



Technical Assistance Report

Project Number: 39151
May 2007

Timor-Leste: Infrastructure Project Management (Cofinanced by the Government of Australia)

CURRENCY EQUIVALENTS

Timor-Leste uses the US dollar as its currency.

ABBREVIATIONS

ADB	–	Asian Development Bank
AusAID	–	Australian Agency for International Development
EDTL	–	Electricity of Timor-Leste
GDP	–	gross domestic product
IMF	–	International Monetary Fund
JICA	–	Japan International Cooperation Agency
MCA	–	Millennium Challenge Account
M&E	–	monitoring and evaluation
MoNRMEP	–	Ministry of Natural Resources, Minerals and Energy Policy
MoPF	–	Ministry of Planning and Finance
MoPW	–	Ministry of Public Works
MoTC	–	Ministry of Transportation and Communications
PCC	–	project coordination committee
SCBP	–	staged capacity-building plan
SIP	–	sector investment program
SOTL	–	Special Office in Timor-Leste
TA	–	technical assistance
WS	–	water supply
WSS	–	water supply and sanitation

TECHNICAL ASSISTANCE CLASSIFICATION

Targeting Classification	–	General intervention
Sectors	–	Multisector: water supply, sanitation, and waste management; energy; transport and communications
Themes	–	Sustainable economic growth, capacity development
Subthemes	–	Fostering physical infrastructure development, institutional development

NOTES

- (i) The fiscal year (FY) of the Government ends in June.
- (ii) In this report, "\$" refers to US dollars.

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I. INTRODUCTION

1. Technical assistance (TA) to strengthen project management in Timor-Leste's infrastructure ministries has concept clearance.¹ A joint Asian Development Bank (ADB) and Australian Agency for International Development (AusAID) TA Fact-Finding and Design Mission visited Dili from 23 October to 10 November 2006. The Minister of Planning and Finance signed the fact-finding mission memorandum of understanding, which describes the proposed TA. The TA design and monitoring framework is in Appendix 1. ADB and AusAID will cofinance the proposed TA.

II. ISSUES

2. **Budgeting for National Development.** The Government of Timor-Leste's National Development Plan (NDP) 2002 sets clear medium- and long-term targets for the delivery of infrastructure and social services. The annual national budget process is guided by these NDP targets and by the poverty reduction strategy contained in the NDP. Each line ministry each year updates a 5-year rolling sector investment program (SIP) for its particular sector and prepares an annual action plan. These program budgeting exercises underpin the Government's annual budget bill submitted to Parliament. Each national budget therefore contains a rigorous developmental and poverty reduction rationale. But the rationale is valid only to the extent that the capital budget is spent and produces the intended outputs. Capital budgets are significantly under-spent in Timor-Leste; therefore, infrastructure-related NDP and poverty reduction targets are at risk.

3. **Development Priorities.** Against a background of ongoing political instability and civil unrest, the Government is working with the United Nations and other development partners to prepare a development compact setting out priorities for government, development partner, and other stakeholder programs. Rebuilding security and judicial institutions are the highest priorities. While the primary underlying causes of the 2006 violence were political and institutional, discontent associated with poverty and the lack of jobs also contributed. Therefore, the Government also ranks increased public capital spending as a high development priority. Indeed, the former Government had before the crisis announced it would more than quadruple the capital development budget from a net \$28 million in financial year 2005/06 (FY2006) to almost \$120 million in FY2007. The then Prime Minister explained that, with private investment likely to be sluggish for some years, the Government would take the lead to make the economy grow at a target 8% per annum to create jobs sufficient to absorb school leavers and others. The strategy requires the Government to execute larger capital works programs.

4. **Medium-Term Capital Expenditure Program** (Supplementary Appendix A).² Public sector capital expenditure over the next 5 years (2007–2012) could total approximately \$1 billion, with expenditure due to reach around \$150 million in 2007–2008 and averaging over \$200 million a year over the following 4 years. The Government's own consolidated budget will account for just under half the total of capital works funding over the next 5 years, with the proposed Millennium Challenge Account (MCA) program accounting for almost a third, and other official development assistance a fifth of total support.

5. **Capital Budget Execution** (Supplementary Appendix A). The Government spent 6.5% of its net capital development budget in FY2006: \$1.83 million out of \$28 million. It may have

¹ The TA first appeared in *ADB Business Opportunities* on 16 February 2007.

² Supplementary appendixes are available upon request.

also spent up to about \$6 million of its accumulated capital budget carryovers from prior years.³ The three infrastructure ministries—Ministry of Public Works (MoPW), Ministry of Transport and Communications (MoTC), and Ministry of Natural Resources, Minerals, and Energy Policy (MoNRMEP)—were allocated over a third of the Government’s total capital development budget in FY2006. MoPW received 24% of the total FY2007 capital budget allocation. MoNRMEP spent not quite 13% of its FY2006 capital budget, MoTC almost 4%, and MoPW just less than 3%.⁴ Nevertheless, the FY2007 capital development budget quadrupled to \$119.7 million, of which \$1.25 million had been spent after the first 6 months and probably around \$3 million of capital development carryovers. MoPW, MoTC, and MoNRMEP were allocated \$55.2 million for capital development in FY2007 (49% of the Government’s combined capital development budget) of which almost 2% had been spent after 6, albeit difficult, months. There is also a backlog of outstanding payments to contractors.

6. Impact of Low Capital Budget Execution. Unspent capital budget allocations translate into impassable roads and river crossings, unhealthy and unsafe urban neighborhoods, compromised safety and service standards at the national airport, patchy communications services and coverage, intermittent supply and variable quality of electricity in cities and towns and scant rural electricity, and unreliable water supplies in towns and villages (Supplementary Appendixes B, C, and D give capital program details). Poor infrastructure is also possibly impeding private sector investment and reducing access to basic social services. Finally, and this was highlighted by the violence perpetrated by urban youth in 2006, the capital works program was creating too few jobs.

7. Overcoming Project Implementation Constraints. A World Bank mission in July 2006 identified (i) centralized and bureaucratic processes, and (ii) limited human capacity in line ministries as underlying budget execution constraints. The Government passed Decree Law 14/2006, increasing the line ministry procurement maximum from \$10,000 to \$100,000, to help overcome the first constraint. Since the National Procurement Directorate of the Ministry of Planning and Finance (MoPF) still handles larger procurements, the AusAID-supported MoPF Capacity Building Project provides budget execution advisors in the directorate. The Government’s Planning and Financial Management Capacity Building Program supported by multiple funding agencies, also has the scope to strengthen budget execution. In addition, a tighter Government position on carrying over unspent budget items into the new FY2008 budget is motivating line ministries to accelerate procurement. Finally, the Government has established a technical commission for budget execution, to help the Council of Ministers scrutinize budget execution performance.

8. Infrastructure Ministries: While some line ministries have been reorganized to streamline their procurement functions, overcoming the second constraint (para. 7) in the short term requires outside resources. Infrastructure ministries can generally cope with routine operations and maintenance and modest capital projects using ministry staff and equipment, but they lack technical staff experienced in outsourcing large or complex or specialized capital works programs. Outsourcing of design and construction is a new approach for some ministries; and programs are now larger. MoPW has approximately 55 consultant and civil work contracts programmed for FY2007, and a total of \$109 million programmed for FY2007–2010 (Supplementary Appendix B). MoPW will directly procure only some of these contracts but will handle all of the project scoping, preparation of terms of reference for consulting services contracts (both design and supervision), preparation of bid documents, and management of

³ Expenditure of carryovers is not clearly reported by MoPF. Accumulated carryovers across all categories totaled \$19.5 million at end-June 2005. Of that amount, \$11.3 million was spent during FY2006. Up to half of it may have been for capital development.

⁴ Treasury Directorate, MoPF. 2006. *Full Year Budget Execution Report, 2005–2006*. Dili.

both consulting and civil works contracts. The ministry's Directorate of Roads, Bridges, and Flood Control, which would handle most of these contracts, has two degree-level qualified engineers who are experienced in documentation and contract management, whereas the caseload requires 5–6 experienced project management engineers and procurement officers. MoTC has approximately 42 capital development projects programmed for FY2007 and a total program of almost \$21 million for FY2007–2010, with the likelihood of significant increases (Supplementary Appendix C). The four technical officers assigned to MoTC's new Procurement Division need on-the-job support from qualified and experienced procurement specialists. MoNRMEP's infrastructure responsibilities are for water supply and sanitation, and for power (Supplementary Appendix D). The National Directorate of Water and Sanitation should receive enough project planning, preparation, and contract management support through AusAID and ADB-assisted projects to handle its caseload, although this should be closely monitored. Electricity of Timor-Leste (EDTL) has 24 small power distribution contracts and several larger biomass generation contracts programmed for FY2007. MoNRMEP's new management contract for EDTL and technical support from the World Bank and the Government of Norway will not fully cover EDTL's project management needs. Staff in MoNRMEP's new Procurement Division will need on-the-job support from qualified and experienced procurement specialists. Strengthening fiduciary controls and financial management in line ministries would also improve the quality and pace of project implementation. More programming and financial specialists are needed to produce technically and financially sound annual budget submissions to MoPF, and skilled use of the Government's general ledger, "FreeBalance" software, would improve monitoring and evaluation (M&E) of program execution. The AusAID-supported MoPF Capacity Building Project has budget execution advisors in MoPW, MoTC, and MoNRMEP.

9. **Safeguards and Risks.** MoPW, MoTC, and MoNRMEP have little expertise in managing environmental and social safeguards for projects (Supplementary Appendix E). Line ministries lack know-how in gender and development, conflict management and mitigation, HIV/AIDS, involuntary resettlement and compensation, and indigenous persons and vulnerable groups. MoPW does not have an environmental impact assessment unit. Environmental Impact Assessment legislation is before the Council of Ministers and the National Directorate of Environment is recruiting staff. An overall risk management matrix for the proposed TA is at Supplementary Appendix F. Special reference is made to the United States Government's Millennium Challenge Account (MCA) Timor-Leste program (Supplementary Appendix G). The MCA program and the proposed TA will likely be at least partly concurrent, and they will both support infrastructure development. They can be complementary, but there is a risk that a large MCA program could further overstretch the Government's project management capacity and Timor-Leste's consulting and contracting industries. The Government will mitigate risks by relying heavily on 'outsourcing', by streamlined project management processes, and by instituting National budget rules that encourage line-ministries to concentrate on executing their regular capital development allocations.

10. **Lessons.** "Stay engaged long enough to give success a chance" is one of 12 principles of good engagement with weakly performing countries.⁵ This is a pivotal capacity building lesson from post-conflict Timor-Leste. There may only be 4–5 degree-level engineers in total recruited annually into the three infrastructure ministries. Diploma-level (polytechnic) engineers would have difficulty absorbing on-the-job training for procuring and administering large or complex contracts. This underscores the need for a long-term approach to building budget execution capacity in MoPW, MoTC, and MoNRMEP (Supplementary Appendix H). Capacity-building experiences globally, particularly in Timor-Leste, highlight the need to engage advisors with a capacity-building mindset and skills. Their terms of reference should explicitly require

⁵ Development Assistance Committee of the Organization for Economic Co-operation and Development.

capacity building, and a structure or discipline should be introduced by requiring long-term consultants to develop a capacity-building plan early in their assignment. Technical specialists must be responsible for achievements in their part of the capacity-building plan, and not yield responsibility to a designated capacity-building specialist and team leader. A key lesson learned from infrastructure projects in Timor-Leste is that contractor performance must be intensively monitored to ensure quality and timely progress. Subcontractors should be closely scrutinized and the principal contractor must retain effective site management.

11. **Strategic Considerations.** ADB's country strategy and program update 2006–2008 for Timor-Leste⁶ focuses on infrastructure support and leadership. The strategy and program aligns with ADB's Pacific Strategy 2005–2009,⁷ which has key results areas for providing infrastructure and improving water supply and sanitation. Infrastructure development and management have been the backbone of ADB operations in Timor-Leste since 2000 and remain appropriate. The Government of Australia's March 2006 White Paper on Overseas Aid, "Better Aid for a Better Future", recommended new investments in key areas in AusAID programs. This included an "Infrastructure for Growth Initiative", focusing particularly on infrastructure in rural areas and on strengthening the systems to enable sustainable partner government delivery of infrastructure. Given Timor-Leste's context of considerable available budget and limited execution capacity, AusAID is eager to support a joint approach with ADB in addressing immediate infrastructure procurement capacity needs supporting the Government's own infrastructure budget. The program would coordinate with Australia's other ongoing support for public financial management in Timor-Leste.

III. THE PROPOSED TECHNICAL ASSISTANCE

A. Impact and Outcome

12. The expected impact of the TA is enhanced opportunities for economic participation, and improved access to basic social services for all East Timorese. The expected outcome is infrastructure assets created and upgraded in line with medium-term NDP targets, including transport, communications, urban development, power, and water supply and sanitation. Sustaining the outcome will require an 8–10-year project horizon. Project support will initially concentrate on preparing and procuring capital projects for implementation with a focus on hands-on technical assistance. The project will progress to more capacity-building support that should continue through to a second 4-year program.

B. Methodology and Key Activities

13. **Component 1: Implementing Capital Development Programs.** The TA will help MoPW, MoTC, and MoNRMEP (i) prepare and procure contracts for consulting services, goods, and works in line with annual capital development work plans; and (ii) manage implementation of these contracts⁸ (Supplementary Appendixes B, C, and D). Specialists provided by the TA will be assigned to MoPW, MoTC, and MoNRMEP. Project management engineers will work in

⁶ ADB. 2005. *Timor-Leste Country Strategy and Program Update (2006–2008)*. Manila.

⁷ ADB. 2004. *Responding to the Priorities of the Poor: A Pacific Strategy for the Asian Development Bank 2005–2009*. Manila.

⁸ The TA scope does not include capital development programming (before project implementation) or infrastructure operations and maintenance (after project implementation). Other programs will provide this support: (i) budget execution advisors and sector investment program advisors from the AusAID-supported MoPF Capacity Building Project and the Public Sector Capacity Development Program, and later, advisors from the multi-donor Planning and Financial Management Capacity Building Program; and (ii) operations and maintenance support from AusAID (water supply and sanitation–WSS), the Japan International Cooperation Agency (JICA – power, WSS, and roads and bridges), ADB (WSS, and roads and bridges), and the World Bank (power).

the various technical directorates and planning and design divisions. They will help prepare technical documentation, which will then be passed on to the procurement units. The procured contracts will then be handed back to the project management engineers for implementation. Procurement specialists will work in the various finance and administration and corporate services directorates of the three infrastructure ministries. Using documentation provided by the technical units, the procurement specialists will help procure contracts directly or finalize bid documents and send them to, and assist the National Procurement Directorate of MoPF. Procured contracts will then be passed back to the technical units for implementation. The procurement specialists will also help with financial and administration aspects of contract management. TA specialists will comprise both long-term, full-time and intermittent consultants who will remain attached to their respective ministries for the duration of the TA, together with a pool of specialists, who can be called upon to provide particular skills on a short-term basis, for example, materials engineers; information, communications, and technology specialists; traffic signals specialists; contract lawyers; and so on. The 'pool' of short-term consultants will also include environmental and social safeguard specialists. At the start of each year, the long-term project management engineers will identify likely environmental and social safeguard issues within their annual program. Safeguard issues and required specialist expertise will be confirmed, and later monitored, by a safeguards specialist (long-term intermittent) assisting the TA team leader.

14. **Component 2: Building Project Management Capacity** (Supplementary Appendix H). The TA will provide a full-time capacity-building and training specialist to oversee the preparation, implementation, and monitoring and evaluation (M&E) of a staged capacity-building plan for project management in each of MoPW, MoTC, and MoNRMEP. Each long-term international specialist will help prepare a staged capacity-building plan for his/her ministry/unit. These tailored strategies will underpin progression from operational support to capacity building, which will be formalized by the TA management team during the first year of TA implementation.

15. **Monitoring and Evaluation and TA Management:** The TA will provide a long-term intermittent monitoring and evaluation specialist to oversee TA effectiveness and results management in accordance with the targets and indicators in the design and monitoring framework. The TA's M&E will draw on the approaches and systems used in the AusAID-supported MoPF Capacity Building Program and the multi-agency Planning and Financial Management Capacity Building Program. The TA will provide a full-time team leader and public works institutional specialist.

16. The following table shows the initial deployment of specialists. Deployments will be reviewed annually.

Proposed TA Specialists

Ministry of Public Works	<ul style="list-style-type: none"> • 2 project management engineers – long-term • 1 procurement specialist – long-term
Ministry of Transport and Communications	<ul style="list-style-type: none"> • 1 project management engineer – long-term • 1 procurement specialist – long-term
Ministry of Natural Resources, Minerals and Energy Policy	<ul style="list-style-type: none"> • 1 project management specialist – long-term • 1 procurement specialist – long-term
General	<ul style="list-style-type: none"> • 1 capacity-building and training specialist – long-term • 1 monitoring and evaluation specialist – long-term, intermittent (50%) • 1 safeguard specialist – long-term, intermittent (50%) • 1 team leader and public works institutional specialist – long-term
Short-term specialists: Short-term technical specialists will be assigned to the ministries on a need basis. Short-term environmental and social safeguards specialists will be assigned on a project basis.	

Sources: Government of Timor-Leste, Australian Agency for International Development, and Asian Development Bank.

C. Cost and Financing

17. The total cost of the TA is estimated at \$18 million. ADB will provide \$3 million out of the total cost, financed on a grant basis by ADB's TA funding program. The Government of Australia will provide \$12 million equivalent on an untied grant basis to be administered by ADB. The Government of Timor-Leste will contribute \$3 million in kind to cover mainly office accommodation, transport, and remuneration of counterpart staff. ADB and AusAID cofinancing will be on a joint basis and TA funds will be disbursed based on ADB's *Guidelines for Disbursements of Technical Assistance Grant* (1992, as amended from time to time). The detailed cost estimates and the financing plan are in Appendix 2.

D. Implementation Arrangements

18. The TA will last for 48 months, beginning August 2007 and ending in July 2011. MoPW, MoTC, and MoNRMEP will be the executing agencies for the TA, providing day-to-day implementation support through their technical directors and finance and administration directors who will also be the primary counterparts of the TA consultant team leader. The TA consultants will work alongside the relevant division and unit heads within each of the ministries, using standard ministry systems and procedures. The TA consultant team leader will provide monitoring and oversight support to the directors to help ensure timely and effective reporting to ministers. The TA's M&E specialist will manage and guide M&E support provided by TA specialists. The M&E specialist will also prepare and manage a plan for disseminating the expected outputs and outcome evaluation. The TA will be reviewed 3 months after mobilization (inception review) and annually thereafter (annual review). A detailed midterm review will be carried out after 2 years. The reviews will be conducted jointly by the Government, AusAID, and ADB. The TA completion report will include recommendations and a design for a second-phase TA.

19. The Government, AusAID, and ADB will provide strategic direction to the TA project through a project coordination committee (PCC). A minister from one of MoPW, MoTC, or MoNRMEP will chair the PCC on a rotating basis, and other permanent members will be a participating director from each ministry, a member from the technical commission for budget execution, one representative each from ADB and AusAID, and the TA consultant team leader. The PCC will invite other partners to join the committee as appropriate. The PCC will approve and review the annual consultant TA project work plans. The PCC will meet at least every 6 months and will monitor and review project progress against the TA's key performance indicators, specialist levels and performance, and any proposed changes in scope or budget.

20. ADB will select and engage a team of international consultants (560 person-months, comprising 440 person-months of long-term and 120 person-months of short-term consulting services) and national consultants (110 person-months) in accordance with ADB's *Guidelines on the Use of Consultants* (2007, as amended from time to time). The TA will be led by the team leader and public works institutional specialist. Other international consultants are shown in the table in para. 16. The outline terms of reference for the specialists are in Appendix 3. The international consulting firm will be recruited using ADB's quality-and cost-based approach (QCBS). The full technical proposal format will be used to invite and evaluate proposals from international consulting firms. The Government will be invited to send up to two officials to attend contract negotiations with the first ranked consultant firm. The TA will finance the purchase of (i) computers, (ii) office equipment, and (iii) vehicles for TA management. Equipment for the TA will be procured by the TA consultant in accordance with ADB's *Procurement Guidelines* (2007, as amended from time to time) and procedures acceptable to ADB, and will be retained by the infrastructure ministries after the TA.

IV. THE PRESIDENT'S RECOMMENDATION

21. The President recommends that the Board approve (i) ADB administering a portion of technical assistance not exceeding the equivalent of \$12,000,000 to be financed on a grant basis by the Government of Australia, AusAID, and (ii) ADB providing the balance not exceeding the equivalent of \$3,000,000 on a grant basis, to the Government of Timor-Leste for Infrastructure Project Management.

DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
<p>Impact Improved opportunities for economic participation, and improved access to basic social services for all East Timorese</p>	<p>By 2015:</p> <ul style="list-style-type: none"> • GDP per capita increased to \$600 (baseline: \$340) • 10,000 cash/salaried jobs created annually (baseline: fluctuating from negative to around 2,000) • 24-hour power supply to all urban areas and to 50% of potential rural consumers (baseline: 18 hours/day (h/d) in Dili, 24 h/d in Baucau, 6–8 h/d in other centers, rural 20% coverage) • 24-hour piped water supply (WS) to 80% of urban areas and safe/convenient WS to 75% of rural households (baseline: 30% urban 24-h service, 55% rural access) • Uninterrupted, all-weather road connectivity between all urban centers, district and subdistrict towns, and <i>suco</i> villages. At least daily flights available from Dili to Darwin, Kupang, and Denpasar. Safe and comfortable thrice-weekly sea ferry services from Dili to Kupang/Oecussi, and to Atauro Island • 100% radio transmission coverage; 100% mobile telephone and TV coverage in urban centers 	<ul style="list-style-type: none"> • National statistical office reports • Ministry of Planning and Finance (MoPF) reports and annual national budget paper • IMF Article IV Mission reports • WB Doing Business Survey Report • IFC reports • USAID PSD reports • ANZ bank reports • ADB's annual country economic assessment mission • WB country performance reports • Millennium Challenge Account (MCA) progress reports 	<p>Assumptions</p> <p>Conducive security conditions for private sector investment. prevail</p> <p>Legal and other institutional arrangements for private sector investment improve</p> <p>Infrastructure assets are properly managed and maintained</p>
<p>Outcome Transport, communications, urban municipal, power, and water supply and sanitation infrastructure assets are created and upgraded in line with medium-term National Development Plan targets</p>	<p>By 2011, MoPW, MoTC, MoNRMEP achieving their respective sector investment programs (SIPs) annual targets: (refer to SIPs for transport; housing and urban development; communications; power; water supply and sanitation)</p>	<ul style="list-style-type: none"> • Annual SIP updates • Annual action plan reports of MoPW, MoTC, and MoNRMEP • Annual national budget paper • Ministry asset inventories 	<p>Assumption</p> <p>MoPW, MoTC, and MoNRMEP budget submissions are substantially incorporated into the annual national budget</p>
<p>Outputs</p> <p>1. MoPW, MoTC, and MoNRMEP have completed annually programmed procurement of consulting services, goods, and works contracts, in a transparent, fair, and efficient manner</p>	<p>For MoPW, MoTC, MoNRMEP, by end of TA</p> <ul style="list-style-type: none"> • 80% of Ministry Annual Procurement Action Plan is achieved on time 	<ul style="list-style-type: none"> • Procurement Monitoring Table: Capital Development Projects, prepared by 6-monthly sample assessment by ministerial QA panels • TA monitoring • High-Level Budget Execution Committee of the Council of Ministers 	<p>Assumptions</p> <p>Decree Law 14/2005, providing for decentralization of procurement to line ministries is effective for MoPW, MoTC, and MoNRMEP. Decentralized procurement thresholds are progressively increased and</p>

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
			<p>processes streamlined by MoPF</p> <p>Local, national, and national/international joint venture contractors are able to respond to tenders</p> <p>Risks</p> <p>MCA contracts fully absorb in-country contracting capacity</p> <p>MCA work overwhelms ministries and distracts Government leaders from budget execution performance</p> <p>Corruption disrupts procurement</p>
<p>2. MoPW, MoTC, and MoNRMEP have implemented annually programmed consulting services, goods, and works contracts, in a transparent, fair, and efficient manner</p>	<p>For MoPW, MoTC, MoNRMEP, by end of TA</p> <ul style="list-style-type: none"> • 70% of capital development items contained in the Ministry Annual Infrastructure Work Plan are completed on time and meet agreed-upon specific quality standards, including budget overrun tolerance • 80% of projects are adequately supervised against established international quality criteria. • 70% of due payments are made within the time specified in the contract/agreement 	<ul style="list-style-type: none"> • Six-monthly sample assessment by ministerial QA panels • Finance & Administration Division records, 6-monthly summary reports • Government of Timor-Leste quarterly budget execution reports • High-Level Budget Execution Committee of the Council of Ministers • TA monitoring 	<p>Assumptions</p> <p>Local, national, and national/international joint venture contractors have the technical and managerial ability to meet international quality/certification standards</p> <p>Budgeted resources are available from Government's consolidated budget, and MoPF and the banking and payments authority make approved payments in a timely manner</p> <p>Risks</p> <p>MCA contracts fully absorb in-country contracting capacity</p> <p>MCA work overwhelms ministries and distracts Government leaders from budget execution performance</p> <p>Corruption disrupts project implementation</p>

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
<p>3. Infrastructure project management systems and processes, and the competencies of MoPW, MoTC, and MoNRMEP staff have improved</p>	<p>For MoPW, MoTC, MoNRMEP, by end of TA</p> <ul style="list-style-type: none"> • All finance and administration professional staff are competent to use “Freebalance” software. • Systems and processes to prepare ministry annual infrastructure work plans, procurement action plans, and project management monitoring and evaluation are functioning effectively and efficiently • All tertiary-qualified infrastructure planning and engineering staff have managed at least 4 complete procurement cycles: 50% of contract procurement and contract management activities are successfully undertaken by ministry staff unsupervised • Project management staff assess projects for cross-cutting/social safeguard implications and refer them to specialized agencies as required 	<ul style="list-style-type: none"> • TA’s capacity building monitoring and evaluation framework. HRM records, 6-monthly summary reports • Ministry training and competency assessment records 	<p>MoPW, MoTC, and MoNRMEP lose technical staff to the private sector, international agencies, and to the MCA program</p> <p>Very few East Timorese graduate as engineers (degree level) and very few are recruited by MoPW, MoTC, and MoNRMEP</p>

Activities with Milestones	Inputs
<p>1. Complete annually programmed procurement of consulting services, supply, and construction contracts in a transparent, fair, and efficient manner.</p> <p>1.1 Assess skill levels of all key personnel in infrastructure ministries in procurement of goods, works, and services by month 4</p> <p>1.2 Review Government procurement processes for capital development projects in general, and in infrastructure ministries in particular by month 4</p> <p>1.3 Develop and improve procurement processes in infrastructure ministries, including preparation of terms of reference, request for proposals, specifications, and evaluation and award of contracts for goods, works, and services by month 5</p> <p>1.4 Provide procurement support as necessary to achieve annual targets through to month 60</p> <p>1.5 Provide on-the-job training in procurement to 50% of key personnel in infrastructure ministries by month 18 (see also 3 below)</p> <p>2. Implement annually programmed consulting services, supply, and construction contracts in a transparent, fair, and efficient manner.</p> <p>2.1 Assess skill levels of all key personnel in infrastructure ministries in project implementation, including project/contract management, supervision, and financial management by month 9</p> <p>2.2 Review Government project/contract management, supervision, and financial management processes for capital development projects in general and in infrastructure ministries in particular by month 12</p> <p>2.3 Develop or improve project/contract management, supervision, and financial management processes in infrastructure ministries, including scope and time management, cost and payment management, quality management and risk management for goods, works, and services contracts by month 10</p> <p>2.4 Provide contract management support as necessary to achieve execution targets through to month 48</p> <p>2.5 Provide on-the-job training in project/contract management, supervision, and financial management to 50% of key personnel in infrastructure ministries by month 24 (see also 3 below)</p> <p>3. Improve infrastructure project management systems and processes, and competencies of staff.</p> <p>3.1 Carry out project management needs and capacity analysis in infrastructure ministries, covering project preparation, project/contract procurement, and scope, time, cost, payment, quality, communications, and risk management by month 6</p> <p>3.2 Prepare a project management capacity-building plan by month 9</p> <p>3.3 Implement, and monitor and evaluate the capacity-building plan through to month 48</p>	<p>ADB and AusAID</p> <ul style="list-style-type: none"> • Consulting services - \$12.104 million • Equipment -- \$0.538 million • Training -- \$0.150 million • Admin. & Office Support -- \$0.310 million • Representatives for contract negotiations - \$0.008 • Contingencies -- \$1.890 million <p>Government</p> <ul style="list-style-type: none"> • Office accommodation -- \$2.000 million • Counterpart staff -- \$1.000 million

ADB = Asian Development Bank; ANZ = Australia and New Zealand; AusAID = Australian Agency for International Development; GDP = gross domestic product; HRM = human resource management; IFC = International Finance Corporation; IMF = International Monetary Fund; MCA = Millennium Challenge Account; MoNRMEP = Ministry of Natural Resources, Minerals, and Energy Policy; MoPF = Ministry of Planning and Finance; MoPW = Ministry of Public Works; MoTC = Ministry of Transport and Communications; PSD = private sector development; QA = questions and answers; SIP = sector investment program; TA = technical assistance; WB = World Bank; WS = water supply.

COST ESTIMATES AND FINANCING PLAN

(\$'000)

Item	Total Cost
A. Asian Development Bank (ADB) Financing ^a	
1. Long-Term Consultants (Specialists)	9,100.0
a. Remuneration and Per Diem	
i. International Consultants	8,660.0
ii. National Consultants	220.0
b. International and Local Travel	170.0
c. Reports and Communications	50.0
2. Short-Term Consultants (Pool)	3,004.0
a. Remuneration and Per Diem	
i. International Consultants	2,888.0
ii. National Consultants	0.0
b. International and Local Travel	94.0
c. Reports and Communications	22.0
3. Equipment and Software	538.0
a. Computers incl. Software	60.0
b. Office Equipment and Furniture	40.0
c. Maintenance Costs	48.0
d. Vehicles and All Running Costs	390.0
4. Training, Seminars, and Conferences ^b	150.0
a. Training and Workshop Facilitators/Interpreter	120.0
b. Workshops and In-House Group Training	30.0
5. Miscellaneous Administration and Support Costs	310.0
6. Representatives for Contract Negotiations	8.0
7. Contingencies	1,890.0
a. Physical	800.0
b. Price	1,090.0
Subtotal (A)	15,000.0
B. Government Financing	
1. Office Accommodation and Transport (MoPW - \$0.800 m; MoTC - \$0.700 m; MoNRMEP - \$0.500 m)	2,000.0
2. Remuneration of Counterpart Staff (MoPW - \$0.400 m; MoTC - \$0.350 m; MoNRMEP- \$0.250 m)	1,000.0
Subtotal (B)	3,000.0
Total	18,000.0

m = million; MoNRMEP = Ministry of Natural Resources, Minerals, and Energy Policy; MoPW = Ministry of Public Works; MoTC = Ministry of Transport and Communications.

^a\$3 million financed by ADB's technical assistance funding program, and \$12 million from the Government of Australia to be administered by ADB.

^bFunds will be administered through the international consultancy contact.

Source: ADB estimates.

OUTLINE TERMS OF REFERENCE FOR CONSULTANTS

1. The Infrastructure Project Management technical assistance (TA) will help the Ministry of Public Works (MoPW), Ministry of Transport and Communications (MoTC), and Ministry of Natural Resources, Minerals, and Energy Policy (MoNRMEP) prepare, procure, and manage consulting services, goods, and works required for their respective annual capital development programs. The TA comprises two linked components. Component 1—executing capital development programs—will help MoPW, MoTC, and MoNRMEP (i) prepare and procure contracts for consulting services, goods, and works in line with annual capital development work plans; and (ii) manage the implementation of these contracts. Component 2—building project management capacity—will improve and strengthen processes, systems, and staff competencies for project management in the three ministries. Because the Government of Timor-Leste urgently needs to reduce its backlog of unexecuted capital development projects, and because there are few project engineers in MoPW, MoTC, and MoNRMEP who could be readily trained in outsourcing services, goods, and works, the TA will initially add to the ministries' project management capacity. TA project managers and procurement specialists will work in-line on each ministry's caseload of contracts to be prepared, procured, and managed. Any "advisory" role will be secondary to the in-line work. Progressively, according to a staged capacity-building plan (SCBP), the TA will swing more of its focus to building project management capacity in MoPW, MoTC, and MoNRMEP. The TA is expected to be implemented over 4 years beginning in August 2007, and with the prospect of a second-phase TA depending on the TA completion assessment.¹

2. Technical directorates in MoPW, MoTC and MoNRMEP prepare bid documents. Bid documents are then passed on to procurement divisions in the ministries' directorates of finance and administration (MoPW and MoTC) or Corporate Services Directorate (MoNRMEP) where the documents are checked and finalized and then tendered. Tendering is managed directly by the ministry or by the National Procurement Directorate of the Ministry of Planning and Finance (MoPF), depending primarily on the contract size. Finally, procured contracts are passed back to the originating technical directorates to implement. The finance and administration/corporate services directorates also have monitoring and reporting functions during contract management.

3. At least one of the TA specialists in each ministry must be fluent in spoken and written English, since the specialists will be required to prepare high-quality English language bid documents. Fluency in *Tetum*, Portuguese or *Bahasa* Indonesia would be an advantage. The TA will provide 10 long-term international specialists (total 440 person-months), a pool of short-term specialists (total 120 person-months), and long-term national consultants (110 person-months). Each specialist will be subject to a performance review after the first 3 months of service and thereafter annually.

¹ The TA scope does not include capital development programming or infrastructure operations and maintenance. Other programs will provide this support: (i) budget execution advisors and sector investment program advisors from the AusAID-supported MoPF Capacity Building Project and the Public Sector Capacity Development Program and, later, advisors from the multi-donor Planning and Financial Management Capacity Building Program; and (ii) operations and maintenance support from AusAID (water supply and sanitation–WSS), the Japan International Cooperation Agency (JICA – power, WSS, and roads and bridges), ADB (WSS, and roads and bridges), and the World Bank (power).

A. Scope of Consulting Services

1. Project Management Engineers (international x 4, total 176 person-months)

4. Two of the long-term international project management engineers will be qualified to work in MoPW (roads, bridges and flood control), one to work in MoTC, and one to work in MoNRMEP (power). Each engineer will have a minimum of 5 years project management experience. The four engineers will initially directly, and over time in an advisory capacity, carry out the following tasks:

- (i) In consultation with the Procurement Division, identify specialist skills required for preparing procurement documentation (e.g., maritime engineer for preparing the terms of reference for the design of a sea wall, traffic signals expert to prepare specifications for supply and installation of traffic signals, river training specialist for preparing the terms of reference for design of flood control measures, pavement specialist to review road pavement designs proposed by consultants); and prepare scope of work and brief terms of reference for such specialists.
- (ii) Working with the long-term safeguard specialist, ensure all relevant environmental and social safeguard assessments and management/mitigation plans are prepared and implemented to the standard required by the Government and according to good international practices, including (a) preparing an annual matrix at the start of each year describing all safeguard issues to be considered for each individual program/project in that year's work program, for sign-off by the team leader, (b) prepare scope of work and terms of reference for short-term safeguard specialists, (c) manage subsequent outsourcing of safeguard consultant services, and (d) manage outsourcing of all subsequent safeguard implementation;
- (iii) In consultation with the Procurement Division, and with input from specialists (as required), prepare terms of reference for consulting services contracts (design, supervision, etc.).
- (iv) In consultation with the Procurement Division, and with input from specialists (as required), prepare specifications/designs/bills of quantities for procurement of goods and works.
- (v) Assist the Procurement Division (and external consultants, if required) to evaluate tenders, bids, proposals; and prepare a bid evaluation report, including recommendations for award.
- (vi) Take over the management of projects/contracts following award of contract.
- (vii) Evaluate contracts/programs and recommend improvements as needed.
- (viii) Assess existing project/contract management procedures including time, cost, payment, quality, human resources, communications, and risk management.
- (ix) Develop project/contract management procedures and systems in consultation with other ministries and ongoing institutional and capacity-building programs.
- (x) Provide project management and implementation support as needed (financial, contract management, risk management, records-keeping, etc. for services, goods, and works contracts including assistance with field supervision activities.
- (xi) Working with the Finance Division, ensure that financial management and reporting systems as specified by MoPF and funding agencies (if applicable) are complied with and maintained.
- (xii) Working with the Finance Division, monitor payments to suppliers, contractors, and consultants and ensure contract payment terms are met.

- (xiii) Depending on project type (goods, works, and services), manage project scope and ensure that change control processes/contract variations are implemented and monitored.
- (xiv) Monitor project/contract scheduling.
- (xv) Monitor quality control and quality assurance processes, and ensure that quality assurance/quality control systems are complied with both on projects/contracts and within the ministry.
- (xvi) Establish communication/reporting procedures, both internally and externally.
- (xvii) With support and guidance from the capacity building and training specialist, prepare the project engineering portion of the TA's SCBP.
- (xviii) Provide on-the-job training and other support to the technical directorates in accordance with the SCBP.
- (xix) Coordinate project engineering capacity-building activities with other related programs, including the AusAID-supported MoPF Capacity Building Project and the Public Sector Capacity Development Program, the multi-donor Planning and Financial Management Capacity Building, the ADB-supported Infrastructure Sectors Capacity Development technical assistance, a proposed AusAID program to support vocational education and training, and the Timor-Leste Millennium Challenge Account program.

5. The long-term domestic project management engineers, to be engaged by the consulting firms, will undertake the following tasks:

- (i) Assist line-ministry staff to complete desk studies of available project information (e.g., master plans, relevant environmental and social safeguard guidelines);
- (ii) Lead project stakeholder consultations and participation;
- (iii) Collect relevant market information and predict likely unit-rates relevant to the planned works (for use in preliminary design cost comparisons);
- (iv) Collect and/or prepare primary data to be used in procurement documentation, including for instance (a) plan drawings, (b) existing utilities locations, (c) available geotechnical information, and (d) relevant planning controls and other regulations;
- (v) Prepare first draft Terms of Reference for feasibility-level studies; and
- (vi) Implement the contract management procedures.

2. Procurement Specialists (international x 3, total 132 person-months)

6. One of the long-term international procurement specialists will be qualified to work in MoPW, one to work in MoTC, and one to work in MoNRMEP. Each specialist will have a minimum 5 years project procurement experience. The procurement specialists will initially directly, and over time in advisory capacity, carry out the following tasks:

- (i) Review the annual and multiyear capital development program and clarify scope and budget.
- (ii) In consultation with other ministries and as required, develop unit rates for common items of services, goods, and works.
- (iii) Review/finalize or fully prepare cost estimates for each contract (ministries may prefer engineers' estimate for works to be prepared by procurement divisions so as to limit the circulation of this confidential information).
- (iv) Assemble procurement documentation in accordance with and based on MoPF guidelines, procedures, and standard documents and incorporating specific

- provisions, terms of reference, designs, drawings, etc., developed by the technical directorate or external consultants.
- (v) Undertake procurement (advertising, issuing request for proposals/terms of reference/tenders, site visits, bidders questions, etc.) either directly (for contracts up to \$100,000) or through MoPF's National Procurement Directorate (for contracts greater than \$100,000).
 - (vi) Maintain close liaison with MoPF and other government agencies, and expedite procurement (tender, evaluation, and award of contracts) of services, goods, and works.
 - (vii) With technical assistance from project manager engineers (and external consultants if required), evaluate tenders, bids, and proposals and prepare a bid evaluation report, including recommendations for award.
 - (viii) Recommend on the award of contracts.
 - (ix) Establish and maintain a contract monitoring/tracking database in accordance with MoPF guidelines and procedures.
 - (x) With support and guidance from the capacity-building and training specialist, prepare the contract procurement portion of the TA's SCBP.
 - (xi) Provide on-the-job training and other support to the Directorate of Administration and Finance/Corporate Services Directorate in accordance with the SCBP.
 - (xii) Coordinate procurement capacity-building activities with other related programs (refer para. 4).

7. The long-term national procurement specialists will undertake the same tasks as those of the international procurement specialists in whatever manner is required to maximize overall efficiency and value-for-money (engaged by the consulting firm).

3. Capacity-Building and Training Specialist (international, 44 person-months)

8. Fluency in *Tetum*, Portuguese, or *Bahasa Indonesia* would be a significant advantage for this position. The long-term international capacity-building and training specialist will carry out the following tasks:

- (i) Lead and guide the international long-term specialists in preparing a project management SCBP for each of MoPW, MoTC, and MoNRMEP.
- (ii) Direct and participate directly in implementing the SCBP, including hands-on advice to the international long-term specialists on customized capacity-building approaches and tools.
- (iii) Monitor and evaluate the implementation of the SCBP in each infrastructure ministry, providing feedback and making adjustments as appropriate.
- (iv) Report capacity-building activities and results to the TA team leader.
- (v) Coordinate the TA's capacity-building activities with other related programs (refer para. 4).

4. Monitoring and Evaluation Specialist (international, 22 person-months)

9. The long-term, intermittent international monitoring and evaluation (M&E) specialist will carry out the following tasks:

- (i) Assess the competencies of line ministry personnel in project monitoring, evaluation, reporting, and communications.

- (ii) Review Government project M&E procedures and systems in general, and MoPW, MoTC, and MoNRMEP, with particular reference to capital development projects.
- (iii) Develop or improve project M&E procedures and systems in infrastructure ministries, including maintaining the contract date in “Freebalance” software.
- (iv) Advise the international project management engineers and procurement specialists in designing and implementing M&E system improvements.
- (v) With support and guidance from the capacity-building and training specialist, prepare the project M&E sections of the TA’s SCBP.
- (vi) Provide on-the-job project M&E training in accordance with the SCBP.
- (vii) Help the TA team leader prepare TA progress reports and assessments.
- (viii) Ensure the TA’s M&E is to the extent possible harmonized with Government M&E systems and approaches used in the AusAID-supported MoPF Capacity Building Project and the multiagency-supported Public Financial Management Capacity-Building Program.

5. Safeguards Specialist (international, 22 person-months)

10. The long-term, intermittent international safeguards specialist will carry out the following tasks relating to environmental impact assessment and management, gender and development, HIV/AIDS, conflict management and mitigation, involuntary resettlement and compensation, and indigenous and vulnerable groups:

- (i) Become fully familiar with environmental and social safeguard policies of the Government and its agencies, and procedures, practices, and capacity.
- (ii) Prepare environmental and social safeguard checklists and summary guidelines (cross-referenced to guidelines of the Government, AusAID, and the ADB) to be followed by TA specialists.
- (iii) Guide the long-term project management engineers in preparing their annual safeguards matrix (refer para. 4).
- (iv) Help the TA team leader review and eventually sign-off the safeguard matrixes;
- (v) Guide the project management engineers in preparing terms of reference for specialized safeguard consultant services, consultant selection, engagement, and implementation.
- (vi) Support the project management engineers in ensuring contractor compliance with environmental and social safeguard measures.
- (vii) Help the capacity building and training specialist design and monitor project safeguards capacity building.
- (viii) Help the TA team leader prepare an annual review of environmental and social safeguards performance under the TA.

6. Team Leader and Public Works Institutional Specialist (international, 44 person-months)

11. The team leader and public works institutional specialist will have relevant management or institutional development qualifications, have a minimum 5 years staff experience in a public works agency or utility including at management level, and have a minimum 5 years project experience in developing countries, including some team leader experience. Fluency in *Tetum*, Portuguese, or *Bahasa* Indonesia would be a significant advantage for this position. The long-term international team leader and public works institutional specialist will carry out the following tasks:

- (i) Design and establish TA management and reporting systems in consultation with participating ministries.
- (ii) Recruit and manage TA support personnel in consultation with the ministries.
- (iii) Coordinate and manage the inputs, activities, and outputs of TA specialists.
- (iv) Define standards and manage TA quality control and quality assurance; recommend to the consultant project director and the ADB TA officer the confirmation or release of individual specialists after the 3-month trial period and for each annual contract renewal.
- (v) Manage the delivery of TA results in accordance with the design and monitoring framework.
- (vi) Monitor and manage TA risks.
- (vii) Assist TA reviews undertaken by ADB, AusAID, and the Government.
- (viii) Take overall responsibility for the timely delivery of TA progress reports in accordance with the reporting requirements of ADB, AusAID, and the Government.
- (ix) Prepare (and present) biannual submissions to the Budget Execution Committee of the Council of Ministers.
- (x) Ensure the smooth operation of the TA project coordination committee (PCC).
- (xi) Act as the primary TA focal point, assisting and briefing leaders in MoPW, MoTC, and MoNRMEP.
- (xii) Working with the capacity building and training specialist, take overall responsibility for the design and delivery of the Building Project Management Capacity component, focusing on institution-level outcomes.
- (xiii) Facilitate coordination and cooperation between the TA and other affected ministries, including MoPF and units responsible for environmental and social safeguards.
- (xiv) Take overall responsibility to ensure international good practice is achieved for environmental and social safeguards (refer para. 4).
- (xv) Ensure proper harmonization and coordination with other programs (see footnote to para 1).
- (xvi) Ensure close coordination with the Government's Millennium Challenge Account-funded program.

12. The team leader will be assisted by one long-term nationally recruited office manager (44 person-months, engaged by the consulting firm).

5. Short-Term Specialists (international, 120 person-months)

13. The main purpose of the pool of short-term specialists is to provide expertise in areas not otherwise or not adequately covered by the competencies of the long-term specialists. These are grouped into (i) infrastructure specialist areas such as (i) specialized communications and information technology facilities, legal services, specialized air and maritime facilities, and (ii) environmental and social safeguards (environmental impact assessment and management, gender and development, conflict management and mitigation, HIV/AIDS, involuntary resettlement and compensation, and indigenous persons and vulnerable groups) aspects. The tasks of short-term specialists will align with those of the long-term project management engineers and procurement specialists, in their respective fields of specialty. This includes training and skills transfer.

B. Implementation Arrangements

14. MoPW, MoTC, and MoNRMEP will be the executing agencies for the TA, providing day-to-day implementation support through their technical directors and finance and administration directors who will also be the primary counterparts of the TA consultant team leader. The TA consultants will work alongside the relevant division and unit heads within each ministry. TA activities within MoPW, MoTC, and MoNRMEP will be managed according to established organizational and implementation arrangements. The TA PCC will be chaired in annual rotations by a minister from one of MoPW, MoTC, and MoNRMEP. It will comprise a director from each of three ministries, a member from the technical commission for execution, ADB, AusAID, and the TA consultant team leader. The committee may invite other development partners involved in infrastructure development to be members; observers may also be invited. The PCC will approve and review annual work plans of the TA consultants. The PCC will meet at least half yearly and will monitor and review project progress against the TA's key performance indicators, staffing levels and performance, and any proposed changes in scope or budget.

C. Reporting Requirements

15. The consultants will prepare

- (i) an inception report after 3 months, covering the following: (a) confirmation of the TA overall rationale and design, (b) recommended adjustments to the terms of reference and timing of long-term specialists' deployment, (c) a schedule of inputs from short-term specialists for the following 15 months of the TA, and (d) a detailed TA implementation schedule;
- (ii) thereafter, semiannual progress reports;
- (iii) the proposed project management SCBP contained in the first semiannual progress report, to be endorsed by the PCC;
- (iv) a midterm review and progress report after 2 years;
- (v) a draft TA completion report; and
- (vi) a final TA completion report incorporating comments from ADB, AusAID, and the Government.

16. Progress reports will record activities, outputs, and outcomes directly against the TA's design and monitoring framework. The reports will also cover risks and assumptions in the framework. The TA completion report will include a recommendation (and design) for a second-phase infrastructure project management TA.