotu) on Tongatapu, and other airports on the islands of Ha'apai, Vava'u and the Niuas. Therefore, there will be no adverse social impact in terms of land use.
- 40. TAL operates the Nuku'alofa international airport (Fua'amotu) and all other airports in the country. Currently Fua'amotu airport is built on three parcels of land which are sub-leased to TAL by the Central Government (Ministry of Civil Aviation). The Central Government leases the three parcels of land from three individual land-owners under the Land Registration Act; each lease is for 99 years. The site plan (in project files) shows the cadastral boundaries of the leases in relation to developments of the airport. The Government is currently negotiating an extension to one of these leases. However, as the land covered by this lease has no superstructure works, it will not affect the airport operations or the investments made under the project if the lease extension is delayed.

T. Environment

41. As detailed in Annex 10, the proposed project is expected to have minimal or no adverse environmental impacts. In accordance with Bank Guideline OP 4.01 it has thus been classified as a Category "C" project. Even if any adverse environmental impacts were to occur at a later stage, it is expected that these would be small to negligible, local and confined to the immediate vicinity where they occurred and could be readily avoided and or easily mitigated through widely available and tangible mitigation measures. As required for category "C" projects (under OP4.01), the GoT has prepared an Environmental Management Plan (EMP), which will be integrated in the technical design and contracts for all civil works, and where necessary, will also be adopted by MOT and TAL for maritime and aviation issues respectively, involving measures

to be adopted during operation and maintenance of any of these activities. The EMP was publicly disclosed on April 18, 2008.

- 42. **Environmental Monitoring Arrangements**. Environmental monitoring is to ensure that the designed mitigation measures are implemented and can be modified if needed, to respond to any unforeseen event. It is also designed to assess the effectiveness of these measures over time. As the TSCP is expected to have only very local and minor environmental impacts, outcome indicators may not be as useful as documenting that the appropriate mitigation measures are undertaken during implementation.
- 43. Responsibility for monitoring construction management issues will lie with the implementing agencies supervising the civil works contractors. The cost of implementation of the mitigation measures will be included in the individual civil works and procurement contracts/specifications. The costs for monitoring are included as incremental operating costs to be funded under the project by the respective implementing entities.
- 44. For an effective post-construction mitigation monitoring phase, MoT and TAL have agreed to incorporate any required measures into their operational plans and reflect this in the post project report which the GoT is required to provide to IDA as part of the project completion process. During project implementation, IDA will also routinely review compliance with the EMP and report its findings in periodic project Implementation Status and Results Reports (ISR) and the Implementation Completion Report (ICR).

U. Safeguard policies

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment (OP/BP 4.01)	[X]	[]
Natural Habitats (<u>OP/BP</u> 4.04)	[]	[X]
Pest Management (OP 4.09)	[]	[X]
Physical Cultural Resources (OP/BP 4.11)	[]	[X]
Involuntary Resettlement (<u>OP/BP</u> 4.12)	[]	[X]
Indigenous Peoples (<u>OP/BP</u> 4.10)	[]	[X]
Forests (<u>OP/BP</u> 4.36)	[]	[X]
Safety of Dams (OP/BP 4.37)	[]	[X]
Projects in Disputed Areas (OP/BP 7.60)*	[]	[X]
Projects on International Waterways (<u>OP/BP</u> 7.50)	[]	[X]

V. Policy Exceptions and Readiness

45. The project complies with all Bank policies and requires no exceptions. The financial management and procurement plans for the first 18 months have been prepared and were reviewed and found to be acceptable. Disclosure requirements for the EMP have been met and the Government's schedule for appointing key staff in MoT for project administration is on track.

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^{*} By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas

Annex 1: Country and Sector or Program Background

TONGA: Tonga Transport Sector Consolidation Project

- 1. The Kingdom of Tonga (estimated population of 105,000 people) comprises three main island groups with a total land area of some 700 sq. km dispersed over a 400,000 sq. km area of the South Pacific (Polynesia sub-Region). Its basic infrastructure network is of reasonably good quality, as is its social-service system. However, its small size, geographic dispersion and isolation and limited natural resources provide a narrow economic base making it particularly vulnerable to external economic fluctuations. Agriculture, fishing and tourism account for most export earnings and it has a high dependency on external aid (averaging US\$205 per-capita annually over 1999-2002) and remittances from the estimated 100,000 Tongans living abroad.
- 2. Tonga faces many challenges in developing and maintaining sustainable internal (intraand inter-island), regional and international transport and communication linkages, all of which
 are crucial to the economic development and social well-being of its national population. In
 addition to its remote location and dispersed islands setting, the country is faced with limited
 capital resources and asset deterioration, combined with financial and administrative constraints
 typical of a small (micro) country, as well as increasingly stringent international transport safety
 and security requirements. The situation was further exacerbated by the September 2005 civil
 servant strike and the November 2006 civil unrest, the latter resulting in significant damage to a
 large part of the capital city. These, together, create a new set of challenges for Tonga.
- 3. Recognizing the key role that transport plays in the economy and social fabric of such an isolated and dispersed country, the Government of Tonga (GoT) is committed to improving the efficiency of the sector. It began this process in 2004, with a request to IDA to support a joint review of the country's entire transport sector (responsibility for which was scattered throughout a number of different Ministries) and recommended strategies and options for improving sector performance. The IDA-supported Tonga Transport Sector Review (TTSR) (TF052906) was completed in 2005.
- 4. The TTSR highlighted major gaps in the policy, planning and legislative framework for the transport sector. It also highlighted a lack of medium-term plans to guide investment in the transport sector; a large maintenance backlog; ongoing compliance issues with international safety and security obligations; inadequate systems for asset management; and inadequate mechanisms for financing a sustainable maintenance and investment program. In particular, the key findings of the TTSR included:
- (i) Institutional arrangements at that time did not provide an adequate long-term basis for managing the Tonga transport sector and should be restructured. The TTSR found that there was limited integration of transport policy across sub sectors with no agency responsible for management of the land transport sector and limited skills dispersed across a number of agencies.
- (ii) The TTSR recommended that the preferred model for managing the Tonga transport sector would be to establish a Ministry of Transport (MoT) which would bring together responsibility for all modes of transport into a single agency. New legislation would then be required to define the scope of and transfer legislative responsibilities from other Ministries. TTSR found that legislative reforms would be required to formalize the

- transfer of transport sector powers and responsibilities to MoT; to rectify overlaps and gaps in the existing legislative framework; and to update out-dated and ineffective legislation.
- (iii) Improved efficiency and accountability could be achieved in the airports sector by moving from a situation in which airports are managed and operated within a traditional central government ministry structure towards a more commercial model. TTSR recommended that the preferred reform option would be to establish a corporatized airport entity as a public company under the Companies Act.
- (iv) Airport user charges (prior to airport corporatization) had not kept pace with costs and met only about 50 percent of the direct cost of operations, maintenance and reinvestment needs. TTSR recommended that a staged program to achieve full recovery should be developed and implemented.
- (v) Immediate steps needed to be taken to address concerns expressed by ICAO on airport security-related matters. TTSR recommended that a strategic ten year Aviation Strategy be prepared by MOT and an Airport Development Plan by TAL.
- (vi) The maritime infrastructure needed urgent upgrading of terminals and navigational aids for inter-island shipping. TTSR recommended that a strategic ten year Maritime Strategy should be prepared by MOT, and a Ports Development Plan should be developed covering all ports.
- (vii) TTSR found that there was limited scope for full cost recovery from inter-island ferry services and recommended that explicit community service obligation arrangements be implemented to support the cost of providing and maintaining minor terminals and harbors.
- (viii) Annual expenditure on the road system only covered about one-third of the amount required for a sustainable road program. The TTSR recommended that, to the degree possible, mechanisms should be put in place to secure sufficient revenue from road use charges to meet a larger share of the cost of providing and managing roads.
- (ix) Tonga did not have an operational road pavement management system or a long-term road development program. TTSR recommended that a simple and appropriate road maintenance and program-management system be implemented; and that works that met defined economic criteria should be prioritized into a rolling work program that would be consistent with a ten year Road Strategy.
- (x) Consistent and reliable information on motor vehicle registrations was not available. TTSR recommended reform of the current vehicle registration system, including introduction of a computerized (simple, spread sheet-based) motor registration system appropriate for the small fleet of vehicles in Tonga, operating staff skills, etc.
- 5. Among some of the actions already taken by GoT to implement the recommendations of the TTSR have been:
- (i) Ministry of Transport (MoT) was formed in March 2006 by the amalgamation of the Ministries of Civil Aviation and Marine & Ports. In addition, agreement was reached to transfer responsibility for motor vehicle registration and driving licensing from Ministry of Police to MoT during FY09.
- (ii) Tonga Airports Ltd (TAL) was established as a corporatized airport company, registered under both the Public Enterprises Act and the Companies Act in July 2007, thus separating the regulatory role of the Ministry of Civil Aviation from the operator (TAL).

- (iii) Government undertook a review of user charges and fees across all sectors of the country (including transport) with the goal of better matching service provision with costs, appropriate levels of technology, and more clearly identifying and rationalizing subsidies. In a related initiative, TAL introduced revised airport passenger service charges with full implementation from early 2008.
- 6. Many of the TTSR main findings and recommendations were adopted as Government policy and are reflected in the Government's national Strategic Development Plan (SDP8), which included the following explicit priorities for the development of the transport sector:
- (i) Implement the National Road Development Program and establish a Road Fund to support proper asset management.
- (ii) Upgrade inter-island sea transport services by introducing a new ferry and a new landing craft.
- (iii) Upgrade and maintain terminals throughout Tonga, giving priority to installation of new, and replacement of deficient, navigational beacons and markers.
- (iv) Improve domestic air services by consolidating the corporatization of airports and ensuring continuity of service provision.
- 7. These steps confirm the commitment of the GoT to improving the efficiency of the transport sector. However tight budget constraints and other challenges facing the GoT mean that Tonga is unable to make significant progress utilizing only its own resources and assistance will be required to make headway in improving key indicators of safety, security and sustainability within the transport sector. As a reference point, some of the main features of the current structure and current performance of the transport system are:
- (i) **Maritime**: One international container and general cargo terminal at Nuku'alofa and six domestic wharves serving inter-island ferries. The main port at Nuku'alofa was corporatized in 1999, as a statutory authority, Ports Authority Tonga Ltd. (PAT) under the Public Enterprises Act. PAT is financially self-sufficient. The outer-island ports and terminals are operated by the Marine Division of the MoT. International trade is highly imbalanced with around 200,000 tonnes of imports each year (including some 5,000 containers) and less than 40,000 tonnes of exports. Inter-island ferry services carry around 60,000 passengers and 10,000 tonnes of freight per year (a daily average of about 165 passengers and 27 tons of freight). While facilities for international shipping are in generally good condition, inter-island shipping facilities are generally in fair-to-poor condition; cost recovery and spending levels are low; and many aspects of inter-island shipping do not meet expected basic standards of safety, security and incident response.
- (ii) Aviation: Six airports with one airport on each of the main islands. The Tonga airports sector was corporatized in July 2007. All airports are now managed and operated by TAL, a public company under the Companies Act and Public Enterprises Act. Fua'amotu airport at Nuku'alofa is the major international gateway with regular services to Australia, New Zealand and United States (via Samoa). Vava'u airport is also a certified international airport but services are sporadic. There are in total around 70,000 international (about 200 daily) and 60,000 domestic passenger departures per year (about 165 daily); and around 2,500 tonnes of international air freight. Fua'amotu International Airport is currently barely compliant with ICAO minimum safety standards and with security standards

- required for international air services. A similar situation of deteriorating assets and substantial backlog of maintenance and upgrading exists at all airports.
- (iii) **Roads:** 900 kilometers of national, community and village roads (180 km paved) and around 12,000 vehicles. As noted above, road cost recovery rates are low; spending on road maintenance has not kept pace with road deterioration; and the current paper-based system for administration of motor registry records is inadequate for present and future needs and does not provide an accurate and efficient basis for road use and revenue management.
- 8. Following IDA's upstream technical assistance support to the sector and consistent with its SDP8, GoT has requested IDA grant assistance to continue and accelerate the process of reforming and consolidating Tonga's transport sector to be better able to respond to both current and future needs. IDA's support primarily would be in the form of assistance to the Government to consolidate the role of the MoT (including capacity strengthening in policy, planning and regulatory functions), as well as support to transport operators to help them to meet urgent safety and security obligations and address critical needs for equipment and small upgrading works on existing facilities. The latter would be by means of some key investments which would complement medium-term investment strategies and local resources already mobilized. The underlying aim of the TSCP project is to assist GoT to establish a platform for the transition to a more-sustainable transport sector, kick start the process, and reach a position where GoT can take over and complete the transition with its own resources and within its own capacity. Even with improved efficiency and appropriate policy modifications, the GoT may still not be able to build a sustainable system based entirely upon limited user charges and so it will have to develop an appropriate subsidy policy and possibly seek long term external subsidies.
- 9. The proposed IDA assistance specifically complements several other ongoing or planned transport-sector initiatives, ensuring consistency, compatibility, sustainability and maximum benefit of the activities and works. These include:
- (i) The ADB is funding an "Integrated Urban Development Project" which includes road upgrading works within the Nuku'alofa urban area. In addition, the China, Australia and New Zealand Governments have approved reconstruction loans for destroyed sections of Nuku'alofa and upgrading urban roads following the November 2006 civil unrest; and NZAID is carrying out small contractor road maintenance training. The IDA assistance would support development of a policy framework and funding mechanisms for sustainable road maintenance, as well as the reform of the central motor registry systems.
- (ii) The Government of Japan is donating an inter-island ferry to Tonga (scheduled for delivery in March 2010). The IDA assistance would help to finance navigation and security lights and equipment as well as upgrade domestic terminals for both the ferry and all other shipping. It would also assist GoT to prepare a development and investment plan for a more sustainable inter-island shipping services.
- (iii) The IDA grant also would help TAL finance important navigational aids and fire fighting equipment at the Fua'amotu international and other airports, which will complement TAL's own investments as well as the New Zealand Government assistance with providing and maintaining baggage and passenger screening equipment.

(iv)	The World Meteorological Organization is donating weather monitoring equipment to the GoT. This will complement proposed IDA assistance for upgrading air and maritime safety and navigations systems.

Annex 2: Major Related Projects Financed by the Bank and/or other Agencies

TONGA: Tonga Transport Sector Consolidation Project

1. The proposed IDA grant specifically would complement several other ongoing or planned transport-sector initiatives and help in ensuring consistency, compatibility, sustainability and maximum benefit of the activities and works. Among such initiatives are:

Donor/Agency and Sector	Project	Latest Rating (ISR) IP DO	
Bank:	G 1 F		-
Housing Construction	Cyclone Emergency	S	S
Flood Protection	Recovery and Management Project.		
Leadite di en Decembra	Procurement Reforms	C	C
Institution Development Fund	and Capacity	S	S
Tund	Development		
Education	Tonga Education	MS	MS
	Support Project		
Other Donors:			
ADB	Integrated Urban		
	Development Project		
IFAD	IFAD sub regional		
	strategy (that introduces		
	development innovations		
	in selected poor rural		
	communities throughout		
	the Pacific Island		
	countries).		

Annex 3: Results Framework and Monitoring

TONGA: Tonga Transport Sector Consolidation Project

Results Framework

PDO	Project Outcome Indicators	Use of Project Outcome Information		
To establish and consolidate the operations of the newly-created MOT as a unified transport sectorpolicy, planning and regulatory ministry and to improve the level of compliance of the civil aviation and maritime sub-sector entities with international safety and security standards	 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. Definition of the new roles of MOT and relevant ministries in respect of land transport; Certification of the Fua'amotu International Airport in accordance with TCAR Parts 139 and 157 (22 April 2008); Domestic shipping services operated in line with an approved plan recommended by a study of options to service outer islands. 	Ex-post assessment of achievements and any complementary actions, resources, etc. needed to build upon such achievements. ICAO and IMO compliance reviews.		
Intermediate Outcomes	Intermediate Outcome Indicators	Use of Intermediate Outcome Monitoring		
Regulations in place with improved monitoring, enforcement and compliance mechanisms. Appropriately skilled staff recruited and equipped to fulfill their respective mandate.	 (i) Phase 1 of phased study to formulate a transport sector national policy and planning framework (multi-modal) completed; (ii) Associated findings and recommendations used to draft laws and associated regulations; (iii) New institutional responsibilities submitted for approval by Privy Council; (iv) New motor registry system established and operational; (v) Aviation sector regulatory and surveillance compliance review and support completed. 	MOF, MOT and IDA to have annual review meetings to monitor progress in schedule and if needed, take required actions to meet project goals.		
Safer inter-island transport for passengers and cargo	 (i) Ferry terminal lights installed and operating during embarkation and disembarkation at ferry terminals. (ii) Access ramps and other ferry terminal improvements upgraded to permit unhindered entry and exit. (iii) Maritime navigation aids acquired, installed and 	MOF, MOT and IDA to have annual review meetings to monitor progress in schedule and if needed, take required actions to meet project goals.		

	operational.	
Improved security arrangements and compliance with requirements for international air transport	 (i) Action plan to address ICAO regulatory and related requirements established and in operation by June 2010. (ii) Navigation equipment acquired, installed and operational by March 2010. (iii) Fire truck acquired and operational by March 2010. (iv) 100% of ICAO 2007 Security Audit addressed by June 2010. (v) Starting to address ICAO highest priority deficiencies in four key areas by Mid-term Review⁴. 	MOF, MOT, TAL and IDA to have annual review meetings to monitor progress in schedule and if needed, take required actions to meet project goals.
Greater sustainability of operations of responsible transport sector agencies (land, sea and air), with clearer assessment of medium term capital and operations and maintenance expenditure requirements, with greater transparency in justifying and managing explicit central subsidies for specific operators	 (i) Operation and Maintenance (O&M) and capital investment budget for each sub-sector prepared annually with defined funding source. (ii) Sub-sector entities fully staffed in line with agreed allocated positions. (iii) Study of community service obligations options for new ferry done before vessel is received in Tonga (due March 2010). 	Supervision missions and annual review meetings to monitor progress in schedule and take any needed actions.
Reduced maintenance backlog, improved safety and accessibility for all users of the upgraded facilities.	 (i) By June 2011, each sub-sector to prepare and utilize a technologically-appropriate asset registration and maintenance system in line with its resource and capacity. (ii) Annual maintenance work program to be derived from above system. 	Supervision missions and annual review meetings to monitor progress in schedule and take any needed actions.

Arrangements for results monitoring

Institutional issues: The monitoring and evaluation task will be in important implementation tool throughout the project. On the input side, the agreed planned work-program along with the planned disbursement schedule will be the initial reference point for evaluating the degree to which the project objectives are being achieved. The project has several TA activities and so commencement of various studies and assistance programs along with goods procured, will provide initial evidence of project progress. As these tasks advance, the focus will include works completed, goods installed, reports completed and TA provided. Monitoring of these results will be done, first, by the MOT and next, by the team responsible for the project. ICAO and IMO periodic reviews will also help to identify progress in meeting critical sub sector needs. The MOT will be responsible for noting lagging or

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⁴ Security; Fire & Safety; Reliability of Air Traffic Management Equipment; Documentation/Quality Assurance.

deficient performance and taking appropriate remedial actions. The Finance Ministry and the Bank will also be provided with these monitoring and evaluation reports along with information of how the MOT is working to address any problems noted. More comprehensive annual and mid-term reviews will also be conducted to identify trends and find ways of taking appropriate corrective measures. During the final phase, the overall results will be reviewed and evaluated to obtain lessons learned and also to help in deciding how to proceed from that point.

• <u>Data collection</u>: Before TAL was created, the Civil Aviation Ministry collected data on aircraft arrivals, passenger profile, etc. Periodic ICAO reviews also provide important compliance data for the air transport sub sector. Also, comprehensive data on maritime accidents are collected by the MOT. However, for other sub sectors, data collection in several key areas (e.g. number of vehicles in Tonga, road condition, ferry passenger and freight traffic, maritime assets, road accidents, subsidy and cost of owning, operating and maintaining a ferry service, etc.), are not being systematically collected, analyzed or utilized because of various reasons (lack of resources, no perceived need, etc.) The proposed project will put in place mechanisms for more reliable and consistent systems for data gathering as well for monitoring and recording improvement and progress in the various sub-sectors.

	Arrangements for results monitoring							
Data Collection and Reporting						T		
Project Outcome Indicators	Baseline April 2008)	December 31, 2008	December 31, 2009	December 31, 2010	December 31, 2011	Frequency and Reports	Data Collection Instruments	Responsibility for Data Collection
MOT	(i) Nine				(i) MOT	Three	Supervision	MOT, Project
operations	separate				operations	Quarterly	missions,	Team
established	entities with				established	Progress	progress	
and	some				and	Reports	reports.	
consolidated	transport				consolidated	plus one		
with MoT functioning	sector function. ⁵				with MoT functioning	Annual Report		
as a unified	Tunction.				as a unified	each year		
transport	(ii) Self-				transport	caen year		
sector-	assessment				sector-			
policy,	of				policy,			
planning and	Fua'amotu				planning and			
regulatory	airport as				regulatory			
ministry to	against				ministry to			
improve the	ICAO				improve the			
level of	compliance level;				level of compliance			
compliance of the civil	Security				of the civil			
aviation and	48%; Fire &				aviation and			
maritime sub	Safety 53%;				maritime sub			
sector entities	Air Traffic				sector			
with	Management				entities with			
international	equipment				international			
safety and	reliability				safety and			
security	56%				security			
standards	addressed;				standards.			
	operation 50%							
	addressed.							
	(iii) Sea							
	navigation							
	aids missing							
	or in							
	disrepair							
	(iv) Ferry							
	terminals in							
	poor							
	condition							
	and without lights.							
Intermediate Outcome Indicators								
Regulations		(i) Ongoing	(i). Plan to	(i) Operation and Maintenance	(i) Lights	Three	Supervision	MOT, Project
in place with		study of MOT	address	(O&M) and capital investment	installed and	Quarterly	missions,	Team
improved		completed;	ICAO	budget for each sub sector	operating	Progress	progress	
monitoring,		(ii) Eindings or 1	regulatory and related	prepared annually with	during	Reports	reports.	
enforcement and		(ii) Findings and recommendation	and related requirements	defined funding source.	embarkation and	plus one Annual		
compliance		s used to draft	established	(ii) Sub sector entities fully	disembarkation	Report		
mechanisms.		laws,	and in	staffed in line with agreed	at ferry	each year		

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⁵ Ministry of Transport currently responsible for Civil Aviation and Maritime sectors. Ministry of Works responsible for road construction and maintenance. Ministry of Police manages vehicle registration and Traffic. Ministry of Labor regulates buses and taxi operators and controls fuel prices and tariffs. Ministry of Lands manages oversize vehicles and coordinates road planning and traffic management. Shipping Corporation of Tonga manages inter-island shipping.

Annex 4: Detailed Project Description

TONGA: Tonga Transport Sector Consolidation Project

- 1. The overall objective of the project is to establish and consolidate the operations of the newly-created MOT as a unified transport sector-policy, planning and regulatory ministry and to improve the level of compliance of the civil aviation and maritime sub sector entities with international safety and security standards.
- 2. The proposed IDA grant would support four main components:

Component A: Establishing a framework for more sustainable development of the transport sector: Development of an improved policy, planning and legislative framework for the sector as well as medium-term investment plans and strategies consistent with technical and other capacity constraints of Tonga.

Component B: Meeting mandatory urgent and high priority obligations: Responding to and meeting mandatory (urgent and high priority) safety and security needs as required under international agreements, treaties and obligations.

Component C: Transition towards greater sustainability in the transport sector: Implementation of follow-up measures required to consolidate the Ministry of Transport and implement strategic items consistent with a more sustainable framework developed in Component A. This is likely to include some high priority investments, plus initiatives to update sector legislation and implement improved systems and procedures for planning and administering the transport sector.

Component D: Project implementation support. Technical Assistance for several skilled experts to assist local counterpart staff throughout all of the above phases of the project and funding of incremental operating costs associated with project implementation.

- 3. The components provide an integrated response to the findings of the *Tonga Transport Sector Review* (TTSR), the GoT *Strategic Development Plan*, and current and emerging needs of the transport sector. Component A responds to the TTSR finding that current institutional arrangements do not provide an adequate long-term basis for managing Tonga's transport sector; to the lack of a policy framework and medium-term sector development plans. Component A provides technical assistance to assist the GoT to develop very simple first-generation policy/planning frameworks and sector development policies and plans that will help to make the sector more sustainable in its operations.
- 4. In line with an appropriate long-term transport sector sustainable framework, there are several urgent investment needs. GoT sector investments in maintenance and upgrading have not kept pace with asset deterioration or the more stringent standards for safety and security under international agreements such as ICAO and IMO. Present budget constraints mean that Tonga is unable to make significant progress in addressing this backlog utilizing only its own resources. Component B will assist by addressing several urgent safety and environmental compliance needs in the aviation and maritime sectors. It will commence as soon as practicable following project approval and proceed in parallel with Component A. Component C builds on

overall policy and institutional reports envisioned under Component A. It will assist with immediate follow-up measures to commence implementation of the findings and recommendations of planning tasks in Component A. This will help to retain the momentum and kick start the transition to a more sustainable transport sector. Although the precise subcomponents will depend on the outcomes of the Component A analysis, it is expected that Component C will comprise a package of priority works in the aviation and maritime sectors consistent with the sustainable development plans; and technical assistance to implement required legislative reform and improved administrative systems for the MoT.

5. The broad structure of the project is shown in the diagram below and each of the Components is described in more detail in the following sections.

	Comp	onent A	Component B	Component C
	Policy/ Planning Framework	Sustainable Development Plan	Urgent Investments	Follow-up Measures
Multi-modal	✓	✓		✓
Aviation	✓	✓	✓	✓
Maritime	✓	✓	✓	✓
Land Transport	✓	✓	√	✓

Component A: Establishing a framework for sustainable development of the Transport Sector (US\$ 1,000,000)

- 6. This is an integrated package of tasks designed to assist with preparation of an overall sector framework as well as medium-term investment plans consistent with the long-term sustainable capacity of Tonga. Sector needs in two main areas will be addressed as follows:
- (i) Developing an improved policy, planning and legislative framework for the transport sector this will include drafting a set of strategic principles for the transport sector (on issues such as role of government, market competition, user-pays, private sector participation, etc); an appropriate mechanism for assessing the merits of policy and project proposals; and policy positions on key sector issues for consideration by GoT. The results will feed into a National Transport Policy Framework which integrates sector and cross-sector polices and development plans, and a program of legislative reform.
- (ii) Preparation of sustainable investment plans for the aviation, maritime and roads sectors to leverage current infrastructure to the maximum extent possible and be appropriate to the scale of activity and local environment. The proposed approaches should be more sustainable in terms of financial and human resource capacity and should be compatible with other sub sector needs so that investments respond to growth and new requirements in a staged way along a logical development pathway. The development plans for each

sector then become part of a National Transport Sector Development Plan including a prioritized three-year action plan for MOT.

7. Efforts will be made to ensure that this exercise is done in close collaboration with GoT so that the counterpart staff will have the opportunity to maximize knowledge transfer and ownership of outputs in line with sustainable local capacity to implement, utilize and update the policy framework and development plans.

8. Component A will comprise:

- A.1 Transport Sector Policy and Planning Framework (\$350,000) Technical assistance for mentoring local staff and developing an improved policy, planning and legislative framework for the transport sector, including capacity strengthening and formulation of strategic principles for the transport sector (on issues such as role of government, market competition, user-charges, conditions for subsidy, private sector participation, etc); an appropriate system for assessing the merits of policy and project proposals (project evaluation guidelines); and policy positions on key sector issues for consideration by GoT. The results will feed into a National Transport Policy Framework which integrates sector and cross-sector polices and development plans, and into a program of legislative reform.
- A.2 Aviation Sector Strategic Plan (\$150,000) Technical assistance to develop in detail an aviation sector policy and strategic plan. This component responds to recent instability in Tonga international and domestic aviation market and the need for the GoT to develop a set of clear sector policies in relation to maintaining a stable and viable aviation market and network of airports, and a strong sector supervision capability. As an interim measure, Tonga will continue to rely on operational and airworthiness inspectors from the New Zealand CAA to perform required inspections, but in the longer run, the Government is committed to ensuring that Tonga is more proactive in the field of regulatory oversight. In particular, the project will:
 - Review the current structure of the air transport sector of Tonga (operators, market, regulatory framework, economic incentives and subsidies, infrastructure, etc) and analyze the economic and social role of air transport in Tonga.
 - Assess the future potential and outlook for air transport market development in Tonga; and identify and assess policy options regarding international air services; international airports; and Government supervision of the domestic aviation market. Recommend for consideration by GoT a detailed and comprehensive policy position regarding sector issues including international and domestic aviation market entry; domestic airline operating license conditions; air services to outer islands; and international entry points.
 - Identify and assess institutional options for structuring technical supervision of the aviation sector (safety, security and environmental aspects), and in particular, combinations of in-house capability, outsourcing (such as NZ, PASO or build certain local capacities), and participation in regional and international organizations.
 - Develop a recommended long-term approach that meets Tonga's obligations under ICAO and other international agreements, affordable with available resources; and

- matches Tonga's local capacity and needs. Identify any required legislative changes to formalize and consolidate recent and proposed reforms.
- A.3 Sustainable Investment Plan for Fua'amotu International Airport (\$100,000) Technical assistance for a 5-10 year sustainable development and investment plan for airport infrastructure needs at Fua'amotu International Airport based on an assessment of the current state and adequacy of airport infrastructure (navigation aids; air traffic control; fire and safety, security and environmental equipment; runways/taxiways/ aprons, terminals, passenger facilities, etc); and realistic planning scenarios (BAU, Expected, Optimistic) for the potential future state and operational needs of the international and domestic aviation market, in terms of design aircraft.
- A.4 *Maritime Sustainable Investment Plan (US\$150,000)* Technical assistance for a 10-year development and investment plan for the infrastructure needs of inter-island shipping based on an assessment of the current state and adequacy of infrastructure for inter-island shipping (navigation aids; safety, security and environmental equipment; berths; channels; shore facilities, etc); a review of current fees and charges in relation to the cost of providing services; and realistic 10-year planning scenarios (Base, Expected, Optimistic) for the potential future state and operational needs of the inter-island shipping market, in terms of type of vessel(s), operation mode, service patterns (route, frequency), projected passengers, freight, revenue, and so on. The study will update the findings of the *Tonga Transport Infrastructure Project* (ADB 2000) and also specifically provide options concerning the community service obligations for providing maritime transport between the Outer Islands and between Nuku'alofa and the Outer Islands,
- A.5 Sustainable Road Maintenance and Investment Plan (US\$250,000) Current levels of road maintenance spending and activity are not keeping pace with deterioration of the road assets. In addition, increasing levels of vehicle ownership and introduction of heavy multi-axle vehicles is accelerating damage to the road system. This technical assistance will develop improved methods and tools for a simple road asset management system appropriate to the scale of the Tonga road network, local resources and capacity; and assess options (such as a road fund) for sustainable financing of the road maintenance program. It will also identify and assess options for developing, managing and implementing an appropriate road maintenance and upgrading program, in particular, the merits of alternative institutional arrangements and contracting mechanisms (possible Public-Private Partnerships).
- 9. Outline scope of works have been developed for all Component A technical assistance projects and are in the Project Files.

Component B - Meeting mandatory urgent and high priority obligations (US\$ 2,730,000)

- 10. This component comprises investments required to respond to and meet mandatory (urgent and high priority) safety and security standards required under international agreements, treaties and obligations. Historic under-investment and a backlog of maintenance led to a situation where there is a risk that Tonga could become non-compliant with its obligations under several international safety, security and environmental agreements. In addition to the direct implications for users, this creates the risk of disruption and possible reduction in international air and inter-island shipping services. With present budget constraints, the GoT is unable to make significant progress in addressing this backlog utilizing only its own resources. Some IDA resources would therefore be used to address critical maintenance and rehabilitation works.
- 11. Because these investments respond to urgent safety and security needs that would be required under any credible sector development scenario, it was decided that they need not be delayed and could commence in parallel with the Component A studies are completed. All of the planned investments would nevertheless be consistent with the medium-term sustainable investment plans to be developed in Component A. These priority investments are:

Aviation Sector:

- 12. Recent aviation sector reforms have separated aviation sector operations and supervision, with airport operations now the responsibility of Tonga Airports Ltd (TAL) and sector supervision becoming the responsibility of the Ministry of Transport. TAL is making good progress towards sustainable operations, but at this early stage of its development, there are several critical safety and security investments that it cannot finance from its own resources. This component will accelerate these critical investments required to maintain compliance with ICAO safety and security requirements and will also strengthen sector supervision. Regulatory oversight of the Tongan aviation sector is currently very limited. Tonga currently requests operational and airworthiness inspectors from the New Zealand CAA to perform required inspections. While this is satisfactory as an interim solution, ICAO recommends and MoT is committed to ensuring that Tonga become more proactive in terms of regulatory oversight. Investments in critical aviation safety and security infrastructure and technical supervision capacity to be funded under Component B are:
- B.1 Aviation Sector Regulatory surveillance and compliance obligations review and support (US\$150,000) This Technical Assistance will strengthen the capacity of the Civil Aviation Division to supervise safety, security and environmental aspects of the aviation sector; with priority on achieving and maintaining ICAO safety and security standards; preparing for the ICAO audit scheduled for 2009 and addressing any high priority deficiencies identified in that audit. The technical assistance will review the current stage of the primary aviation law and operating regulatory framework and the technical guidance material, and assist with the development of regulatory Handbooks and similar. Specifically, this component will review the compliance of the primary aviation legislation and specific operating regulations with ICAO Standards and Recommended Practices (SARPs); review the current technical guidance material and its accuracy with oversight

- functions performed by the Tongan authorities; review the difference of regulations between the Tongan and NZ CAR with recommendations on how to integrate the required regulations in the Tongan framework; recommend required administrative improvements at the Civil Aviation Directorate (licensing and certification, AIP service, etc.); and capacity building in Civil Aviation Division of MoT to strengthen its regulatory capacity.
- B.2 New navigational aids equipment (DVOR/DME and PAPI) at Fua'amotu International Airport (US\$1,100,000). This is a critical item of air navigation equipment required under current ICAO standards for international aviation. The existing VOR/DME is more than 25 years old and although it has been well-maintained, records show that it has failed 22 times in the past six months. It has long exceeded its design life, spares are no longer available, and alternative modified parts are expensive and not fully compatible thus exacerbating the operational limitations. There is a risk that it could become unrepairable, with serious consequences for continued international airline services to Tonga. The remaining navigation aid, the Non Directional Beacon, does not allow aircraft to descend in bad weather to the lower height allowed by the VOR/DME. Under these conditions, there is a heightened safety risk due to less accurate navigation by aircraft, and airline payloads may be affected during times of outage by having to carry additional fuel to fly to other airports if the aircraft cannot land due to bad weather. There are also financial and environmental impacts resulting from aircraft being required to fly longer inefficient routes and approach procedures; and a risk that lack of reliable VOR/DME operation may result in airlines interrupting or withdrawing services from Tonga. It is vital to the safety, efficiency and continuity of regular international air services to Tonga that the DVOR/DME is replaced as soon as practicable. TAL has the skills and resources to sustainably operate and maintain the new VOR/DME once it is installed. In addition, the existing old Visual Approach Slope Indicator (VASI) will be replaced with a new Precision Approach Path Indicator (PAPI).
- B.3 New fire tender at Fua'amotu International Airport (US\$850,000). This is also a critical safety equipment required to comply with ICAO minimum standards. International Airport is currently barely compliant in terms of the number and capacity of the fire tenders. TAL, in conjunction with GoT, has commenced a program to replace old and unserviceable fire tenders. GoT has funded one new tender and refurbished others within the last two years. This responsibility now falls on TAL which plans to refurbish two of its old tenders over the next 2 years at its own expense. This has provided much improved fire fighting and rescue capability, but an additional new fire tender with high water capacity and discharge rate is still required to ensure full compliance to ICAO Category 9 at Fua'amotu (the major international airport in Tonga) and ICAO Category 5 at Vava'u (where increasing turbo-prop international services are anticipated). If adequate fire fighting response capability is not maintained at Tonga's two international airports, the worst case scenario is difficulty in maintaining and ultimately potential loss of airport certification, resulting in possible loss of international air traffic since airlines are obliged to ensure that they fly into compliant and safe airports. TAL has the skills and resources to sustainably maintain new and refurbished fire tenders and in due course, upgrade its fire tenders.
- B.4 Security and emergency power equipment (US\$130,000) To upgrade passenger screening as required by ICAO security regulations for international passengers, including those in

transit at Fua'amotu International Airport and to obtain a new back-up generator for the international terminal at Fua'amotu International Airport and at Lupepau'u Airport in Vava'u to ensure the airports remain safe for aircraft operations and fully functional in the event of (frequent) power outages.

Maritime Sector:

- 13. A similar situation of historic under-investment and maintenance backlog exists for facilities supporting safe and efficient inter-island shipping. Basic navigational aids (beacons, buoys, etc.) are largely non-functional. There are also very limited resources and facilities to respond to search and rescue and environmental incidents. Current fees paid to Government from inter-island shipping operations are small and insufficient to sustainably maintain the facilities. Current budget constraints mean that GoT is unable to make significant progress in addressing sector needs. While Component A will examine longer-term solutions to sustainable financing of inter-island shipping infrastructure, several urgent and high priority items require attention. Investments in critical maritime safety and improved operations and pollution-response capability to be funded under Component B are:
- B.5 Ferry terminal improvements, lighting and navigational equipment (all terminals) (US\$330,000) Replacement and/or upgrading of navigation lights and terminal lighting required for safe operation of all inter-island shipping. Most existing navigation lights on inter-island routes are currently non-functional and on some outer islands with difficult access and large swells (Niuafo'ou and Niuatoputapu) adequate navigation indicators are not currently in place. In many locations, reef hazards are not identified adequately on maritime charts. This compromises safe access and does not meet IMO Safe Navigation standards. This component will fund replacement of existing navigational lights and installation of new lights with long-life lights with multiple globes; and upgraded towers. This will address urgent safe navigation deficiencies, and by the introduction of suitable equipment with low maintenance needs, will reduce whole-of-life costs. The component will also fund improvements to terminals to better meet the needs of existing boats and services and the planned introduction of a new ferry, including improved cargo handling, reconstruction of ramps, provision of fenders and isolation of dangerous goods.
- B.6 Equipment for Pollution Management Work Boats (US\$20,000) upgrading of oil spill and emergency response capability at Ha'apai and Vava'u. This component will fund outboard motors and onboard equipment required to improve the speed, reliability and effectiveness of response. This enhances compliance under the IMO MARPOL convention.

Land Transport Sector:

B.7 Reform of motor registry system (\$150,000). Current paper-based systems for the administration of motor registry records are inadequate for present and future needs and do not provide an accurate and efficient basis for assessing road use and revenue management. This component will help to develop and implement a new motor registry system that is appropriate to the scale of the Tonga vehicle fleet; appropriate to local capacity and resources; and suitable for deployment across all island groups. It will: (a) consolidate the transition of the registry functions from Police to MoT; and (b) simplify,

speed up and reduce the cost of processing of transactions; provide a central computerized database (spreadsheet) of vehicles and drivers that can be interrogated to provide fast turnaround of official enquires from Police and other approved agencies; provide improved financial management, audit and data security capability; generate relevant management and planning information and performance indicators; and contribute more sustainable road maintenance initiatives, e.g., through a possible road fund.

Component C: Transition towards sustainability in the transport sector (US\$ 596,000)

- 14. Specific activities under this component will depend upon the findings and recommendations of Component A. However, based on the findings of the project preparation and discussions with GoT, it is expected that Component C will likely include the following modules:
- C.1 Legislative Framework (US\$200,000) Assistance with drafting of legislation to implement the recommended legislative reforms identified in the Transport Sector Planning and Policy Framework module of Component A.
- C.2 Resurfacing the inter-island domestic ferry terminal at Nuku'alofa (US\$220,000) The existing terminal surface is constructed from crushed dead coral and has poor drainage. The surface deteriorates rapidly with daily use especially after rain and this creates unacceptable working conditions for cargo loading and poor passenger access. Although the surface is periodically patched, a longer term solution is required both for general safety as well as to accommodate the passengers using the new ferry. This component will fund resurfacing the terminal; improved drainage; reinforcing of concrete areas where loading of cargo is carried out and improved passenger access to the ferry from the passenger assembly area. The works may be carried out by MOT at the request of Ports Authority Tonga if so requested, once clearer development plans for the domestic terminal are available.
- C.3 Maritime Sector (US\$26,000) package of maritime works consistent with the medium-term sustainable investment plan, with priority on safety and environmental initiatives to achieve and maintain IMO standards. This is expected to include further small-scale repairs and upgrading of ferry terminals, such as installation of solar lighting in work areas and improve the safety and efficiency of primary inter-island shipping with benefits for cargo and passengers.
- C.4 Aviation Sector additional safety and security equipment (US\$150,000) This would include assistance to TAL with further urgent upgrading of equipment at Fua'amotu International and other Airports.

COMPONENT D: PROJECT IMPLEMENTATION SUPPORT (US\$ 630,000)

15. Project implementation support will comprise a full-time locally-recruited project manager, part-time internationally recruited procurement adviser and (as needed) internationally recruited aviation adviser and locally recruited works supervisory support for the marine division. Project associated incremental operating costs will not be covered under this component (\$220,000). These include, for example, transport to and within the Islands to supervise the various activities, local workshops for stakeholders, procurement associated advertising and printing costs, travel and subsistence for staff supervising electrical and concrete small works and installing outboard motors, costs associated with environmental monitoring of project activities and related tasks. All of these incremental operating costs will be met by MoT and TAL for their respective portions, through their annual budgets.

Annex 5: Project Costs by Components

TONGA: Tonga Transport Sector Consolidation Project

Project Cost By Component and/or Activity	Local US \$million	Foreign US \$million	Total US \$million
A. Policy and operating framework	0.00	1.00	1.00
B. Urgent and high priority obligations	0.24	2.49	2.73
C. Transition to sustainability	0.22	0.38	0.60
D. Project implementation support	0.48	0.15	0.63
Total Baseline Cost (excl. local taxes)	0.94	4.02	4.96
Physical and Price Contingencies (10%)	0.09	0.40	0.49
Total Project Costs (excl. local taxes)	1.03	4.42	5.45
Local taxes and duties (15%)	-		0.82
Front-end Fee	=	-	
Total Project Costs (incl. local taxes)			6.27
Total Financing Required			5.44

¹ Identifiable taxes and duties are US\$0.82m, and the total project cost, net of taxes, is US\$5.45m. The IDA Grant will finance 100% of Expenditures (exclusive of taxes and duties) other than the Incremental Costs Category of which the GoT will finance 100%.

Breakdown of Costs by Project Component

Component		Subproject	Amount (USD)	Implementing Agency
A. Policy and operating framework			\$1,000,000	
	A.1	Formulating a Transport Sector National Policy and Planning Framework (multi-modal)	\$350,000	MoT (Policy & Planning Division) MoT (Civil
	A.2	Air Transport Sector Strategic Plan	\$150,000	Aviation Division)
	A.3	Fua'amotu Airport future investment study	\$100,000	Tonga Airports Ltd.
	A.4	Review and sustainable investment and financing plan for maritime sector	\$150,000	MoT (Maritime Division)
	A.5	Options for Sustainable Road Maintenance and Investment Plan	\$250,000	MoT (Policy & Planning Division)
B. Urgent and high priority obligations			\$2,730,000	
A STATE OF THE STA	B.1	Aviation sector regulatory surveillance and compliance obligations review and support	\$150,000	MoT (CAD)
	D.1	Navigational aids equipment	\$130,000	WoT (CAD)
	B.2	(aviation-TBU)	\$1,100,000	TAL
	B.3	Fire tender (TBU)	\$850,000	TAL
	B.4	Security and emergency power equipment	\$130,000	TAL
	B.5	Ferry terminal improvements, lighting and navigational equipment (all terminals excl. resurfacing of TBU domestic ferry terminal)	\$330,000	MoT (MAD)
	D.3	Safety and environmental	\$330,000	MoT (MAD)
	B.6	protection equipment	\$20,000	MoT(MAD)
	B.7	Reform of motor vehicle registry systems	\$150,000	MoT (Land Transport Division)
C. Transition to sustainability			\$596,000	
	C.1	Legislative framework	\$200,000	МоТ
	C.2	Domestic ferry terminal resurfacing (TBU)	\$220,000	MoT (MAD)
	C.3	Solar lighting (primary ferry terminals)	\$26,000	MoT (MAD)
	C.4	Additional safety and security equipment	\$150,000	TAL

Component		Subproject	Amount (USD)	Implementing Agency
D. Project implementation support		Susproject	\$630,000	rigency
~~PF~~	D.1	Project Manager	\$180,000	MoT
	D.2	Project procurement advisor	\$120,000	MoT
	D.3	Audits	\$75,000	MoT
	D.4	Aviation sector specialist technical advisor (as needed)	\$35,000	МоТ
	D.5	Supervisory services for Part B.5 (included in D.6 Incremental Operating Costs)	(\$66,500)	
	D.6	Incremental operating costs	\$220,000	GoT
Total Baseline Cost (excl. local taxes ⁶)			\$4,956,000	
Contingencies (10%)			\$495,600	
TOTAL PROJECT COST			Φ 7 4 7 4 600	
(excl. local taxes)			\$5,451,600	
Local taxes ⁷ (15%)			\$817,740	
TOTAL PROJECT COSTS (INCL. LOCAL				
TAXES)			\$6,269,340	

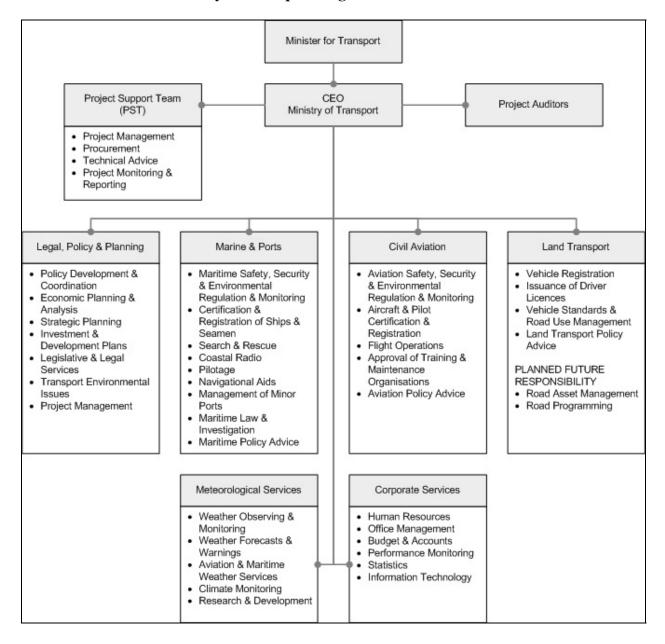
⁶ Including Consumption tax on domestically procured goods, works and services and import duties.

⁷ Local consumption tax on domestically procured goods, works and services and import duties on internationally supplied goods will be met by MOF on behalf of MOT and TAL through the 'Tax Expenditure for Development Projects' budget item for all years in which the project is implemented as part of the GoT's counterpart contributions to the project.

Annex 6: Implementation and Financing Arrangements TONGA: Tonga Transport Sector Consolidation Project

- 1. Project implementation arrangements are consistent with the basic lines of responsibility and accountability used by the GoT. At the central level, the MOF and the office of the Auditor General will be responsible for ensuring that the implementing agencies use the resources for the purposes intended and that project accounts are audited. The MLSNRE will be responsible for providing environmental assessments, monitoring, enforcement and other tasks related to all works carried out under the project.
- 2. **Project management.** The two project implementing agencies are the Ministry of Transport, in particular, the Land Transport, Civil Aviation and Maritime divisions, and Tonga Airports Limited (TAL). The MoT and TAL will be responsible for accounting for project funds and coordinating activities under the project. The post of CEO in the MOT will be filled prior to project effectiveness in order to provide adequate project management of the TSCP. In the event that a suitable candidate cannot be selected in time, the Ministry will provide IDA with a time-bound action plan for recruiting a permanent staff for this position.
- 3. **Implementation support.** A project support team (PST) will provide the necessary technical support to the MoT and TAL and will assist in the preparation of work plans, budgets, procurement matters, progress reports, and coordination of the overall implementation of the project. It will be housed within the MoT and act as an interface with IDA and MoF to ensure that TSCP is implemented as per the IDA/GoT Financing Agreement. MoT will be responsible for preparing terms of reference for the post of Project Manager as well as for the post of a part-time Procurement Adviser for review by IDA. These two positions will be filled as a condition of project effectiveness. The position of project manager, periodic procurement adviser, and specialist advisory support (in particular in the aviation and marine divisions), will be financed under the project. The Financing Agreement will highlight the role of the PST in project implementation.
- 4. **Ministry of Transport.** MoT was established on July 1, 2006 as a result of broad reforms introduced under the Government's Public Service and Economic Reform Program. As shown in the diagram overleaf, it comprises six main sector divisions: Corporate Services Division, Legal, Policy and Planning Services Division, Marine and Ports Services Division, Civil Aviation Services Division, Meteorological Services Division and Land Transportation Services Division. The project files contain greater detail regarding the responsibilities and functions summarized below.

Ministry of Transport Organization Chart



Annex 7: Financial Management and Disbursement Arrangements TONGA: Tonga Transport Sector Consolidation Project

- 1. This section summarizes the financial management arrangements in place for the proposed Kingdom of Tonga Transport Sector Consolidation Project. The scope of the work is set out in the "Financial Management Practices in World Bank-Financed Investment Operations" issued by the Financial Management Sector Board on November 3, 2005. Under the Bank's OP/BP 10.02 with respect to projects financed by the Bank, the Recipient and the project implementing agencies are required to maintain financial management systems including accounting, financial reporting, and auditing systems adequate to ensure that they can provide the Bank with accurate and timely information regarding project resources and expenditures.
- 2. The overall Financial Management (FM) risk assessment for this project is MODEST based on the capacity of the implementing agencies, the total financial commitment to the program and the structure and complexity of the project. The financial management arrangements proposed will meet the minimum requirements of the Bank.

Implementing Agencies:

- 3. To most effectively facilitate the overall objectives of this project it is appropriate to have two implementing agencies, the Ministry of Transport (MOT) and Tonga Airlines Limited (TAL). As TAL is a fully owned government corporation a subsidiary agreement will be required between the Ministry of Finance (MOF) and TAL. This will set out GoT's commitment to provide specified funds, and on what terms and conditions and for what purposes, to TAL, and will enable the direct transfer to TAL of those funds to be administered by TAL. The Ministry of Finance (MOF) who will have overall responsibility for ensuring that project resources are used for the purposes intended and that project accounts are audited have agreed to these arrangements.
- 4. Project implementation support will be provided through a project-financed Project Manager. Additional guidance and monitoring will occur through a Project Steering Committee and a working group chaired by the MOT. The working group has appointed a Chair/Project Director (Deputy-Director of Policy and Planning in MOT) and a Project Preparation Manager to assist in the preparation of work plans and budgets.

Ministry of Transport

5. The Ministry of Transport is subject to Tongan Government Legislation including the *Public Finance Management Act 2002*. The government of Tonga operates a centralized financial system with the MOF approving and processing all expenditure and providing guidelines and ceilings for budget preparation.

- 6. The MOT will be the implementing agency for parts of each of the following:
 - Component A: Establishing a policy and planning framework (Activities A.1, A.2, A.4 and A.5).
 - Component B: Meeting urgent and high priority obligations (Activities B.1, B.5, B.6 and B.7)
 - Component C: Transition towards sustainability in the transport sector (Activities C.1, C.2 and C.3).
 - Component D: Project implementation support. Under this part, all services and the incremental operating costs will be managed through the respective implementing entities.
- 7. Funds for the Ministry of Transport will make use of the existing institutional structure within government. Hence MOT will receive support from the MOF (Development Division) which will oversee the project designated account, make final authorizing of expenditure and the processing and paying of expenditure through the government accounting system (SUN) and provision of reports.
- 8. The MOT currently uses a system of recording votes disaggregated down the line item level into "vote book." This is then reconciled to reports provided from the MOF. In addition spreadsheets are used for budget to actual comparisons. This system seems to be working well and staff are experienced using this manual system.
- 9. The finance section of the MOT includes a Deputy Secretary Corporate Services (who oversees the 5 sections of Corporate Services), Senior Accounting Officer, computer operator (inputs the information) and clerk. In addition the Senior Economist is able to assist with financial issues. All positions are currently filled and there is good capacity within the current staff however there is limited excess capacity to engage in the additional work load generated by this project. The resources available to complete the financial requirements as an implementing agency need to be monitored throughout the project and if it circumstances within the MOT change or resources are found to be inadequate at a later date there could be consideration given to using project funds for a part time position to maintain the project's financial records. Withdrawal Applications (WAs) will be prepared by the MOT but MOF would be a signatory for the Withdrawal Application and will submit the WAs.

Tonga Airports Limited

- 10. Tonga Airports Limited (TAL) was established on July 2 2007 under the *Public Enterprises Act 2002*. This act is administered by the Minister of Public Enterprises. For TAL to be an implementing agency an appropriate Subsidiary Agreement will need to be established between MOF and TAL and Project Agreement between TAL and IDA.
- 11. TAL will be the implementing agency for some of Components A (Activity A.3), B (Activities B.2, B.3 and B.4) and C (Activity C.4) of the project.

- 12. TAL will prepare its own annual financial statements on an accrual basis. Its financial year is from July to June and it uses the Attache accounting software package. TAL's account is held with the ANZ bank in Tonga and it has recently appointed Price Waterhouse Coopers (Fiji) as its auditor.
- 13. As this is the first year of operation of TAL it has not been possible to use past performance as a guide to either the financial position of the organization or the capacity of its financial staff. The finance section consists of a Director of Finance, Accounts Manager, three revenue collectors and three clerical staff. There seems to be a high level of financial skill capacity within the current staff.
- 14. A major part of TAL's projected revenue is from landing fees and departure taxes from international flights. Any reduction in these fees/taxes caused by a major downturn in passenger numbers would place the viability of the TAL operation in jeopardy. Many of the factors that could cause a downturn (such as civil unrest, reduction in flights or an airline withdrawing from the Tongan routes) are outside the control of TAL and hence are an added risk particularly in the early years of TAL's operations.
- 15. Also there has been a history of government and executive rule involvement in public enterprises. Any such involvement may increase the risk of TAL's ability to operate and hence increase the risk to implementation of those components managed by TAL.
- 16. While it is necessary to raise the risks arising from the events mentioned in paragraph 14 and 15 the likelihood of such events occurring and having a material effect on TAL's operations is considered to be quite low.

Risk Assessment

17. The table below details the financial management risk assessment for the project. These show a *MODEST* rating. This reflects the Government of Tonga's previous experience in implementing World Bank Projects, the relatively simple project structure from a financial management perspective, the use of direct payments for all payments over USD\$10,000, and the current strong capacity for project management within TAL.

Risk	Risk Rating (H,S,M,L)	Risk Mitigation Measures Incorporated into Project Design	Risk after Mitigation Condition of Negotiation, Board or Effectiveness
1. Country Level			
1.1 Country Public Financial Management Systems There remains the limited possibility that the fiscal stress experienced by the country will spill over into poor budget discipline and execution. This could impact on whole of government processes. There are few effective checks and balances on executive power which could also impact on government processes.	Modest	GOT continues to institute tight control of non wage spending. Project to be funded 100% by IDA grant.	Low
1.2 Country Portfolio Indicators Tonga has one portfolio indicator flagged, country environment.	Modest	Supervision in the early implementation phases.	Modest
2.1 Entity Level – MOT The MOT is a new Ministry and has no experience in its own right in the management of World Bank (WB) projects.	High	The GoT will provide a Project Manager will act as secretariat to the working group and provide support to the MOT. The MOF will be responsible for the payment of all non direct payments for MOT activities. Hence all documentation will be independently scrutinized before payment is made. MOF will also be a signatory for all Withdrawal Applications. (WAs)	Substantial

Risk	Risk Rating (H,S,M,L)	Risk Mitigation Measures Incorporated into Project Design	Risk after Mitigation Condition of Negotiation, Board or Effectiveness
2.1 Entity Level – TAL TAL was established in July 2007 and hence has no history in managing WB projects nor are there any audited financial statements on which to assess their financial and project management capacity. 3. Project Level	High	The Project Manager will provide guidance and assistance to TAL. TAL Board of Directors will be required to approach MOF with all Withdrawal Applications and will be a required signatory for WAs.	Substantial
3.1 Project Size USD 5.44 million over a 3 year period divided between two implementing agencies. The majority of these funds are likely to be direct payments to suppliers. The majority of project activities will be carried out in Nuku' alofa.	Modest	The Project Manager to assist in the implementation of the project. A substantial percentage of expenditure will be large payments through direct payments. All WAs will require a MOF signatory.	Low
3.2 Project Complexity There are 4 components each with sub components. In addition the project will be implemented through two single agencies. On the other hand the majority of transactions will be large; hence there will be relatively few transactions.	Modest	The Project Manager to assist in the implementation of the project.	Modest
OVERALL INHERENT RISK CONTROL RISK	Substantial		Modest
МОТ			

Risk	Risk Rating (H,S,M,L)	Risk Mitigation Measures Incorporated into Project Design	Risk after Mitigation Condition of Negotiation, Board or Effectiveness
I Budget All donor funds are to be included in the GoT budget. MOT is required to provide budget estimates however these are made within the constraints of a predetermined ceiling.	Substantial	The Project Manager will assist the MOT in the preparation of budgets. Regular supervision missions from the FMS.	Modest
2 Accounting			
2.1 Capacity of Project Management and FM Staff The MOT has limited additional Financial Management Capacity – the current accounting staff, while capable, are fully employed in dealing with GoT operations.	Substantial	The Project Manager can provide some assistance. There may be a need for a part time project accountant, the need for which will be monitored by supervision missions. MOT is employing a TA (on another aspect of MOT work) who could assist with the preparation of financial information. A part time finance position may need to be considered.	Modest

Risk	Risk Rating (H,S,M,L)	Risk Mitigation Measures Incorporated into Project Design	Risk after Mitigation Condition of Negotiation, Board or Effectiveness
2.2 Accounting Systems MOT will use existing GoT accounting systems for this project. The government accounting system is well established (SUN systems) and is operated by the MOF. The manual systems used within MOT are well documented and staff are familiar with these systems. The major risk will be to ensure that direct payments are captured in the financial reports.	Modest	MOT will maintain "vote books" and spreadsheets to record the financial transactions. MOF will provide MOT with monthly financial reports and these will be reconciled to the MOT records.	Modest
3 Internal Controls The GoT accounting processes ensure authorization and payment processes are clearly segregated. All payments and WA applications are prepared by MOT. Payments are made by MOF and all WAs require a MOF signature. There is no internal audit function.	Modest	Regular supervision missions to ensure adequate maintenance of internal controls	Modest
4 Funds Flow The MoF have experience in operating WB projects using similar funds flow processes.	<i>Low</i>	There will be a high percentage of direct payments. Funds will flow through the designated account managed by the MOF.	Low

Risk	Risk Rating (H,S,M,L)	Risk Mitigation Measures Incorporated into Project Design	Risk after Mitigation Condition of Negotiation, Board or Effectiveness
5 Financial Reporting Based on the structure of this project the reporting requirements will not be onerous. MOT will maintain financial information on spreadsheets. This will be reconciled back to reports provided through the GoT accounting system. (SUN systems)	Modest	Quarterly financial reports are required and these will be used by FMS staff to monitor financial reporting effectiveness. Regular FMS supervision.	Modest
6 Auditing Project funds will be subject to annual financial audits. This will be carried out either by the AG's office or an independent auditor contracted by the AGs office.	Modest	FMS will work with MOT to ensure annual audit is conducted within the required timeframe.	Low
CONTROL RISK TAL			
I Budget TAL it is in its first year of operation and while a 2007/08 budget has been prepared for its own operations which seem realistic, it is difficult to evaluate the accuracy of the projections without any historical data.	Substantial	Monthly budget to actual reports are prepared. Regular FMS supervision visits.	Modest
2 Accounting			
2.1 Capacity of Project Management and FM Staff TAL's current staff seem to have a strong capacity both in finance and management.	Modest	The Project Manager can provide assistance.	Low

Risk	Risk Rating (H,S,M,L)	Risk Mitigation Measures Incorporated into Project Design	Risk after Mitigation Condition of Negotiation, Board or Effectiveness
2.2 Accounting Systems There are a relatively low number of high value transactions in the components managed through TAL. TAL use Attache as a stand alone package. Staff have demonstrated competence in using this system. The Chart of accounts could easily be modified to include the requirements of this project. As this is the first year of TAL's operations there may be some "systems" issues that may arise.	Modest	There is good support for Attache within Tonga	Low
3 Internal Controls TAL have a robust set of internal controls with segregation of duties between the authorization and payment of cheques. There is no internal audit function. TAL would need to develop a system to monitor payments vs. contract vs. performance of TAs.	Modest	Regular supervision missions to ensure adequate maintenance of internal controls	<i>Low</i>
4 Funds Flow TAL has no previous experience in managing World Bank disbursement procedures. The GoT will need to enter into a subsidiary agreement with TAL and TAL will need a Project Agreement with IDA. TAL will be required to open a separate bank account for this project.	Substantial	All WAs will be signed off by the Board of Directors and authorized by the MOF.	Modest

Risk	Risk Rating (H,S,M,L)	Risk Mitigation Measures Incorporated into Project Design	Risk after Mitigation Condition of Negotiation, Board or Effectiveness
5 Financial Reporting Although the reporting requirements will be quite basic TAL has no demonstrated experience in producing financial statements.	Modest	Quarterly financial reports are required and these will be used by FMS staff to monitor financial reporting effectiveness. Regular FMS supervision.	Modest
6 Auditing TAL has appointed it's auditors. (Price Waterhouse Coopers –Fiji) As this is TAL's first year of operation there are no previous audits.	Modest	The project will be audited as part of the TAL overall audit and will be disclosed as a note to the accounts. FMS will provide guidance on what the disclosure will include.	Low
OVERALL CONTROL RISK	Modest		Modest
OVERALL RISK RATING	Modest		Modest

Funding Sources

18. The source of funding for the Transport Sector Consolidation Project (TSCP) is an IDA grant. The project includes four components: (i) establishing a framework for sustainable development of the framework sector; (ii) meeting mandatory (international) urgent and high priority obligations; (iii) transition towards sustainability in the transport sector; and (iv) project implementation support. The IDA grant will finance one single expenditure category i.e. "Goods, Works and Consultants' Services".

Disbursement and Fund Flow Arrangements

- 19. The disbursement arrangements will allow the project to use all of the following methods: (a) advances into and replenishment of Designated Accounts, (b) direct payment from the grant/TF account, (c) special commitment and (d) reimbursement. It is expected that direct payments will be used for payment on large contracts requiring payment in foreign currency. i.e. major purchases of goods and equipment and contracts relating to expatriate technical advisors. This is subject to the IDA's no objection prior to signature on the contract.
- 20. There are two implementing agencies and two methods for the disbursement of funds. There will only be the one disbursement category for this project.

A. MOT

- 21. Funds for the MOT will be disbursed into an IDA Transport Sector Consolidation Project foreign currency account (designated account), with an initial authorized allocation of US\$50,000, held in the National Reserve Bank of Tonga. The Bank would make an initial deposit into the project's designated account out of the proceeds of the IDA grant upon receipt of a duly completed withdrawal application from the Government of Tonga. Subsequent replenishments will be made through submission of withdrawal applications providing details on the use of funds previously advanced. Disbursements would be made on the receipt of a Withdrawal Application. Withdrawals will be made on the basis of Statements of Expenditures for the funds previously used. Any amount required above the replenishment amount would only be considered on additional cash flow forecast documentation demonstrating a need for additional short terms funds.
- 22. The account will operate on an advance basis. From the Foreign currency special accounts the Government of Tonga will transfer funds, on a monthly basis according to the MOT requirements based on their cash requirements, into a special TOP Transport Sector Consolidation Project Financial Security Account for release into the Public Fund. The management of these transactions shall be the responsibility of the MOF on the advice of MOT.
- 23. Where there is a large payment in foreign currency it is recommended the direct payment method be used to facilitate the payment of these amounts. Thus the Withdrawal Application will specify direct payment from the IDA account to contractor or supplier. The suggested threshold for determination of the direct payment should be \$10,000 USD per individual payment. While this does not preclude the purchase of goods it is envisaged that most direct payments in the case of those components implemented by the MOT would be for technical

advisors. All direct payment applications would be paid based on documentation provided which would include, evidence that the good or service had been satisfactorily completed, evidence that the good or service is part of the work plan and included in the in budget and a copy of the invoice provided by the supplier.

B. Tonga Airports Limited

- 24. If funds are to flow directly to TAL a subsidiary agreement needs to be established between the Recipient and TAL which defines the terms and conditions under which funds would be made available to TAL as an implementing agency. In addition another agreement must be established between IDA and TAL to govern the transfer of funds for activities to be implemented by TAL under the project.
- 25. Funds would be transferred directly from IDA into a foreign exchange account held by TAL in US\$ with an initial authorized allocation of US\$50,000. The Bank would make an initial deposit into the TAL designated account out of the proceeds of the IDA grant upon receipt of a duly completed withdrawal application from the Government of Tonga. Subsequent replenishments will be made through submission of withdrawal applications providing details on the use of funds previously advanced. This would be done through a Statement of Expenditure record. Disbursements would be made on the receipt of a Withdrawal Application supported by cash flow forecasts. All Withdrawal Applications will require to be presented to the Board of Directors then processed by the MOF who would be a joint signatory.
- 26. Withdrawals will be made on the basis of Statements of Expenditures for the funds previously used. Any amount required above the replenishment amount would only be considered on additional cash flow forecast documentation demonstrating a need for additional short terms funds.
- 27. Funds from the foreign exchange account would be drawn down as required by TAL into a bank account (separate from their operating account) held in TOP. This account would be used for all TOP payments related to those sub components within the project.
- 28. For large payments for the purchase of equipment and the payment of foreign technical advisors it is recommended the direct payment method be used to facilitate the payment of these amounts. (direct payment from IDA to contractor/supplier) The recommended threshold for determination of the direct payment should be US\$10,000 per individual payment as this should ensure payments to overseas contractors/suppliers in foreign currency would be paid through direct payment and all local payments in TOP would be paid through the TAL local project account.
- 29. All direct payment applications would be paid based on documentation provided which would include, evidence that the good or service had been satisfactorily completed, evidence that the good or service is part of the work plan and included in the in budget and a copy of the invoice provided by the supplier.
- 30. In requesting disbursements into the DA's for expenditures incurred, use would be made of Statements of Expenditure (SOE). The SOE could be used for (a) goods and works contracts costing less than US\$100,000 equivalent each; (b) service contracts for individual consultants

costing less than US\$50,000 equivalent each and for firms costing less than US\$100,000; (c) training, workshops; and (d) operating costs.

Budgeting

- 31. The annual procurement plan will form the basis for the preparation of the project budget. Each implementing agency will be required to prepare a budget enabling budget identification at a component, sub component and account level. Given the relatively small number of transactions envisaged and the similarity of many of the transactions (T/A fees, asset purchases) this should not be a difficult task.
- 32. Project funds to be managed by the MOT must be incorporated into the GoT's annual estimates.

Accounting Systems

MOT

- 33. MOT will keep its own subsidiary records for reporting on the program. This will provide MOT with the flexibility to prepare reports that specifically meet the program's reporting needs; i.e. reporting by component and subcomponent on a budget to actual basis. These records will be maintained on spreadsheets.
- 34. All documentation relating to payments will be prepared and collated by MOT, authorized by the MOT Director of Finance then submitted to MOF for final authorization and payment. MOF will not later than three weeks after the close of any month, present the MOT with TSCP expenditure reports for the month and year to date by source of funds by line item. This will enable MOT to reconcile MOF records to their own and to prepare bank reconciliations which it will submit before the following month end to MOF for its records. The spreadsheets will also be used to capture direct payments which are processed through individual Withdrawal Applications.

TAL

35. TAL has purchased Attache accounting software package and uses this for its operations. The package has the capacity to both operate more than one bank account and to report separately for project funds. Staff have indicated they have the capacity to make the necessary modifications to the chart of accounts to achieve separate reporting of project funds.

Reporting and Monitoring

36. Both implementing agencies are required to provide interim un-audited quarterly financial within 45 days of the end of the reporting period. As these reports are to be used as a measuring tool it should report project progress (on a component and sub component basis) with adequate description, explanation and analysis of variances. A consolidation of such reports at the end of the fiscal year may form the basis of annual project financial statements which will be subject to audit.

External Audit

37. Both implementing agencies will be required to provide annual audited financial statements for each fiscal year of the project. These reports must be received by the World Bank within 6 months of the end of the fiscal year for which the reports have been audited. The MOF will be responsible for ensuring project funds are audited.

MOT

38. The Office of the Auditor-General audits all government projects. Project funds will be made available for financial audits of the project. At the time of this assessment it is not known if the Auditor General's office will carry out the audit or sub contract out the work. If the AG's office decided to contract out the audit it should be noted that the market in Tonga for audit services is limited and hence there would be an increased risk that the audit may not identify any deficiencies in the financial reports. Therefore, the procurement of audit services should be carried out by Quality Based Selection method with prior review by IDA.

TAL

- 39. Tonga Airports Limited operates as an autonomous entity and prepares full sets of financial statements using accrual accounting. They have appointed Price Waterhouse Coopers Fiji as their auditors. There will be a separate Project Agreement with IDA, specifying the terms of the funds to be made available to it. This would include the need to submit audited financial statements for the total TAL operations, together with a management letter, within six months following the end of each fiscal year.
- 40. To reduce the additional audit costs that will be incurred by acting as an implementing agency a note to the audited financial statements will be sufficient. An example of possible format for this note is shown overleaf:

"Note X. World Bank Financing

(a) The Tonga Airports Limited received financial support from the World Bank IBRD *Loan No. 1234-MY dated mm/dd/yy* to support implementation of [describe]. Summary information on transactions taking place during the year is as follows:

	Current year	Preceding
		year
	\$	\$
Balance at the beginning of the year	X	X
Amounts received during the year	X	X
Expenditures during the year	(X)	(X)
Balance at the end of the year	X	X

- (c) The proceeds of the World Bank grant have been expended in accordance with the intended purposes as specified in the credit grant Agreement."

Supervision

- 41. As the overall assessment for this project is modest financial management supervision will be carried by the Bank Financial Management Specialist (FMS) at least once a year. The initial supervision will be a review of the implementation progress of agreed action plans noted above. The FMS will also:
 - Conduct a financial management supervision before effectiveness/disbursement;
 - Review the financial component of the quarterly IFRs as soon as they are submitted to the World Bank; and,
 - Review the annual audit reports and management letters from the external auditors and follow-up on material accountability issues by engaging with the TTL, Client, and/or auditors.

Annex 8: Procurement Arrangements

TONGA: Tonga Transport Sector Consolidation Project

General

1. Procurement for the proposed project would be carried out in accordance with the World Bank's "Guidelines: Procurement Under IBRD Loans and IDA Credits" dated May 2004, revised October 2006; and "Guidelines: Selection and Employment of Consultants by World Bank Borrowers" dated May 2004, revised October 2006, and the provisions stipulated in the Credit Agreement. The general description of various items under different expenditure categories is presented below. For each contract to be financed by the Grant, the different procurement methods or consultant selection methods, the need for prequalification, estimated costs, prior review requirements, and time frame would be agreed between the Recipient and IDA project team in the Procurement Plan. The Procurement Plan would be updated at least annually, or as required to reflect the actual project implementation needs and improvements in institutional capacity.

I. Procurement of Goods (US\$2.2 million, Grant)

- 2. Goods required for the project would comprise of air navigation equipment, firefight vehicle, screening X-ray equipment, generators, boat engines, navigational aids and fenders.
 - a) International Competitive Bidding (ICB): The project is expected to include four ICB contracts (i.e. contracts estimated to cost more than US\$100,000). The two main contracts are: air navigation equipment (frequently referred as VOR/DME VHF Omnidirectional Radio Range / Distance Measuring Equipment) estimated at US\$0.9 million; and firefight vehicle estimated at US\$0.8 million. The estimated cost of goods to be procured through this method is US\$2.0million.
 - b) **National Competitive Bidding (NCB):** Goods estimated to cost US\$50,000 or more but less than US\$100,000 would be procured though NCB. No such contract have been identified at this stage.
 - c) **Shopping:** Goods estimated to cost less than US\$50,000, such generators, boat engines and fenders may be procured through Shopping. The estimated cost of goods to be procured through this method is US\$0.2million.

II. Procurement of Works (US\$0.7 million, Credit)

- 3. Works required for the project would comprise of the resurfacing the inter-island ferry docking wharf at Nuku'alofa and ramp reconstruction in several locations.
 - a) **National Competitive Bidding (NCB)**: The project is expected to include two NCB contracts (i.e. contracts estimated to cost US\$50,000 or more but less than US\$700,000) and they involve the contracts for Nuku'alofa wharf resurfacing. The estimated cost of civil works to be procured through this method is US\$0.4million.

b) **Shopping**: Works estimated to cost less than US\$50,000, such as ramp reconstruction, may be procured through Shopping. The estimated cost of civil works to be procured through this method is US\$0.1million.

III. Selection of Consultants (US\$2.2 million, Credit)

- 4. With a large technical assistance component, most contracts would involve consulting services. They would consist of services in diverse areas, reflecting the needs of the different bodies supported by the project. These would include: formulation of a transport sector national policy and planning framework; air transport sector master plan, review and sustainable investment and financing plan for maritime sector; options for sustainable road maintenance and investment plan; review and recommendations on regulatory framework for air transport supervision; reform of motor registry systems; legislative framework in aviation sector and project management support.
 - a) Quality Cost Based Selection (QCBS): With regard to the assignments where the scope of work of the assignment can be precisely defined and the Terms of Reference are clear and well specified (such as investments and financing plans) the recommended method is OCBS.
 - b) Quality Based Selection (QBS): For legal advice qualified consultants may be selected through QBS. The scope of services and its duration require a degree of flexibility, as opposed to QCBS's rigidity, because of the complexity of the assignment.
 - c) Selection Based on Consultants' Qualifications (CQS): Regarding small assignments (below US\$200,000) of a routine nature, such as training and/or facilitation, a qualified consultant firm may be selected through CQS method.
 - d) Least Cost Selection (LCS): Regarding assignments of a standard or routine nature (e.g. audits), a qualified consultant firm may be selected through LCS method.
 - e) Single Source Selection (SSS): Regarding very small assignments (below US\$50,000) of a routine nature, such as auditing, a qualified consultant firm may be selected through SSS method.
 - f) Individual Consultants: International consultants, as well as local ones, may be appointed by the implementing agencies to assist in project implementation and to provide technical assistance. They should be selected through a comparison of qualifications of at least three qualified consultants among those who have expressed interest in the assignments or have been approached directly by the agencies. In addition, with appropriate justifications and after concurrence by IDA, individual consultants may be selected on a sole-source basis in exceptional cases, such as: tasks that are continuation of previous work that the consultants have carried out and for which the consultants were selected competitively; assignments lasting less than six months; and when the individual consultant is the only consultant qualified for the assignment.

IV. Incremental Operating Costs (US\$0.3 million, Government Financing)

5. This item would include communications, utilities, stationary, transportation, installation, accommodation and allowances. The procurement of such items would follow the implementing agencies' administrative procedures.

Assessment of the agency's capacity to implement procurement

6. An assessment of the capacity of the Implementing Agencies (MOT and TAL) to implement procurement actions for the Project was carried out in February 2008. The assessment reviewed the organizational structure for implementing the Project and the interaction between the staff responsible for procurement. The overall Project risk for procurement is "high", consistent with the OPR. This is based on MOT and TAL's lack of procurement expertise and the project's multifaceted organizational structure. The following action plan has been adopted:

Perceived Risk	Action	Timeframe
Several legal provisions do not conform to WB's policy regarding NCB	Inclusion of Special Procedures for National Competitive Bidding into the Project's Legal Agreements.	During Negotiations
	Provisions to be reflected in bidding documents approved by the WB	During Implementation
Project implementation delays as procurement planning is not fully adopted by MOT and TAL.	Preparation of a draft procurement plan	Completed
MOT and TAL's procurement capacity is weak.	Procurement Training to PST's Program Manager	On-Going (first action completed in February 07)
	"On call" procurement consultant to assist MOT and TAL on procurement during implementation	During implementation (selection as condition for effectiveness)
Fragile general procurement environment	Project funds will be subject to annual financial audits. This will be carried out either by the Auditor General's office or an independent auditor contracted to the AGs office.	During implementation

Procurement Plan

7. The agencies developed at pre-appraisal a Procurement Plan for project implementation which provides the basis for the procurement methods. It is being made available at the agencies offices and in the Bank's external website, having been finalized and cleared by the Bank during negotiations. The Procurement Plan would be updated in agreement with the Project Team annually or as required to reflect the actual project implementation needs and improvements in institutional capacity.

Frequency of Procurement Supervision

8. In addition to the prior review supervision to be carried out from Bank offices, the capacity assessment of the Implementing Agency has recommended twice a year in the first two years and then once in the remaining Project period. Supervision missions to visit the field to carry out post review of procurement actions.

Prior Review Thresholds

Procurement Methods	Prior Review Thresholds
Goods	
Shopping	First three contracts
National Competitive Bidding	First three contracts
International Competitive Bidding	All
Works	
Shopping	First three contracts
National Competitive Bidding	>=US\$400,000 + first 2 contracts
Selection Methods	
Consultants	
QCBS	
QBS	>=US\$100,000
CQS	
SSS	All
Individuals	As indicated in the Procurement Plan ⁸

All other contracts would be subject to post review on a sample basis.

All the prior review contracts would be stated in the Procurement Plan.

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⁸ The Task Team Leader is aware that current Bank's policy calls for prior review of Individual Consultants only on an exceptional basis. However, because of the risk of the operation, prior review of key and selected assignment is considered necessary by him, and supported by the Procurement Specialist.

Details of the Procurement Arrangements involving International Competition

Goods and Works

List of contract Packages which would be procured following ICB:

Contract Description	Estimated Cost (USD'000)	Procurement Method	Bank's Review	Expected Bid Opening
New Fire Tender (TBU)	850	ICB	Prior	Jan-09
Upgrade Emergency Power (TBU and VAV)	80	ICB	Prior	Apr-09
DVOR/DME (TBU): Supply, Commission and Installation	900	ICB	Prior	Jan-09
PAPI navigational aid (TBU): Supply, Commission and Installation	200	ICB	Prior	Jan-09
Navigational lights (Navigation Light Beacons, Leading Lights, Buoy Lights, Solar Lights, Lattice towers)	146	ICB	Prior	Jan-09

Consulting Services

List of Consulting Assignments with short-lists of international firms

Description of Assignment	Estimated Cost (US\$'000)	Selection Method	Bank's Review (Prior /Post)	Expected Proposal Submission
Options for Sustainable Road Maintenance and Investment	250	QCBS	Prior	Sep-09
Transport Sector Policy and Planning Framework (Multi-modal)	350	QCBS	Prior	Mar-09
Legislative TA: Legislative Framework	200	QCBS	Prior	Mar-09
Reform of Motor Registry Systems	150	CQS	Prior	Jan-10
Aviation sector legal and regulatory surveillance and compliance obligations review	150	CQS	Prior	Jun-09
Sustainable Investment and Financing Plan for Maritime Sector	150	CQS	Prior	Jul-10
Audit of Designated and project accounts	75	CQS	Post	Jan-09

National Competitive Bidding: Mandatory Provisions

1. In order to ensure economy, efficiency, transparency, and broad consistency with the provisions included in Section I of the Guidelines (as required by paragraph 3.3 of the Guidelines), goods and works for which this Schedule allows procurement under paragraphs 3.3 and 3.4 of the Guidelines, shall be procured in accordance with the following paragraphs.

Participation in Bidding

- 2. Government-owned enterprises in Tonga shall be eligible for bidding only if they can establish that they are legally and financially autonomous, operate under commercial law, and are not a dependent agency of the Recipient.
- 3. Foreign bidders shall be eligible to participate in bidding under the same conditions as national bidders. In particular, no domestic preference over foreign bidders shall be granted to national bidders in bid evaluation.

Advertising; time for bid preparation

4. Invitations to bid shall be advertised in at least one newspaper of national circulation, allowing a minimum of 30 days for the preparation and submission of bids, such 30 days to begin with the availability of the bidding documents or the advertisement, whichever is later.

Standard bidding documents

5. Until national standard bidding documents approved by the Association are available, bidding documents approved by the Association shall be used.

Bid security

6. All bidders shall provide bid security if indicated in the bidding documents. A bidder's bid security shall apply only to a specific bid.

Classification of contractors: qualification: post-qualification

7. Bidding shall not be restricted to any particular class of contractors, and non classified or contractors shall also be eligible to bid. Qualification criteria (in case prequalification was not carried out) shall be stated in the bidding documents, and before contract award the bidder having submitted the lowest evaluated responsive bid shall be subject to post-qualification.

Registration

8. If a registration process was required, a foreign firm determined to be the lowest evaluated responsive bidder shall be given reasonable opportunity of registering, without any let or hindrance.

Evaluation criteria

9. Evaluation criteria shall be clearly specified in bidding documents, and evaluation criteria other than price shall be quantified in monetary terms.

Bid Opening; and Bid Evaluation

- 10. Bidders may deliver bids, at their option, either in person or by courier service or by mail.
- 11. Bids shall be opened in public, immediately after the deadline for submission of bids.
- 12. Evaluation of bids shall be made in strict adherence to the criteria declared in the bidding documents and contracts shall be awarded to the lowest evaluated bidder.
- 13. No bidder shall be rejected merely on the basis of a comparison with the owner's estimate and budget ceiling without the Association's prior concurrence.

Rejection of Bids

14. Rebidding shall not be carried out without the Association's prior concurrence.

Extension of the validity of bids

15. In exceptional circumstances, the procuring entity may, before the expiration of bid validity, request all bidders in writing to extend the validity of their bids. In such a case, bidders shall not be requested nor permitted to amend the price or any other condition of their bid. Bidders shall have the right to refuse to grant such an extension without forfeiting their bid security, but bidders granting such an extension shall be required to provide a corresponding extension of their bid security.

No post-bidding; negotiations

16. There shall be no post-bidding negotiations between the procuring entity and the lowest or any other bidder.

Inspection and Auditing

17. Each contract financed from the proceeds of a Grant shall provide that the contractors shall permit the Association, at its request, to inspect their accounts and records relating to the performance of the contract and to have said accounts and records audited by auditors appointed by the Association.

Conflict of Interest

18. Contractors that have a business or family relationship with a senior member of the project implementing agency's staff may not be awarded a contract, unless the conflict of interest stemming from this relationship has been resolved in a manner satisfactory to the Association throughout the process of evaluation of the bids and the execution of the contract.

Annex 9: Economic and Financial Analysis TONGA: Tonga Transport Sector Consolidation Project

			Qualitative Economic Assessment	ssessment	
Com	Component	Cost (US\$)	Benefits of Project Implementation	Costs of Non-Implementation	Quantitative Impacts/Benefits
A.1	Formulation of a transport sector national policy and planning framework Air Transport sector strategic plan	\$150,000	* Better informed planning and decision making * Strategic direction/vision for the transport sector as a whole * Consistent policy position on key sector issues * Consistent multi-modal approach * Improved basis for funding of subsidies and community service obligations * Improved framework for use of local and donor funds	* Ad hoc and reactive planning and decision making * Lack of coordination and multi-modal integration * No framework for sector development * No framework for use of local and donor funds	* GoT exp. budget for transport sector is about US\$2.5m p.a. (about 4% of total Govt. expenditure) * SOE expenditure on transport sector is about US\$4.0m p.a. * Transport and Communications is about 8% of GDP
A.3 A.5 A.5	Preparation of sustainable investment plans for the aviation, maritime and road/land transport sub-sectors	\$500,000	* Well conceived investment program for each sector backed up by a solid business case * Staged modular development within an overall medium/long-term investment plan * Better targeted investments * Improved asset management * Improved cost recovery from road use * Reduced long-term maintenance and operating costs * Better coordination and value-for-money from local and donor funds	* Ad hoc and reactive investments * Risk of unsuitable and unsustainable development * No medium/long-term investment plan * Continuation of long-term asset decline * Continuing low levels of cost recovery	* About US\$800,000 spent p.a. on roads = about one-third sustainable level * Airport cost recovery prior to TAL was only around 50% * Airport cost recovery with TAL is around 70% and rising * Cost recovery at outer-island ports is only around 50% of actual spending and estimated at less than one-quarter sustainable level

Component	Cost (US\$)	Benefits of Project Implementation	Costs of Non-Implementation	Quantitative Impacts/Benefits
Aviation Sector regulatory surveillance and compliance obligations review and support	\$150,000	* Improved regulatory capability * Improved ICAO compliance * Reduced cost of regulation	* Weak local capacity and compliance * Higher regulatory cost * Delayed compliance with safety and security requirements	
Navigational aids and equipment at Fua'amotu International Airport	\$1,100,000	* ICAO compliance * Reliable operation of navigational aids * Regular international air services * Support for tourism industry development (Tourism adds about US\$15m p.a. to the Tonga economy)	* Unreliable operation of navigational aids aids * Possible loss of ICAO compliance * Longer and less efficient flight paths * Reduced payloads due to need to carry additional fuel to fly to other airports if the aircraft cannot land due to bad weather * Possible reduced international air services (10% reduction in services would cost TAL about US\$250,000 p.a.) * Possible reduced tourism (10% drop in tourism would cost Tonga about US\$1.5m p.a. in lost earnings)	* "Tourism underpins activity across many sectors of the economy, including commerce, hotels and restaurants, transport and communication, recreation and personal services. Together these sectors account for around 30 percent of GDP" Reserve Bank * Tourism directly adds about US\$12-15m p.a. in foreign exchange earnings to the Tonga economy would cost Tonga economy up to US\$1.5m p.a. in lost earnings * TAL revenue from aviation operations of around US\$2.0-2.5 p.a. * 10% reduction in services would cost TAL up to \$250,000 p.a. * About one-third of the Tonga population live on outer islands (~35,000

Quantitative Impacts/Benefits	As above	As above
Costs of Non-Implementation	* Inadequate emergency response capability * Reduced safety * Possible loss of ICAO compliance * Possible reduced international air services (10% reduction in services would cost TAL about US\$250,000 p.a.) * Possible reduced tourism (10% drop in tourism would cost Tonga about US\$1.5m p.a. in lost earnings)	* Frequent power outages * Possible loss of security compliance * Possible reduced international air services (10% reduction in services would cost TAL about US\$200,000 p.a.) * Possible reduced tourism (10% drop in tourism would cost Tonga about US\$1.5m p.a. in lost earnings)
Cost (US\$) Benefits of Project Implementation	* ICAO compliance * Adequate emergency response capability	* Compliance with international security requirements * Reliable power supply for safety and security equipment
Cost (US\$)	\$850,000	\$130,000
Component	Fire tender at Fua'amotu International Airport	Replacement of security (x-ray screening) equipment and emergency power equipment
	B.3	B.4

	Component	Cost (US\$)	Benefits of Project Implementation	Costs of Non-Implementation	Quantitative
			,		Impacts/Benefits
B.5	Improvements to ferry	\$330,000	* Improved safety of maritime	* Hazardous navigation and berthing	* Ferry capacity 350
	terminals		navigation and berthing	especially in poor weather at exposed	persons; 300 tonnes freight
			* Compliance with basic IMO guidelines	terminals	(current ferry)
			for safe navigation	* Does not comply with basic IMO	* About 60,000 person trips
			* Improved reliability of access to outer	guidelines for safe navigation	and 10,000 tonnes of freight
			islands	* Reduced ferry safety (up to 350	p.a. to/from outer-islands
			* Reduced ship hull damage during	passengers at risk)	* About one-third of the
			adverse weather	* Increased delays and unreliability of	Tonga population live on
			* Improved safety and efficiency of	access to outer islands	outer islands ($\sim 35,000$
			handling for all cargo	* Adverse impact on trade from outer-	people)
			* Improved security and handling of	islands	
			hazardous cargos	* Ongoing hull damage during adverse	
			* Improved handling of refrigerated	weather	
			cargo	* Poor facilities for handling of	
			* Less spoilage of perishable goods	hazardous and refrigerated cargos	
			* Better segregation of passenger and	* Limits growth of trade in perishable	
			freight access	spood	
			* Readiness for arrival of new and larger	* Poor segregation of passenger and	
			ferry	freight access	
				* Terminals are not suitable for new and	
				larger ferry	
B.6	Marine safety and	\$20,000	* Improved safety and response to	* Very limited response capability	
	environmental protection		emergencies		
	equipment		* Improved response to marine pollution		
			incidents		

					Impacts/Benefits
B.7.8	Reform of motor registry system	\$150,000	* Consolidates the transition of the registry functions from Police to MoT * Simplify, speed up and reduce the cost of processing of transactions * Improved revenue collection efficiency (est. US\$50,000 p.a. or more in uncollected fees) * Accurate central computerized database of vehicles and drivers * Faster turnaround of official enquires from Police and other agencies * Improved financial management, audit and data security * Improved management and planning information and performance indicators * Supports sustainable road maintenance initiatives, for instance through a road fund.	* Business-as-usual * Inaccurate records and no central register * Inefficient revenue collection (revenue leakage estimated at US\$50,000 p.a. or more in uncollected fees) * Slow response to official enquires from Police and other agencies * No useful management and planning information	* About US\$500,000 collected each year in registration and licensing fees * 10% leakage would cost US\$50,000 p.a.
C.1 L	Legislative framework	\$200,000	* Consolidates transition to MoT	* Legislative gaps, overlaps and	
			* Strong legislative support for reforms * Clear delineation of powers and responsibilities	inconsistencies * Institutional reforms only partially implemented (in name only)	
C.2 R	Resurfacing the (domestic) inter-island	\$220,000	* Safer working conditions for cargo handling	* Hazardous working conditions * High ongoing infrastructure	
—	ferry terminal at Nuku'alofa		* Reduced infrastructure maintenance cost * Reduced cargo damage * Reduced operating & maintenance cost for cargo handling equipment * Improved passenger access to the ferry * Improved drainage and water quality	maintenance cost * Cargo damage * Damage and high operating & maintenance cost for cargo handling equipment * Poor passenger access to the ferry * Poor drainage	

	Component	Cost (US\$)	Benefits of Project Implementation	Costs of Non-Implementation	Quantitative Impacts/Benefits
C.3	Installation of solar lighting at primary ferry terminals	\$26,000	 * Improved night-time operations * Safer working conditions * Improved cargo security * Improved passenger safety and amenity 	* Hazardous night-time operations * Reduced safety, security and amenity	
C.4	Additional safety and	\$150,000	* Compliance with international safety	* Possible loss of ICAO compliance	* Tourism directly adds
	security equipment for		and security requirements	* Possible reduced international air	about US\$12-15m p.a. in
	airports		* Support for tourism industry	services (10% reduction in services would	foreign exchange earnings
			development (Tourism adds about	cost TAL about US\$250,000 p.a.)	to the Tonga economy
			US\$15m p.a. to the Tonga economy)	* Possible reduced tourism (10% drop in	* 10% drop in tourism
				tourism would cost Tonga about	would cost Tonga economy
				US\$1.5m p.a. in lost earnings)	up to US\$1.5m p.a. in lost
					earnings
					* TAL revenue from
					aviation operations of
					around US\$2.0-2.5 p.a.
					* 10% reduction in services
					would cost TAL up to
					\$250,000 p.a.
					* About one-third of the
					Tonga population live on
					outer islands (~35,000
					people)

Annex 10: Safeguard Policy Issues

TONGA: Tonga Transport Sector Consolidation Project

Safeguards Compliance Issues

- 1. Component A of the TSCP project focuses on TA to review the various institutional arrangements, make appropriate recommendations, and to establish an institutional and legislative framework. As such, it is unlikely that there will be any adverse social and environmental impact from these components.
- 2. Components B and C of the TSCP will finance a number of civil works/investment activities and purchase of certain equipment.
- 3. Of these, the following table lists those activities funded under the proposed project that could potentially have some social and environmental impact.

Table 1:Project funded activities that could potentially have social and environmental impact

Sector	Project Description	
Aviation	Purchase of new Fire Engine	
Aviation	Purchase of new generators (TBU and VAV)	
Maritime	Ferry Terminal paving, Ramp Reconstruction and Dangerous Goods Isolation (TBU) –	
	Resurfacing of existing unsealed surface for passenger	
	facilitation, assembly areas, cargo loading/unloading. Some	
	ramp reconstruction is also involved to widen the existing	
	ramp to facilitate the new inter-island ferry. Dangerous Goods	
	Isolation area involves a concrete slab foundation, securely	
	fenced.	
Maritime	Minor Installation Works (Navigational Lighting) (EUA) –	
	Concreting of small foundations for the installation of	
	navigational and wharf lighting	
Maritime	Ramp Reconstruction and Cargo Management (concreting), Minor	
	Installation Works (Navigational Lighting) (NFTP) –	
	Reconstruction of existing ramp (using existing ramp design	
	and drawings) to facilitate safe loading/unloading of	
	passengers and cargo	
Maritime	Upgrading Landing Site, Minor Installation Works (NFTO) –	
	Concreting of existing hazardous and uneven rock (lava flow)	
	landing site and concreting small foundations for the	
	installation of navigational lights and wharf lighting	
Maritime Ramp Reconstruction, Dangerous Goods Isolation and Minor		
Installation Works (Navigational Lighting) (VAV) –		
	Reconstruction of the existing two narrow ramps to construct	
	one single wider ramp necessary for facilitation of the new	
	inter-island ferry;	
Maritime	Ramp Widening and Adjustment, Dangerous Goods Isolation, Minor	
	Installation Works (Navigational Lighting) (HAP) –	
	Widening of the existing ramp to enable it to facilitate the new	

	inter-island ferry, concrete slab with secure perimeter fencing for isolating dangerous goods; concreting small foundations for the installation of navigational lights and wharf lighting	
Maritime	Installation of Navigational Light Beacons and Lattice Towers (all ports) – Replacement of existing beacons and lattice towers, and installation of new beacons where needed for safety and security	
Maritime	Installation of Solar Lighting (all ports) – Replacement of existing lighting	
Maritime	Installation of Leading Lights and Buoy Lights (all ports) – Replacement of existing lighting and installation of new lighting where needed for safety and security	

- 4. A through technical review of these investment activities in terms of their location, handling, and transportation associated with their use, their construction/civil works needs, and operations and maintenance requirements has concluded the following;
 - (i) There will be no land acquisition required whatsoever under this project for any reason since for the maritime sector activities will be located or undertaken at the existing sites of the domestic Ferry Terminals in Nuku'alofa, Vava'u, Ha'apai, and the other islands. Similarly, with regards to aviation, all activities will be located at or undertaken at the existing site of Fua'amotu International Airport on Tongatapu, and other international and domestic airports on the other islands in Tonga. Therefore, there will be no adverse social impact in terms of land use.
 - (ii) Any adverse environmental impact, where it occurs at any stage, will be small if not negligible, local, and confined to the immediate vicinity where it may occur and can be readily avoided and or easily mitigated through widely available and tangible mitigation measures.
- 5. For these reasons, in compliance with the Laws and Policies of the Kingdom of Tonga and the World Bank's own Operational Policy on Environmental Assessment OP4.01, no environmental assessment is required, and using the latter policy, this project satisfies the Environmental Assessment category for a "C" project.
- 6. Pursuant therefore to the requirements for category "C" projects in OP4.01, the Government of Tonga (GOT) has prepared an Environmental Management Plan (EMP), which will be integrated into the technical design and contracts for all civil works, and where necessary will also be adopted by the Marine Division of the Ministry of Transport and the Tonga Airports Ltd for maritime and aviation issues respectively, involving measures to be adopted during operation and maintenance of any of these activities.
- 7. The main environmental concerns are related to construction issues and use/operation of facilities procured and/or built.
- 8. Table 2 below contains the major construction issues and there proposed management and Table 3 contains a summary of the other significant related environmental issues.

<u>Table 2: Specific Management Plan</u> <u>For all construction-related environmental issues</u>

Construction Issues	Management Measures
Disposal of rubble and other spoil	Transport to and dispose of at approved
material	disposal sites, landfills.
	Re-use as backfill material on site as appropriate
Use of Quarries and Aggregates	Obtain only from approved and licensed
	Quarries or borrow pits.
	Rehabilitate borrow pits after use to
	control erosion, settlement of flood
	water and prevent any other hazards to
	public.
Dust Control	Transport aggregate material in covered
	trucks.
	Use water sprinkler when loose tipping
	material on ground.
	Constant watering of loose material
Handling of lubricants and fuels for	Store and handle in bunded areas.
Construction Equipment	Service and maintain equipment in
	facilities with appropriate capture and
	disposal of used lubricants.

Table 3: Specific Management Plan for non-construction related environmental issues

Project Activity	Environmental Concern/Issue	Management Measures
New Paved areas	Adequate drainage of surface storm water.	 Design of adequate slope/gradient on finished pavement surface. Run-off water channeled through oil-separator as required.
Dangerous Goods Isolation and Lubricants storage area	Contamination of land and/or water bodies	Provide bunded area which drains into an oil separator
General Safety and Operations of Ferry Terminals	Concern is with ensuring ferries are safe for the public and that terminals are operated safely	 Planned segregation of cargo and passengers Specific safety zones will be identified for isolation of dangerous goods General safety will be significantly enhanced with the installation of

		appropriate terminal lighting (non-existent at most terminals) • Planned installation of navigational aids and beacons will significantly reduce safety issues for vessels on ferry terminal approaches • Ferry and terminal operations are in accordance with both national legislation and international obligations under the IMO.
Purchase of and use of new generators	• Noise	Generators are to be containerized (pre-fab).
	Air quality	Specification for new generators will include compliance with required emission standards. Regular and routine maintenance of generators in compliance with manufacturer's requirements

Monitoring Plan

- 9. Responsibility for monitoring construction management issues will lie with the consultant supervising the civil works contractors. This would be the same consultant that would be supervising the other technical aspects the civil works contractors are required to achieve.
- 10. With regards to monitoring post construction stage mitigation measures, again primary responsibility will be for the two implementing agencies (MOT and TAL) to be responsible for ensuring that they incorporate any of these measures into their operational plans.
- 11. Additionally, the World Bank as part of its supervision process will review compliance of this EMP during the project implementation phase and report its findings in its Implementation Status Report (ISR) and Implementation Completion Reports (ICR).

Institutional Arrangements

12. The mitigation measures in table 2 will be implemented by the civil works contractor's during construction and monitored by the consultant supervising the construction whereas implementation of the non construction mitigation measures (table 3) will be done as part of the engineering design/civil works contracts or as part of the preparation of the procurement specification for equipment, as the case maybe, and responsibility for this will lie with the implementing agencies such as TAL and/or maritime division of the MoT.

EMP Costs

13. The cost of implementation of the mitigation measures indicated in Tables 2 and 3 above will be included in the individual civil works and procurement contracts/specifications. Therefore, the cost included here is the cost for monitoring. These costs are estimated at US\$15,000 and are to be included in the TSCP costs under the item incremental operating costs (IOC) to be borne by the respective implementing entities.

Disclosure.

14. The EMP was disclosed locally in Tonga on April 18, 2008, and at the INFOSHOP on April 15, 2008.

Annex 11: Project Preparation and Supervision

TONGA: Tonga Transport Sector Consolidation Project

	Planned	Actual
PCN review	01/14/2008	12/20/2007
Initial PID to PIC	02/19/2008	2/21/2008
Initial ISDS to PIC		3/11/2008
Appraisal	04/22/2008	
Negotiations	05/08/2008	
Board/RVP approval	06/26/2008	
Planned date of effectiveness	09/01/2008	
Planned date of mid-term review	06/30/2010	
Planned closing date	12/31/2011	

Key institutions responsible for preparation of the project: MOF, MOT, TAL, MLSNRE, MOP, MOW, MLCI

Bank staff and consultants who worked on the project included:

Name	Title	Unit
Thakoor Persaud	Lead Economist	EASTE
Colleen Butcher-Gollach	Consultant	EASTE
Sheila Musiime	Counsel	LEGES
Edward Daoud	Senior Finance Officer	LOAFC
Cristiano Nunes	Procurement Specialist	EAPCO
Stephen Hartung	Financial Management Specialist	EAPCO
James Monday	Senior Environmental Engineer	EASRE
Charles Schlumberger	Senior Air Transport Specialist	ETWTR
Glen D'Este	Consultant	EASTE
Sydney Herron	Consultant	EASTE
Lawrie Carlson	Consultant	EASTE
Esme Abedin	Operations Analyst	EACNQ
Sudesh Ponnappa	Senior Program Assistant	EACNF
Perry Radford	Program Assistant	EASTE

Bank funds expended to date on project preparation:

Bank resources: \$140,000
 Trust funds: \$107,000
 Total: \$287,000

Estimated Approval and Supervision costs:

Remaining costs to approval: \$85,000
 Estimated annual supervision cost: \$85,000

Annex 12: Documents in the Project File

TONGA: Tonga Transport Sector Consolidation Project

- 1. IBRD IDA (2005) Regional Engagement Framework Fy2006-2009 For Pacific Islands
- 2. Tonga Transport Sector Review December 2005
- 3. Tonga Transport Sector Consolidation Project Program and IDA Funding Concept for Discussion *Revised November 2006*
- 4. Kingdom of Tonga Strategic Development Plan 8 2006/07 2008/09 July 14, 2006
- 5. Preparation Mission January 11-17, 2008 Aide Memoire Jan 2008
- 6. Preparation Mission February 25-March 6, 2008 Aide Memoire and Management Letter March 08
- 7. Preparation Mission April 5-9, 2008 Aide Memoire and Management Letter April 08
- 8. Identification Mission (June 2007) Aide Memoire July 2007
- 9. Preparation Mission (February 25-March 6, 2008) Aide Memoire and Management letter-March 2008
- 10. PCN Review Meeting Decision Note March, 2008
- 11. Quality Enhancement Review Package (PAD with detailed Annexes) March 2008
- 12. Decision Meeting Minutes, April 22, 2008
- 13. Site plan for Fua'amotu International Airport showing leases and existing built development.
- 14. Transport Sector Policy Planning and Framework (Component A.1)

Annex 13: Statement of Loans and Credits TONGA: Tonga Transport Sector Consolidation Project

			Original Amount in US\$ Millions					expecte	nce between d and actual arsements	
Project ID	FY	Purpose	IBRD	IDA	SF	GEF	Cancel.	Undisb.	Orig.	Frm. Rev'd
P079657	2005	TO-Tonga Education Support Project	0.00	1.00	0.00	0.00	0.00	1.05	1.90	0.00
P075230	2004	TO-HEALTH SECTOR SUPPORT PROJECT	0.00	10.94	0.00	0.00	0.00	2.46	-0.11	0.00
		Total:	0.00	11.94	0.00	0.00	0.00	3.51	1.79	0.00

TONGA STATEMENT OF IFC's Held and Disbursed Portfolio In Millions of US Dollars

			Committed							
				IFC				IFC		
FY Approval	Company		Loan	Equity	Quasi	Partic.	Loan	Equity	Quasi	Partic.
		Total portfolio:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

		Approvals Pending Commitment						
FY Approval	Company	Loan	Equity	Quasi	Partic.			
			_					
	Total pending commitment:	0.00	0.00	0.00	0.00			

Annex 14: Country at a Glance
TONGA: Tonga Transport Sector Consolidation Project

POVERTY and SOCIAL				East Asia &	Lower- middle-	Development diamond*
			Tonga	Pacific	income	
2006			0.40	1000	0.070	
Population, mid-year (millions)			0.10	1,900 1,863	2,276	Life expectancy
GNI per capita (Atlas method, US\$)			2,190 0.22	,	2,037 4,635	
GNI (Atlas method, US\$ billions)			0.22	3,539	4,035	T
Average annual growth, 2000-06	6					
Population (%)			0.4	0.9	0.9	0.11
Labor force (%)			1.3	1.3	1.4	GNI Gro
M ost recent estimate (latest ye	ar ava	ilable, 200	0-06)			per prima capita enrollme
•			•			Gapita
Poverty (% of population below national	•	ty iifie)	 24			Y
Urban population (% of total population	')		24 73	42 71	47	
Life expectancy at birth (years)			73 20	26	71 31	
Infant mortality (per 1,000 live births)	۲)				31 13	
Child malnutrition (% of children under		l-4:\	100	15 79	81	Access to improved water source
Access to an improved water source (Literacy (% of population age 15+)	%01 pop	oulation)		79 91	89	
Gross primary enrollment (% of schoo		\	 115	114	113	Tonga
Male	r-aye po	pulationi	118	115	117	
Male Female			112	113	114	——— Lower-middle-income group
			112	110	114	1
KEY FOONOMIO DATION	ONO T					
KEY ECONOMIC RATIOS and L	ONG-I	ERM TRE	NDS			
KEY ECONOMIC HATIOS and L	ONG-1	1986	NDS 1996	2005	2006	Economic ratios*
GDP (US\$ billions)	ONG-1			2005 0.21	2006 0.22	Economic ratios*
	ONG-1	1986	1996			
GDP (US\$ billions) Gross capital formation/GDP	ONG-1	1986 0.07	1996 0.18		0.22	Economic ratios*
GDP (US\$ billions) Gross capital formation/GDP Exports of goods and services/GDP	ONG-1	1986 0.07 24.1	1996 0.18 22.6		0.22	
GDP (US\$ billions) Gross capital formation/GDP Exports of goods and services/GDP	ONG-1	1986 0.07 24.1 25.7	1996 0.18 22.6 7.8	0.21	0.22	
GDP (US\$ billions) Gross capital formation/GDP Exports of goods and services/GDP Gross domestic savings/GDP	ONG-1	1986 0.07 24.1 25.7 -20.0	1996 0.18 22.6 7.8 -17.2	0.21	0.22	Trade
GDP (US\$ billions) Gross capital formation/GDP Exports of goods and services/GDP Gross domestic savings/GDP Gross national savings/GDP	ONG-1	1986 0.07 24.1 25.7 -20.0 24.0	1996 0.18 22.6 7.8 -17.2 17.0	0.21	0.22	Trade Domestic Capital
GDP (US\$ billions) Gross capital formation/GDP Exports of goods and services/GDP Gross domestic savings/GDP Gross national savings/GDP Current account balance/GDP	ONG-1	1986 0.07 24.1 25.7 -20.0 24.0	1996 0.18 22.6 7.8 -17.2 17.0	0.21 -2.7	0.22	Trade
GDP (US\$ billions) Gross capital formation/GDP Exports of goods and services/GDP Gross do mestic savings/GDP Gross national savings/GDP Current account balance/GDP Interest payments/GDP	ONG-1	1986 0.07 24.1 25.7 -20.0 24.0 13 0.4	1996 0.18 22.6 7.8 -17.2 17.0 -11.4 0.4	0.21 -2.7 0.5	0.22 	Trade Domestic Capital
GDP (US\$ billions) Gross capital formation/GDP Exports of goods and services/GDP Gross do mestic savings/GDP Gross national savings/GDP Current account balance/GDP Interest payments/GDP Total debt/GDP	ONG-1	1986 0.07 24.1 25.7 -20.0 24.0 13 0.4 42.4	1996 0.18 22.6 7.8 -17.2 17.0 -11.4 0.4 35.8	0.21 -2.7 0.5 39.2	0.22 	Trade Domestic Capital
GDP (US\$ billions) Gross capital formation/GDP Exports of goods and services/GDP Gross domestic savings/GDP Gross national savings/GDP Current account balance/GDP Interest payments/GDP Total debt/GDP Total debt service/exports	UNG-1	1986 0.07 24.1 25.7 -20.0 24.0 13 0.4 42.4 2.1	1996 0.18 22.6 7.8 -17.2 17.0 -11.4 0.4 35.8 4.4	0.21 -2.7 0.5 39.2 9.3	0.22 -8.3	Trade Domestic Capital savings
GDP (US\$ billions) Gross capital formation/GDP Exports of goods and services/GDP Gross domestic savings/GDP Gross national savings/GDP Current account balance/GDP Interest payments/GDP Total debt/GDP Total debt service/exports Present value of debt/GDP Present value of debt/exports		1986 0.07 24.1 25.7 -20.0 24.0 13 0.4 42.4 2.1	1996 0.18 22.6 7.8 -17.2 17.0 -11.4 0.4 35.8 4.4	0.21 -2.7 0.5 39.2 9.3 29.8 148.5	0.22 -8.3 	Trade Domestic Capital
GDP (US\$ billions) Gross capital formation/GDP Exports of goods and services/GDP Gross domestic savings/GDP Gross national savings/GDP Current account balance/GDP Interest payments/GDP Total debt/GDP Total debt service/exports Present value of debt/GDP Present value of debt/exports		1986 0.07 24.1 25.7 -20.0 24.0 13 0.4 42.4 2.1	1996 0.18 22.6 7.8 -17.2 17.0 -11.4 0.4 35.8 4.4	0.21 -2.7 0.5 39.2 9.3 29.8	0.22 	Trade Domestic Capital savings
GDP (US\$ billions) Gross capital formation/GDP Exports of goods and services/GDP Gross domestic savings/GDP Gross national savings/GDP Current account balance/GDP Interest payments/GDP Total debt/GDP Total debt service/exports Present value of debt/GDP Present value of debt/exports (average annual growth)	86-96	1986 0.07 24.1 25.7 -20.0 24.0 13 0.4 42.4 2.1 	1996 0.18 22.6 7.8 -17.2 17.0 -11.4 0.4 35.8 4.4 2005	0.21 -2.7 0.5 39.2 9.3 29.8 148.5	0.22 	Domestic Savings Capital formatio
GDP (US\$ billions) Gross capital formation/GDP Exports of goods and services/GDP Gross domestic savings/GDP Gross national savings/GDP Current account balance/GDP Interest payments/GDP Total debt/GDP Total debt service/exports Present value of debt/GDP Present value of debt/exports		1986 0.07 24.1 25.7 -20.0 24.0 13 0.4 42.4 2.1 1996-06	1996 0.18 22.6 7.8 -17.2 17.0 -11.4 0.4 35.8 4.4	0.21 -2.7 0.5 39.2 9.3 29.8 148.5	0.22 -8.3 	Trade Domestic Capital savings

STRUCTURE of the ECONOMY

(%of GDP)	1986	1996	2005	2006	Growth of capital and GDP (%)
Agriculture	39.0	31.6			⁶ ₹
Industry	14.6	18.5			4
M anufacturing	5.2	4.3			
Services	46.5	49.9		-	
Household final consumption expenditure	104.2				01 02 03 04 05 06
General gov't final consumption expenditure	15.8	15.5			——GCF ——GDP
Imports of goods and services	69.9	47.5			
	1006.06	1996-06	2005	2006	
	1900-90	1990-00	2003	2000	Growth of exports and imports (%)
(average annual growth)					Growth of exports and imports (%)
(average annual growth) Agriculture	1.4	0.9	-3.0	-0.5	2 T
(average annual growth) Agriculture Industry	1.4 3.1	0.9 2.5	-3.0 10.0	-0.5 -0.2	
Agriculture		2.5			
Agriculture Industry	3.1	2.5	10.0	-0.2	2
Agriculture Industry Manufacturing	3.1 -1.5	2.5 3.0	10.0 1.7	-0.2 0.0	2
Agriculture Industry Manufacturing Services	3.1 -1.5 2.1	2.5 3.0 3.6	10.0 1.7 2.6	-0.2 0.0 3.2	2
Agriculture Industry Manufacturing Services Household final consumption expenditure	3.1 -1.5 2.1	2.5 3.0 3.6	10.0 1.7 2.6	-0.2 0.0 3.2	
A griculture Industry Manufacturing Services Household final consumption expenditure General gov't final consumption expenditure	3.1 -1.5 2.1 	2.5 3.0 3.6	10.0 1.7 2.6	-0.2 0.0 3.2 	2 T 1 T 1 T 1 T 1 T 1 T 1 T 1 T 1 T 1 T

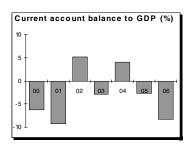
Note: 2006 data are preliminary estimates.

This table was produced from the Development Economics LDB database.

^{*}The diamonds show four key indicators in the country (in bold) compared with its income-group average. If data are missing, the diamond will be incomplete.

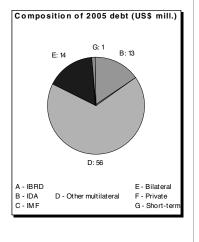
					To
PRICES and GOVERNMENT FINANCE					
	1986	1996	2005	2006	Inflation (%)
Domestic prices					, ,
(%change)					¹⁵ T
Consumer prices	21.7	3.0	8.3		10
Implicit GDP deflator	16.2	6.3	9.7	7.0	
0					5 \$
Government finance					
(% of GDP, includes current grants)					0 + + + + + +
Current revenue		28.3	29.3	34.1	01 02 03 04 05
Current budget balance		2.9	3.4	-2.8	GDP deflator → CPI
Overall surplus/deficit		-1.1	2.5	-3.3	
TRADE					
	1986	1996	2005	2006	Export and import levels (US\$ mill.)
(US\$ millions)					Export and import levels (03\$ inin.)
Total exports (fob)	6	10	16	16	150 _T
Squash		7	8	4	150
Fish		3	6	3	
Manufactures		1	2	1	100 +
Total imports (cif)		76	116	116	
Food		20	32	33	50 +
Fuel and energy		9	32	37	
Capital go o ds		15	23	15	
					00 01 02 03 04 05 06
Export price index (2000=100)					
Export price index (2000=100) Import price index (2000=100)					■ Exports ■ Imports

BALANCE of PAYMENTS				
	1986	1996	2005	2006
(US\$ millions)				
Exports of goods and services	21	45	40	41
Imports of goods and services	49	122	139	151
Resource balance	-28	-77	-99	-110
Net income	3	2	2	3
Net current transfers	26	54	92	89
Current account balance	1	-20	-6	-19
Financing items (net)	0	17	10	23
Changes in net reserves	-1	3	-4	-4
Memo:				
Reserves including gold (US\$ millions)	22	31	43	40
Conversion rate (DEC, local/US\$)	1.5	1.2	1.9	2.0



EXTERNAL DEBT and RESOURCE FLOWS

EXTERNAL DEBT and HESSONICE LE	0 11 0			
	1986	1996	2005	2006
(US\$ millions)				
Total debt outstanding and disbursed	29	64	84	
IBRD	0	0	0	0
IDA	0	5	13	16
Total debt service	1	3	4	
IBRD	0	0	0	0
IDA	0	0	0	0
Composition of net resource flows				
Official grants	7	12	17	
Official creditors	1	2	2	
Private creditors	0	0	0	
Foreign direct investment (net inflows)	0	2	5	
Portfolio equity (net inflows)	0	0	0	
World Bank program				
Commitments	0	0	1	0
Disbursements	0	0	5	3
Principal repayments	0	0	0	0
Net flows	0	0	4	3
Interest payments	0	0	0	0
Net transfers	0	0	4	3



Note: This table was produced from the Development Economics LDB database.

9/28/07



